Low voltage
Catalogue | 2015

Prisma G

Wall-mounted and floor-standing enclosures
for Electrical Distribution up to 630 A

Schneider Electric

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To respond to increasing building requirements

Improve the continuity of service

Ensure the safety of life and property

Control deadlines and costs

Prisma:

the optimised, tested and IEC compliant solution,
for low voltage electrical distribution and control switchboards.

Prisma,
a comprehensive range of enclosures and cubicles

> A solution based on more than **25 years of experience** in low voltage switchboards.

> Integrating Schneider Electric switchgear offerings and ensuring electrical, mechanical and communication **functions complete consistency**.

> Quality production, **certified ISO 9001.**

Pack 160 enclosures / Prisma G Pack 250 Enclosures up to 630 A IP30, IP31, IP43, IP55

Cubicles P up to 4000 A IP30, IP55

4000 A

630 A

> Hospitals
> Internet data centres
> Logistics centres, etc.
> Shopping centres
> Offices buildings

Prisma P

Prisma G

Electrical switchboards ...

The Prisma G functional system can be used for all types of low voltage distribution switchboards up to 630 A, in commercial and industrial environments.

PB113427.eps

PD390228_SE_2013.eps

Switchboard design is very simple

1 A metal structure
The switchboard is made up of one or more enclosures, combined width-wise and/or height-wise, with a choice of doors (plain or transparent).

2 A distribution system
A complete offer of centralised or row distribution blocks, with busbars in duct or on rear of enclosure, provides current distribution over the full height of the switchboard.

3 Complete functional units
Built around each device, the functional unit includes:
- a dedicated mounting plate for device installation
- a front plate to block direct access to live parts
- prefabricated busbar connections to connect devices to the busbar
- cable-running accessories can be clipped onto the back of double-profile modular rails.

Each functional unit contributes to a function in the switchboard.
The system includes everything required for functional unit mounting, supply and connection.
The Prisma G and functional unit components, in particular, have been designed and tested according to device characteristics.
This design approach ensures a high degree of reliability in system operation and optimum safety.

Advantages of Prisma switchboards

1 A dependable electrical installation
The total compatibility of Schneider Electric devices with the Prisma enclosure is a key advantage in ensuring a high level of installation dependability.

2 An upgradeable electrical installation
Thanks to modular design, Prisma switchboards can be easily modified to integrate new functional units as needed.
Maintenance operations, carried out with the switchboard de-energised, are fast and straight-forward due to easy access to devices.

3 Total safety for personnel
Work in a switchboard must be carried out by authorised persons in compliance with all applicable safety regulations.
To increase the safety of personnel, devices are installed behind protective front plates; only the operating handles are accessible.
Additional internal protection (partitions, barriers) is available to protect against direct contact with live parts.
Terminal shields are mandatory for installing Compact NSX and INS/INV devices in Prisma for even more personnel safety.

... up to 630 A

System design has been validated by type tests as per standard IEC 61439-1 & 2 and benefits from the combined experience of Schneider Electric over many years.

Electrical characteristics

Comply with IEC 62208 and EN 62208 standards:
- rated insulation of main busbars at rear of enclosure: 1000 V
- InA: 630 A
- rated peak withstand current Ipk: 53 kÂ
- rated short-time withstand current Icw: 25 kA rms / 1 second
- short-circuit current: 50 kA
- frequency: 50/60 Hz.

Readly available close by

The kit concept makes handling and transport easier and you get to benefit from Schneider Electric's efficient international logistics. Your distributor, hand-picked by Schneider Electric, can give you the very best advice.

Mechanical characteristics

- Steel sheet metal
- Electrophoresis treatment + hot-polymerised polyester epoxy powder, white colour RAL 9001.
- Enclosures supplied in kit form, totally dismountable, designed to be assembled and wired horizontally on a work station.
- Can be combined side by side and one on top of another
- Degree of protection:
  - IP30: with or without door
  - IP31: with door + canopy
  - IP43: with door + gasket + canopy
  - IP55: IP55 Prisma G offer, supplied in kit form
- degree of protection against mechanical impacts:
  - IK07: without door
  - IK08: with door (plain or transparent)
  - IK10: for Prisma G IP55
- Enclosure dimensions:
  - 3 widths:
    - L = 300: duct
    - L = 600: Wall-mounted and floor-standing enclosures, 24 modules width
    - L = 850: Floor-standing enclosure, 33 modules height, 36 modules width
  - depth with door:
    - enclosures G IP30: 250 mm
    - enclosures G IP55: 260 mm
  - heights:
    - Prisma G IP30: 11 heights: 330 mm to 1830 mm
    - Prisma G IP55: 7 heights: 450 mm to 1750 mm
- Inside switchboards.

Electrical switchboards built using the Prisma functional system and Schneider Electric recommendations fully comply with international standard IEC 61439-1&2.

Simple, functional systems for safe, up to 630 A

Switchboards that are safe...

With **Prisma G** you can be sure to build **100 % Schneider Electric** switchboards that are safe, optimised:

> All components (switchgear, distribution blocks, prefabricated connections, etc.) are perfectly rated and coordinated to work together;

> All switchboard configurations, even the most demanding ones, have been tested.

You can prove that your switchboard meets the current standards, at any time.

You can be sure to build a reliable electrical installation and give your customers full satisfaction in terms of dependability and safety for people.

...esthetics

Prisma G with its discreet design, blends harmoniously into all tertiary buildings, including in entrance halls and passageways.

Available power

Safety of people and property

Controlled costs and delivery times

Upgradeability

upgradeable LV switchboards

...optimised and upgradeable

With **Prisma G** you can build just the right switchboard for your customer, sized precisely to fit costs and needs. With this complete, prefabricated and tested system, it's easy to upgrade your installation and still maintain the performance levels.

> The wall-mounted and floor-standing enclosures combine easily with switchboards already in service.

> Devices can be replaced or added at any time.

Simple moves for cabling in the workshop

All connection points are fully accessible and easy to check.

Efficient installation and connection work on site

Easy connection on site, whatever the cable cross-section or installation location.

Easy maintenance throughout the switchboard

Easy and direct access to devices, in a switchboard in service.

The switchboard, central to the electrical installation

Both the point of arrival of energy and a device for distribution to the site applications, the LV switchboard is the intelligence of the system, central to the electrical installation.

It plays an essential role in the availability of electric power, while meeting the needs of personal and property safety. Its definition, design and installation are based on precise rules; there is no place for improvisation. The IEC 61439 standard aims to better define "low voltage switchgear and controlgear assemblies", ensuring that the specified performances are reached. It specifies in particular:

> the responsibilities of each player, distinguishing those of the original equipment manufacturer; the organisation that performed the original design and associated verification of an assembly in accordance with the standard, and of the assembly manufacturer - the organisation taking responsibility for the finished assembly;

> the design and verification rules, constituting a benchmark for product certification.

All the component parts of the electrical switchboard are concerned by the IEC 61439 standard. Equipment produced in accordance with the requirements of this switchboard standard ensures the safety and reliability of the installation.

A switchboard must comply with the equirements of standard IEC 61439-1 and 2 to guarantee the safety and reliability of the installation. Managers of installations, fully aware of the professional and legal liabilities weighing on their company and on themselves, demand a high level of safety for the electrical installation.

What is more, the serious economic consequences of prolonged halts in production mean that the electrical switchboard must provide excellent continuity of service, whatever the operating conditions.

The Schneider Electric solution

> Specify switchboards that comply with standard IEC 61439-1 and 2.

> Guarantee a level of safety that has been 100 % tested, from the day the switchboard is installed and throughout its service life.

> Ensure a lasting investment through easy upgrading of the installation in compliance with the standard.

> Guarantee that the switchboard complies with the technical specifications.

Prisma tested switchboards

The conformity of the switchboard has been tested and proven.

A Prisma switchboard is:

> made up of Schneider Electric low voltage devices and components that all comply with the applicable standards;

> based on configurations in our catalogue;

> made up of Prisma and Linergy mechanical and electrical components that have been subjected to the verification of original equipment manufacturer;

> mounted and wired by a panelbuilder in compliance with professional standards;

> subjected to the individual verification.

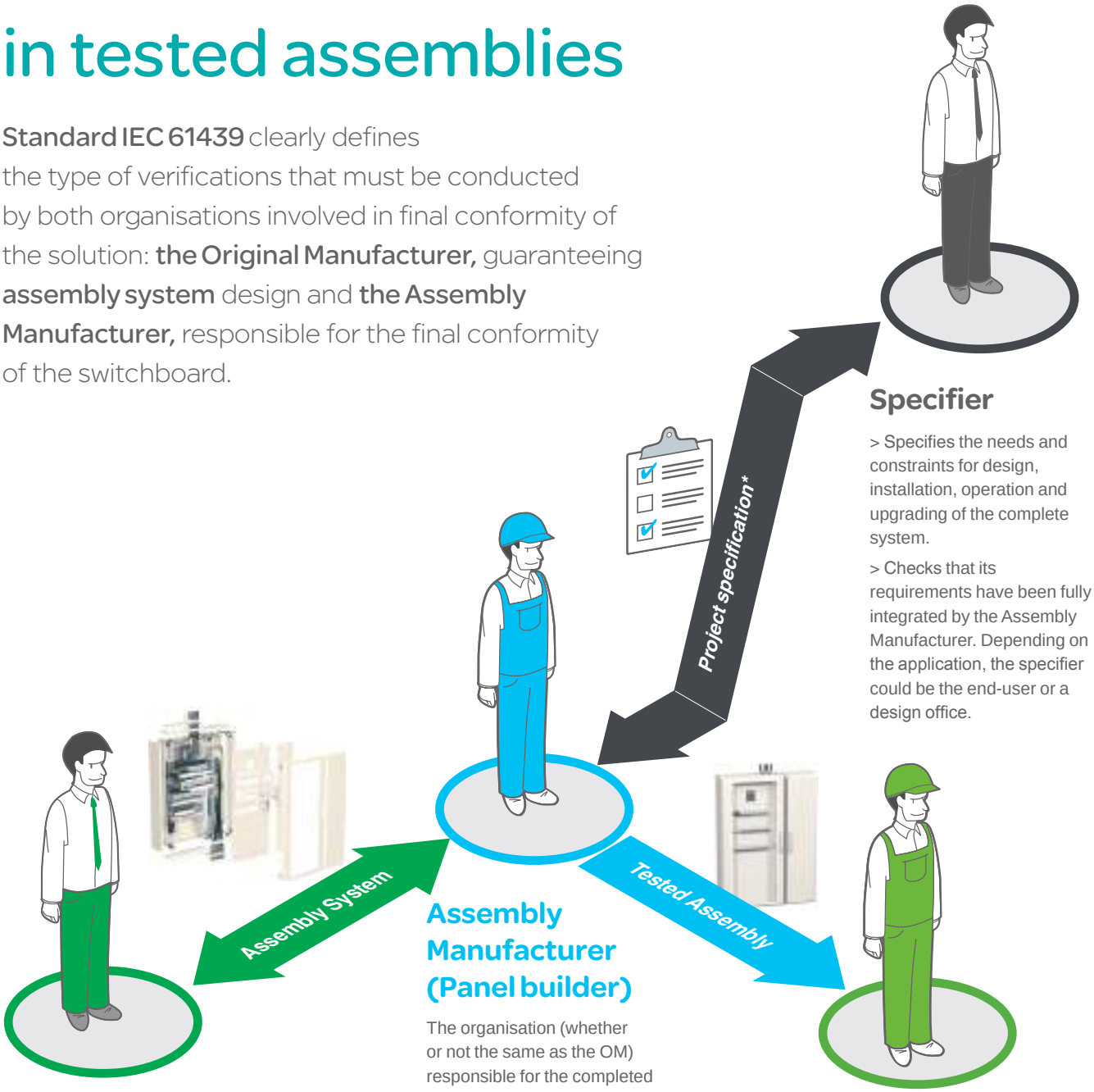
Schneider Electric makes available to the panelbuilder everything required to create tested Prisma switchboards, including the basic configurations in the low voltage distribution catalogue, all the documentation for switchboard design and mounting, calculation and design software, etc.

Panelbuilders can demonstrate conformity with standard IEC 61439-1 and 2 by presenting the declarations or certificates of conformity for type tests carried out by independent laboratories (ASEFA, ASTA, KEMA, etc.) and supplied by Schneider Electric. The panelbuilder is responsible for the individual routine verification and delivers the corresponding declarations of conformity.

Original Manufacturer and Assembly Manufacturer:

Both involved in tested assemblies

Standard IEC 61439 clearly defines the type of verifications that must be conducted by both organisations involved in final conformity of the solution: **the Original Manufacturer,** guaranteeing **assembly system** design and **the Assembly Manufacturer,** responsible for the final conformity of the switchboard.



Specifier

> Specifies the needs and constraints for design, installation, operation and upgrading of the complete system.

> Checks that its requirements have been fully integrated by the Assembly Manufacturer. Depending on the application, the specifier could be the end-user or a design office.

Assembly Manufacturer (Panel builder)

The organisation (whether or not the same as the OM) responsible for the completed **assembly**.

He is responsible for **"Routine verifications"** on each panel produced, according to the standard.

If he derivates from the instructions of the original manufacturer he has to carry out again design verifications.

Original Manufacturer

The organisation that has carried out the original design and the associated verification of an **assembly system**.

He is responsible for the **"Design verifications"** listed by IEC 61439-2 including many electrical tests.

End-User

Should ask for a certified LV switchboard.
By systematically requesting routine verifications, he ensures that the assembly system used is compliant.

** Schneider Electric has developed a specification guide.*

The main 10 functions of standard IEC 61439

For each of the following 10 functions, the standard IEC 61439 requires design verifications from the system manufacturer - mainly through type-tests - and routine verifications on each panel from the Panel Builder to achieve 3 basic goals: safety, continuity of service and compliance with end-user requirements.

Safety

Voltage stresses withstand capability

To withstand long term voltages, and transient and temporary overvoltages according to the insulation coordination principles and requirements.

Current-carrying capability

To protect against burns and to withstand temperature rise:
> when any circuit is continuously loaded, alone, to the specified current
> when the **assembly** is loaded to the specified current according to the specified load pattern (between circuits and/or as a function of the time).

Short-circuit withstand capability

To withstand the stresses resulting from the prospective short-circuit current and from the associated data (High forces between conductors, temp. rise in a very short time, air ionization, overpressure).

Protection against electric shock

> Hazardous-live-parts not to be accessible (basic protection)
> Accessible conductive parts not to become hazardous-live (fault protection).

Protection against risk of fire or explosion

> Resistance to internal glowing elements
> **Note:** protection of persons, and optional protection of the **assembly**, against arcing due to internal fault can be specified through a "special test" according to IEC 61641.

Continuity of service

Maintenance and modification capability

Capability to preserve continuity of supply without impairing safety during **assembly** maintenance or modification
> Electrical condition of the **assembly** or various circuits
> Speed of exchange of the functional units
> Test facilities…

Electro-Magnetic compatibility

To properly function (immunity) and not to generate EM disturbances (emission) in specified environmental conditions:
> Industrial networks or locations (Environment A)
> Domestic, commercial, and light industrial locations (Environment B).

Compliance with end-user requirements

Capability to operate the electrical installation

To properly function, according to:
> The electrical diagram of the overall system and related information (voltages, coordination…)
> The specified operating facilities (e.g. free or restricted access to Man Machine Interfaces, isolation of the outgoing circuits…).

Capability to be installed on site

> To withstand handling, transport, storage… and installation constraints
> Capability to be erected and connected (type of enclosure, type, material and cross sectional areas of external conductors).

Protection of the **assembly** against mechanical and atmospheric environmental conditions

> Presence of water or solid foreign bodies (IP according to IEC 60529)
> External mechanical impacts (optional IK according to IEC 62262)
> Indoor or outdoor installation (humidity, UV).

IEC 61439-1 paragraph 11.4

Protection against electric shocks and integrity of protection circuits

The following should be checked visually:

> presence of protective shields against direct and indirect contacts on live parts;

> presence of the PE conductor.

The continuity of protection circuits is ensured by compliance with the assembly instructions delivered with each product.

IEC 61439-1 paragraph 11.5

Integration of incorporated components

The assembly manufacturer must comply with the instructions of the original equipment manufacturer for installation and wiring of the components used.

IEC 61439-1 paragraph 11.6

Internal electric circuits and connections

Schneider Electric recommends marking the nut with a tinted acrylic lacquer, indelible and temperature-resistant.

This allows:

> not only self-checking to check effective tightening to torque;

> but also identification of any loosening.

IEC 61439-1 paragraphe 11.9

Dielectric properties

The main circuits, and the auxiliary and control circuits connected to the main circuit, shall be subjected to the test voltage in accordance.

IEC 61439-1 paragraph 11.10

Wiring, operating performance and function

Verification of wiring and marking conformity with the drawings, parts list and diagram.

Standard individual check sheet

in accordance with the IEC 61439-1 and 2 standard from the assembly manufacturer (panelbuilder)

Job No.: .....

Switchboard No.: .....

Drawing No./Rev. No.: .....

	Chapter	Verified
Degrees of protection provided by enclosures	**11.2**	☐
Insulation clearances and creepage distances	**11.3**	☐
Protection against electric shocks and integrity of protection circuits	**11.4**	☐
Integration of incorporated components	**11.5**	☐
Internal electric circuits and connections	**11.6**	☐
Terminals for external conductors	**11.7**	☐
Mechanical operation	**11.8**	☐
Dielectric properties	**11.9**	☐
Wiring, operating performance and function	**11.10**	☐

Date of verification:

..... / ..... /.....

Verifications performed by:

.....

Examples of switchboard configurations

Incomer	
NG160 A	
Incoming cables via top	

Distribution
Linergy DS distribution block 4P

Outgoing devices	
Acti 9 devices	
Supply	Linergy FM distribution block + Linergy FH comb busbar
Cable running	Straps + cover + trunking
Connection	Linergy TR, TB terminal block at bottom of switchboard

IP30 enclosure
Wall-mounted enclosure, W = 595 mm, H = 1080 mm

Config_40k.eps

Incomer

Compact NSX250

Fixed, front connection
Toggle
Incoming cables via top on incoming connection block

Distribution

Linergy BW rear busbar

Outgoing devices

Acti 9 + NG160 devices

Supply	Linergy FM + Linergy FH comb busbar + Linergy DS distribution block 4P + Linergy DX
Cable running	Straps + cover + trunking
Connection	Linergy TR, TB terminal block in duct

IP30 enclosure

Wall-mounted enclosure, W = 595 mm, H = 1450 mm

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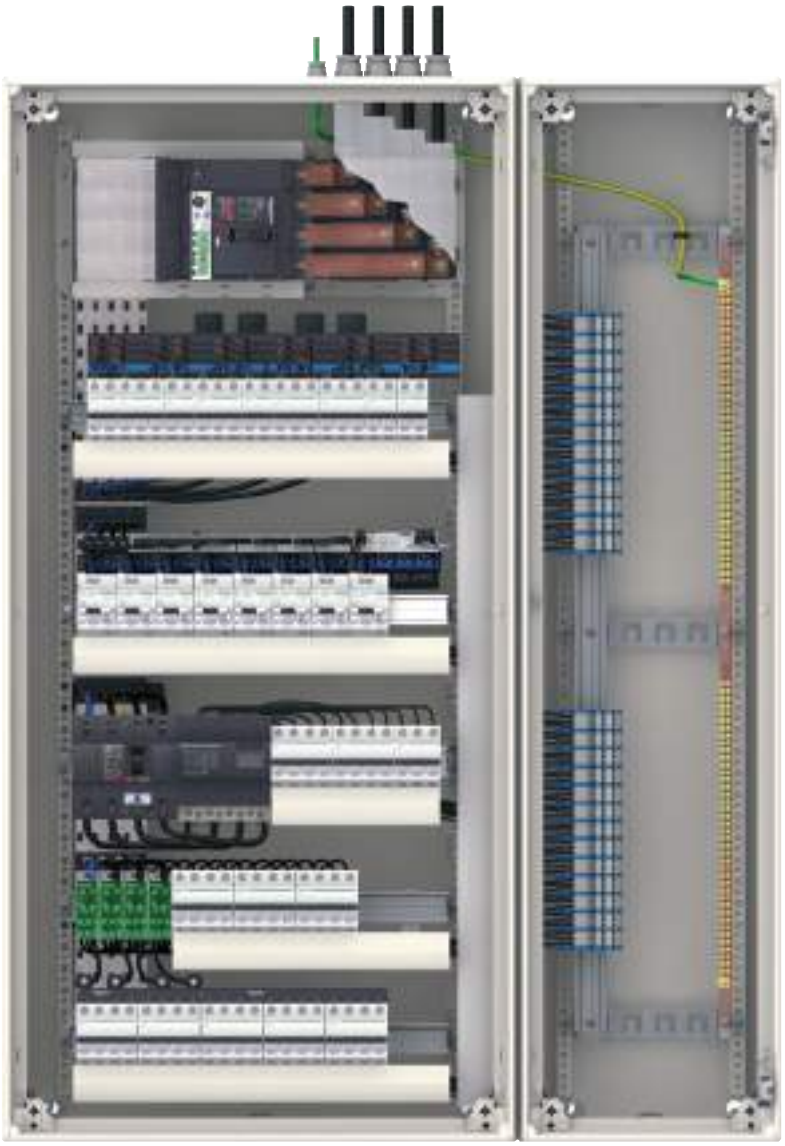


With Prisma, your solution is 100 % optimised

Flexible design for building applications and their operation

Thanks to Prisma solutions, design offices can design and customise switchboards easily and quickly:

> organisation by functional units, each corresponding to an application in the building (lighting, HVAC, lifts, etc.)

> organisation by dedicated physical zones: one for functional units (switchgear, mounting plates, front plates), one for power distribution, and one for connections.

100 % dependable and optimised design, in compliance with costs and deadlines

By supporting design offices with the services and software tools (Ecodial, Rapsody...) needed to quickly design switchboards, we help them to highlight their professionalism: switchboards with tested architectures to meet the most stringent specifications.

Our tools and services also enable them to meet requirements concerning compliance with costs and deadlines: optimised selection of the appropriate components for each switchboard (switchgear, distribution systems, enclosures with perfect electrical and mechanical consistency), front panel design and fast cost studies.

*

100 %

of dedicated building switchboard architectures are tested in compliance with IEC standards and can be customised.

Determining catalogue numbers
Rapsody software

Easy design with Rapsody software

A time-saver in the design and quotation phases.

More flexibility since modifications and upgrades are possible throughout the project.

5 **easy steps to design a switchboard**

1

Define the switchboard's electrical and environmental characteristics, in a few clicks.

2

Choose and configure the devices to be installed, with no risk of error.

3

Customise, and easily modify the single-line diagram.
Move or duplicate devices.
Generate current distribution and connection systems.

4

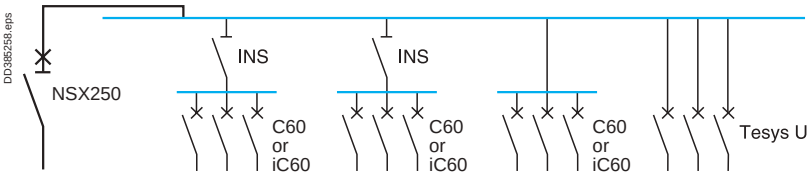
Choose the switchboard and let the software set up the enclosure.
A list of mounting and connection accessories is proposed to make mounting work easier.

5

Automatically **export** the information required to make a clear, comprehensive and professional quotation.

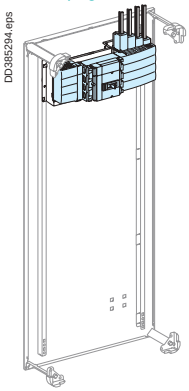
Determining catalogue numbers

Starting with the electrical diagram: IP30 switchboard



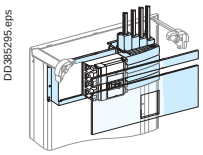
Install the incomer

> see page 36



- order the mounting plates and the front plates
- the incoming connection block
- the power supply block for the Linergy BW busbars.

1 Installation/connection



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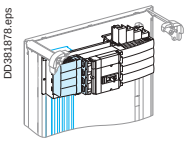
Device	No. of vertical modules	Mounting plate	Cut-out front plate	Upstream front plate	Connection block: cables via top	Connection block: cables via bottom
Fixed Compact NSX						
NSX100/250	5	03030	03232	03801	04066	ou 04067

2 Distribution using Linergy BW busbars



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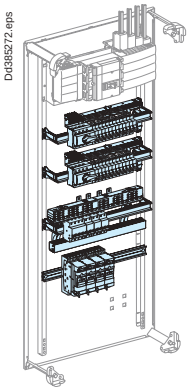
Device	Power supply block	Terminal shields (set of 2)	Linergy BW busbars
Fixed Compact NSX and Vigicompact NSX			
NSX100/250	04060		

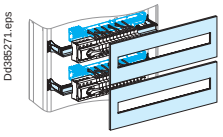
Install the modular devices



Order the mounting plates and front plates taking into account:
- supply to the rows
- cable running.

1 Acti 9

> see page 55



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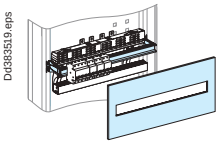
Device	No. of vertical modules	Modular rail	Modular front plate
All Multi 9 or Acti 9 devices			
All supply systems (Linergy FH) with cable straps and trunking sections	4	03001	03204
Multi 9 or Acti 9 devices ≤ 40 A			
Supply via 63/80 A Linergy FM or Linergy FH with cable straps	3	03001	03203

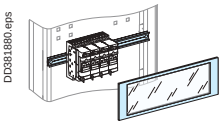


DD385229.eps

Device	No. of vertical modules	Modular rail	Modular front plate
All Multi 9 or Acti 9 devices			
All supply systems (Linergy FH) with cable straps and trunking sections	4	03001	03204
Multi 9 or Acti 9 devices ≤ 40 A			
Supply via 63/80 A Linergy FM or Linergy FH with cable straps	3	03001	03203

2 TeSys "U"

> see page 57



DD381978.eps

Device	No. of vertical modules	Useful length of rail (mm)	Rear modular rail	Transparent front plate
TeSys U model				
TeSys U model	4	432	03004	03342

- Linergy FM distribution block > see page 96
- Cable running > see page 74

Determine the size of the switchboard

- count the number of occupied modules

19 modules

- determine the corresponding wall-mount enclosure

21 modules

- order the additional plain front plate.

Plain front plate

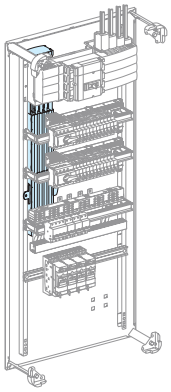
> see page 68

DD381979.eps

500 mm wide plain front plate	Cat. no.
1 module (H = 50 mm)	03801
2 modules (H = 100 mm)	03802
3 modules (H = 150 mm)	03803

Plan the distribution system

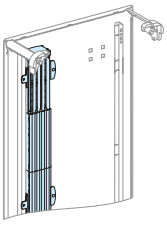
Dd385273.eps



Linergy BW busbars

> see page 84

DD381882.eps



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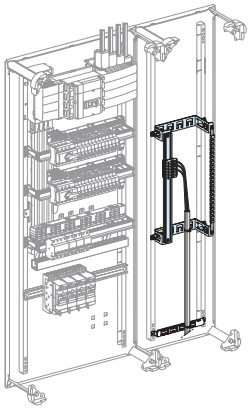
Linergy BW busbars		160 A	250 A	400 A	630 A
Three-pole	W = 1000 mm	04111	04112	04113	04114
	W = 1400 mm	04116	04117	04118	04119
Four-pole	W = 1000 mm	04121	04122	04123	04124
	W = 1400 mm	04126	04127	04128	04129

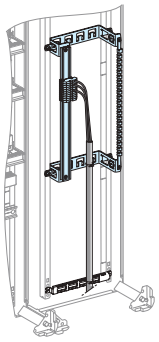
Select the Linergy TR terminal blocks and the Linergy TB earth bar

> see pages 103, 106

Dd385274.eps



Dd383520.eps



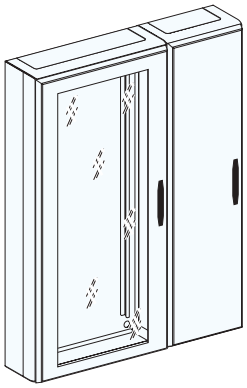
DD385231.eps

Designation	Cat. no.
Mounting plate for terminal block and Linergy TB earth bar	04220
Modular rail, W = 1600 mm	04226
12 x 3 mm direct earth bar with 1 terminal 35² L330 Linergy TB	04201
4 earth block 12 x 4² quick connection Linergy TB	04214
4 earth block 3 x 16² quick connection Linergy TB	04215

Select the enclosures

> see page 114

DD381892.eps



1 IP wall-mount enclosure

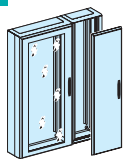
DD381884.eps

DD381962.eps

No. of vertical modules	*Height of enclosure*	*Enclosure*	*Plain door*	*Transparent door*
Wall-mount enclosure (IP30)				
6	330	08102	08122	08132
9	480	08103	08123	08133
12	630	08104	08124	08134
15	780	08105	08125	08135
18	930	08106	08126	08136
21	1080	08107	08127	08137

2 Duct, W = 300 mm

DD381885.eps



DD381963.eps

No. of vertical modules	*Height of duct*	*Duct, W = 300 mm*	*Plain door*	*Transparent door*
Duct (IP30)				
6	330	08172	08182	
9	480	08173	08183	
12	630	08174	08184	
15	780	08175	08185	
18	930	08176	08186	
21	1080	08177	08187	08197

3 Cable tie supports

DD381995.eps

Designation	Cat. no.
4 cable-tie supports for 300 mm wide ducts	08868

4 Accessories for lifting, handling, wall mounting, finishing parts, etc.

Prisma functional system

Contents

Functional units

Upgradeable Prisma functional units: the best electrical and mechanical + communication consistency.
Functional units include switchgear mounting plates, front plates, connections, barriers for ensuring the best level of continuity of service, safety of life and property.

Compact NSX up to 630 A
> 36

Easypact CVS/EZC from 100 to 630 A
> 40

Compact INS-INV250-630 A > 46

Source changeover systems
Compact NSX > 48

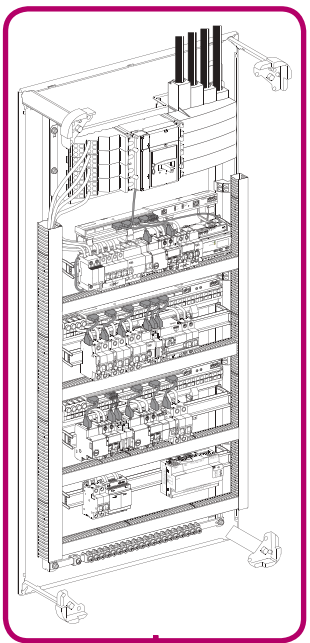
Source changeover systems
Compact INS > 49

Fupact INF from 32 to 160 A > 50

Fupact ISFT from 160 to 250 A > 52

NG125, NG160, INS40 to 160,
iC120 - Acti 9 > 54

Industrial control switchgears, metering > 56
Human-switchboard interface > 60



Presentation of Compact NSX circuit breakers for Prisma G - Presentation of source changeover system

Presentation

A range of intelligent circuit breakers

Compact NSX improves management of electrical installations

In addition to protection functions, the new generation of Compact NSX moulded-case circuit breakers provides new features (analysis, measurements and communication) with access to information:

- either directly on the LCD screen of the trip unit to set the circuit breaker or read the main electrical values, including U, I, f, P(W) and E (kWh)
- or on the FDM 121 or FDM128 display on the front of the Prisma switchboard (duct door with special front plate) for quick access to a greater wealth of information.

A cable connects the display to the trip unit without any special settings or configuration, making it easy to personalise alarms and displays or read event logs and maintenance indicators.

Integration of Compact NSX in Prisma

Installation of Compact NSX devices in a Prisma functional switchboard is very easy and made of a functional unit system:

- dedicated mounting plates for Compact NSX offer
- matching power connections Linergy DP distribution block and prefabricated connections, connection blocks, power supply blocks)
- partitioning
- compliance with the safety perimeter, by design.

Installation architectures for the measurement function

Compact NSX circuit breakers equipped with Micrologic 5/6 A or E trip units provide measurements that can be read on the FDM 121 or FDM128 display module or directly on the circuit breaker. This makes it possible to optimise the space required by the functional unit.

Installation times have also been reduced with respect to system with current transformers.

What is more, installation and connections are made easier because the FDM121 or FDM128 may be installed:

- via a direct cut-out in a plain door
- on the front of a W600 enclosure for one or four 96 x 96 devices
- on partial door cut-out.

PB105112.eps

A new front plate

The front of Compact NSX circuit breakers has an eye-pleasing curved profile, making Prisma switchboards even more attractive. Prisma front plates are designed for all types of controls (toggle, motor mechanism, rotary handle).

Presentation

To ensure the supply of energy at all times, certain electrical installations are connected to two sources:

- normal source S1
- replacement source S2 which steps in to supply the installation if the normal source is not available.

A mechanical and/or electrical interlocking system between two Compact switch-disconnectors or circuit breakers (or a mixture) avoids simultaneous connection of the two sources during switching.

In Prisma G, a manual changeover with mechanical interlocking of devices may be installed.

This is the simplest system. A human operator is required and consequently, the transfer from the normal source to the replacement source is delayed.

A manual source-changeover system comprises two or three manually controlled devices (circuit breakers or switch-disconnectors) that are mechanically interlocked.

The interlocking system avoids simultaneous connection (even transient) of the two sources.

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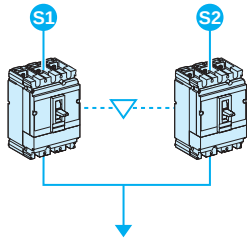


For more information on the communication functions of Compact NSX, see the ULP system user manual, ref. TRV99100, and the Compact NSX catalogue, ref. LVPED208001_EN.
See catalogue "Compact, Masterpact source changeover systems", ref. LVPED211122EN

Presentation of Fupact fusegear for Prisma G

Fusegear

Presentation

Whatever the switchboard configuration, Prisma range offers tested and certified solution guaranteeing the safety of life and properties.

2 families of Fupact fusegears

Fupact INF

Fupact INF ensures your power application for:
- distribution switchboards
- disconnection, isolation, locking and primary control of incoming circuits
- emergency stop,
- motor feeders (protect motors against single-phasing).

Fupact fusegears have a test position for greater flexibility, easy to use.

PB107591_35.eps

Fupact ISFT

Fupact ISFT fuse-switch disconnectors are particularly suited for:
- secondary distribution circuits
- powering and control of industrial motors as local isolation device.

PB104875.eps

PB104876.eps

Installation

- Fupact fusegears have dedicated mounting plates and front plates.
- The upstream and downstream connections are made by the panelbuilder.
- Vertical mounting allows to install several Fupact fusegears.

Positioning and mounting of the devices in the switchboard and the percentage of space occuped take into account temperature rise, short-circuit withstand capacities, clearances.

_MG_1041_50.eps

Modular devices
Acti 9
NG160, NG125, iC120 circuit breakers
INS40/160 switch disconnector

Presentation

A double-profile modular rail offering a high level of performance
Made of an aluminium alloy with amagnetic properties, the rail design is extremely rigid. The rail supports are crimp mounted.

Fast mounting
The supports have positioning studs to guide the rail on the rear uprights. Only two mounting screws are required.

Multiple functions
A number of devices clip directly onto the rails, including Linergy FM 80 and 200 A distribution systems, all horizontal cable-running accessories such as cable straps and trunking supports, as well as the supports for Linergy TB earth bars.

Supply from all directions
Supply to the rows, using Linergy FH comb busbars or Linergy FM distribution systems via:
- Linergy BS or insulated busbar Linergy BW installed behind the devices.
- Linergy BS busbar installed in a busbar compartment.

Centralised power supply
Via Linergy DX or DS distribution blocks, Linergy DP.

PD090227_SE_2013.eps

Distribution

Linergy FM 80 and 200 A device feeders
- Fast and secure front connection using spring terminals.
- Reliable connections, will not loosen over time, insensitive to vibrations and thermal variations.
- All types of modular devices can be mixed.
- Easy balancing of phases.
- Interchangeable devices.
- Easy installation upgrades.
- Fully insulated (IPxxB).

Linergy FH comb busbars
- Direct connection to device terminals or via a connector.
- Fully insulated.
- Can be cut to length.

Linergy DX quick distribution blocks
- See page 90

Linergy DP distribution blocks
- See page 92

Linergy DS screw distribution blocks
- See page 94

Cable running

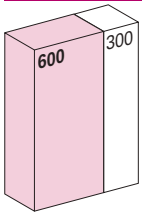
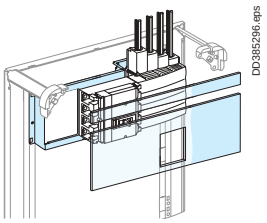
Straps
- Easy and fast to install.
- Low cost.
- Perfectly organised and integrated cable running.
- Professional finish.
- Mounting at the back of modular rail, very compact dimensions.

Trunking
- Traditional solution.

Config_4ok.eps

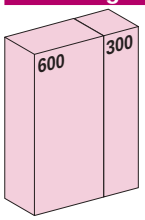
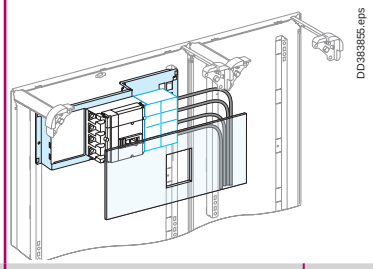
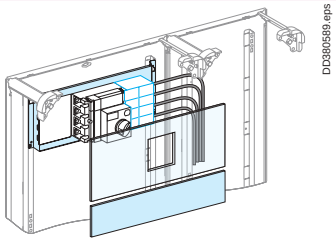
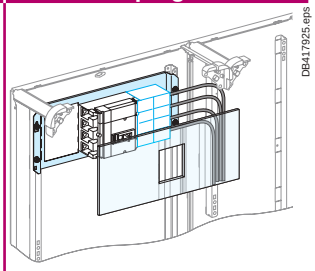
Compact NSX100/250 horizontal mounting

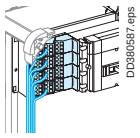
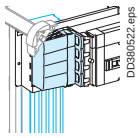
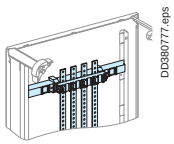
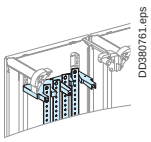
Circuit breakers

Mounting	Horizontal fixed (1)
	

Devices	Toggle
	NSX100/250
Number of devices per row	1
Nb. of vertical modules	**5**
Mounting plates	**03030**
Front plates [Nb. of vertical modules] cut-out	**03232** [4]
Front plates [Nb. of vertical modules] upstream	**03801** [1]
Upstream connection	
Incoming connection block	cables via top: **04066** cables via bottom: **04067**

(1) Maximum size of connection cables: 70 mm². For cable cross-sections greater than 70 mm², use of a cable duct is recommended.

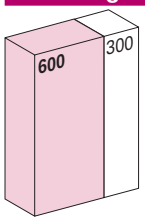
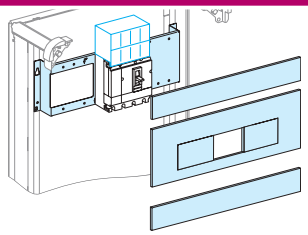
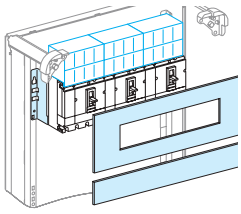
Mounting	Horizontal fixed					Horizontal plug-in
						
Devices	**Toggle**		**Direct rotary handle**		**Motor mechanism module**	**Toggle**
	NSX100/250	**NSX100/250 with ammeter module or Vigi**	**NSX100/250**	**Vigi NSX100/250**	**NSX100/250**	**NSX100/250**
Number of devices per row	1	1	1	1	1	1
Nb. of vertical modules	**4**	**4**	**4**	**4**	**4**	**4**
Mounting plates	**03030**	**03033**	**03031**	**03031**	**03032**	**03032**
Front plate [Nb. of vertical modules] cut-out	**03232** [4]	**03292** [4]	**03232** [4]	**03292** [4] **+ LV429285** (collar)	**03234** [4]	**03290** [4]
Upstream connection						
					Plug-in base	**Device**
Short/Long terminal shields	3P: **LV429517** 4P: **LV429518**				3P: **LV429517** 4P: **LV429518**	3P: **LV429515** 4P: **LV429516**
+ connection adapter for plug-in base	-				3P: **LV429306** 4P: **LV429307**	

Downstream distribution	Linergy DP 250 A distribution block	Insulated Linergy BW busbars		Rear Linergy BS busbars	Linergy BS multi-stage busbars
					
Type of connected devices	**All types**	**Toggle**		**All types**	**All types**
		NSX	**NSX with ammeter module or Vigi NSX**		
Busbars / distribution blocks	3P: **04033** *> page 92* 4P: **04034**	*> page 84*		*> page 86*	*> page 87, 88*
Power supply block	-	**04060** (2)	**04060** (2)	(3)	
Long terminal shields	-	-	-	3P: **LV429517** 4P: **LV429518**	

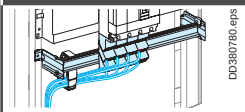
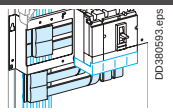
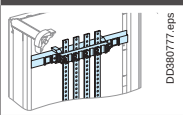
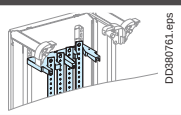
(2) Supplied with connections. - (3) Connection must be made.

Compact NSX100/250 vertical mounting

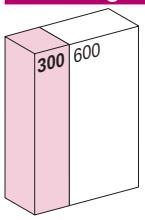
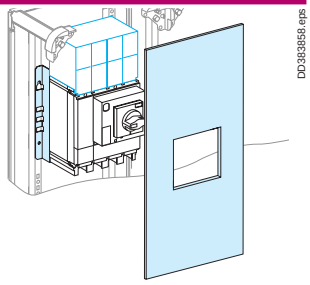
Circuit breakers

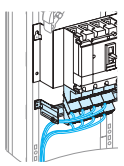
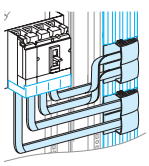
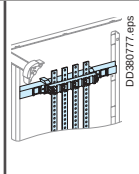
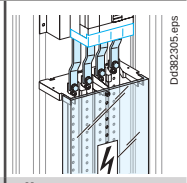
Mounting	Vertical fixed							
								
Devices	**Toggle**				**Rotary handle**			
	NSX100/160	**NSX250**	**Vigi NSX100/160**	**Vigi NSX250**	**NSX100/160**	**NSX250**	**Vigi NSX100/160**	**Vigi NSX250**
Number of devices per row	4 x 3P or 3 x 4P				4 x 3P or 3 x 4P			
Nb. of vertical modules	**7**	**9**	**8**	**11**	**7**	**9**	**8**	**11**
Mounting plates	**03040**	**03040**	**03040**	**03040**	**03041**	**03041**	**03041**	**03041**
Front plates [Nb. of vertical modules] cut-out	**03243** [5]	**03243** [5]	**03241** [7]	**03241** [7]	**03243** [5]	**03243** [5]	**03244** [7] **+ LV429285** (collar)	**03244** [7] **+ LV429285** (collar)
upstream	-	**03802** [2]	-	**03802** [2]	-	**03802** [2]	-	**03802** [2]
downstream	**03802** [2]	**03802** [2]	**03801** [1]	**03802** [2]	**03802** [2]	**03802** [2]	**03801** [1]	**03802** [2]
Upstream connection								
Long terminal shields	3P: **LV429517** 4P: **LV429518**							
Cable-ties	**08867** + **08866**							
Divisible blanking plates (H x L) 85 x 147 mm	**03249** (to add modular devices to a row with Compact NSX 3P or 4P without electronic trip unit)							
107 x 147 mm	**03222** (to add modular devices to a row with Compact NSX 3P or 4P with electronic trip unit)							
46 x 1000 mm	**03220** (to add modular devices to a row with Compact NSX 3P or 4P + Vigi without electronic trip unit)							
46 x 90 mm (1)	**03221** (to add modular devices to a row with Compact NSX 3P or 4P + Vigi with electronic trip unit) - Set of 4							

(1) *In strip.*

Downstream distribution	Linergy DP 250 A distribution block	Insulated Linergy BW busbars (2)		Rear Linergy BS busbars	Linergy BS multi-stage busbars
					
Type of connected devices	**All types**	**NSX**	**Vigi NSX**	**All types**	**All types**
Distribution block / busbars	3P: **04033** 4P: **04034** + **03002** *> page 92*	*> page 84*		*> page 86*	*> page 87, 88*
Power supply block	-	**04061**	**04061**	-	
Connection block	-	**04062**	must be made	must be made	
Short terminal shields	-	3P: **LV429515** 4P: **LV429516**	3P: **LV429517** 4P: **LV429518**	3P: **LV429517** 4P: **LV429518**	

(2) *1 device centred on mounting plate.*

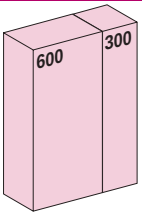
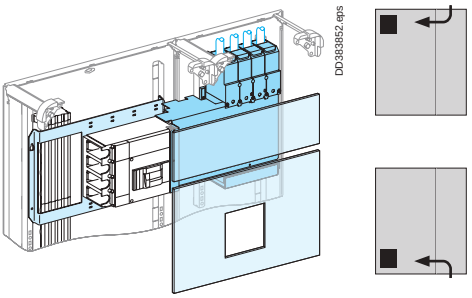
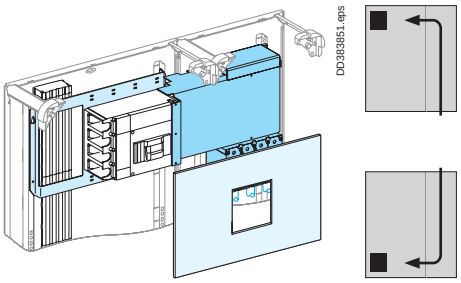
Mounting	Vertical fixed		
			
Devices	**Toggle**		**Direct rotary handle**
	NSX 100/250	**Vigi NSX 100/250**	**NSX 100/250**
Number of devices per row	1	1	1
Nb. of vertical modules	**9**	**13**	**9**
Mounting plates	**03050**	**03050**	**03051**
Front plates [Nb. of vertical modules] cut-out	**03253** [9]	**03293** [9]	**03253** [9]
upstream	-	**03812** [2]	-
downstream	-	**03812** [2]	-
Upstream connection			
Long terminal shields	3P: **LV429517** 4P: **LV429518**		
Cable-ties	**08868** + **08866**		

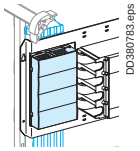
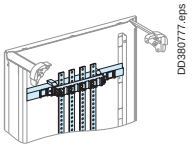
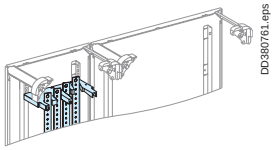
Downstream distribution	Linergy DP 250 A distribution block in duct	Insulated Linergy BW busbars (3)		Rear Linergy BS busbars	Linergy BS multi-stage busbars or multi-stage distribution block
					
Type of connected devices	**All types**	**NSX**	**Vigi NSX**	**All types**	**All types**
Distribution block / busbars	3P: **04033** 4P: **04034** + **03011** *> page 92*	*> page 84*		*> page 86*	*> page 87, 88*
Power supply block	-	**04061**	**04061**	-	-
Connection block	-	**04064**	must be made	must be made	**04065**
Short/long terminal shields	-	3P: **LV429515** 4P: **LV429516**	3P: **LV429517** 4P: **LV429518**	3P: **LV429517** 4P: **LV429518**	3P: **LV429515** 4P: **LV429516**

(3) *Space available at the top of the enclosure after mounting the universal power supply block:*
- NSX100/250 = 7 modules
- Vigi NSX100/250 = 9 modules.
Space required by power supply block on Linergy BW busbars = 5 modules.

Compact NSX400/630 horizontal mounting

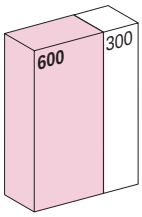
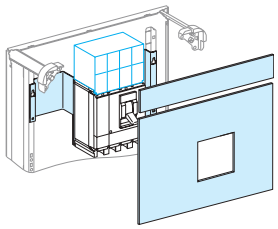
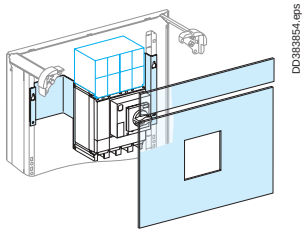
Circuit breakers

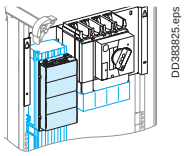
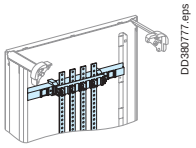
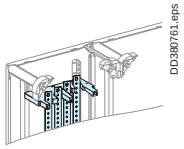
Mounting	Horizontal fixed	
		
Devices	**Toggle**	
	NSX400/630	
Number of devices per row	1	1
Nb. of vertical modules	**9**	**6**
Mounting plate	**03070**	**03070**
Front plates cut-out	**03296** [6]	**03296** [6]
[Nb. of vertical modules] upstream	**03803** [3]	-
Upstream connection		
Incoming connection block	**04076**	**04076**

Downstream distribution	Insulated Linergy BW busbars		Rear Linergy BS busbars	Linergy BS multi-stage busbars
				
Type of connected devices	**NSX400**	**NSX630**	**All types**	**All types**
Busbars	*> page 84*		*> page 86*	*> page 87, 88*
Power supply block with connections	**04070**	**04071**	connection must be made	connection must be made
Long terminal shields	-		3P: **LV432593** 4P: **LV432594**	3P: **LV432593** 4P: **LV432594**

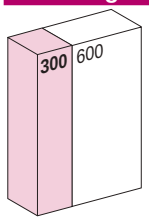
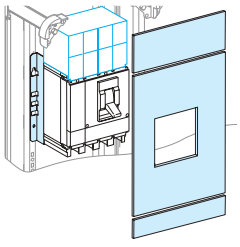
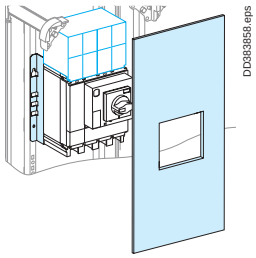
Compact NSX400/630 vertical mounting

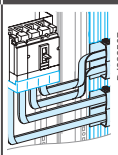
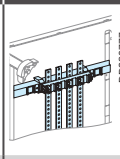
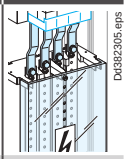
Circuit breakers

Mounting	Vertical fixed					
						
Devices	**Toggle**				**Direct rotary handle**	
	NSX400	**NSX630**	**Vigi NSX400**	**Vigi NSX630**	**NSX400/630**	**Vigi NSX400/630**
Number of devices per row	1	1	1	1	1	1
Nb. of vertical modules	**11**	**12**	**13**	**14**	**14**	**17**
Mounting plate	**03073**	**03073**	**03073**	**03073**	**03074**	**03074**
Front plates [Nb. of vertical modules] cut-out	**03275** [9]	**03275** [9]	**03297** [11]	**03297** [11]	**03275** [9]	**03297** [11] **+ LV429285** (collar)
upstream	**03802** [2]	**03802** [2]	**03802** [2]	**03802** [2]	**03802** [2]	**03802** [2]
downstream	-	**03801** [1]	-	**03801** [1]	**03803** [3]	**03804** [4]
Upstream connection						
Long terminal shields	3P: **LV432593** 4P: **LV432594**					
Cable-ties	**08866 + 08867**					

Downstream distribution	Insulated Linergy BW busbars	Rear Linergy BS busbars	Linergy BS multi-stage busbars
			
Type of connected devices	**All types**	**All types**	**All types**
Busbars	*> page 84*	*> page 86*	*> page 87, 88*
Power supply block	**04074** (1)	connection must be made	connection must be made
Long terminal shields	3P: **LV432593** 4P: **LV432594**	3P: **LV432593** 4P: **LV432594**	3P: **LV432593** 4P: **LV432594**

(1) *Connection must be made.*

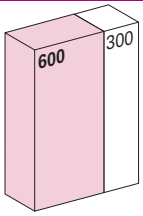
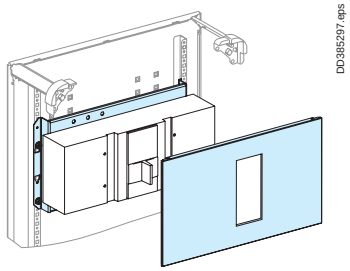
Mounting	Vertical fixed			
				
Devices	**Toggle**			**Direct rotary handle**
	NSX400	**NSX630**	**Vigi NSX 400/630**	**NSX400/630**
Number of devices per row	1	1	1	1
Nb. of vertical modules	**11**	**12**	**14**	**12**
Mounting plates	**03080**	**03080**	**03080**	**03081**
Front plates [Nb. of vertical modules] cut-out	**03298** [8]	**03298** [8]	**03299** [10]	**03283** [12]
upstream	**03812** [2]	**03812** [2]	**03812** [2]	-
downstream	**03811** [1]	**03812** [2]	**03812** [2]	-
Upstream connection				
Long terminal shields	3P: **LV432593** 4P: **LV432594**			
Cable-ties	**08866 + 08868**			

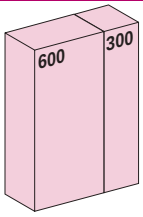
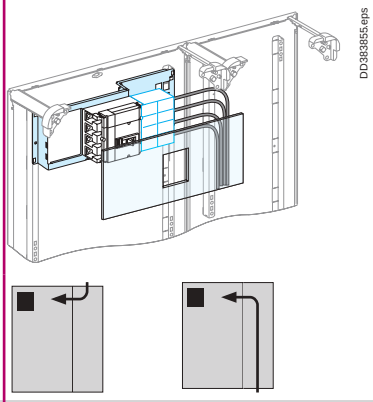
Downstream distribution	Insulated Linergy BW busbars (2)	Rear Linergy BS busbars	Linergy BS multi-stage busbars
			
Type of connected devices	**All types**	**All types**	**All types**
Busbars	*> page 84*	*> page 86*	*> page 87, 88*
Power supply block	**04074**	-	-
Connection block	**04073**	must be made	**04075**
Short/long terminal shields	3P: **LV432591** 4P: **LV432592**	3P: **LV432593** 4P: **LV432594**	3P: **LV432591** 4P: **LV432592**
Barrier	included	**04198**	**04197**

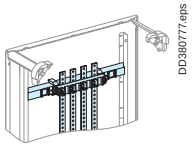
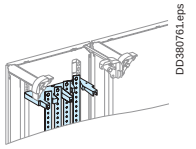
(2) *Space required by power supply block on insulated Linergy BW busbars = 5 modules.*

Easypact EZC100/630 horizontal mounting

Circuit breakers

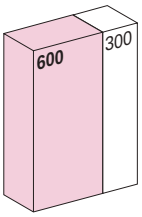
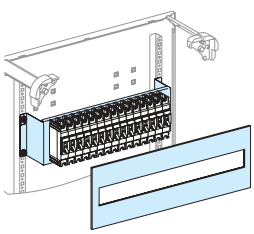
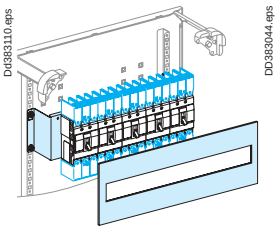
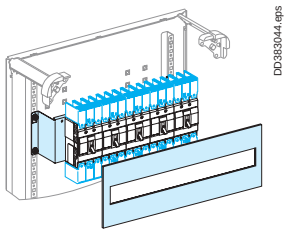
Mounting	Horizontal fixed	
		
Devices	**Toggle**	
	EZC100-250 / EZCV250	
	3P	4P
Number of devices per row	1	1
Nb. of vertical modules	**4**	**4**
Mounting plate	**03104**	**03104**
Cut-out front plate	**03304**	**03304**
Upstream connection		
Long terminal shields (set of 2)	**EZETSHD3P**	**EZETSHD4P**

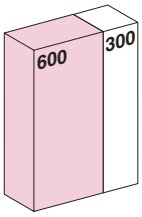
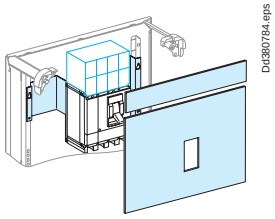
Mounting	Horizontal fixed	
		
Devices	**Toggle**	
	EZC400/630	
	3P	4P
Number of devices per row	1	1
Nb. of vertical modules	**11**	**8**
Mounting plate	**03070**	**03070**
Front plates [Nb. of vertical modules] — cut-out	**03270** [6]	**03270** [6]
Front plates [Nb. of vertical modules] — upstream	**03803** [3]	-
Front plates [Nb. of vertical modules] — downstream	**03802** [2]	**03802** [2]
Upstream connection		
Long terminal shields	3P: **LV429593** 4P: **LV429594**	3P: **LV429593** 4P: **LV429594**

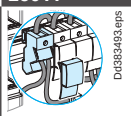
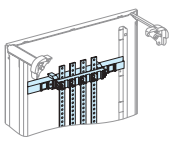
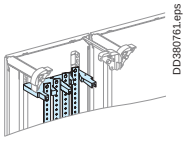
Distribution	Rear Linergy BS busbars		Linergy BS multi-stage busbars	
				
Type of connected devices	**EZC250/EZCV250**	**EZC400/630**	**EZC250/EZCV250**	**EZC400/630**
Busbars	*> page 86*		*> page 87, 88*	
Connection block	must be made		must be made	
Long terminal shields	3P: **EZETSHD3P** 4P: **EZETSHD4P**	3P: **LV429593** 4P: **LV429594**	3P: **EZETSHD3P** 4P: **EZETSHD4P**	3P: **LV429593** 4P: **LV429594**

Easypact EZC100/630 vertical mounting

Circuit breakers

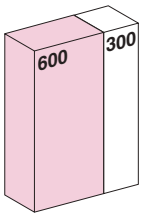
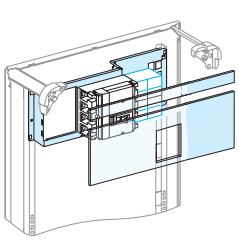
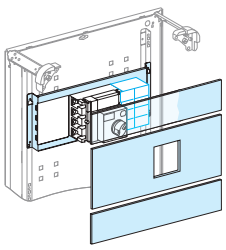
Mounting	Vertical fixed				
	 				
Devices	**Toggle**				
	EZC100			**EZC250 / EZCV250**	
	1P	3P	4P	3P	4P
Number of devices per row	15	5	3	4	3
Nb. of vertical modules	**5**	**5**	**5**	**7**	**7**
Mounting plates	**03102**	**03102**	**03102**	**03104**	**03104**
Cut-out front plate	**03303**	**03303**	**03303**	**03305**	**03305**
Upstream connection					
Long terminal shields (set of 2)	**-**	**EZATSHD3P**	**EZATSHD4P**	**EZETSHD3PN**	**EZETSHD4PN**
Divisible blanking plate H = 85 mm, L = 147 mm	**03249**			-	

Mounting	Vertical fixed
	
Devices	**Toggle**
	EZC400/630
	1P
Number of devices per row	1
Nb. of vertical modules	**13**
Mounting plate	**03073**
Front plates [Nb. of vertical modules] — cut-out	**03273** [9]
Front plates [Nb. of vertical modules] — upstream	**03802** [2]
Front plates [Nb. of vertical modules] — downstream	**03802** [2]
Upstream connection	
Long terminal shields	3P: **LV429593** 4P: **LV429594**

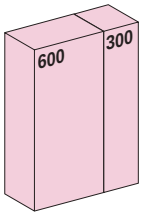
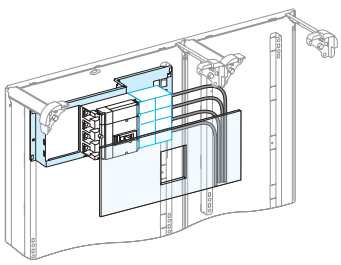
Distribution	Distribution block Linergy DX 1P, 160 A	Rear Linergy BS busbars			Linergy BS multi-stage busbars		
							
Type of connected devices	**EZC100**	**EZC100**	**EZC250/EZCV250**	**EZC400/630**	**EZC100**	**EZC250/EZCV250**	**EZC400/630**
Distribution block	**04031** (x Nb. of pole) + **03001** (rail) *> page 90*	⩽ 400 A			⩽ 630 A		
Busbars	-	*> page 86*			*> page 87, 88*		
Connection block	must be made	must be made			must be made		
Long terminal shields	3P: **EZATSHD3P** 4P: **EZATSHD4P**	3P: **EZATSHD3P** 4P: **EZATSHD4P**	3P: **EZETSHD3PN** 4P: **EZETSHD4PN**	3P: **LV429593** 4P: **LV429594**	3P: **EZATSHD3P** 4P: **EZATSHD4P**	3P: **EZETSHD3PN** 4P: **EZETSHD4PN**	3P: **LV429593** 4P: **LV429594**

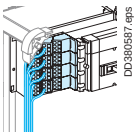
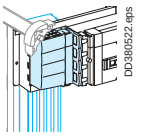
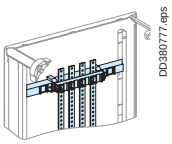
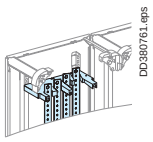
Easypact CVS100/250 horizontal mounting

Circuit breakers

Mounting	Horizontal fixed without cable duct (1)			
				
Devices	**Toggle**		**Rotary handle**	
	CVS100/250, 3P/4P	**Vigi CVS100/250, 3P/4P**	**CVS100/250, 3P/4P**	**Vigi CVS100/250, 3P/4P**
Number of devices per row	1	1	1	1
Nb. of vertical modules	**8**	**8**	**8**	**8**
Mounting plates	**03030**	**03033**	**03031**	**03031**
Front plates [Nb. of vertical modules] cut-out	**03230 [4]**	**03238 [4]**	**03232** [4]	**03292** [4] + collar **LV429285**
upstream	**03802** [2]	**03802** [2]	**03802** [2]	**03802** [2]
downstream	**03802** [2]	**03802** [2]	**03802** [2]	**03802** [2]
Upstream connection				
Long terminal shields	3P: **LV429517** 4P: **LV429518**	3P: **LV429517** 4P: **LV429518**	3P: **LV429517** 4P: **LV429518**	3P: **LV429517** 4P: **LV429518**
Cable-ties	**08866 + 08867**			

(1) *Maximum size of connection cables: 70 mm². For cable cross-sections greater than 70 mm², use of a cable duct is recommended.*

Mounting	Horizontal fixed with cable duct			
				
Devices	**Toggle**		**Rotary handle**	
	CVS100/250, 3P/4P	**Vigi CVS100/250, 3P/4P**	**CVS100/250, 3P/4P**	**Vigi CVS100/250, 3P/4P**
Number of devices per row	1	1	1	1
Nb. of vertical modules	**4**	**4**	**4**	**4**
Mounting plates	**03030**	**03033**	**03031**	**03031**
Front plate [Nb. of vertical modules] cut-out	**03230 [4]**	**03238 [4]**	**03232** [4]	**03292** [4] + collar LV429285
Upstream connection				
Long terminal shields	3P: **LV429517** 4P: **LV429518**	3P: **LV429517** 4P: **LV429518**	3P: **LV429517** 4P: **LV429518**	3P: **LV429517** 4P: **LV429518**
Cable-ties	**08866 + 08868**			

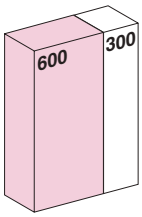
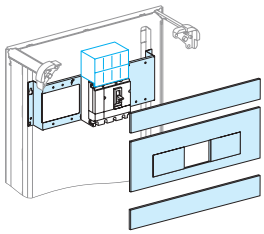
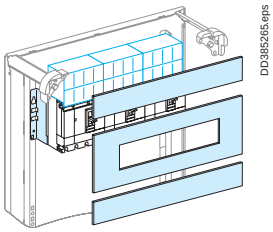
Downstream distribution	Linergy DP 250 A distribution block	Insulated Linergy BW busbars			Rear Linergy BS busbars	Linergy BS multi-stage busbars
						
Type of connected devices	**All types**	**Toggle**		**Direct rotary handle**	**All types**	**All types**
		CVS	**CVS or Vigi CVS**			
Busbars / Distribution blocks	3P: **04033** *> page 92* 4P: **04034**	*> page 84*			*> page 86*	*> page 87, 88*
Power supply block	-	**04060** (2)	**04060** (2)	**04061** (3) + connection must be made	connection must be made	
Long terminal shields	-	-	-	3P: **LV429517** 4P: **LV429518**	3P: **LV429517** 4P: **LV429518**	

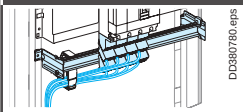
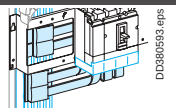
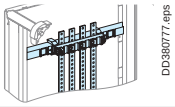
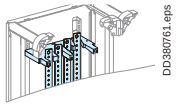
(2) *Supplied with connections.*
(3) *Connection must be made.*

Note: *for insulated flexible bars connections, see page 66.*

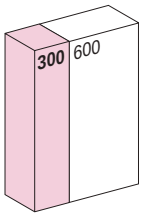
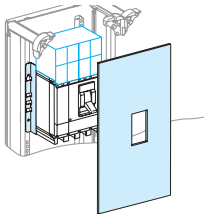
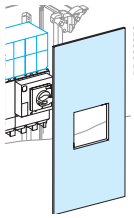
Easypact CVS100/250 vertical mounting

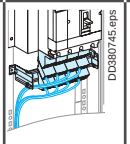
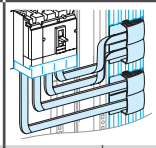
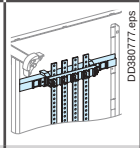
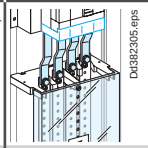
Circuit breakers

Mounting	Vertical fixed without cable duct			
				
Devices	**Toggle**		**Rotary handle**	
	CVS100/250	**Vigi CVS100/250**	**CVS100/250**	**Vigi CVS100/250**
Number of devices per row	4 x 3P or 3 x 4P	4 x 3P or 3 x 4P	4 x 3P or 3 x 4P	4 x 3P or 3 x 4P
Nb. of vertical modules	**9**	**11**	**9**	**11**
Mounting plates	**03040**	**03040**	**03041**	**03041**
Front plates [Nb. of vertical modules] cut-out	**03243** [5]	**03241** [7]	**03243** [5]	**03244** [7] + collar **LV429285**
Front plates [Nb. of vertical modules] upstream	**03802** [2]	**03802** [2]	**03802** [2]	**03802** [2]
Front plates [Nb. of vertical modules] downstream	**03802** [2]	**03802** [2]	**03802** [2]	**03802** [2]
Upstream connection				
Long terminal shields	3P: **LV429517** 4P: **LV429518**	3P: **LV429517** 4P: **LV429518**	3P: **LV429517** 4P: **LV429518**	3P: **LV429517** 4P: **LV429518**
Cable-ties	**08867** + **08866**			
Divisible blanking plates	**03249**	**03221**	**03249**	**03221**

Downstream distribution	Linergy DP 250 A distribution block	Insulated Linergy BW busbars (2)		Rear Linergy BS busbars	Linergy BS multi-stage busbars
					
Type of connected devices	**All types**	**CVS**	**Vigi CVS**	**All types**	**All types**
Distribution block / busbars	3P: **04033** + **03002** 4P: **04034** + **03002** *> page 92*	*> page 84*		*> page 86*	*> page 87, 88*
Power supply block	-	**04061**	**04061**	-	
Connection block	-	**04062**	must be made	must be made	
Short/long terminal shields	-	3P: **LV429515** 4P: **LV429516**	3P: **LV429517** 4P: **LV429518**	3P: **LV429517** 4P: **LV429518**	

(1) *1 device centred on mounting plate.*

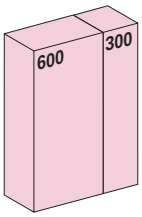
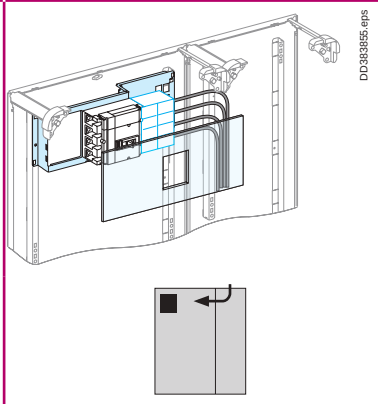
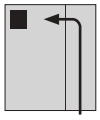
Mounting	Vertical fixed in duct		
			
Devices	**Toggle**		**Rotary handle**
	CVS100/250, 3P/4P	**Vigi CVS100/250, 3P/4P**	**CVS100/250, 3P/4P**
Number of devices per row	1	1	1
Nb. of vertical modules	**9**	**13**	**9**
Mounting plates	**03050**	**03050**	**03051**
Front plates [Nb. of vertical modules] cut-out	**03250** [9]	**03252** [11]	**03253** [9]
Front plates [Nb. of vertical modules] upstream	-	**03812** [2]	-
Upstream connection			
Long terminal shields	3P: **LV429517** 4P: **LV429518**	3P: **LV429517** 4P: **LV429518**	3P: **LV429517** 4P: **LV429518**
Cable-ties	**08866 + 08868**		

Downstream distribution	Linergy DP 250 A distribution block in duct	Insulated Linergy BW busbars (2)		Rear Linergy BS busbars	Linergy BS multi-stage busbars or multi-stage distribution block
					
Type of connected switchgear	**All types**	**CVS**	**Vigi CVS**	**All types**	**All types**
Distribution block / busbars	3P: **04033** 4P: **04034** + **03011** *> page 92*	*> page 84*		*> page 86*	*> page 87, 88*
Power supply block	-	**04061**	**04061**	-	-
Connection block	-	**04064**	must be made	must be made	**04065**
Short/long terminal shields	-	3P: **LV429515** 4P: **LV429516**	3P: **LV429517** 4P: **LV429518**	3P: **LV429517** 4P: **LV429518**	3P: **LV429515** 4P: **LV429516**

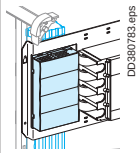
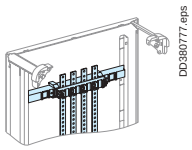
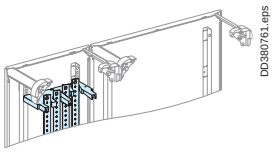
(2) *Space available at the top of the enclosure after mounting the universal power supply block:*
- CVS100/250 = 7 modules
- Vigi CVS100/250 = 9 modules
Space required by power supply block on insulated Linergy BW busbars = 5 modules.

Easypact CVS400/630 horizontal mounting

Circuit breakers

Mounting	Horizontal fixed with cable duct	
		
		

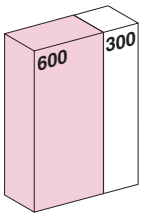
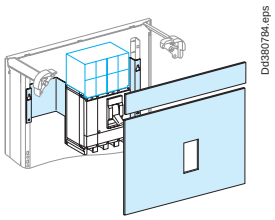
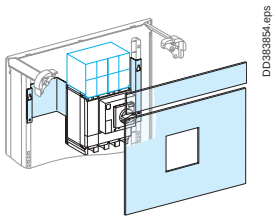
Devices		Toggle	
		CVS400/630, 3P/4P (upstream incoming)	**CVS400/630, 3P/4P (downstream incoming)**
Number of devices per row		1	1
Nb. of vertical modules		**11**	**8**
Mounting plate		**03070**	**03070**
Front plates [Nb. of vertical modules]	cut-out	**03270** [6]	**03270** [6]
	upstream	**03803** [3]	**-**
	downstream	**03802** [2]	**03802** [2]
Upstream connection			
Long terminal shields		3P: **LV429593** 4P: **LV429594**	3P: **LV429593** 4P: **LV429594**

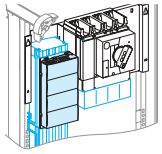
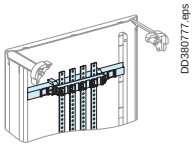
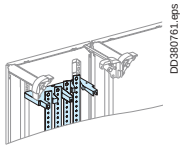
Downstream distribution	Insulated Linergy BW busbars		Rear Linergy BS busbars	Linergy BS multi-stage busbars
				
Type of connected devices	**CVS400**	**CVS630**	**All types**	**All types**
Busbars	*> page 84*		*> page 86*	*> pages 87, 88*
Power supply block with connection	**04070**	**04071**	connection must be made	connection must be made
Long terminal shields	**-**		3P: **LV432593** 4P: **LV432594**	3P: **LV432593** 4P: **LV432594**

Note: *for insulated flexible bars connections, see page 66.*

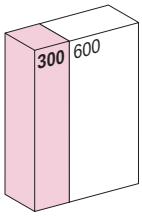
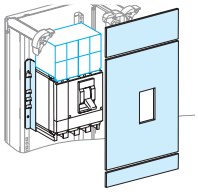
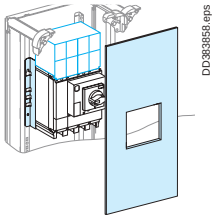
Easypact CVS400/630 vertical mounting

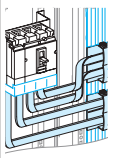
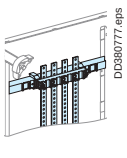
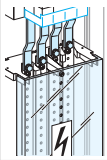
Circuit breakers

Mounting	Vertical fixed without cable duct			
				
Devices	**Toggle**		**Rotary handle**	
	CVS400/630, 3P/4P	**Vigi CVS400/630, 3P/4P**	**CVS400/630, 3P/4P**	**Vigi CVS400/630, 3P/4P**
Number of devices per row	1	1	1	1
Nb. of vertical modules	**13**	**15**	**14**	**17**
Mounting plates	**03073**	**03073**	**03074**	**03074**
Front plates [Nb. of vertical modules] cut-out	**03273** [9]	**03276** [11]	**03275** [9]	**03297** [11] + collar **LV429285**
Front plates [Nb. of vertical modules] upstream	**03802** [2]	**03802** [2]	**03802** [2]	**03802** [2]
Front plates [Nb. of vertical modules] downstream	**03802** [2]	**03802** [2]	**03803** [3]	**03804** [4]
Upstream connection				
Long terminal shields	3P: **LV429593** 4P: **LV429594**	3P: **LV429593** 4P: **LV429594**	3P: **LV429593** 4P: **LV429594**	3P: **LV429593** 4P: **LV429594**

Downstream distribution	Insulated Linergy BW busbars	Rear Linergy BS busbars	Linergy BS multi-stage busbars
			
Type of connected devices	**All types**	**All types**	**All types**
Busbars	*> page 84*	*> page 86*	*> pages 87, 88*
Power supply block	**04074** (1) + connection must be made	connection must be made	connection must be made
Long terminal shields	3P: **LV432593** 4P: **LV432594**	3P: **LV432593** 4P: **LV432594**	3P: **LV432593** 4P: **LV432594**

(1) *Connection must be made.*

Mounting	Vertical fixed in duct		
			
Devices	**Toggle**		**Rotary handle**
	CVS400/630, 3P/4P	**Vigi CVS400/630, 3P/4P**	**CVS400/630, 3P/4P**
Number of devices per row	1	1	1
Nb. of vertical modules	**12**	**13**	**12**
Mounting plates	**03080**	**03080**	**03081**
Front plates cut-out [Nb. of vertical modules]	**03280** [8]	**03282** [5]	**03283** [12]
Front plates upstream [Nb. of vertical modules]	**03812** [2]	**03814** [4]	**-**
Front plates downstream [Nb. of vertical modules]	**03812** [2]	**03814** [4]	**-**
Upstream connection			
Long terminal shields	3P: **LV429593** 4P: **LV429594**	3P: **LV429593** 4P: **LV429594**	3P: **LV429593** 4P: **LV429594**
Cable-ties	**08868** + **08866**		

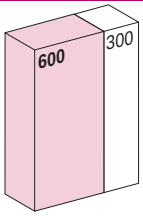
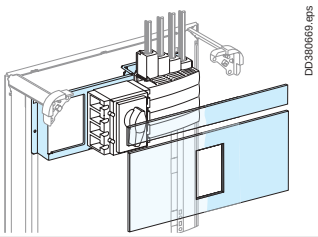
Downstream distribution	Insulated Linergy BW busbars (2)	Rear Linergy BS busbars	Linergy BS multi-stage busbars
			
Type of connected switchgear	**All types**	**All types**	**All types**
Busbars	*> page 84*	*> page 86*	*> pages 87, 88*
Power supply block	**04074**	-	-
Connection block	**04073**	must be made	**04075**
Short terminal shields	3P: **LV432591** 4P: **LV432592**	3P: **LV432593** 4P: **LV432594**	3P: **LV432591** 4P: **LV432592**
Barrier	included	**04198**	**04197**

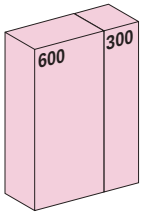
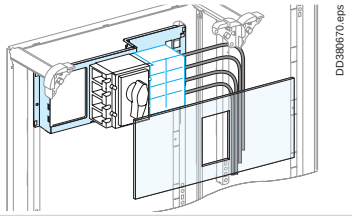
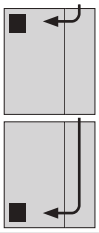
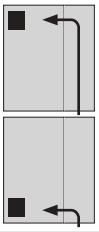
(2) *Space required by power supply block on insulated Linergy BW busbars = 5 modules.*

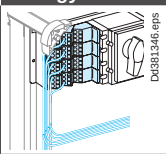
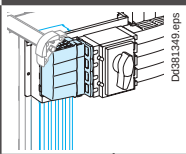
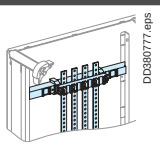
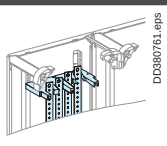
Note: *for insulated flexible bars connections, see page 66.*

Compact INS-INV250/630 horizontal mounting

Switch-disconnectors

Mounting	Horizontal fixed with connection block		
			
Devices	**Direct front handle**		
	INS250-INV100/250		
Number of devices per row	1		
Nb. of vertical modules	**5**		
Mounting plate	**03030**		
Front plates [Nb. of vertical modules]	cut-out	**03231** [4]	
	upstream	**03801** [1]	
Upstream connection			
Incoming connection block	cables via top	**04066**	
	cables via bottom	**04067**	

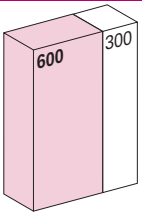
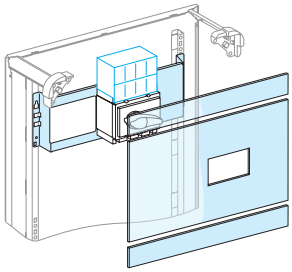
Mounting	Horizontal fixed, direct connection		
			
Devices	**Direct front handle**		
	INS250-INV100/250	**INS-INV320/630**	**INS-INV320/630**
			
Number of devices per row	1	1	1
Nb. of vertical modules	**4**	**9**	**6**
Mounting plates	**03030**	**03070**	**03070**
Front plates [Nb. of vertical modules]	cut-out	**03231** [4]	**03271** [6]	**03271** [6]
	upstream	-	**03803** [3]	-
Upstream connection				
Long terminal shields (1)		**LV429518**	**LV432594**	**LV432594**

Downstream distribution	Distribution block Linergy DP 250 A		Insulated Linergy BW busbars			Rear Linergy BS busbars		Linergy BS multi-stage busbars	
									
Type of connected devices	**INS250 INV100/250**		**INS250 INV100/250**	**INS-INV 320/400**	**INS-INV 500/630**	**INS-INV250**	**INS-INV 320/630**	**INS-INV250**	**INS-INV 320/630**
	3P	4P							
Distribution block / busbars	**04033** *> page 92*	**04034** *> page 92*	*> page 84*			*> page 86*		*> pages 87, 88*	
Power supply block with connection	-		**04060**	**04070**	**04071**	connection must be made		connection must be made	
Long terminal shields (1)	-		-			**LV429518**	**LV432594**	**LV429518**	**LV432594**

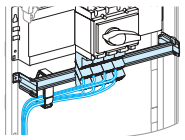
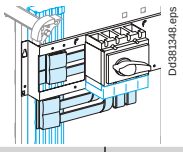
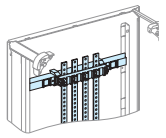
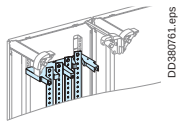
(1) Available for 3P/4P.

Compact INS-INV250/630 vertical mounting

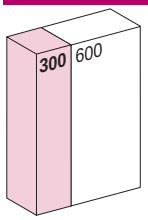
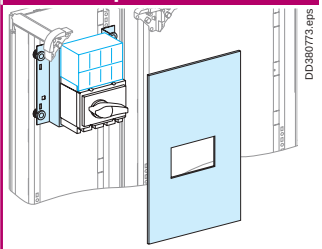
Switch-disconnectors

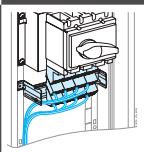
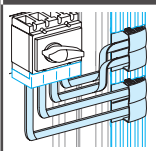
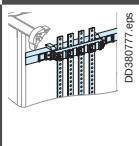
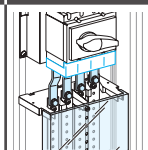
Mounting	Vertical fixed with or without spreaders			
				
Devices	**Direct front handle**			**Lateral handle**
	INS250-INV100/250	**INS/INV320/400**	**INS/INV500/630**	**INS/INV250**
Number of devices per row	1	1	1	1
Nb. of vertical modules	**8**	**10**	**12**	**8**
Mounting plates	**03040**	**03073**	**03073**	**03032**
Front plates [Nb. of vertical modules] cut-out	**03248** [5]	**03274** [10]	**03274** [10]	-
Front plates [Nb. of vertical modules] upstream	**03801** [1]	-	**03802** [2]	**03806** [6]
Front plates [Nb. of vertical modules] downstream	**03802** [2]	-	-	**03802** [2]
Upstream connection				
Long terminal shields (1)	**LV429518**	**LV432594**	**LV432594**	**LV429518**
Cable-ties	**08866 + 08867**			

(1) Available for 3P/4P.

Downstream distribution	Linergy DP 250 A distribution block				Insulated Linergy BW busbars		Rear Linergy BS busbars		Linergy BS multi-stage busbars	
										
Type of connected devices	**INS-INV250**				**INS-INV250**	**INS-INV 320/630**	**INS-INV250**	**INS-INV 320/630**	**INS-INV250**	**INS-INV 320/630**
	Front handle		**Lateral handle**							
	3P	4P	3P	4P						
Distribution block / busbars	**04033 + 03002** *> page 92*	**04034 + 03002** *> page 92*	**04033 + 04037** (2) **+ 03003** *> page 92*	**04034 + 04037** (2) **+ 03003** *> page 92*	*> page 84*		*> page 86*		*> pages 87, 88*	
Power supply block	-				**04060**	**04074**				
Connection block	-				**04062**	must be made	must be made		must be made	
Short/long terminal shields (1)	-				**LV429516**	**LV432594**	**LV429518**	**LV432594**	**LV429518**	**LV432594**

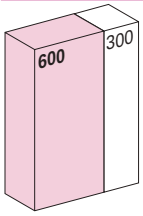
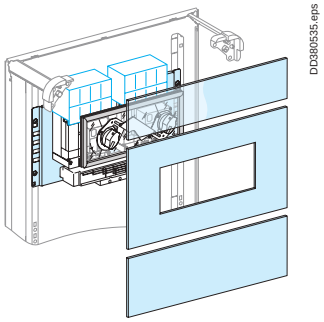
(2) Copper spacer.

Mounting	Vertical fixed with or without spreaders		
			
Devices	**Direct front handle**		
	INS250 INV100/250	**INS-INV 320/400**	**INS-INV 500/630**
Number of devices per row	1	1	1
Nb. of vertical modules	**9**	**10**	**12**
Mounting plates	**03050**	**03080**	**03080**
Front plates [Nb. of vertical modules] cut-out	**03251** [9]	**03281** [10]	**03281** [10]
Front plates [Nb. of vertical modules] downstream	-	-	**03812** [2]
Upstream connection			
Long terminal shields (1)	**LV429518**	**LV432594**	**LV432594**
Cable-ties	**08866 + 08868**		

Downstream distribution	Distribution block Linergy DP 250 A		Insulated Linergy BW busbars (3)		Rear Linergy BS busbars		Linergy BS multi-stage busbars	
								
Type of connected devices	**INS250 INV100/250**		**INS250-INV 100/250**	**INS-INV 320/630**	**INS250-INV 100/250**	**INS-INV 320/630**	**INS250-INV 100/250**	**INS-INV 320/630**
	3P	4P						
Distribution blocks / Busbars	**04033 + 03011** *> page 92*	**04034 + 03011** *> page 92*	*> page 84*		*> page 86*		*> pages 87, 88*	
Power supply block	-		**04061**	**04074**	-		-	
Connection block	-		**04064**	**04073**	must be made		**04065**	**04075**
Short/long terminal shields (1)	-		**LV429516**	**LV432594**	**LV429518**	**LV432594**	**LV429516**	**LV432592**
Barrier	-		included		**04198**		**04197**	

(3) Space available at the top of the enclosure after mounting the universal power supply block: 7 modules. Space required by power supply block on insulated Linergy BW busbars = 5 modules.

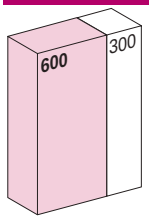
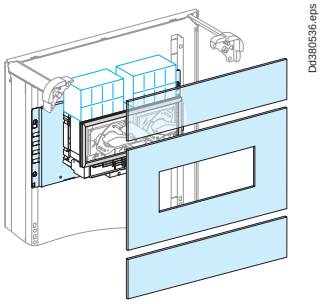
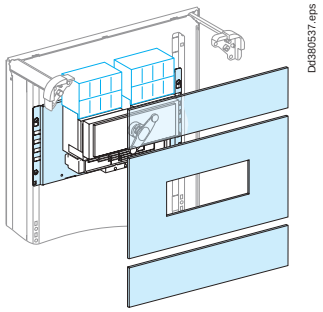
Compact NSX100/250 circuit breakers changeover system

Mounting	Fixed (Changeover with mechanical interlocking)	
		
Devices	**Front connection, direct rotary handle**	
	NSX100/250	
	3P	4P
Nb. of vertical modules	**10**	**10**
Mounting plate	**03043**	**03043**
Front plates [Nb. of vertical modules] cut-out	**03245** [5]	**03245** [5]
Front plates [Nb. of vertical modules] upstream	**03802** [2]	**03802** [2]
Front plates [Nb. of vertical modules] downstream	**03803** [3]	**03803** [3]
Mechanical interlocking	**LV429369**	**LV429369**
Upstream connection		
Long terminal shields	**LV429517**	**LV429518**
Cable-ties	**08866 + 08867**	
Coupling accessory	**LV429358**	**LV429359**

Downstream distribution	
	
Long terminal shields	3P: **LV429517** 4P: **LV429518**

Manual source changeover system

Compact INS-INV250 switch-disconnector changeover system

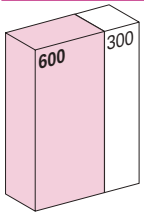
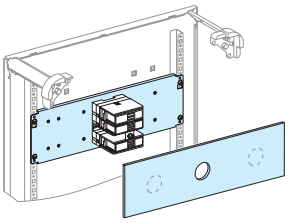
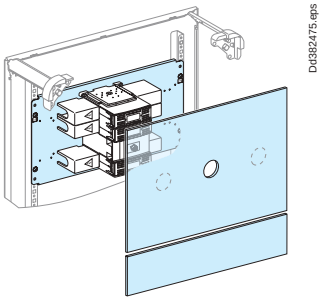
Mounting		Fixed (Changeover with mechanical interlocking)		Fixed (Complete source changeover assembly)	
					
Devices		**Front, direct rotary handle**		**Front, direct rotary handle**	
		INS-INV250		**INS250**	
		3P	4P	3P	4P
Nb. of vertical modules		**9**	**9**	**9**	**9**
Mounting plate		**03043** + 2 x **LV431064** (raiser)	**03043** + 2 x **LV431064** (raiser)	**03043**	**03043**
Front plates [Nb. of vertical modules]	cut-out	**03235** [5]	**03235** [5]	**03247** [5]	**03247** [5]
	upstream	**03802** [2]	**03802** [2]	**03802** [2]	**03802** [2]
	downstream	**03802** [2]	**03802** [2]	**03802** [2]	**03802** [2]
Mechanical interlocking		**31073**	**31073**	-	-
Complete source-changeover assembly		-	-	100 A: **31140** 160 A: **31144** 200 A: **31142** 250 A: **31146**	100 A: **31141** 160 A: **31145** 200 A: **31143** 250 A: **31147**
Upstream connection					
Long terminal shields		**LV429518**	**LV429518**	**LV429518**	**LV429518**
Cable-ties		**08866 + 08867**			
Coupling accessory		**LV429359**	**LV429359**	**LV429359**	**LV429359**

Downstream distribution

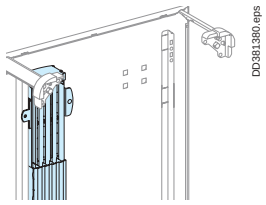
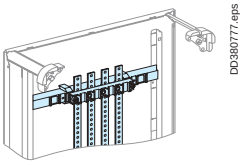
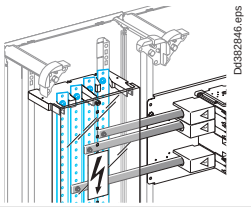
Long terminal shields	**LV429518**

Fupact INF horizontal mounting

Fusegear

Mounting	Horizontal				
					
Devices	**Extended rotary handle**				
	INF32	**INF40/63**		**INF100/160**	
	3P or 4P	3P	4P	3P	4P
Number of devices per row	1	1	1	1	1
Nb. of vertical modules	**3**	**5**	**5**	**7**	**7**
Mounting plates	**03113**	**03114**	**03114**	**03114**	**03114**
Front plates cut-out	**03313**	**03314**	**03314**	**03314** [5]	**03314** [5]
[Nb. of vertical modules] downstream	-	-	-	**03802** [2] (1)	**03802** [2] (1)
Upstream connection					
Long terminal shields	-	-	-	3 x **LV480445**	4 x **LV480445**

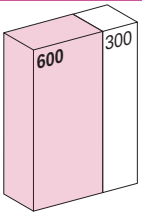
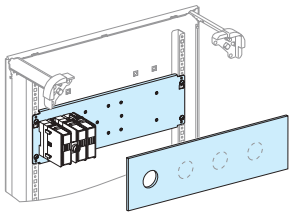
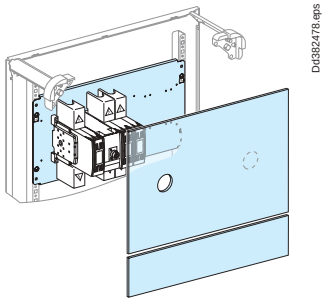
(1) *Not needed if direct distribution.*

Downstream distribution	Insulated Linergy BW busbars (2)	Rear Linergy BS busbars	Linergy BS multi-stage busbars
			
Type of connected devices	**INF100/160**	**All types**	**All types**
Busbars	*> page 84*	*> page 86*	*> pages 87, 88*
Power supply block	**04061**	-	-
Connection block	must be made	must be made	must be made
Long terminal shields	3P: 3 x **LV480445** 4P: 4 x **LV480445**	3P: 3 x **LV480445** 4P: 4 x **LV480445**	3P: 3 x **LV480445** 4P: 4 x **LV480445**

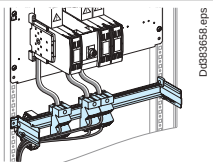
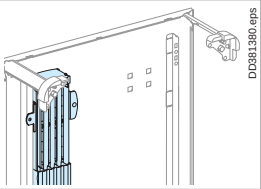
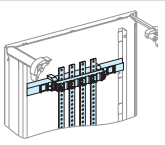
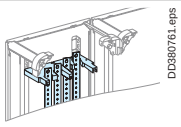
(2) *The mounting plate for INF Fupact does not leave a passage for the busbar; it can only be installed below the plate. The distribution system is installed under the functional unit.*

Fupact INF vertical mounting

Fusegear

Mounting	Vertical					
						
Devices	**Extended rotary handle**					
	INF32/40		**INF63**		**INF100/160**	
	3P	4P	3P	4P	3P	4P
Number of devices per row	4	3	3	2	2	2
Nb. of vertical modules	**3**	**3**	**5**	**5**	**7**	**7**
Mounting plates	**03113**	**03113**	**03114**	**03114**	**03114**	**03114**
Front plates [Nb. of vertical modules] cut-out	**03312**	**03313**	**03314**	**03315**	**03315** [5]	**03315** [5]
downstream	-	-	-	-	**03802** [2] (1)	**03802** [2] (1)
Upstream connection						
Long terminal shields	-	-	-	-	3 x **LV480445**	4 x **LV480445**

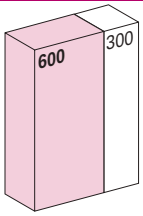
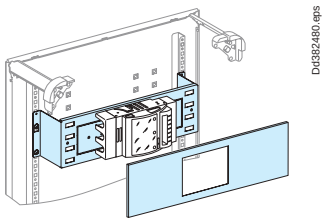
(1) Not needed if direct distribution.

Downstream distribution	Distribution block Linergy DX 1P, 160 A		Insulated Linergy BW busbars (2)		Rear Linergy BS busbars		Linergy BS multi-stage busbars	
								
Type of connected devices	**INF100/160**		**INF100/160**		**INF100/160**		**INF100/160**	
	3P	4P	3P	4P	3P	4P	3P	4P
Distribution block / busbars	3 x **04031** + **03002** *> page 91*	4 x **04031** + **03002** *> page 91*	*> page 84*		*> page 86*		*> pages 87, 88*	
Power supply block universel	-		**04061**		-		-	
Connection block	must be made		must be made		must be made		must be made	
Long terminal shields	3 x **LV480445**	4 x **LV480445**	3 x **LV480445**	4 x **LV480445**	3 x **LV480445**	4 x **LV480445**	3 x **LV480445**	4 x **LV480445**

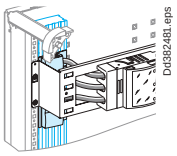
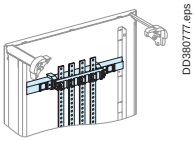
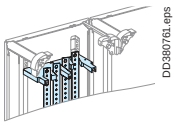
(2) The mounting plate for INF Fupact does not leave a passage for the busbar; it can only be installed below the plate. The distribution system is installed under the functional unit.

Fupact ISFT160/250 horizontal mounting

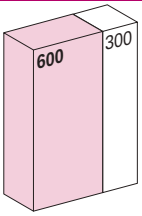
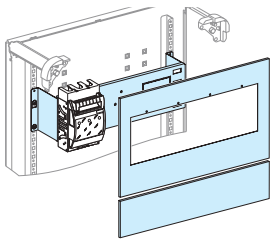
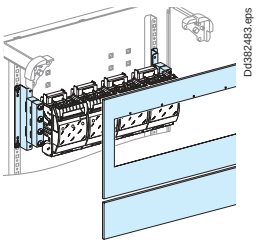
Fusegear

Mounting		Horizontal	
			
Devices		**On mounting plate**	
		ISFT160	**ISFT250**
Number of devices per row		1	1
Nb. of vertical modules		**6**	**6**
Mounting plates		**03121**	**03124**
Front plates [Nb. of vertical modules]	cut-out	**03326** [3]	**03328** [5]
	upstream	**03801** [1]	-
	downstream	**03802** [2] (1)	**03801** [1]
Upstream connection			
Long terminal shields		**49869**	**49872**

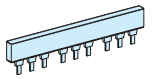
(1) *Not needed if direct distribution.*

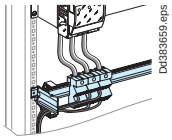
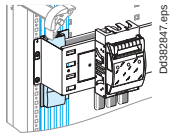
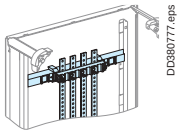
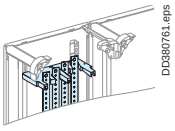
Downstream distribution	Insulated Linergy BW busbars		Rear Linergy BS busbars		Linergy BS multi-stage busbars	
						
Type of connected devices	**ISFT160**	**ISFT250**	**ISFT160**	**ISFT250**	**ISFT160**	**ISFT250**
Busbars	*> page 84*		*> page 86*		*> pages 87, 88*	
Universal power supply block	**04061**		-		-	
Connection block	must be made		must be made		must be made	
Long terminal shields	**49869**	**49872**	**49869**	**49872**	**49869**	**49872**

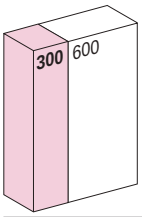
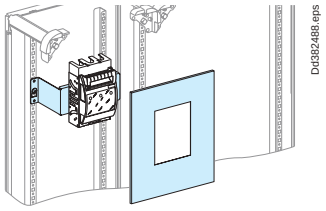
Fupact ISFT100/100N, ISFT160/250 vertical mounting

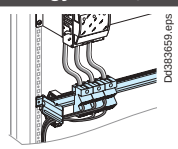
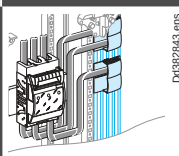
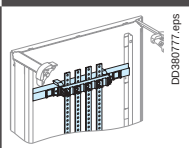
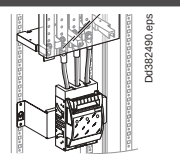
Mounting	Vertical				
					
Devices	**On mounting plate**			**On busbars**	
	ISFT100	**ISFT100N**	**ISFT160**	**ISFT100N**	**ISFT160**
Number of devices per row	5	8	4	6	4
Nb. of vertical modules	**7**	**8**	**8**	**8**	**8**
Mounting plates	**03120**	**03126**	**03121**	**03122**	**03122**
Front plates [Nb. of vertical modules] cut-out	**03320** [6]	**03325** [8]	**03321** [6]	**03325** [8]	**03321** [6]
upstream	-	-	-	-	-
downstream	**03801** [1]	-	**03802** [2] (1)	-	**03802** [2] (1)
Upstream connection					
Long terminal shields	-	**LV480756**	**49869**	**LV480756**	**49869**

(1) Not needed if direct distribution.

Upstream connection	Comb busbar		
			
Connected devices **Type**	**ISFT100**		
Number	**2**	**3**	**4**
Comb busbat	**49861**	**49862**	**49863**
Coupler to connect 2 busbars	**49890**		
Tooth cover	**49864**		
Set of 3 connectors	**49865** (25 to 95 mm²)		
	49860 (3 x 10 mm²)		

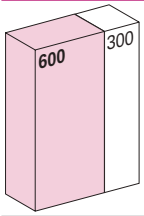
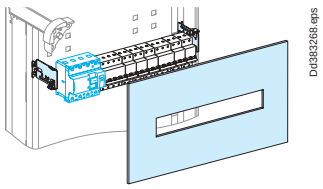
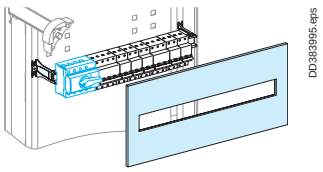
Downstream distribution	Distribution block Linergy DX 1 P, 160 A		Insulated Linergy BW busbars		Rear Linergy BS busbars		Linergy BS multi-stage busbars	
								
Type of connected devices	**ISFT100N**	**ISFT160**	**ISFT100N**	**ISFT160**	**ISFT100N**	**ISFT160**	**ISFT100N**	**ISFT160**
Connectors / distribution block / busbars	3 x **04031** + **03002** *> page 91*		*> page 84*		*> page 86*		*> pages 87, 88*	
Universal power supply block	-		**04061**		-		-	
Connection block	must be made		must be made		must be made		must be made	
Long terminal shields	**LV480756**	**49869**	**LV480756**	**49869**	**LV480756**	**49869**	**LV480756**	**49869**

Mounting	Vertical fixed	
		
Devices	**On mounting plate**	
	ISFT160	**ISFT250**
Number of devices per row	1	1
Nb. of vertical modules	**6**	**9**
Mounting plates	**03123**	**03125**
Cut-out front plate	**03327**	**03329**
Upstream connection		
Long terminal shields	**49869**	**49872**

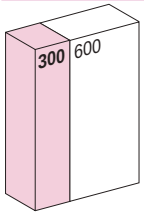
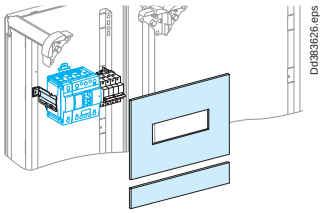
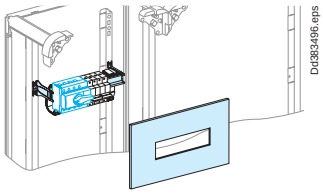
Downstream distribution	Distribution block Linergy DX 1 P, 160 A		Insulated Linergy BW busbars		Rear Linergy BS busbars		Linergy BS busbars in duct	
								
Type of connected devices	**ISFT160**		**ISFT160**	**ISFT250**	**ISFT160**	**ISFT250**	**ISFT160**	**ISFT250**
Distribution block / busbars	3 x **04031** + **03011** *> page 91*		*> page 84*		*> page 86*		*> page 87*	
Power supply block universel	-		**04061**		-		-	
Connection block	must be made		must be made		must be made		must be made	
Long terminal shields	**49869**		**49869**	**49872**	**49869**	**49872**	**49869**	**49872**

Modular devices
80/160 A switchboard incomer

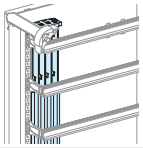
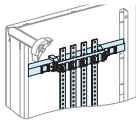
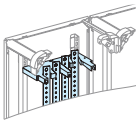
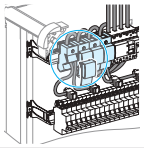
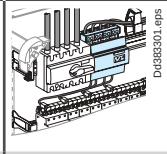
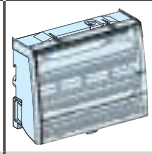
Modular devices

Mounting	Circuit breaker		Switch-disconnector	
				
Devices	**NG160, NG160NA Vigi NG160**	**NG125, NG125NA,Vigi NG125, C120, Vigi C120, iC120, Vigi iC120**	**INS40/160**	**INS100/160 with long terminal shields**
Nb. of vertical modules	**5**	**5**	**4**	**5**
Rail (48 modules of 9 mm)	**03002** (adjustable) (1)	**03001**	**03001**	**03001**
Modular front plate	**03205**	**03205**	**03204**	**03205**
Blanking plates strip	**03220**		**03220**	
Blanking plates divisible (> page 163)	**03221**		**03221**	

*(1) Can be completed by a rail + raiser (cat. no. **04227**) to instal modular devices on.*

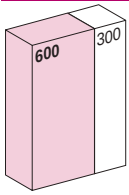
Mounting	Circuit breaker		Switch-disconnector	
				
Devices	**NG160, NG160NA**	**NG125, NG125NA,Vigi NG125, C120, Vigi C120, iC120, Vigi iC120**	**INS40/160**	**INS100/160 with long terminal shields**
Nb. of vertical modules	**5**	**4**	**4**	**5**
Rail (20 modules of 9 mm)	**03011** (adjustable) (2)	**03010**	**03010**	**03010**
Front plates [Nb. of vertical modules] modular	**03214** [4]	**03214**	**03214** [4]	**03214** [4]
Front plates [Nb. of vertical modules] downstream	**03811** [1]	-	-	**03811** [1]
Blanking plates strip	**03220**	**03220**	**03220**	**03220**
Blanking plates divisible (> page 163)	**03221**	**03221**	**03221**	**03221**

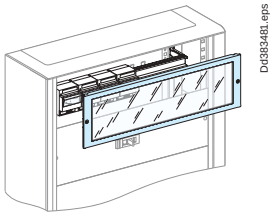
*(2) Can be completed by a rail + raiser (cat. no. **04227**) to install modular devices on.*

Downstream distribution	Insulated Linergy BW busbars	Rear Linergy BS busbars	Linergy BS Multi-stage busbars in duct	Distribution block Linergy DX 1P, 160 A	Distribution block Linergy DX 4P, 160 A		Linergy DS Multi-stage distribution
							
Type of connected devices	**All types**	**All types**	**All types**	**All types**	**All types**		**All types**
Distribution block / busbars	*> page 84*	*> page 86*	*> page 87*	**04031** *> page 91*	**04046** *> page 91*	**04045** *> page 91*	*> page 94*
Connections block	*> page 85*	-	must be made	**04149**	supplied with **04046**	**04047**	must be made

Other devices behind transparent front plates

Transparent front plates W = 600

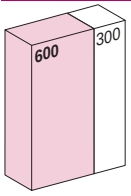


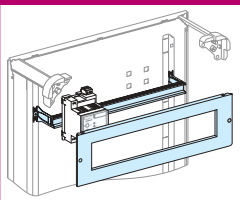


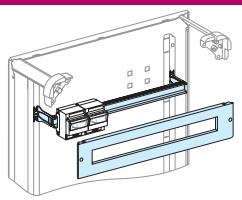
Nb. of modules	Height	
4	200 mm	**03342**
6	300 mm	**03343**
9	450 mm	**03344**
12	600 mm	**03345**

Other modular devices

Vigirex, Vigilohm and other modular devices



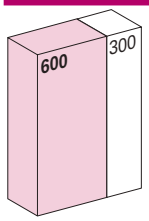
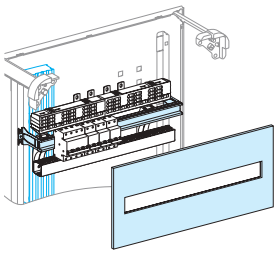
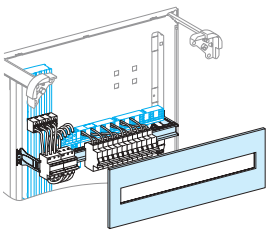
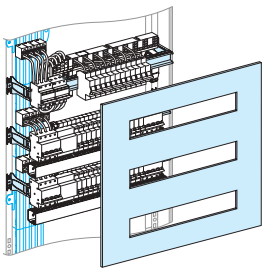
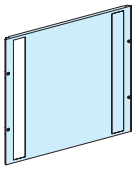




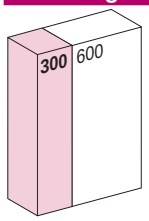
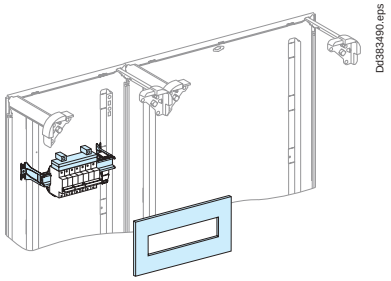
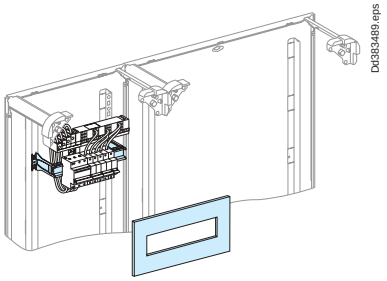
Devices	Vigirex (1), Vigilohm (2)	Other modular devices (ammeter, voltmeter, lamp, pushbuttons, etc.)
Nb. of vertical modules	**3**	**2**
Rail (48 modules of 9 mm)	**03001**	**03001**
Cut-out front plates	**03203**	**03202** (3)

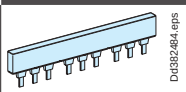
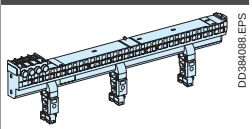
(1) RH10, RH21, RH99, RMH relay and RM12T Multiplexer.
(2) IM9, IM9-0L, IM20, IM20H.
(3) For installation at the top or bottom of the enclosure, use a 3-module modular front plate (03203).

Modular devices

Mounting	Distances between centres: 200 mm	Distances between centres: 150 mm		Vertical	
	 Dd383264.eps	 Dd383265.eps	 Dd383266.eps	 Dd383121.eps	
Devices	**All modular devices**	**Modular devices ⩽ 40 A**		**All modular devices**	
Rail lenght (modules of 9 mm)	48	48	48	48	64
Nb. of vertical modules	**4** (1)	**3**	**8**	**9**	**12**
Rail (48 modules of 9 mm)	**03001**	**03001**	**03001** x 3	**04226**	**04226**
Modular front plate	**03204**	**03203**	**03223**	**03228**	**03229**
Blanking plates strip	**03220**	**03220**	**03220**	**03220**	
> page 163 divisible	**03221**	**03221**	**03221**	**03221**	

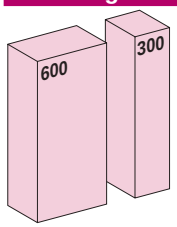
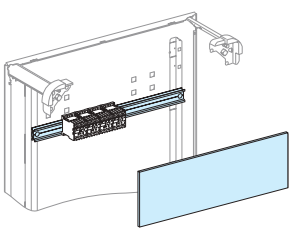
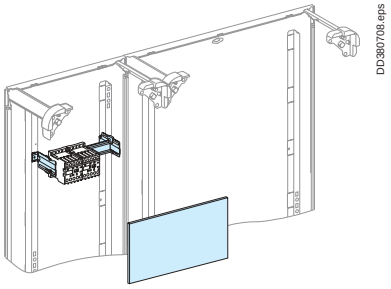
(1) *For a modular row with a 160 A (half row) and 200 A Linergy FM distribution block positioned directly below a non-modular mounting-plate (Compact, etc.), or at the top of a switchboard, add one additional module (i.e. 4+1) and a plain upstream front plate (03801).*

Mounting	Distances between centres: 200 mm	Distances between centres: 150 mm
	 Dd383490.eps	 Dd383489.eps
Devices	**All modular devices**	**Modular devices ⩽ 40 A**
Rail lenght (modules of 9 mm)	20	20
Nb. of vertical modules	**4**	**3**
Rail (20 modules of 9 mm)	**03010**	**03010**
Modular front plate	**03214**	**03213**
Blanking plates strip	**03220**	**03220**
> page 163 divisible	**03221**	**03221**

Downstream distribution	Linergy FH comb busbar	Distribution block Linergy FM 63 to 200 A row
	 Dd382484.eps	 DD384088.EPS
Type of connected devices	**According devices**	**All types**
Comb busbars / distribution blocks	> page 98	> page 96

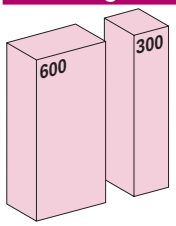
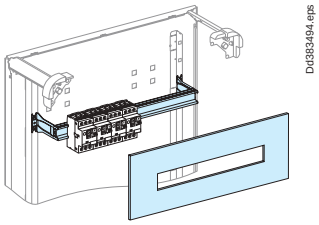
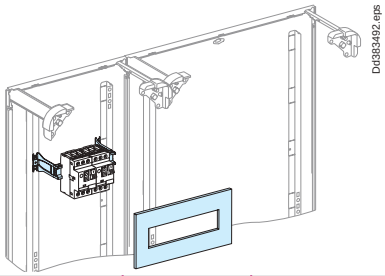
Industrial control devices

TeSys D, TeSys K contactors

Mounting	For 600 mm wide enclosures	For 300 mm wide duct
		

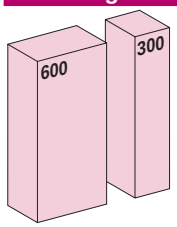
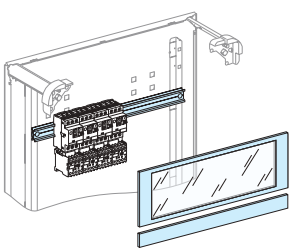
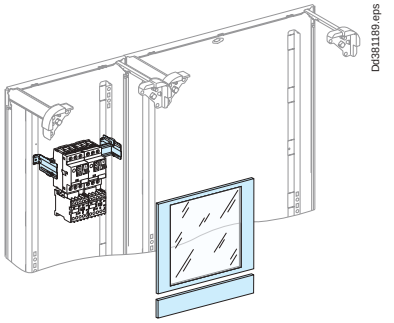
Devices	LC1D● or LC1K● (≤ 40 A)	LC1D● or LC1K● (≤ 40 A)
Useful length for rail	432 mm	180 mm
Nb. of vertical modules	**3**	**3**
Modular rail	**03004** (in rear)	**03011** (adjustable)
Plain front plate	**03803**	**03813**

TeSys GV2/GV3 circuit breakers

Mounting	For 600 mm wide enclosures	For 300 mm wide duct
		

Devices		TeSys GV2L, GV2P	TeSys GV2RT, GV2ME, GV2LE	TeSys GV3	TeSys GV2L, GV2P	TeSys GV2RT, GV2ME, GV2LE	TeSys GV3
Useful length for rail		432 mm		432 mm	180 mm		180 mm
Nb. of vertical modules		**3**	**3**	**5**	**3**	**3**	**5**
Modular rail		**03002**	**03001**	**03002**	**03011**	**03010**	**03011** (adjustable)
Front plates [Nb. of vertical modules]	cut-out	**03203** [3]	**03203** [3]	**03205** [5]	**03213** [3]	**03213** [3]	**03213** [3]
	upstream	-		-	-		**03811** [1]
	downstream	-		-	-		**03811** [1]
Blanking plates > page 163	strip	**03220**		**03220**	**03220**		**03220**
	divisible	**03221**		**03221**	**03221**		**03221**

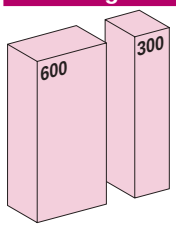
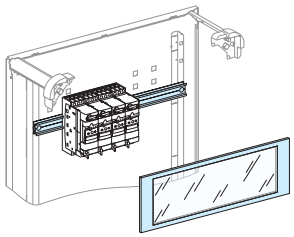
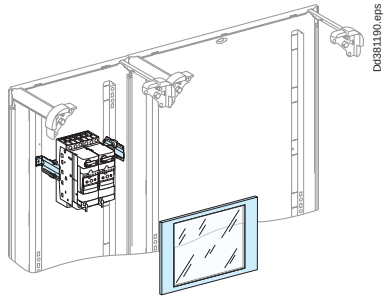
Combined TeSys GV2 circuit breaker + TeSys GV3P●●1 contactor

Mounting	For 600 mm wide enclosures	For 300 mm wide duct
		

Devices		GV2 + LC1D● or LC1K● (≤ 40 A)	GV3P●●1	GV2 + LC1D● or LC1K● (≤ 40 A)	GV3P●●1
Useful length for rail		432 mm	432 mm	180 mm	180 mm
Nb. of vertical modules		**5**	**7**	**5**	**7**
Modular rail		**03004** (in rear)	**03004**	**03011** (adjustable)	**03011**
Front plates [Nb. of vertical modules]	transparent	**03342** [4]	**03343** [6]	**03352** [4]	**03353** [6]
	plain downstream	**03801** [1]	**03801** [1]	**03811** [1]	**03811** [1]

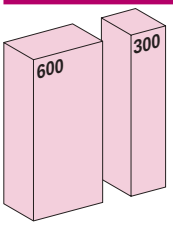
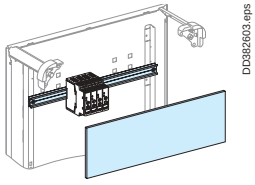
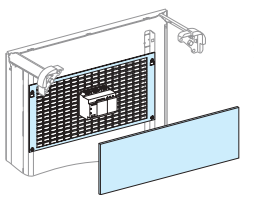
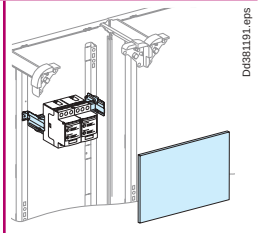
Industrial control devices

Tesys U starter-controler

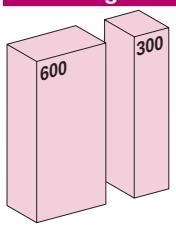
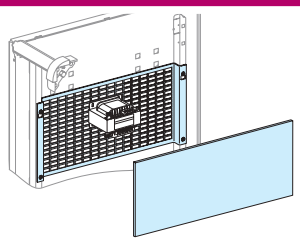
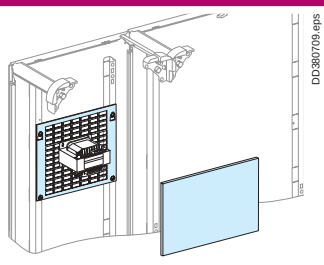
Mounting	For 600 mm wide enclosures		For 300 mm wide duct	
				
Devices	**TeSys U**	**TeSys U (1)**	**TeSys U**	**TeSys U (1)**
Useful length for rail	432 mm	432 mm	180 mm	180 mm
Nb. of vertical modules	**5**	**4**	**5**	**4**
Rail	**03004** (in rear)	**03004** (in rear)	**03011** (adjustable)	**03011** (adjustable)
Front plates transparent	**03342** [4] (2)	**03342** [4] (3)	**03352** [4] (2)	**03352** [4] (3)
[Nb. of vertical modules] plain	**03801** [1]	-	**03811** [1]	-

(1) *TeSys U without communication module, neither auxiliary contact, neither inverter module.*
(2) *If the communication module is installed, the transparent front plate is mandatory. If not, the 2 front plates can be replaced by one plain front plate (cat.no 03805 in wall-mounted or floor-standing enclosure, 03815 in duct).*
(3) *Or plain front plate (cat.no 03804 in wall-mounted or floor-standing enclosure, 03814 in duct).*

Soft starters Altistart 01

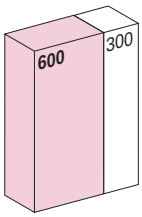
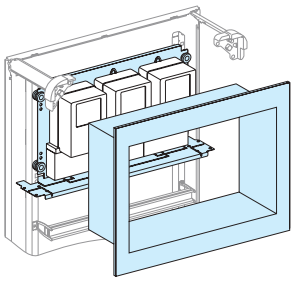
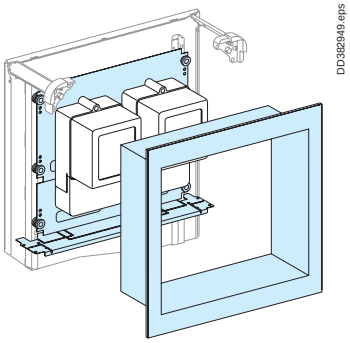
Mounting	For 600 mm wide enclosures					For 300 mm wide in duct
						
Devices	**On rail**				**On recessed slotted mounting plate**	**On rail**
	ATS01N103FT ATS01N106FT	**ATS01N109FT ATS01N112FT ATS01N206 to 212**	**ATS01N222 to 232**	**ATS01N230LY ATS01N244LY ATS01N244Q**	**ATS01N272LY, ATS01N285LY ATS01N272Q, ATS01N285Q**	**ATS01N103FT ATS01N106FT**
Number of devices per row	19	9	9	2	2	19
Useful length	432 mm	432 mm	432 mm	432 mm	420 mm	180 mm
Nb. of vertical modules	**4**	**5**	**6**	**5**	**6**	**4**
Rail	**03004** (in rear)	**03003**	**03003**	**03003**	-	**03011** (adjustable)
Slotted plate	**-**	**-**	**-**	**-**	**03172**	**-**
Plain front plate	**03804**	**03805**	**03806**	**03805**	**03806**	**03814**

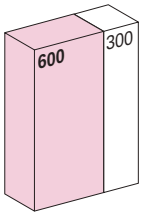
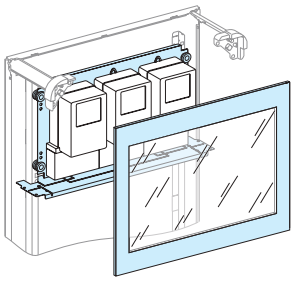
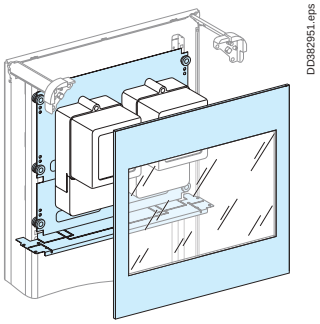
Supply and LV/LV Phaseo transformer

Mounting	For 600 mm wide enclosures	For 300 mm wide in duct
		
Devices	**On recessed slotted mounting plate ABL6TS/TD, ABL6-RF**	**On slotted plate ABL6TS/TD, ABL6-RF**
Useful length for mounting plate	420 mm	172 mm
Nb. of vertical modules	**4**	**4**
Slotted plates	**03171**	**03175**
Plain front plate	**03804**	**03814**

Kilowatt-hour meters Class II

Other devices

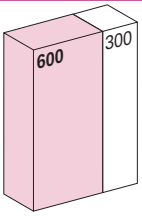
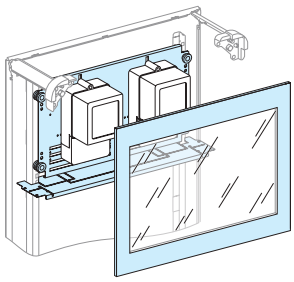
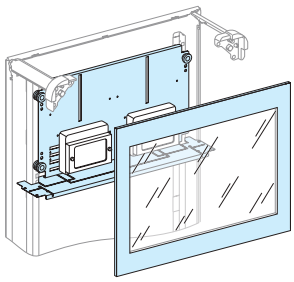
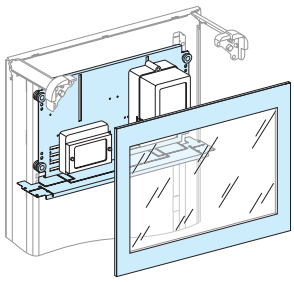
Mounting	Accessible (1)	
		
Devices	**Single-phase (Ph + N)**	**3-phase (3 Ph + N)**
Number of devices per row	3	2
Nb. of vertical modules	**6**	**9**
Mounting plates	**03157**	**03152**
Metering front plate	**03155**	**03158**
Horizontal partitioning	**04331**	**04331**
Insulating plate	**03154**	**03154**
Accessories	M5 spacers for mounting plate > page 70	

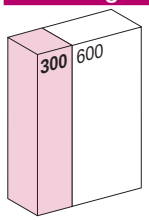
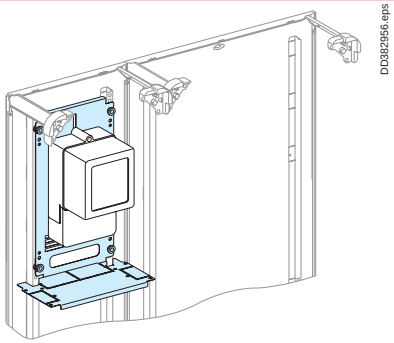
Mounting	Behind front plate (1)	
		
Devices	**Single-phase (Ph + N)**	**3-phase (3 Ph + N)**
Number of devices per row	3	2
Nb. of vertical modules	**6**	**9**
Mounting plates	**03157**	**03152**
Front plates at your choice — transparent	**03343**	**03344**
Front plates at your choice — plain	**03806**	**03807**
Horizontal partitioning	**04331**	**04331**
Insulating plates	**03154**	**03154**
Accessories	M5 spacers for mounting plate > page 70	

(1) *Order one additional horizontal partition in case of installation other than at the top of enclosure.*
Note: *meters can be installed directly on mounting plate equipped with 6 mm² earthing braid (cat.no 08910) and combined with partitioning or front plates.*

Kilowatt-hour meters

Other devices

Mounting	Behind front plate (1)		
			
Devices	**3-phase kilowatt-hour meters (3 Ph + N)**	**Connection blocks**	**3-phase kilowatt-hour meters (3 Ph + N) + connection block**
Number of devices per row	2	2	1+1
Nb. of vertical modules	**6**	**6**	**6**
Mounting plate	**03160**	**03160**	**03160**
Front plates at your choice — transparent	**03343**	**03343**	**03343**
Front plates at your choice — plain	**03806**	**03806**	**03806**
Horizontal partitioning	**04331**	**04331**	**04331**
Earthing braid (2)	**08910**	**08910**	**08910**
Accessories	M5 spacers for mounting plate *> page 70*		

Mounting	Behind front plate (1)
	
Devices	**3-phase (3 Ph + N)**
Number of devices per row	1
Nb. of vertical modules	**9**
Mounting plate	**03156**
Front plates at your choice — transparent	**03354**
Front plates at your choice — plain	**03817**
Horizontal partitioning	**04332**
Earthing braid (2)	**08910**
Accessories	M5 spacers for mounting plate *> page 70*

(1) *Order one additional horizontal partition in case of installation other than at the top of enclosure.*

(2) *Meters can be installed directly on mounting plate equipped with 6 mm² earthing braid (cat.no 08910) and combined with partitioning or front plates.*

Human-switchboard interface

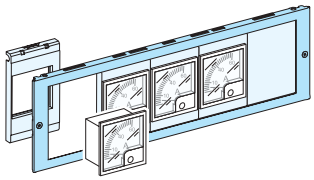
Other devices

2 types of device mounting 72 x 72 and 96 x 96

1

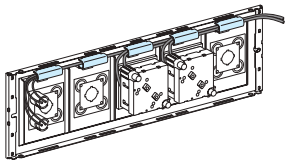
> On an interface with plastic mounting plates clipped onto the metal front plate with cut-outs

Dd381705.eps



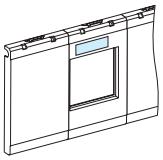
■ The interface is made up of a metal front plate and plastic mounting plates that clip onto the front plate.
■ The devices are attached in the cut-outs of the plastic mounting plates and insulated from the front plate.

Dd381687.eps



■ A system at the rear of the mounting plates guides the wires.

Dd381688.eps

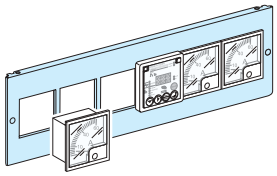


■ Each mounting plate can receive an adhesive label.
■ Plain mounting plates are available to blank off any unused locations.

2

> Directly on a metal front plate with cut-outs

Dd381689.eps



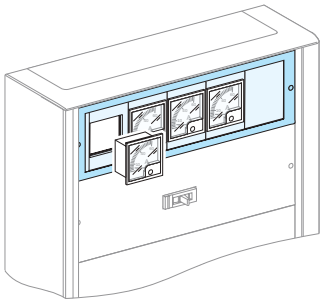
■ Devices are attached directly to the metal front plate.
■ Blanking plates are available to blank off any unused locations.

3 mounting types in Prisma G IP30

1

> In the device zone of wall-mounted and floor-standing enclosures

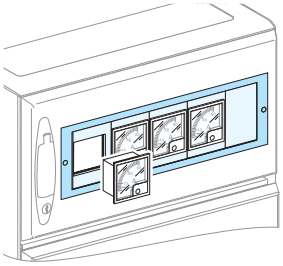
Dd381685.eps



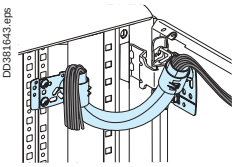
2

> On a partial door with cut-outs in wall-mounted and floor-standing enclosures

Dd382574.eps



DD381643.eps

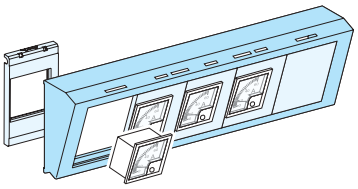


■ With flexible trunking to protect and guide wiring to door (04235).

3

> On a plain door with cut-outs, on an inclined visor by 30°

Dd382636.eps



■ With cut-out plastic mounting plate directly clipped on the visor.
■ Supplied with a drilling diagram for mounting on a plain door.

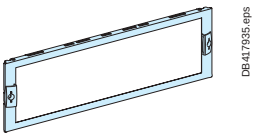
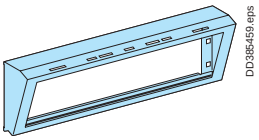
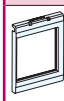
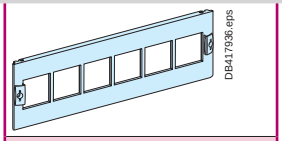
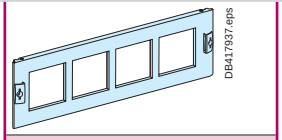
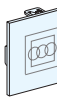
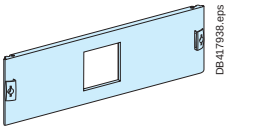
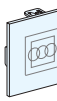
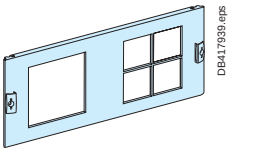
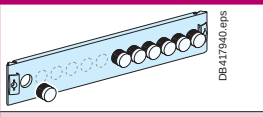
Possible installation

Catalogue numbers	03904	03928	03910	03911	03913	03912	03914
Prisma P: CSP (08564, 08566)	■	■	■	■	■	■	■
Prisma P: L300/L400 cut-out (08593, 08594)	■	■	■	■	■	-	-

Note: *device mounting on door: earthing braid (ref. 08910) or earthing wire (ref. 08911).*

Other devices

Human-switchboard interface
Devices 72 x 72 and 96 x 96
Devices 144 x 144
Lamps and pushbuttons Ø22

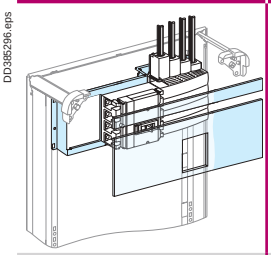
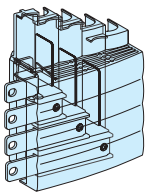
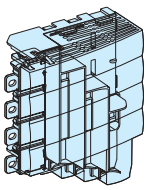
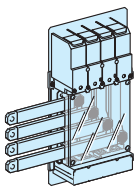
No. and type of devices per row	Metal front plate with cut-outs	Nb. of vertical modules	Plastic mounting plates cut-out	Blanking plate or devices support
Mounting on an interface with plastic plates				
5 x 72 x 72 Vigirex [1] and other devices 72 x 72	 DB417935.eps	3	 DD385465.eps **03902**	 DD385466.eps **03900** To blank-off or install: - from 1 to 4 buttons ø 16 or 22 mm - 1 device, 45 x 45
4 x 96 x 96 Power Meter [2] and other devices 96 x 96	**03904**		 DD385467.eps **03903**	 DD385468.eps **03901** To blank-off or install: - from 1 to 4 buttons ø 16 or 22 mm - 1 device, 45 x 45 - 1 device, 72 x 72
Mounting on an inclined visor by 30° with plastic mounting plates				
5 x 72 x 72 Vigirex [1] and other devices 72 x 72	 DD385459.eps	3	 DD385465.eps **03902**	 DD385466.eps **03900** To blank-off or install: - from 1 to 4 buttons ø 16 or 22 mm - 1 device, 45 x 45
4 x 96 x 96 Power Meter [2] and other devices 96 x 96	**03928** [3]		 DD385467.eps **03903**	 DD385468.eps **03901** To blank-off or install: - from 1 to 4 buttons ø 16 or 22 mm - 1 device, 45 x 45 - 1 device, 72 x 72
Direct mounting on a metal front plate with cut-outs				
72 x 72 devices				
6 x 72 x 72 Vigirex [1] and other devices 72 x 72	 DB417936.eps **03910**	3	Direct mounting **-**	 DD385469.eps **03907** To blank-off or install: - from 1 or 2 buttons ø 22 mm - 1 device, 45 x 45
96 x 96 devices				
6 x 96 x 96 Power Meter [2] and other devices 96 x 96	 DB417937.eps **03911**	3	Direct mounting **-**	 DD385470.eps **03908** To blank-off or install: - from 1 or 2 buttons ø 22 mm - 1 device, 45 x 45 - 1 device, 72 x 72
1 x 96 x 96 Power Meter [2] and other devices 96 x 96	 DB417938.eps **03913**	3	Direct mounting **-**	 DD385470.eps **03908** To blank-off or install: - from 1 or 2 buttons ø 22 mm - 1 device, 45 x 45 - 1 device, 72 x 72
144 x 144 devices + 72 x 72 devices				
1 x 144 x 144 + **4** x 72 x 72 144 x 144 device + 72 x 72 devices	 DB417939.eps **03912**	4	Direct mounting **-**	 DD385469.eps **03907** To blank-off or install: - from 1 or 2 buttons ø 22 mm - 1 device, 45 x 45
Pushbuttons and lamps Ø 22 mm				
12 x ø 22 mm	 DB417940.eps **03914**	2	Direct mounting **-**	**-**

(1) RHU, RH10P, RH21P, RH99 relay, RM12T Multiplexer.
(2) PM200 / PM700 / PM800, FDM121.
(3) The visor (cat. no. 03928) can be installed on a plain door with cut-outs.

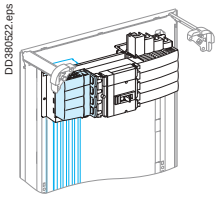
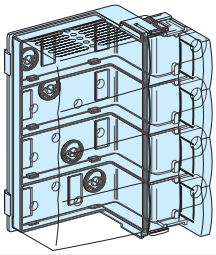
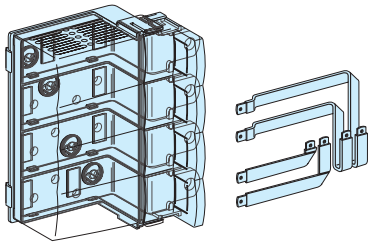
***Note:** To maintain the IP55 degree of protection, the measurement devices must be installed behind a transparent door. If they are installed on a plain door, use the corresponding mounting plates.*

Connections blocks
Power supply blocks
Horizontal mounting

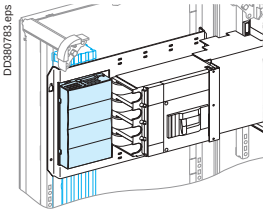
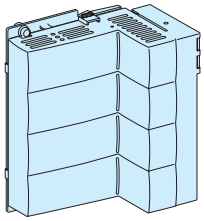
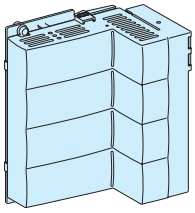
Incoming connection blocks
Devices ≤ 630 A

Description	Incoming connection block 250 A via top		Incoming connection block 250 A via bottom		Connection block 630 A (top/bottom)
	 DD385296.eps	 DD385234.eps	 DD385235.eps		 DD385236.eps
Devices	**Compact NSX100/250**	**Compact INS250, INV100/250**	**Compact NSX100/250**	**Compact INS250, INV100/250**	**Compact NSX400/630**
Mounting	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal, in duct
Catalogue number	**04066**	**04066**	**04067**	**04067**	**04076**
Configuration	*> page 36*	*> page 46*	*> page 36*	*> page 46*	*> page 38*
Characteristics	Optimize the dimension of the enclosure and avoid the contraints of cables bending radius.				

Power supply block with connections between Compact device and Linergy BW isolated busbar
Devices ≤ 250 A

Description	Power supply block 250 A		Power supply block 250 A + prefabricated connections 250 A
	 DD380522.eps	 DD385237.eps	 DD385240.eps
Devices	**Compact NSX100/250**	**Compact INS250, INV100/250**	**Compact INS250, INV100/250**
Mounting	Horizontal	Horizontal	Vertical
Catalogue number	**04060**	**04060**	**04060** + connection **04062**
Configuration	*> page 36*	*> page 46*	*> page 47*

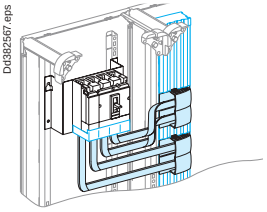
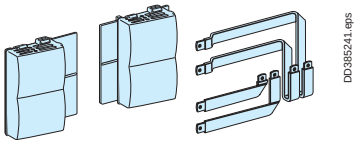
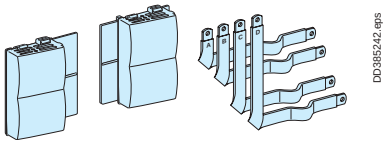
Power supply block with connections between Compact device and Linergy BW isolated busbar
Devices 400-630 A

Description	Power supply block 400 A		Power supply block 630 A	
	 DD380783.eps	 DD385238.eps	 DD385239.eps	
Devices	**Compact NSX400**	**Compact INS-INV320/400**	**Compact NSX630**	**Compact INS-INV500/630**
Mounting	Horizontal	Horizontal	Horizontal	Horizontal
Catalogue number	**04070**	**04070**	**04071**	**04071**
Configuration	*> page 38*	*> page 46*	*> page 38*	*> page 46*

Connections blocks
Power supply blocks
Vertical mounting

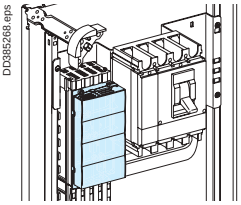
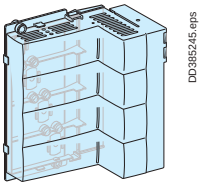
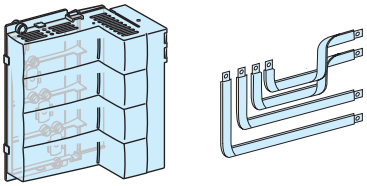
Universal power supply block + prefabricated connections between Compact device and Linergy BW isolated busbar

Devices 100-250 A

Description	Universal power supply 250 A + prefabricated connections 250 A		Universal power supply 250 A + prefabricated connections 250 A	
				
Devices	**Compact NSX100/250**		**Compact NSX100/250**	**Compact INS250, INV100/250**
Mounting	Vertical		Vertical, in duct	Vertical, in duct
Catalogue number	**04061** + connection **04062**		**04061** + connection **04064**	**04061** + connection **04064**
Configuration	*> page 37*		*> page 37*	*> page 47*

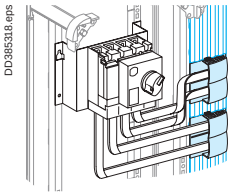
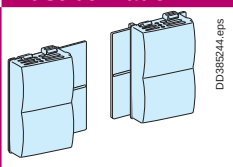
Universal power supply block + prefabricated connections between Compact device and Linergy BW isolated busbar

Devices 400-630 A

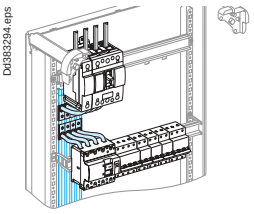
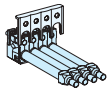
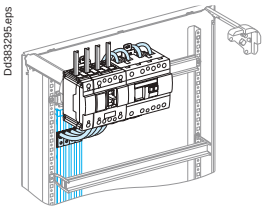
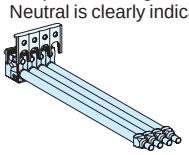
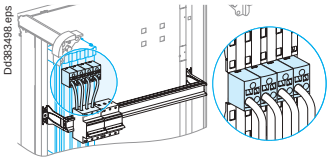
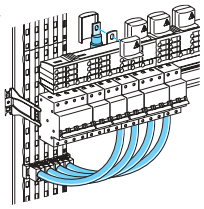
Description	Universal power supply 400/630 A + connection must be made		Universal power supply 400/630 A + prefabricated connections 400/630 A	
				
Devices	**Compact NSX400/630**	**Compact INS-INV320/630**	**Compact NSX400/630**	**Compact INS-INV320/630**
Mounting	Vertical	Vertical	Vertical, in duct	Vertical, in duct
Catalogue number	**04074** + connection must be made	**04074** + connection must be made	**04074** + connection **04073**	**04074** + connection **04073**
Configuration	*> page 39*	*> page 47*	*> page 39*	*> page 47*

Universal power supply block, connections to be made between Compact device and Linergy BW isolated busbar

Devices ⩽ 250 A

Description	Universal power supply 250 A + connection must be made	
		
Devices	**Compact NSX100/250 (direct rotary handle, motor mechanism module)**	
Mounting	Horizontal	Vertical
Catalogue number	**04061** + connection must be made	**04061** + connection must be made
Configuration	*> page 36*	*> page 37*

Connections Linergy BW isolated busbar and device or Linergy FM

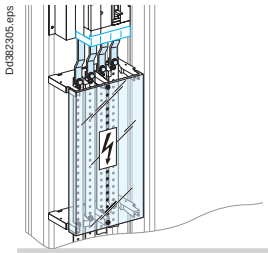
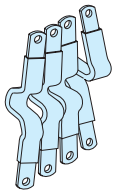
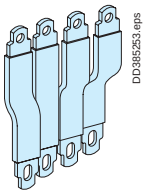
	Descriptif	Allows connection of	Cat. no.
Dd3811379.eps  x 4	**Set of 4 125 A connections, L = 230 mm** 35 mm² ferrule + 45° angle lug (insulated covers IPxxB, cat. No 04150)	NG125, IN40/125S with tunnel terminals cat.no. **28947** 3P or **28948** 4P	**04145** **+ 04150**
	Set of 4 160 A connections, L = 230 mm 45 mm² ferrule + 45° angle lug (insulated covers IPxxB, cat. No 04150)	INS160, NG125, NG160	**04146** **+ 04150**
Dd3813294.eps 	**One-piece connection 3/4P - 160 A, L = 165 mm** ■ Fast connection to Linergy BW busbars ■ Equipped with male fittings one end for tunnel terminals ■ Respects the degree of protection IPxxB ■ Neutral is clearly indicated (blue) 	NG160 (located on left-hand side), NG125, INS160, C120, iC120	**04147**
Dd3813295.eps 	**One-piece connection 3/4P - 160 A, L = 440 mm** ■ Fast connection to Linergy BW busbars ■ Equipped with male fittings one end for tunnel terminals ■ Respects the degree of protection IPxxB ■ Neutral is clearly indicated (blue) 	NG160 (located on left-hand side), Vigi NG160 (located in the middle), NG125, INS160, C120, iC120	**04148**
Dd3813498.eps 	**12 tap-off blocks** for 1 cable of 6 mm² (32 A max.) and 1 of 10 mm² (40 A max.) Respects the degree of protection IPxxB. In: 55 A max., Ui: 750 V	All types of device, equipped with tunnel terminals, Linergy FM 160/200 A	**04151**
	12 tap-off blocks for 1 cable of 16 mm² (50 A max.) Respects the degree of protection IPxxB. In: 55 A max., Ui: 750 V	All types of device, equipped with tunnel terminals, Linergy FM 63/80/160/200 A	**04152**
Dd3813472.eps 	**Set of four connections 4P - 200 A , L = from 230 to 330 mm** Supplied with mounting hardware **+ insulated covers**	Linergy FM 200 A	**04021** **+ 04150**

When mounting Schneider Electric prefabricated connections, short terminal shields can be used or not if the function is already integrated in prefabricated connections.

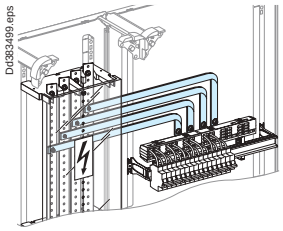
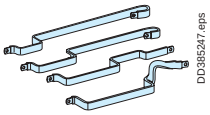
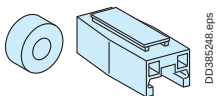
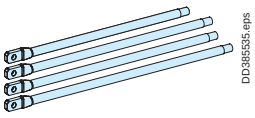
Note: *for some devices, it is recommended to use Schneider Electric prefabricated connections. If not, switchgears must be equipped with long terminal shields for personnel safety.*

Other prefabricated connections

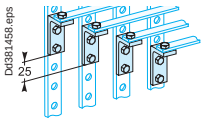
Devices/Linergy BS multi-stage busbars connections

	Linergy BS multi-stage lateral busbars, 250 A	Linergy BS multi-stage lateral busbars, 630 A
		
Devices	**Compact NSX-INS-INV**	
Mounting	Vertical, in duct	Vertical, in duct
Catalogue number	**04065**	**04075**
Configuration	*> page 47*	*> page 47*

Linergy BS and Linergy FM busbars connections ⩽ 200 A

	Linergy BS multi-stage busbars	Rear Linergy BS busbars	Devices
			
Devices			
Catalogue number	**04024**	**04029**	**04030**
Configuration	*> page 97*	*> page 97*	*> page 97*
Allows supply of a distribution block	Linergy FM device feeders 200 A	Linergy FM device feeders 200 A, Set of 4	Linergy FM device feeders 160 A

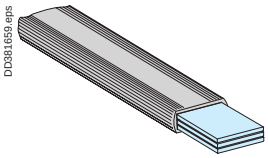
Connections between two sets of Linergy BS busbars

	Connection between 2 sets of Linergy BS busbars
	
Devices	**Set of 4 copper angle brackets - 250 A**
Catalogue number	**04190**
Allows connection of	Electrical connections between two sets of rear busbars

Choice of accessories depending on devices

Device to connect		Catalogue numbers
Fupact	INF100/160 vertical	Connection must be made + rail **03002**
	ISFT vertical	Connection must be made + rail **03002** or **03011**
INS	INS40/125/160	**04149**
NG	NG160	**04149**
C120, iC120		**04149**
Compact	NSX100/250 with or without Vigi horizontal	**04033** (3P) **04034** (4P)
	NSX100/250 with or without Vigi vertical	**04033** (3P) **04034** (4P) + rail **03002** or **03011**
	INS-INV250 horizontal	**04033** (3P) **04034** (4P)
	INS-INV250 vertical	**04033** (3P) **04034** (4P) + rail **03002** or **03011**
	INS-INV250 lateral handle vertical	**04033** (3P) **04034** (4P) + rail **03002** or **03011** + spacer **04037**

Insulated flexible bars



The insulated flexible bars are tested in a type-tested switchboard environment. Their design takes into account the switchboard architecture where they are often in close proximity to a protection device (circuit breaker or fuse) with significant heat losses.
The sizes for the flexible bars indicated below take into account the heat losses of Schneider Electric devices in a Prisma switchboard.

Characteristics

Length	1800 mm
Rated insulation voltage (Ui)	1000 V

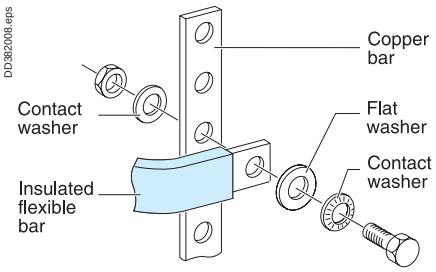
Connection between device busbar

The flexible bars are determined taking into account the connected device, whatever the internal temperature of the switchboard.
The bar sizes indicated below take into account the derating curves of devices.

Devices	Size (mm)	Catalogue numbers
NSX100	20 x 2	**04742**
NSX160/250	20 x 3 (1)	**04743**
NSX400	32 x 5	**04751**
NSX630	32 x 8	**04753**
INS125/160	20 x 2	**04742**
INS250	20 x 3	**04743**
INS400	32 x 5	**04751**
INS630	32 x 6	**04752**
200 A Linergy FM	20 x 3	**04743**
Fupact 250	24 x 5	**04746**
Fupact 400	32 x 5	**04751**
Fupact 630	32 x 8	**04753**
Easypact CVS100	20 x 2	**04742**
Easypact CVS160/250	20 x 3	**04743**
Easypact CVS400	32 x 5	**04751**
Easypact CVS630	32 x 8	**04753**

(1) *To connect a Compact NSX250 to Linergy BW busbars, use a 24 x 5 mm flexible bar (04746).*

Note: *the references 87646 (3P) and 87647 (4P) can be used up to 250 A, when binding of insulated flexible bars, to withstand Isc.*



Connection between busbars

Flexible bars are designed for connections between busbars taking into account the following characteristics:
- a maximum temperature of 60 °C inside the switchboard. This corresponds to the average temperature inside a switchboard for an ambient temperature of 35 °C
- the maximum withstand temperature for the insulating material is 125 °C.

Ie (1) max	Size (mm)	Catalogue numbers
200 A	20 x 2	**04742**
250 A	20 x 3	**04743**
400 A	24 x 5	**04746**
520 A	32 x 5	**04751**
580 A	32 x 6	**04752**
660 A	32 x 8	**04753**

(1) *Rated operational current.*

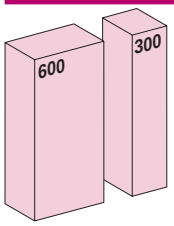
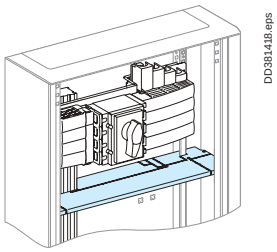
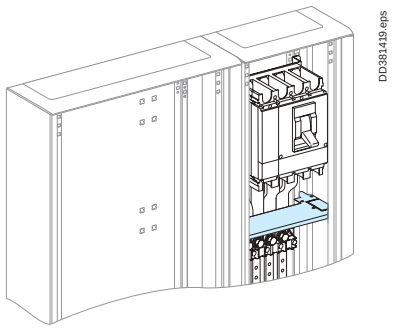
Designing connections

> page 179

Partitioning

Horizontal partitioning

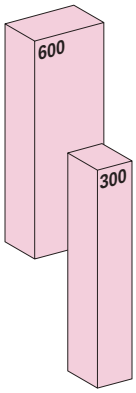
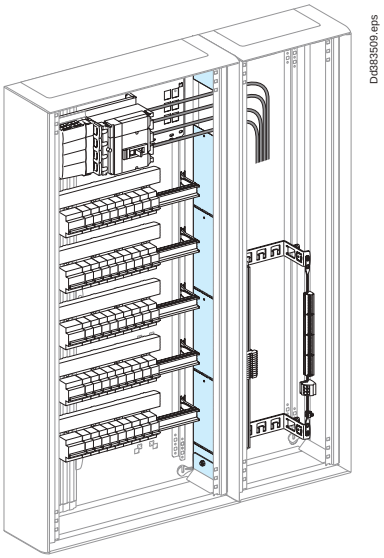
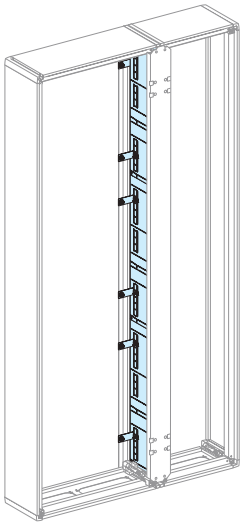
The metal partitions are used to:
- separate the functional units from one to another
- create a physical separation between devices and a terminal block, for example.

Used for	IP30 and IP55 enclosures W600	IP30 and IP55 ducts W300
	 	
Catalogue numbers	**04331**	**04332**
Characteristics	Metal. It is mounted directly on the functional uprights. Lateral and rear cut-outs are available for cable running or the installation of busbars at the rear of the switchboard.	

Vertical partitioning

The metal partition creates a physical separation between the device compartment and a wide duct.

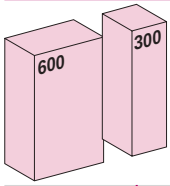
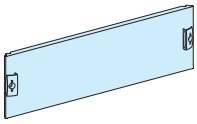
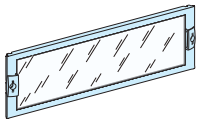
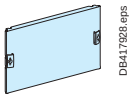
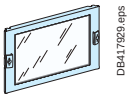
It is used to:
- separate the devices from busbars or a distribution block installed in the duct,
- set up a special zone for terminal blocks in the duct.

Used for	Wall-mounted, floor-standing enclosures and IP30 duct, W600	Wall-mounted enclosures and IP55 duct, W300
	 	
Cat. no.	**04330**	**08384**
Description	Can be used for partitioning up to 33-modules. It can be cut to length every 150 mm.	Metal. There are cut -outs for cable running. Quantity to order according to height.

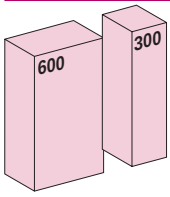
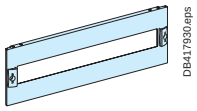
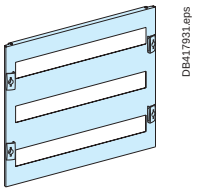
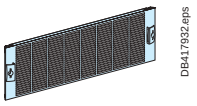
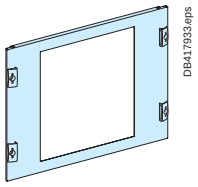
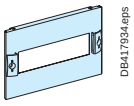
Nb. of vertical modules of 50 mm	7	11	15	19	23	27	33
Height (mm)	450	650	850	1050	1250	1450	1750
Quantity	1		2		3		

Front plates, rails, slotted mounting plates

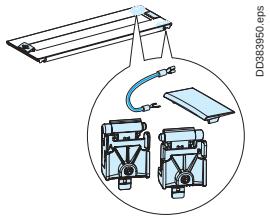
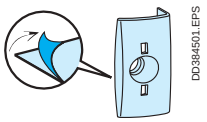
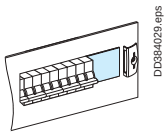
Plain and transparent front plates

Used for		Enclosure W600		Duct W300	
					
Nb. of vertical modules	**Height**	**Plain**	**Transparent**	**Plain**	**Transparent**
1	50 mm	**03801**	-	**03811**	-
2	100 mm	**03802**	-	**03812**	-
3	150 mm	**03803**	-	**03813**	-
4	200 mm	**03804**	**03342**	**03814**	**03352**
5	250 mm	**03805**	-	**03815**	-
6	300 mm	**03806**	**03343**	**03816**	**03353**
9	450 mm	**03807**	**03344**	**03817**	**03354**
12	600 mm	**03808**	**03345**	-	-

Other front plates

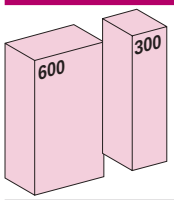
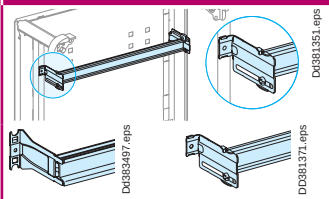
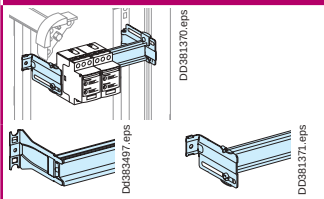
Used for		Enclosure W600				Duct W300
						
Nb. of vertical modules	**Height**	**1 row of modular devices**	**3 rows of modular devices**	**Ventilated**	**With cut-out for fan or filter** *> page 77*	**1 row of modular devices**
1	50 mm	**-**	**-**	**03891**	**-**	**-**
2	100 mm	**03202**	**-**	**-**	**-**	**-**
3	150 mm	**03203**	**-**	**03895**	**-**	**03213**
4	200 mm	**03204**	**-**		**-**	**03214**
5	250 mm	**03205**	**-**	**-**	**-**	**-**
7	350 mm	**-**	**-**	**-**	**03890**	**-**
8	400 mm	**-**	**03223**		**-**	**-**

Accessories for front plates

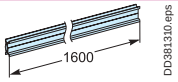
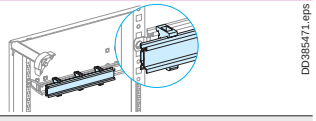
Used for	Front plate hinge kit	Self adhesive front plate grips	Front-plate locking handles	Blanking plates	
					
Catalogue numbers	**08585**	**01093**	**01094**	**03220**	**03221**
Characteristics	Set of 2 hinges	Set of 20 white RAL9001	Set of 10	■ Strip ■ H = 46 mm, L = 1 m	■ Divisible ■ Set of 4 ■ H = 46 mm, L = 90 mm

Front plates, rails, slotted mounting plates

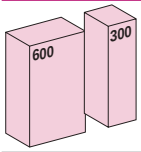
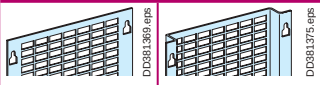
Rails

Used for	Enclosure W600				In duct W300	
						
	Fixed	**Adjustable**	**Rear**	**Recessed**	**Fixed**	**Adjustable**
Catalogue numbers	**03001**	**03002**	**03004**	**03003**	**03010**	**03011**
Useful length	432 mm	432 mm	432 mm	432 mm	180 mm	180 mm
9 mm pitch number	48	48	48	48	20	20
Useful depth behind front plate	50 mm	from 47 to 114 mm	128 mm	158 mm	50 mm	from 47 to 114 mm

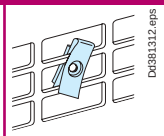
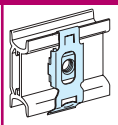
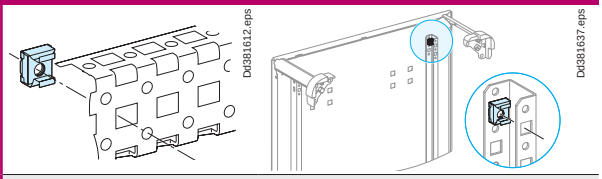
Adjustable rails

Rail to be cut W600		
		
Cat. no.	**04226**	**04227**
Characteristics	Set of 2 rails, useful length: 1600 mm with 4 holes, dia. 6.4 mm, 450 mm between centres	Rail and 4 modular raisers Useful length: 432 mm Raiser height: 33 mm

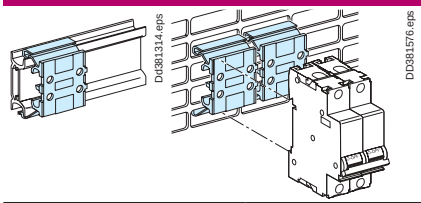
Slotted mounting plate

Used for	Enclosure W600				Duct W300			
								
	Flat	**Recessed**			**Flat**	**Recessed**		
Catalogue numbers	**03170**	**03171**	**03172**	**03173**	**03175**	**03176**	**03177**	**03178**
Nb. of vertical modules	4	4	6	9	4	4	6	9
Height	200 mm	200 mm	300 mm	450 mm	200 mm	200 mm	300 mm	450 mm
Useful width	440 mm	420 mm			172 mm	152 mm		
Useful depth behind front plate	140 mm	160 mm			140 mm	160 mm		

Clip-nuts

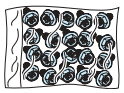
Clip-nuts			
			
M4	**03180**	**03164**	**-**
M5	**03181**	**03165**	**-**
M6	**03182**	**03166**	**03194**
Mounting on	Slotted mounting plate and also on cable-tie support (08876)	Rail	Functional uprights of IP30/55 enclosures
Characteristics	Set of 20 Mounting of various devices	Set of 20	Set of 20

Raiser for rails and slotted mounting plates

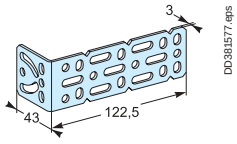
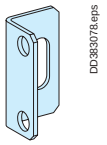
Raiser	
	
Catalogue number	**04224**
Characteristics	Set of 5 Height: 10 mm, length 27 mm Colour: RAL 9001, insulating material

Installation accessories

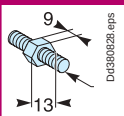
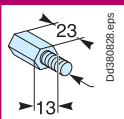
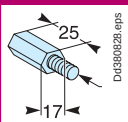
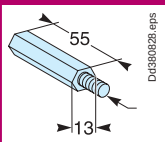
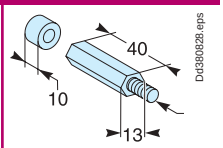
Self-tapping screws

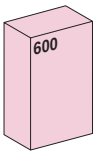
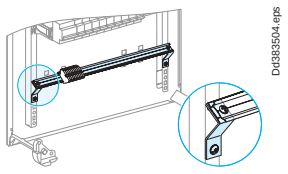
Self-tapping screws	
	
M5	**03183**
Characteristics	Set of 20 Mounting on functional uprights

Universal angle bracket

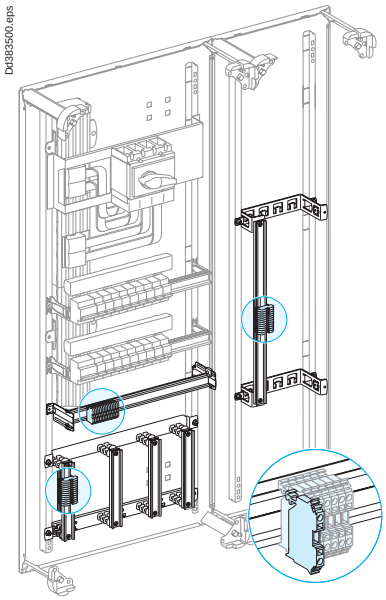
Universal angle bracket		
		
Catalogue numbers	**03581**	**03583**
Characteristics	Set of 2	Set of 6

Hexagonal spacers, 30° supports

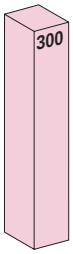
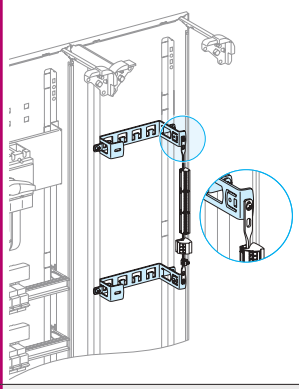
Hexagonal spacers					
					
M5	**03185**	**03186**	**-**	**03187**	**-**
M6	**03195**	**03196**	**03198**	**03197**	**-**
M8	**-**	**-**	**-**	**-**	**03199**
Characteristics	Height: 9 mm Set of 4	Height: 23 mm Set of 4	Height: 25 mm Set of 4	Height: 55 mm Set of 4	Height: 40 + 10 mm Set of 4

Used for	30° supports
	
Catalogue numbers	**03005**
Characteristics	Set of 2 supports

Installation accessories for terminal block and earth bar

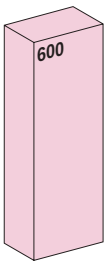
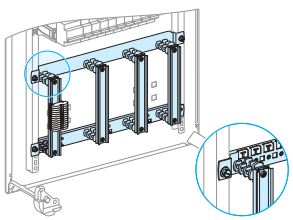


On mounting plate

Used for	On mounting plate for terminal block and Linergy TB earth bar
	
Catalogue number	**04220**
Characteristics	■ A mounting plate made up of two supports, is equipped with: □ a 1600 mm modular rail (04226) for terminal blocks □ Linergy TB earth bar > page 106 ■ The supports have cut-outs that can be used to easily tie down the connection wires.

Dedicated mounting plate, in device compartment

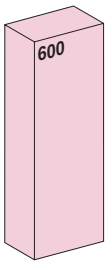
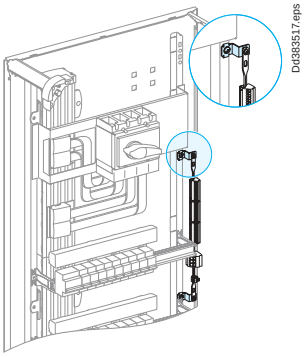
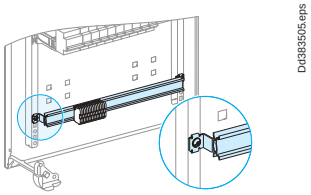
This mounting assembly is used to easily install and connect a large number of terminal blocks in a minimum amount of space. It is particularly useful when a duct is not warranted or cannot be installed.

Used for	In device compartment
	
Number of vertical modules	5 (250 mm)
Catalogue number	**04223**
Characteristics	■ Mounting brackets, fixed to the functional uprights at the top or bottom of the enclosure, is equipped with four 200 mm symetrical rails. They are installed vertically to facilitate cable running. ■ To facilitate mixing of different size terminal blocks and ensure convenient connections from the front or the side, the distance between rails and the depth of each rail can be adjusted. ■ The assembly has cut-outs that can be used to easily tie down the connection wires. ■ Linergy TB earth bars and Linergy TR terminal blocks layout, supplied separately, can be installed between the rows of terminal blocks to form different configurations, e.g.: □ four sets of terminal blocks □ 3 sets of terminal blocks + one or two Linergy TB earth bars (W = 290 mm). > page 106

Installation accessories for terminal block and earth bar

Installation on the side or in the width of the enclosure

This solution saves considerable space in the device zone and avoids the need for the 300 mm wide duct.

Fixing mode	2 fixing brackets for the earth bar on the functional uprights			Horizontally on brackets		
						
Catalogue numbers	**04206**	**04207**	**04208**	**04206**	**04207**	**04208**
Characteristics	H = 15 mm	H = 45 mm	H = 80 mm	H = 15 mm	H = 45 mm	H = 80 mm
	Set of 2 brackets			Set of 2 brackets		

Linergy TR terminal blocks

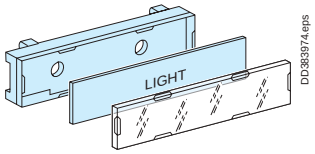
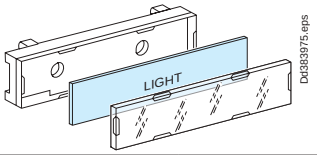
> page 104.

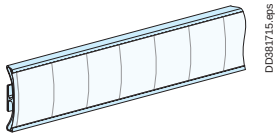
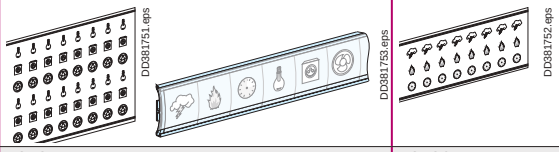
Linergy TB earth bars

> page 106.

Finishing parts
Labels

Identification labels

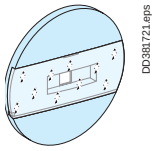
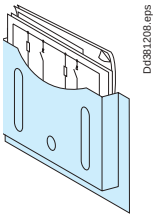
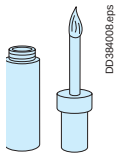
	Clip-on labels			Engraving plates		
						
Catalogue numbers	**08913**	**08915**	**08917**	**08914**	**08916**	**08918**
Dimensions (mm)	18 x 35	18 x 72	25 x 85	18 x 35	18 x 72	25 x 85
Characteristics	■ Set of 12 ■ The clip-on support is supplied with a paper label and a transparent cover. ■ It clips onto the front plate horizontally or vertically and can be screwed to any support (plain door, plain front plate, etc.).			■ Set of 12 ■ These plates simply replace the paper labels.		

	Adhesive labels				Symbol sheets	
						
Catalogue numbers	**08905**	**08906**	**08903**	**08904**	**13735**	**13736**
Dimensions (mm)	24 x 180	36 x 180	24 x 432	36 x 432		
Characteristics	■ Set of 12 ■ The adhesive label holders are supplied with a paper label and a transparent cover.				■ Set of 10 adhesive symbol sheets ■ Standard symbols: □ loads: sockets, lights, heating units, etc. □ rooms: bedroom, bathroom, etc.	■ Set of 10 adhesive symbol sheets ■ Special symbols: □ loads: lightning arrestor, gate, swimming pool, etc. □ rooms: technical room, computer room, etc.

Adhesive labels for mimic diagrams

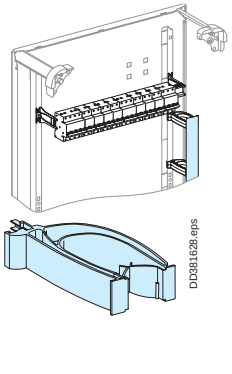
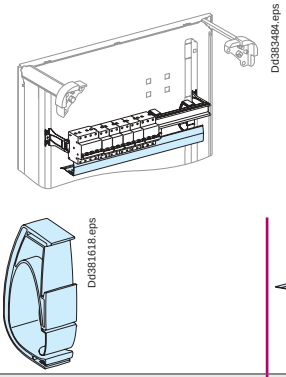
	Lines, 900 mm long (7 mm thick)	Outgoing arrows	Incoming arrows	Transformers	Earth symbols
	 x 10	 x 10	 x 10	 x 10	 x 10
Catalogue numbers	**01005**	**01006**	**01007**	**01008**	**01009**
Characteristics	Set of 10 Colour: black				

Accessories

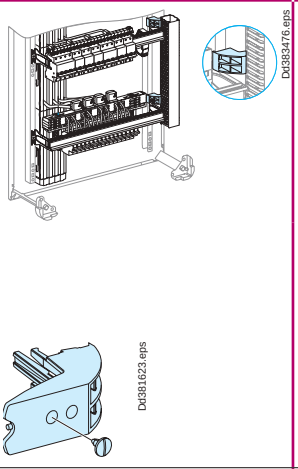
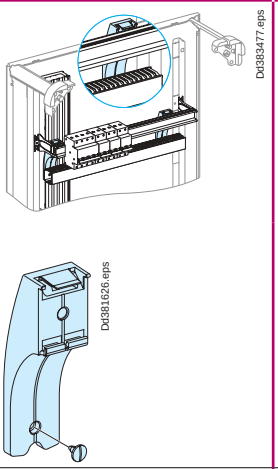
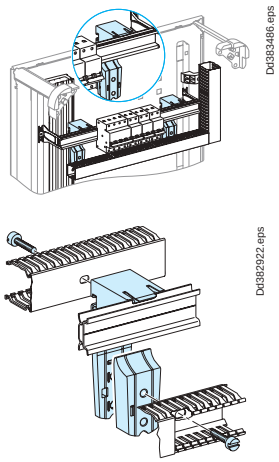
	Switchboard identification plate	Adhesive drawing holder	Touch-up paint brush
			
Catalogue numbers	**08900**	**08963**	**08961**
Characteristics	Colour: RAL 9001	Colour: RAL 9001	Colour: RAL 9001

Cable running

Straps and covers

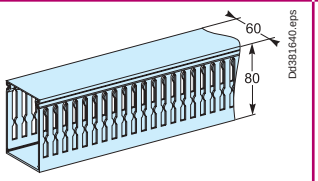
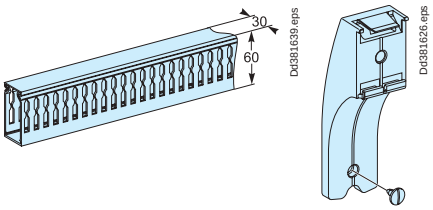
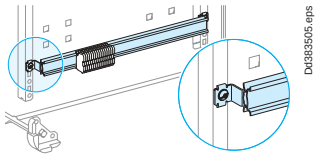
Type	Vertical cable straps	Covers for vertical cable straps	Horizontal cable straps	Covers for horizontal cable straps
				
Catalogue numbers	**04264**	**04263**	**04239**	**04243**
Characteristics	Set of 12	Set of 2 x 1 m	Set of 12 Have the same capacity as 60 x 30 mm trunking	Set of 4 covers of 430 mm
Used	Prisma G wall-mounted and floor-standing enclosures		Prisma G wall-mounted and floor-standing enclosures + Pack enclosures	Prisma G wall-mounted and floor-standing enclosures + Pack enclosures

Trunking supports

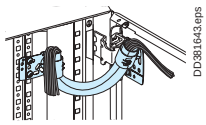
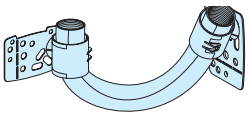
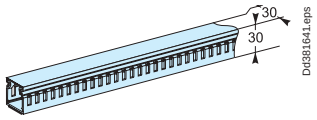
Type	Vertical trunking supports	Horizontal trunking supports	Adaptable support for horizontal trunking
			
Catalogue numbers	**04265**	**04255**	**04256**
Characteristics	Set of 12	Set of 12	Set of 10 Aligns the cover of a horizontal trunking section (H = 60 or 80 mm) with that of a vertical trunking section (H = 80 mm) ***Note:*** *not designed for use with Pack enclosures*
Used	Prisma G wall-mounted and floor standing enclosures for trunking 04267 and 04257	Prisma G wall-mounted and floor-standing enclosures + Pack enclosures, for trunking 04267	Prisma G wall-mounted and floor-standing enclosures

Cable running

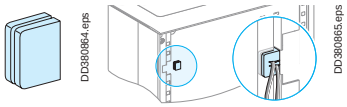
Trunking

Type	Vertical trunking 80 x 60 mm	Horizontal trunking 60 x 30 mm	Brackets
			
Catalogue numbers	**04267**	**04257**	**04206**
Characteristics	Set of 18 L = 2000 mm	Set of 4 L = 450 mm Supplied with 8 supports	H = 15 mm For vertical trunking installation
Used with	Prisma G wall-mounted and floor-standing enclosures	Prisma G wall-mounted and floor-standing enclosures + Pack 160 enclosures	Pack 160 enclosures

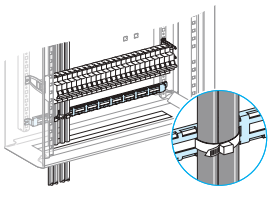
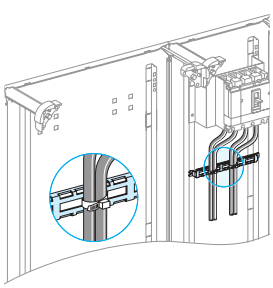
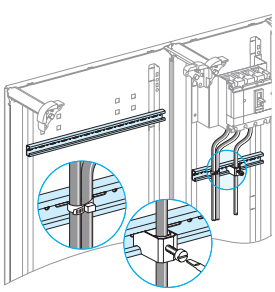
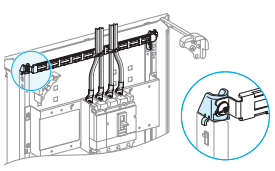
Cable trunking for doors

Type	Flexible trunking for wiring to door		Cable trunking
			
Catalogue numbers	**04235**		**04233**
Characteristics	L = 500 mm, inner ø = 19 mm		Set of 30 adhesive trunking 30 x 30 mm, L = 2000 mm

Grommets for wiring through front

Grommets	
	
Catalogue number	**04234**
Characteristics	Set of 10. For wiring through front.

Cable-tie supports

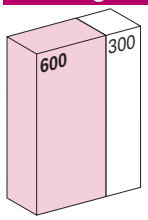
Used for	Cable-tie supports for wall-mounted or floor-standing enclosures	Cable-tie supports in a duct	C-shaped cable-tie supports for wall-mounted or floor-standing enclosures and ducts	Cable-tie support adapters
				
Catalogue numbers	**08867**	**08868**	**08783**	**08866**
Characteristics	■ Set of 2 ■ Supplied with hardware for mounting on the functional uprights of the enclosure.	■ Set of 4 ■ Supplied with hardware for mounting on the functional uprights of the duct.	■ L = 1600 mm, can be cut to length as needed. ■ Cables secured by ties or cable clamps. ■ Supplied with hardware for mounting on the functional uprights of the enclosure or duct.	■ Set of 2 ■ Makes it possible to tie down the cables next to the gland plate and gain one module in height.

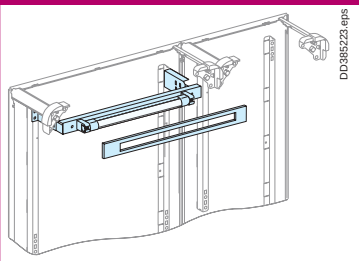
Note: *for the connection of power cables, see page 75 .*

Switchboard lighting

Fixed lighting

Fixed lighting

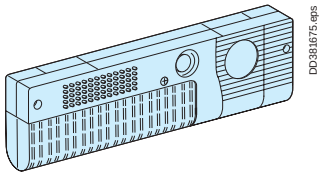




Catalogue number	**08964**
Presentation	This system is generally used to illuminate the front of a switchboard. ■ The kit is made up of: □ a base □ a neon tube □ a front plate with cut-out (1 module) □ a door contact.
Characteristics	■ Supply voltage: 220/240 V ■ Power rating: 8 W ■ Height: 1 module vertical (50 mm)

Switchboard portable lamp

Baladeuse de tableau



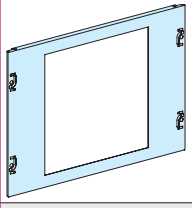
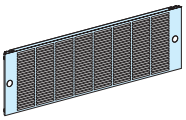
Catalogue number	**08965**
Presentation	■ Lamp with a magnetic base for installation behind a door or directly on the cubicle framework. ■ Supplied without a power cord ■ H x W x D: 90 x 345 x 42
Characteristics	■ Supply voltage: 220/240 V ■ Power rating: 11 W ■ Lamp: picoline OSRAM 8W (supplied) ■ Class 2 ■ IP20

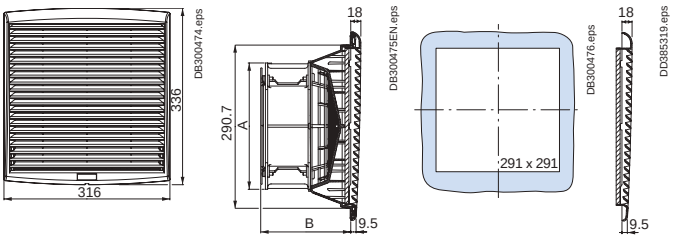
Management of the internal temperature

Ventilation

In most cases and notably for IP30 switchboards, the heat dissipation by convection takes place naturally and does not require fans.
However, when the switchboard is installed in temperate environments or when the degree of protection is high (IP54), ventilation accessories are indispensable.

For more in-depth information on selecting air-conditioning accessories and the thermal management of switchboards *> page 199 to page 206.*

Front plate L = 600	For fan and grill	Ventilated front plate	
	 DD60759.eps	 Dd881676.eps	
Catalogue number	**03890**	**03891**	**03895**
Height	7 modules H = 350 mm	1 vertical module, H = 50 mm	3 vertical modules, H = 150 mm
Characteristics	Front plate with cut-out. Degree of protection: IP30.	Degree of protection: IP30. Located at the top and bottom of the switchboard, IP30 ventilated front plates facilitate natural convection in the switchboard.	
Surface area of the openings	-	80 cm²	250 cm²

		Fan		Grill with filter
		 PB501053_35.eps		 PB501046_35.eps
Catalogue numbers		**NSYCVF560M230PF**	**NSYCVF850M230PF**	**NSYCAG291LPF**
Power rating (W)		68/85	150/195	-
Noise level (dB)		59/59	76/75	-
Unimpeded throughput	50 Hz	562 m³	838 m³	-
	60 Hz	586 m³	803 m³	-
Throughput with counterpressure (grill + standard filter)	50 Hz	473 m³	718 m³	-
	60 Hz	477 m³	568 m³	
Weight (kg)		3.2	4.1	-
Installation		Generally installed at the bottom of floor-standing enclosures: ■ by cutting out a side panel, ■ or by using the front plate with cut-out for fan or grill, directly clipped on (03890).		
Characteristics		The set comprises the fan with a grill and a filter. ■ Input voltage: 230 V (50/60 Hz). ■ Degree of protection: IP54. ■ RAL 7035. ■ Material: ABS		Supplied with standard filter. ■ Maximum throughput 350 m³/h. ■ Degree of protection: IP54. ■ RAL 7035. ■ Material: ABS.
Dimensions		 DB300474.eps 336 316 DB300475EN.eps 18 290.7 A B 9.5 DB300476.eps 291 x 291 DD385319.eps 18 9.5		

A	B	Catalogue number
225	160.5	NSYCVF560M230PF
280	192	NSYCVF850M230PF

Filters for grill	Standard filters	Fine filters
Catalogue numbers	**NSYCAF291**	**NSYCAF291T**
Characteristics	Set of 5 (for replacement) G2 M1 synthetic filter	Set of 5 (for replacement) G3 M1 synthetic filter

Management of the internal temperature

Heating elements

The resistors prevent condensation, corrosion and superficial leakage currents. They maintain a positive temperature in the enclosures when external temperatures drop very low.
Install heaters according to the desired power level at the bottom of the enclosure, respect a safety area of a least 10 cm around the device.
Vertical installation is recommended to ensure optimum convection.
The resistance heaters are equipped with a PTC - type sensor (positive temperature coefficient). Thanks to these heaters, the surface temperature stabilises at 75 °C when the ambient is at -5 °C.

Heating resistor

Catalogue numbers	NSYCR55WU2	NSYCR100WU2	NSYCR250W230VV
Power rating	55 W	90 W	250 W
Characteristics	■ Vertical mounting. ■ Aluminium case with fins. ■ Temperature: □ turns off at 60 °C, □ turns on at 25-30 °C (temperature of the resistor itself). ■ Equipped with a symetrical rail for rapid mounting (clips on). ■ Input voltage: 110-250 V.		■ Vertical mounting. ■ Aluminium case with fins. ■ Temperature: □ turns off at 60 °C, □ turns on at 25-30 °C (temperature of the resistor itself). ■ Equipped with a symetrical rail for rapid mounting (clips on). ■ Input voltage: 230 V.

Regulating

Used to control the temperature inside electrical switchboards in conjunction with heating resistors and fans.
This thermostat can control the activation of a fan and a heater and regulate their temperature independently.

Double adjustable thermostat
Double temperature control with a resistance heater and a fan with separate operation
■ Red button: with normally closed contact (NC) for controlling the resistance heaters.
■ Blue button: with normally open contact (NO) for controlling the fans, signalling systems or alarms.

Thermostat

Catalogue number	NSYCCOTHD
Characteristics	■ Setting range: 0 °C to +60 °C. ■ Power rating: 30 W ■ Input voltage: 120 V AC: 15 A - 230 V AC: 10 A ■ Fixing: clips onto a modular rail.

Thermal management of switchboards

> page 199

Linergy distribution and connection systems

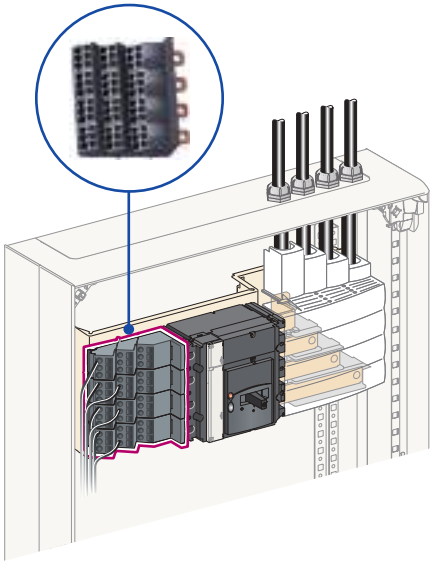
Contents

Panorama of the solution

Linergy and Prisma G: an optimised and high-performance type-tested offer (IEC 61439-1 & 2 standard)

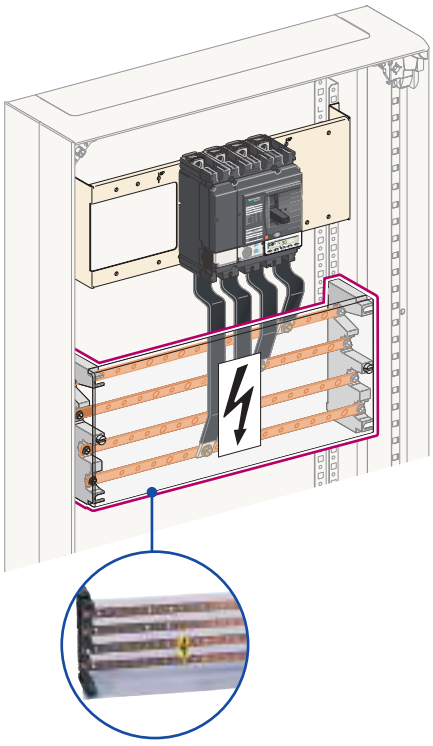
> For incoming devices

Linergy DX 160 A and Linergy DP 250 A distribution block



- Reliable spring-terminal connections for outgoing circuits, requiring no maintenance
- Horizontal or vertiical installation in minimum space

Linergy BS 160 to 630 A distribution block

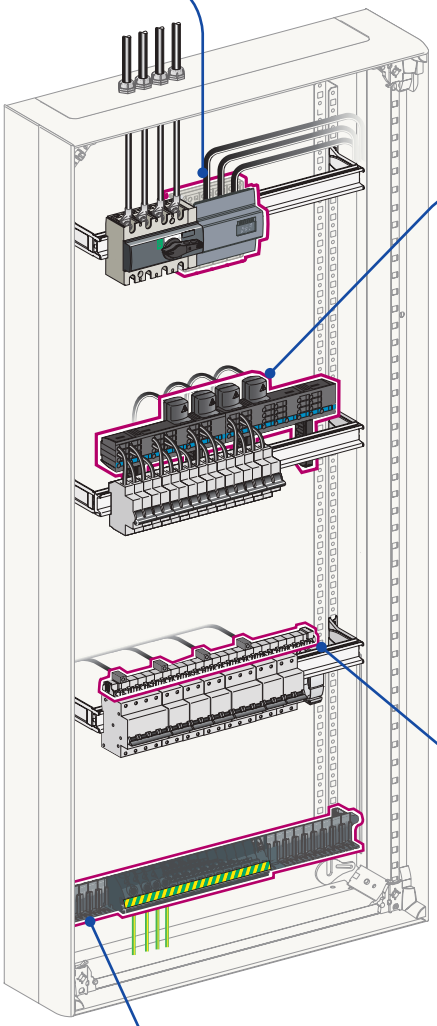


- Traditional, highly polyvalent solution
- Many installation possibilities

> For rows of modular devices

Linergy DX 125 at 160 A distribution block

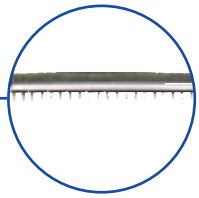
- Spring terminals for electrical connections that stay tight
- Front designed to integrate perfectly with modular devices



Linergy FM 63/200 A

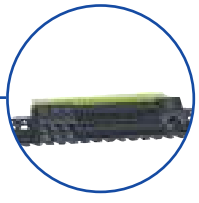
- Reliable spring-terminal connections requiring no maintenance
- Fast installation
- Easy upgrades through replacement or addition of devices
- Easy balancing of phases

Linergy FH 100 to 125 A comb busbars



- Fast and direct connections, adaptable to all needs
- Easy, economical connections

Linergy TR



- Fast and simple installation
- Multiple connection options (screw, spring or push-in connections)

Panorama of the solution

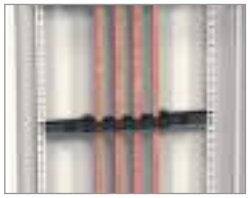
Customised organisation of your switchboard

> Busbars up to 630 A for all switchboard architectures

Linergy BW busbars:
compact and insulated for fast upgrades.

Prefabricated connections, optimised and fully insulated.

Linergy BS busbars:
for traditional distribution.



Rear Linergy BS busbars.

Lateral busbars. The bars are staggered for easy access to connection points.

> Row distribution blocks for modular devices

Linergy FH comb busbars:
a simple, cost-effective solution.

Linergy FH comb busbars.
Linergy FH comb busbars are fully insulated.
Device can de connected in a single operation.

Linergy FM device feeder:
a fast, flexible and reliable solution.

Linergy FM device feeder 80 A.

Linergy FM device feeder 200 A.

The Linergy FM device feeder snaps easily onto the back of the rails.
All types of modular devices can be mixed in the same row and phase balancing is simple. It's easy to change or add devices.

> Centralised distribution blocks for switchboard incomers

Linergy DX 160 A 4P: practical and aesthetic.
Modular monobloc distribution block for fast connections

Linergy DX 160 A 1P: "à la carte" distribution block.
Modular combinable components for fast connections.

Linergy DS 160 A: a traditional solution.
Installation on modular rail on mounting-plate.
Screw-terminal connections.

Linergy DP 250 A: modular and compact.
Installed directly downstream of Compact circuit breakers and switches without taking up any extra vertical modules.
Fast connections in spring-loaded terminals.

Linergy BW
Insulated busbars up to 630 A

PD390337.eps

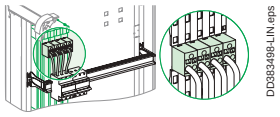
Description

- Compact busbar, **IPxxB**, ready for installation (supplied complete with supports and end caps)
- Shaped busbar, threaded M6 with 25-mm pitch, can be cut with 200-mm pitch (150 mm for the 125 A)
- Busbar installed on insulating supports, screwed onto the rear uprights
- Wide selection of tested pre-wired connectors
- Clip-on covers to protect against direct contact (IPxxB). Can easily be cut to allow connections to pass through to the switchgear
- Ends protected by end caps

Linergy BW busbar

		125 A		160 A		250 A		400 A		630 A	
Rated peak withstand current	(Ipk)	20 kÂ		30 kÂ		30 kÂ		52.5 kÂ		52.5 kÂ	
Rated insulation voltage	(Ui)	500 V AC		750 V AC		750 V AC		750 V AC		1000 V AC	
Rated impulse withstand voltage	(Uimp)	8 kV		8 kV		8 kV		8 kV		8 kV	
Rated short-time current	(Icw)	8.5 kA rms / 1 s		10 kA rms / 1 s		13 kA rms / 1 s		20 kA rms / 1 s		25 kA rms / 1 s	
Thermal stress	($A^2.s$)	7.225×10^7		1.000×10^8		1.690×10^8		4.000×10^8		6.250×10^8	
Length (mm)		**450**	**750**	**1000**	**1400**	**1000**	**1400**	**1000**	**1400**	**1000**	**1400**
Catalogue numbers	**3P**	**04103**	**04107**	**04111**	**04116**	**04112**	**04117**	**04113**	**04118**	**04114**	**04119**
	4P	**04104**	**04108**	**04121**	**04126**	**04122**	**04127**	**04123**	**04128**	**04124**	**04129**

Accessories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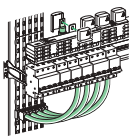
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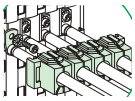
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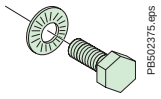

PB502375.eps

	IPxxB tap-off terminals		200 A connections	IPxxB insulating covers	Class 8.8 fixing accessories
	12 tap-off blocks For 1 cable of 6 mm^2 (32 A max.) and 1 cable of 10 mm^2 (40 A max.) Ui: 750 V In: 55 A max. (1)	12 tap-off blocks For 1 cable of 1 to 16 mm^2 Ui: 750 V In: 55 A max. with only 1 cable		Covers which can be clipped on and cut to size are used to isolate the connectors of a connection with cables of cross-section 10 to 25 mm^2	M6 x 12 + 20 M6 contact washers
Used for connecting	■ All switchgear equipped with enclosed terminals ■ Linergy FM 160/200 A	■ All switchgear equipped with enclosed terminals ■ Linergy FM 63/80/160/200 A	■ Linergy FM 200 A		
Set of	12	12	4	8	20
Catalogue numbers	**04151**	**04152**	**04021**	**04150**	**04158**

(1) Imax = 55 A for all connected cables.

Spare parts

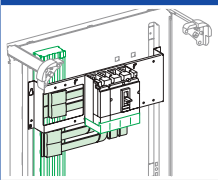
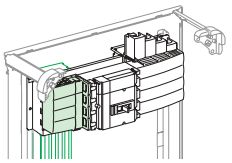

DD384952_L13-LIN.eps

		Linergy BW busbar supports				
Rated operational current at 40 °C	(Ie)	125 A	160 A	250 A	400 A	630 A
Composition		2 busbar supports + 2 end caps + packet of fixing accessories				
Catalogue numbers		-	**01210**	**01210**	**01210**	**01211**

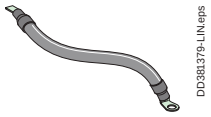
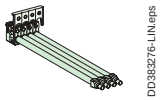
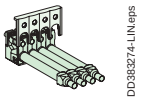
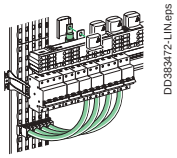
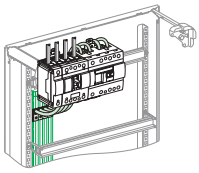
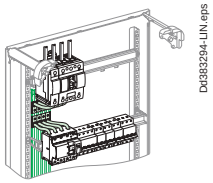

DD384951_L13-LIN.eps

	IPxxB clip-on covers				
Length (mm)	200				
Set of	2				
Catalogue numbers	-	**01201**	**01201**	**01201**	**01201**

Linergy BW
Insulated busbars up to 630 A

Mounting	Vertical					Horizontal		
	 DD380593-LIN.eps					 DD380522-LIN.eps		
	Power supply units without connections		**Universal power supply units**			**Universal power supply units with connections**		
Switchgear	**Fixed** ■ Enclosed horizontal NSX100/250 with rotary handle or remote control ■ Vertical Fupact INF100/160, Fupact ISFT100/250	**Fixed** ■ Enclosed NSX400/630 with or without Vigi ■ Enclosed INS-INV320/630	**Fixed** ■ Enclosed NSX100/250 with toggle switch ■ Enclosed Vertical INS-INV250	**Fixed** ■ In duct NSX100/250 with or without Vigi ■ In duct Vertical INS-INV250	**Fixed** ■ In duct NSX400/630 with or without Vigi ■ In duct INS-INV320/630	**Fixed** ■ NSX100/250 horizontal with or without Vigi ■ INS-INV250 horizontal	**Fixed** ■ NSX400 horizontal ■ INS-INV320/400 horizontal	**Fixed** ■ NSX630 horizontal ■ INS-INV500/630 horizontal
Catalogue numbers	**04061**	**04074**	**04062**	**04064**	**04073**	**04060**	**04070**	**04071**

Pre-wired connectors

	 DD381379-LIN.eps		 DD383276-LIN.eps	 DD383274-LIN.eps	 DD383472-LIN.eps
	Connections		**IPxxB 3/4P monobloc connection**	**IPxxB 3/4P monobloc connection**	**Connections 4P**
	35 mm² ferrule + 45° angled connector	45 mm² ferrule + 45° angled connector	Quick connection on the busbar equipped with a male ferrule for enclosed terminals. Neutral identified by the colour blue.		Supplied with mounting hardware
Rated operational (Ie) current at 40 °C	125 A	160 A	160 A	160 A	200 A
Length	230 mm	250 mm	440 mm	165 mm	230 to 330 mm
Used for connecting	■ NG125, INS with enclosed terminals cat. no. **28947** or **28948**	■ INS160, NG125, NG160	■ NG160 (left-hand position), Vigi NG160 (middle position), ■ NG125, INS160, C120, iC120  DD383295-LIN.eps	■ NG160 (left-hand position), NG125, INS160, C120, iC120  Dd383294-LIN.eps	■ Linergy FM 200 A
Set of	4	4	1	1	4
Catalogue numbers	**04145**	**04146**	**04148**	**04147**	**04021** **+ 04150 insulated covers**

Linergy BS
Rear flat busbars up to 400 A

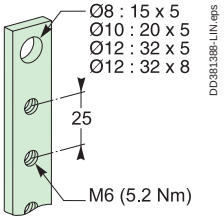
PD390532_SE.eps

IEC 61439-1 & 2

Description

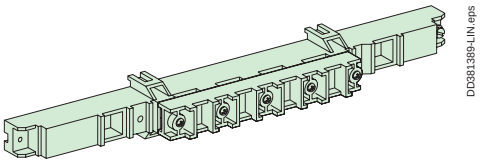
The busbar can be 3-pole or 4-pole with ratings between 160 A and 400 A.
2 lengths are available: 1000 and 1400 mm, which can be cut as required.
The number of supports depends on the installation maximum rated current.
The supports allow installation of a 5th busbar with 15 or 20 x 5 mm cross-section to create the earth collector.

Copper busbars 160 à 400 A



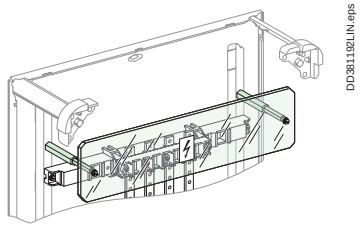
		160 A	250 A	400 A
Rated peak withstand current	(Ipk)	30 kÂ	40 kÂ	55 kÂ
Rated insulation voltage	(Ui)	1000 V AC	1000 V AC	1000 V AC
Rated short-time current	(Icw)	10 kA rms / 1s	13 kA rms / 1s	25 kA rms / 1s
Thermal stress	($A^2.s$)	1.000 x 10^8	1.690 x 10^8	6.250 x 10^8
Conductor cross-section		15 x 5 mm	20 x 5 mm	32 x 5 mm
Installation		Threaded M6 holes every 25 mm all the way up Connection by: 16 to 50 mm^2 flexible cables with crimped lugs		
Set of		4		
Length (mm)		**1000** / **1400**	**1000** / **1400**	**1000** / **1400**
Catalogue numbers		**04161** / **04171**	**04162** / **04172**	**04163** / **04173**

Insulating busbar support



Distance between supports depending on Icw (1)	⩽ 10 kA rms / 1 s	450 mm	450 mm	450 mm
	⩽ 13 kA rms / 1 s	-	450 mm	450 mm
	⩽ 15 kA rms / 1 s	-	450 mm	450 mm
	⩽ 20 kA rms / 1 s	-	-	300 mm
	⩽ 25 kA rms / 1 s	-	-	225 mm
Installation		On the rear uprights Screwed onto a solid or pre-slotted plate (fixing centres 450 x 200 mm)		
Catalogue numbers		**04191**	**04191**	**04191**

IPxxB insulating protective shield



Length	470 mm
Height	100 mm
Composition	Supplied with fixings
Catalogue numbers	**04198**

*(1) Linergy FM 200 A distribution blocks with connections ref. **04029** can act as intermediate supports (max. distance apart 200 mm) in addition to the support ref. **04191** at the top and bottom.*

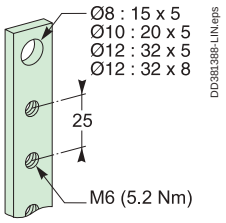
Linergy BS
Multi-stage busbars up to 630 A

IEC 61439-1 & 2

Description

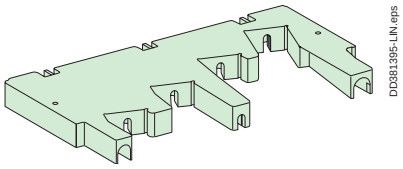
Multi-stage busbars are installed in a sheath L = 300 mm.
We strongly recommend dividing the current between 2 cubicles or enclosures joined on either side.
All the connection points are easily accessible from the front.
The busbar orientation makes them easier to tighten and facilitates running the cables between them.
The current can be 3-pole or 4-pole with ratings between 160 A and 630 A.
2 lengths are available: 1000 and 1400 mm, which can be cut as required.
The number of supports depends on the installation maximum rated current.

160 to 630 A copper busbars



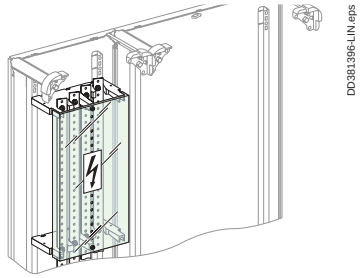
		160 A		250 A		400 A		630 A	
Rated peak withstand current	(Ipk)	30 kÂ		40 kÂ		55 kÂ		55 kÂ	
Rated insulation voltage	(Ui)	750 V AC		750 V AC		750 V AC		750 V AC	
Rated short-time current	(Icw)	10 kA rms / 1s		13 kA rms / 1s		20 kA rms / 1s		25 kA rms / 1s	
Thermal stress	($A^2.s$)	1.000 x 10^8		1.690 x 10^8		4.000 x 10^8		6.250 x 10^8	
Supply at incoming terminals		Connection by: 16 to 50 mm^2 flexible cables with crimped lugs							
Conductor cross-section		15 x 5 mm		20 x 5 mm		32 x 5 mm		32 x 8 mm	
Installation		Flat copper busbar with threaded M6 holes every 25 mm^2 all the way up							
Set of		4							
Length (mm)		**1000**	**1400**	**1000**	**1400**	**1000**	**1400**	**1000**	**1400**
Catalogue numbers		**04161**	**04171**	**04162**	**04172**	**04163**	**04173**	must be made	**04174**

Insulating busbar support



Distance between supports depending on Icw (1)	≤ 10 kA rms / 1 s	450 mm	450 mm	450 mm	450 mm
	≤ 13 kA rms / 1 s	-	450 mm	450 mm	450 mm
	≤ 15 kA rms / 1 s	-		450 mm	450 mm
	≤ 20 kA rms / 1 s	-	-	300 mm	300 mm
	≤ 25 kA rms / 0.6 s	-	-	300 mm	-
	≤ 25 kA rms / 1 s	-	-	-	300 mm
Installation		Installation on functional uprights of duct (Prisma G). Screwed onto a solid or pre-slotted plate (450 x 200 mm fixing centres)			
Catalogue numbers		**04192**	**04192**	**04192**	**04192**

IPxxB insulating protective shield



Length	250 mm
Height	1500 mm
Composition	Fixing accessories supplied with support ref. **04192**
Catalogue numbers	**04197**

Linergy BS
Multi-stage distribution blocks up to 630 A

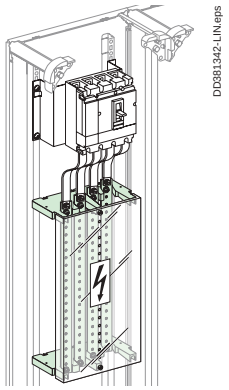
PB502514_60.eps

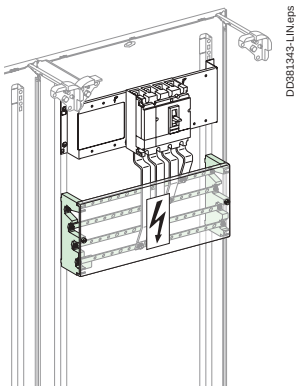
IEC 61439-1 & 2

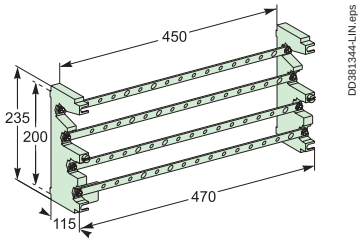
Description

The multi-stage distribution block can be installed horizontally in the device zone or vertically in the 300 mm wide duct of enclosures and cubicles.
The distribution block is made up of:
- two staggered supports made of an insulating material
- four slanted copper bars with holes every 25 mm.

Multi-stage distribution blocks

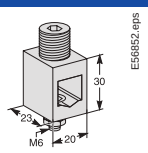

DD381342-LIN.eps

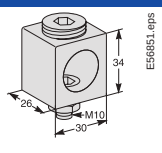

DD381343-LIN.eps

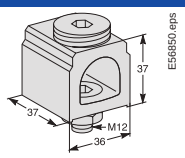
		160 A	250 A	400 A	630 A
Rated peak withstand current	(Ipk)	30 kÂ	30 kÂ	40 kÂ	40 kÂ
Rated insulation voltage	(Ui)	750 V AC			
Rated operational voltage	(Ue)	440 V AC			
Rated impulse withstand voltage	(Uimp)	8 kV			
Rated short-time current	(Icw)	10 kA rms/1 s	13 kA rms/1 s	20 kA rms/1 s	25 kA rms/1 s
Thermal stress	($A^2.s$)	1.000 x 10^8	1.690 x 10^8	4.000 x 10^8	6.250 x 10^8
Total connection capacity		4 incomers per phase: ø 12.2 mm clearance holes 13 outgoers per phase 16 to 50 mm^2: M6 tapped holes			
Busbar cross-section		15 x 5 mm	20 x 5 mm	32 x 5 mm	32 x 8 mm
Dimensions (mm)		 DD381344-LIN.eps			
Installation		Screwed in horizontal position on functional uprights in enclosures and cubicles (Prisma G) Screwed in vertical position on sheathed uprights (Prisma G) Screwed onto a solid or pre-slotted plate (fixing centres 450 x 200 mm)			
Composition		2 multi-stage supports made of an insulating material 4 slanted copper busbars, with holes every 25 mm 1 pack of 36 M6 x 16 screws + contact washers 1 IPxxB front insulating shield			
Catalogue numbers		**04052**	**04053**	**04054**	**04055**

Linergy BS
Common accessories up to 630 A

Incomer accessories

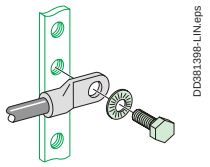






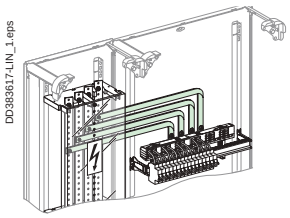
	Connectors for copper or aluminium cables		
Rated operational current at (Ie) 40 °C	160 A	250 A	400 A
Supply at incoming terminals	16 to 70 mm² cables	16 to 185 mm² cables	70 to 300 mm² cables
Composition	Supplied with fixings at busbar end		
Set of	4		
Catalogue numbers	**07051**	**07052**	**07053**

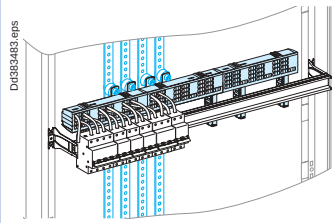
Outgoer accessories



	Class 8.8 fixings	
Composition	20 M6 x 20 screws + 20 nuts + 40 contact washers	40 M6 x 16 screws + 40 contact washers
Catalogue numbers	**04194**	**04195**

Connections to the distribution block





	4P 200 A connection (supplied with fixings)	4P 200 A connection (supplied with fixings)
Allows supply of	Linergy BS busbars in duct	Rear Linergy BS busbars
Catalogue numbers	**04024**	**04029**

Linergy DX
Quick distribution blocks

IEC 60947-7-1, IEC 61439-2

Description

- Downstream circuits are connected from the front, to spring terminals.
- Contact pressure automatically adapts to the size of the conductor.
- Contacts are insensitive to vibrations and thermal variations.
- Only one cable (flexible or rigid) can be inserted per terminal.

Quick distribution blocks

Number of poles		4P, upstream incoming	4P, downstream incoming
			
Rated operational current at 40 °C	(Ie)	63 A	63 A
Rated conditional short-circuit breaker of an assembly	(Isc)	The reinforced breaking capacity due to cascading in circuit breaker combinations is maintained. The worst-case situations have been tested.	The reinforced breaking capacity due to cascading in circuit breaker combinations is maintained. The worst-case situations have been tested.
Rated peak withstand current	(Ipk)	-	-
Rated insulation voltage	(Ui)	500 V AC	500 V AC
Rated operational voltage	(Ue)	440 V AC	440 V AC
Rated impulse withstand voltage	(Uimp)	6 kV	6 kV
Rated short-time current Icw	(Icw)		
Thermal stress	($A^2.s$)	-	-
Rated operational frequency		50/60 Hz	50/60 Hz
Degree of protection		IPxxB	IPxxB
Incoming terminals		1 tunnel terminal 25^2/Ph	1 tunnel terminal 25^2/Ph
Total connection capacity, outgoing terminals		24 connections: 4 x 6^2/phase 12 x 6^2/neutral	24 connections: 4 x 6^2/phase 12 x 6^2/neutral
Dimensions (H x W x D)		96.5 x 72 x 62 8 x 9 mm pitch	96.5 x 72 x 62 8 x 9 mm pitch
Installation		Clipped onto a DIN rail	Clipped onto a DIN rail
Other			
Standard for installation inside Prisma		IEC 61439-2	IEC 61439-2
Glow-wire 60695-2-11		960 °C	960 °C
Degree of pollution		3	3
Catalogue numbers		**04040**	**04041**

Accessories

Catalogue numbers		**-**	**-**

Linergy DX
Quick distribution blocks

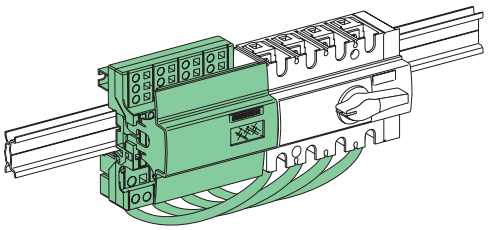
Advantages

- A reliable electrical connection, no maintenance required (tightness guaranteed over time).
- Quick connection.
- Easy phase balancing.
- Ease of rewiring if the switchboard is expanded or modified.

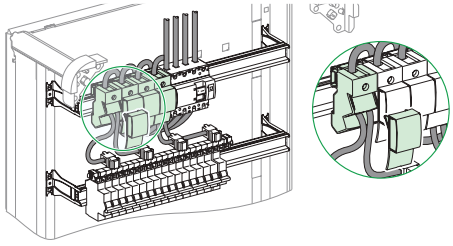
	4P		1P
	 PB500924-75.eps	 PD400106.eps	 PB111453_10.eps
	125 A	160 A	160 A
	20 kA/60 ms max according to IEC 61439-1	20 kA/60 ms max according to IEC 61439-1	32 kA
	20 kÂ	20 kÂ	24 kÂ
	750 V AC	750 V AC	750 V AC
	690 V AC	690 V AC	690 V AC
	8 kV	8 kV	8 kV
	4.5 kA rms/1s	4.5 kA rms/1s	5.5 kA rms/1s
	2.025 x 10^7	2.025 x 10^7	3.025 x 10^7
	50/60 Hz	50/60 Hz	50/60 Hz
	IPxxB	IPxxB	IPxxB
	1 tunnel terminal 35²/Ph	Supplied with a prefabricated flexible connection (with lugs) designed for INS100/160 switch-disconnector installed on the left or right	1 tunnel terminal 70²/Ph
	52 connections: 7 x 4²/phase 3 x 6²/phase 2 x 10²/phase 1 x 16²/phase (screw terminal)	52 connections: 7 x 4²/phase 3 x 6²/phase 2 x 10²/phase 1 x 16²/phase (screw terminal)	6 connections: 6 x 16²/phase
	127 x 108 x 48 8 x 9 mm pitch	127 x 108 x 48 8 x 9 mm pitch	95 x 36 x 70 4 x 9 mm pitch
	Screwed to plain or slotted backplate or onto DIN rail	Screwed to plain or slotted backplate or onto DIN rail	Onto DIN rail
	Possible to combine 2 terminal blocks (2nd terminal block supplied from enclosed terminals in the 1st, Imax of 2nd terminal block: 80 A)		
	IEC 61439-2	IEC 61439-2	IEC 61439-2
	960 °C	960 °C	960 °C
	3	3	3
	04045	**04046**	**04031**

	4 x 125 A flexible connections, L = 210 mm with 1 end fitting for tunnel terminal and 1 end 45 ° angle lug		4 x 160 A flexible connections, L = 380 mm with 2 x 45 mm² end fittings for tunnel terminals
	04047	**-**	**04149**

PB502370-55.eps



DD383300-LIN.eps



Linergy DP
Quick distribution blocks

IEC 60947-7-1, IEC 61439-1 and 2

Description

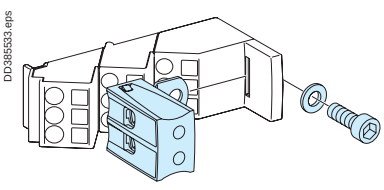
■ The Linergy DP quick distribution block is designed for installation directly downstream of Compact NSX and INS up to 250 A. It can also be clipped onto a modular rail.

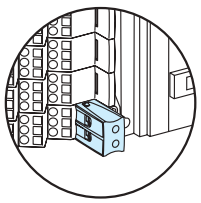
Avantages

■ It is quick to mount in the horizontal position. Electrical connections are made directly to the device terminals.
■ It is the same width as the devices and does not take up any additional space in the switchboard.
■ The connection terminals are slanted to facilitate cable entry and avoid exceeding the bending radius of the flexible and rigid cables.

Quick distribution blocks for Compact devices					
Number of poles		**3P**	**4P**	**3P**	**4P**
		 PB111454-15-r.eps	 PB111455-15-r.eps	 PB502519-11_r.eps	 PB502519-11_r.eps
Rated operational current	(Ie)	250 A	250 A	250 A	250 A
Rated peak withstand current	(Ipk)	30 kA	30 kA		
Rated short-time current	(Icw)	8.5 kA rms/1 s	8.5 kA rms/1 s		
Thermal stress	(A^2.s)	7.225 x 10^7	7.225 x 10^7		
Total connection capacity, outgoing terminals		27 connections: 6 x 10^2/phase 3 x 16^2/phase	36 connections: 6 x 10^2/phase 3 x 16^2/phase	2 connections: 2 x 35^2/pole	2 connections: 2 x 35^2/pole
Incomer terminals		1 cable lug 120 mm² per pole			
Dimensions (H x W x D)		105 x 138 x 63	140 x 138 x 64		
Installation		On mounting plate or DIN rail		On mounting plate	
Product certifications		ASEFA - KEMA			
Standard for installation inside Prisma		IEC 61439-1-2			
Glow-wire 60695-2-11		960 °C			
Catalogue numbers		**04033**	**04034**	**04155**	**04156**

Additional block		
	 PB502519-11_r.eps	 PB502519-11_r.eps
Description	2 x 35^2 3P for Linergy DP 250 A	2 x 35^2 4P for Linergy DP 250 A
Catalogue numbers	**04155**	**04156**



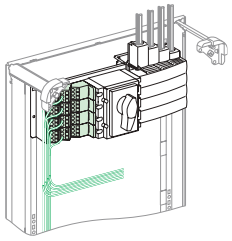


Linergy DP
Quick distribution blocks

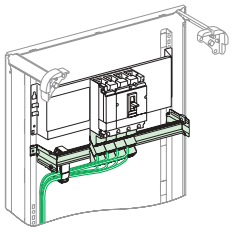
Technical data

Common characteristics		
Rated conditional short-circuit current of an assembly	(Isc)	The reinforced breaking capacity due to cascading in circuit-breaker combinations is maintained. The worst-case situations have been tested.
Rated insulation voltage	(Ui)	750 V AC
Rated operational voltage	(Ue)	690 V AC
Rated impulse withstand voltage	(Uimp)	8 kV
Network frequency		50/60 Hz
Degree of protection		IPxxB
Degree of pollution		3
Overvoltage category		III
Additional technical characteristics		
Reference temperature		40 °C
Operating temperature		-25 °C to 55 °C

Installation



Directly on the mounting plates of horizontally mounted Compact **NSX100/250** and Compact **INS250** devices in the enclosures.



It can also be mounted downstream of vertically mounted Compact **NSX100/250** and Compact **INS250** devices in the enclosures.
In this case, the Linergy DP is mounted on a depth-adjustable modular rail.

Linergy DS

PB111254-30.eps

PB111253-30.eps

IEC/EN 60947-7-1, IEC/EN 61439-1 & 2

Description

- Single-pole or four-pole distribution block that can be installed on a standard DIN rail or on a mounting plate.
- Compatible with Prisma G and P, Pragma, Mini Pragma and Resbo series switchboards.
- Incomers and feeders are connected to screw terminals that accept rigid or flexible cables with ferrule.
- Optional: additional neutral terminal strip for four-pole distribution block.

Avantages

- Simplified power supply for main incomers.
- Easy phase balancing.
- Easy, effortless cabling due to excellent accessibility.
- Visible cabling.
- Insulation between phases.
- The single-pole distribution blocks are adjacent and bridgeable via the second incoming hole for parallel connection.

Screw distribution blocks

Number of poles		1P			4P
		 PB111250-20.eps	 PB111251-20.eps	 PB111252-20.eps	 PB111243-20.eps
Rating		125 A	160 A	250 A	100 A
Number of connections		10	13	14	4 x 7
Terminal capacity					
Diameter		2 x ø 9.5 mm	2 x ø 12 mm	1 x ø 15.3 mm	2 x ø 7.5 mm
		2 x ø 7.5 mm	3 x ø 7.5 mm	1 x ø 10 mm	5 x ø 5.5 mm
		6 x ø 5.8 mm	8 x ø 5.8 mm	4 x ø 6 mm	-
		-	-	8 x ø 7.5 mm	-
Rated peak withstand current (Ipk)	Ipk/60 ms	25 kÂ	36 kÂ	60 kÂ	14 kÂ
	Ipk/6 ms	-	-	-	24 kÂ
Rated short-time withstand current (Icw) (IEC/EN 60947-7-1)		4.2 kA rms/1 s	8.4 kA rms/1 s	14.4 kA rms/1 s	3 kA rms/1 s
Width (number of 9 mm pitches)		3	4	5	8
Dimension (H x W x D)		85 x 27 x 50.5	85 x 36 x 50.5	85 x 45 x 50.5	100 x 71 x 50.5
Weight (g)		125	163	239	210
Neutral terminal strip (optional)		-	-	-	LGYN1007
Catalogue numbers		**LGY112510**	**LGY116013**	**LGY125014**	**LGY410028**

On LGY412560 and LGY416048 references.
Input cabling facilitated by side terminals.

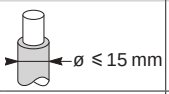
Technical data

Common characteristics	
In compliance with IEC/EN 60947-7-1 and IEC/EN 61439-1 & 2	
Rated insulation voltage (Ui)	500 V AC
Rated operational voltage (Ue)	230 V AC (Ph/N) 440 V AC(Ph/Ph)
Rated impulse withstand voltage (Uimp)	8 kV
Rated conditional short-circuit current of an assembly	Up to the breaking capacity of Schneider Electric feeder circuit breakers, even in cascading configuration
Network frequency	50/60 Hz
Pollution degree	3
Overvoltage category	III
Additional technical characteristics	
Reference temperature	40 °C
Operating temperature	-25 °C to 55 °C
Dielectric withstand (IEC/EN 60947-1)	2500 V AC

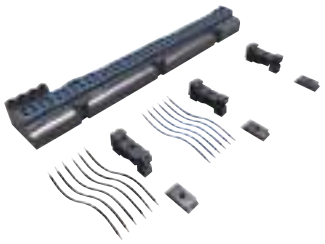
				Neutral terminal strip		
	 PB111244-20.eps	 PB111245-20.eps	 PB111246-20.eps	 PB111247-20.eps	 PB111248-20.eps	 PB111249-20.eps
	125 A		160 A	100 A	125 A	
	4 x 12	4 x 15	4 x 12	7	12	15
	1 x ø 9 mm	1 x ø 9.5 mm	1 x ø 12 mm	2 x ø 7.5 mm	1 x ø 9 mm	1 x ø 9.5 mm
	7 x ø 7.5 mm	3 x ø 8.5 mm	3 x ø 9 mm	5 x ø 5.5 mm	7 x ø 7.5 mm	3 x ø 8.5 mm
	4 x ø 6.5 mm	11 x ø 6.5 mm	8 x ø 7.5 mm	-	4 x ø 6.5 mm	11 x ø 6.5 mm
	-	-	-	-	-	-
	18 kÂ	18 kÂ	22 kÂ	-	-	-
	26 kÂ	28 kÂ	36 kÂ	-	-	-
	4.2 kA rms/1 s	4.2 kA rms/1 s	8.4 kA rms/1 s	-	-	-
	14	20	18	7	14	17
	100 x 126 x 50.5	100 x 162 x 50.5	100 x 174 x 50.5	20 x 70 x 35	20 x 125 x 35	20 x 155 x 35
	390	559	567	63	111	149
	LGYN12512	LGYN12515	LGYN12512	-	-	-
	LGY412548	**LGY412560**	**LGY416048**	**LGYN1007**	**LGYN12512**	**LGYN12515**

Terminal technical data

Type	**PZ2 screw**							
Diameter	ø 5.5 mm	ø 5.8 mm	ø 6 mm	ø 6.5 mm	ø 7.5 mm	ø 8.5 mm	ø 9 mm	ø 9.5 mm
Section Rigid cable	1.5 to 16 mm²	1.5 to 16 mm²	1.5 to 16 mm²	1.5 to 16 mm²	2.5 to 25 mm²	6 to 35 mm²	10 to 35 mm²	10 to 35 mm²
Section Flexible cable or with ferrule	1.5 to 10 mm²	1.5 to 10 mm²	1.5 to 10 mm²	1.5 to 10 mm²	1.5 to 16 mm²	4 to 25 mm²	4 to 25 mm²	6 to 35 mm²
Tightening torque	2 N.m	2 N.m	2 N.m	2 N.m	2 N.m	2 N.m	2.5 N.m	2.5 N.m

Type	**Hc screw**				
Diameter	ø 9.5 mm	ø 10 mm	ø 12 mm		ø 15.3 mm
Section Rigid cable	10 to 35 mm²	1.5 to 50 mm²	25 to 70 mm²	 ø ≤ 15 mm	35 to 120 mm²
Section Flexible cable or with ferrule	6 to 35 mm²	1.5 to 35 mm²	16 to 50 mm²		25 to 95 mm²
Tightening torque	8 N.m	4 N.m	1P: 10 N.m	4P: 5 N.m	14 N.m

Linergy FM
Quick device feeders


PB104505-50.eps

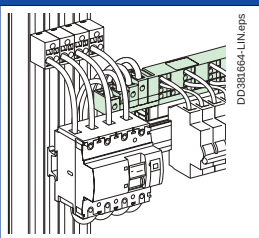
Description

- Distribution over full rows of modular devices.
- The distribution block is generally supplied by busbars in enclosures and cubicles.
- Easy phase balancing.
- Mix of devices and functions in the same row.
- Installation ⩾ 160 A: clipped onto the back of a modular rail or screwed onto a solid or pre-slotted plate.

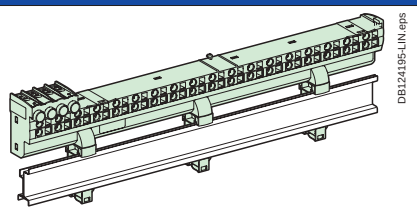
Distribution blocks

Number of poles			4P	4P
			 PB502496-31_r.eps	 PB104501-52-r.eps
			63 A	80 A
Rated peak withstand current		(Ipk)	15 kÂ	16 kÂ
Rated conditional short-circuit current of an assembly		(Isc)	The cascading reinforced breaking capacity when combining circuit breakers is maintained. The worst-case scenarios have been tested. The characteristics are exactly right for the connected devices. Circuit breakers and switches still have their temperature derating curves, and their whole performance is maintained.	
Insulation voltage		(Ui)	500 V AC	500 V AC
Rated voltage		(Ue)	440 V AC	440 V AC
Rated impulse withstand voltage		(Uimp)	6 kV	6 kV
Maximum current		(Imax)	-	-
Thermal stress		($A^2.s$)	2.400×10^6	2.400×10^6
Rated operational frequency			50/60 Hz	
Degree of protection			IPxxB	IP20
Width	9 mm modules		24	48
	18 mm modules		12	24
Supply at incoming terminals			Enclosed terminals for cables up to 25 mm^2	Enclosed terminals for flexible cables 6 to 25 mm^2 or rigid cables 10 to 35 mm^2
Downstream connection capacity, cable to be used without ferrules	Max. 4 mm^2	Phase	2	-
		Neutral	4	-
	Max. 6 mm^2	Phase	2	-
		Neutral	4	-
	Max. 10 mm^2	Phase	-	18
		Neutral	-	18
Accessories included	Pre-stripped copper connections		10 x 4 mm^2 + 6 x 6 mm^2 (W = 100 mm)	12 blue + 12 black
	Protection cover		-	-
	Fixings		-	-
Catalogue numbers			**04008**	**04000**

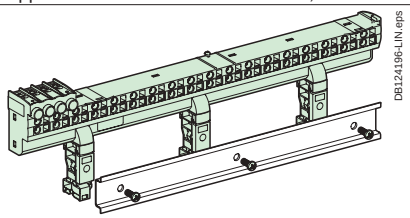
Installation


DD381664-LIN.eps

Clipped onto the back of a modular rail, or screw fixing.

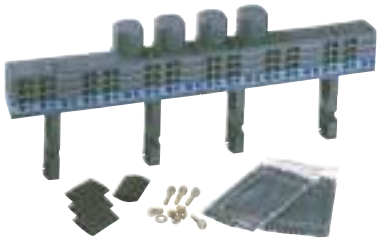

DB124195-LIN.eps

Clipped onto the back of a modular rail, or screw fixing.


DB124196-LIN.eps

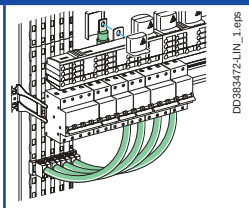
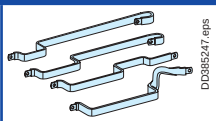
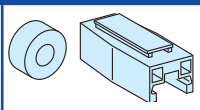
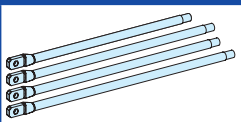
Can be mounted in Pragma Evolution enclosures and in Prisma Pack 160.

Linergy FM
Quick device feeders



	4P	**2P**	**3P**	**4P**	**4P**
	 PB502500-18_r.eps	 PB502499-23_r.eps	 PB502496-27_r.eps	 PB502497-27-r.eps	 PB502501-27_r.eps
	160 A	**200 A**	**200 A**	**200 A**	**200 A**
	27 kÂ	25 kÂ	25 kÂ	30 kÂ	20 kÂ
	The cascading reinforced breaking capacity when combining circuit breakers is maintained. The worst-case scenarios have been tested.				
	750 V AC	750 V AC	750 V AC		750 V AC
	690 V AC	690 V AC	690 V AC		690 V AC
	8 kV	8 kV	8 kV		8 kV
	50 A for feeder for 10 mm² cable/63 A for feeder for 2 10 mm² cables				
	6.700 x 10^6	6.700 x 10^6	6.700 x 10^6		6.700 x 10^6
	50/60 Hz				
	IPxxB				
	24	48			72
	12	24			36
	Direct onto the row by cable 50 mm² with crimped lug, or flexible bar 20 x 3 from busbar with prefabricated connection				-
	-	-			-
	-	-			-
	-	-			-
	-	-			-
	6	12			18
	6	18			27
	20 x 4 mm² + 6 x 6 mm² (W = 100 mm)				-
	For rows (IPxxB)	-			-
	For rows	-			-
	04018	**04012**	**04013**	**04014**	**04026**

Connections to the device feeders

	 DD383472-LIN_1.eps	 DD385247.eps	 DD385248.eps	 DD385535.eps	
	4P 200 A connection (supplied with fixing accessories)	4P 200 A connection (supplied with fixing accessories)	4P 200 A connection (supplied with fixing accessories)	4P 160 A connection for Linergy FM 1/2 row	200 A connection (20 x 3) for Linergy FM
Allows power supply from	Linergy BW busbar	Multi-stage Linergy BS busbar	Rear Linergy BS busbar	Device	Device
Catalogue numbers	**04021** **04150 insulating covers**	**04024**	**04029**	**04030**	**04743**

Spare parts

	 PB502502-8_r.eps
	4 covers for 160/200 A Linergy FM rows
Catalogue numbers	**01202**

Linergy FH
Horizontal comb busbar for 27 mm pitch for NG125

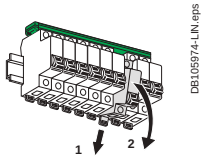
IEC 60664-1

Description

Comb busbars make it easier to install C120 and NG125 circuit breakers.
- Supplied with 2 lateral end-caps, IP 2.
- Outgoing feeders can be marked.
- Cutting markings on the copper bars and the insulating material.

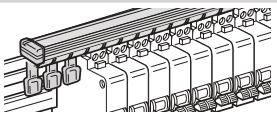
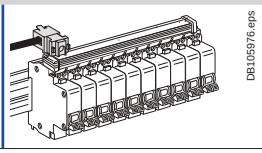
NG125	27 mm poles, cuttable			
Number of poles	**1P**	**2P**	**3P**	**4P**
				
	Each com busbar reference includes: ■ 1 x single or 2 pole comb busbar + 8 tooth-caps + 2 side plates ■ 1 x 3 or 4 pole comb busbar + 4 tooth-caps + 2 side plates To insulate teeth that have been left free can be insulated by tooth-caps			
Rated operational current at 40 °C (Ie)	125 A (63 A max by outgoer)			
Rated conditional short-circuit current of an assembly (Isc)	Compatible with the breaking capacity of C120 and NG125 circuit breakers			
Insulation voltage (Ui)	620 V AC			
Rated voltage (Ue)	500 V AC			
Fire resistance to IEC 695-2-1	Self-extinguishing 960 °C, 30 s			
Colour	RAL 7016 (anthracite grey)			
Use				
	Power supply by connector recommended			
Number of 27 mm modules	16	16	15	16
Set of	1			
Catalogue numbers	**14811**	**14812**	**14813**	**14814**

Installation



Comb busbars allow dismountability (1-2)

Accessories

Number of poles	**1P, 2P, 3P, 4P**	
		
	Tooth covers	**Insulated connector**
		Compatible with all Schneider Electric comb busbars. Clip onto the comb busbar's insulating material, which gives them very great stability Receive clip-on markers allowing circuit identific
Use		
		For 25 mm² semi-rigid cable
Set of	20	4
Catalogue numbers	**14818**	**14885**
Installation		
		

Linergy FH
Horizontal comb busbar for 18 mm pitch for Acti 9


PB502379.eps

IEC 60947-7-1, IEC 61439-2

Description
Comb busbars make it easier to install Acti 9 circuit breaker.
- Can be sawn and cut in a single pass.
- Supplied with two IP20 lateral end-caps except for 57 module references.
- The side plates are compulsory after cutting.
- The phases are identified by symbols on each side of the comb busbar for installation in all positions.
- Cutting marks on the insulating material.
- The special comb busbars for circuit breakers with 9 mm auxiliaries have a 9 mm gap for inserting iOF and iSD.

Acti 9		18 mm poles, cuttable										
Number of poles		**1P**	**2P**	**3P**	**4P**	**3 (N+P)**	**Aux+1P**	**Aux+2P**	**Aux+3P**	**Aux+4P**	**3 (Aux+1P)**	**3 (Aux+N+1P)**
		 PB110252-24.eps										
Rated operational current at 40 °C	(Ie)	100 A										
Rated conditional short-circuit current of an assembly	(Isc)	Compatible avec le pouvoir de coupure des disjoncteurs Acti 9										
Insulation voltage	(Ui)	500 V AC										
Rated voltage	(Ue)	415 V AC										
Fire resistance to IEC 695-2-1		Self-extinguishing 960 °C, 30 s										
Colour		RAL 7016 (anthracite grey)										
Use												
		Power supply by connector recommended										
Type		L1…	L1L2…	L1L2L3...	NL1L2L3...	NL1NL2… …NL3	AuxL1...	AuxL1L2…	AuxL1L2L3	AuxNL1… …L2L3	AuxL1… …AuxL2… …AuxL3	AuxL1… …AuxL2… …AuxL3
Set of		1	1	1	1	1	1	1	1	1	1	1
Catalogue numbers												
6 modules of 18 mm		**A9XPH106**	-	-	-	-	-	-	-	-	-	-
12 modules of 18 mm		**A9XPH112**	**A9XPH212**	**A9XPH312**	**A9XPH412**	**A9XPH512***	-	-	-	-	-	-
18 modules of 18 mm		-	-	-	-	**A9XPH518***	-	-	-	-	-	-
24 modules of 18 mm		**A9XPH124**	**A9XPH224**	**A9XPH324**	**A9XPH424**	**A9XPH524***	-	-	-	-	-	-
57 modules of 18 mm		**A9XPH157**	**A9XPH257**	**A9XPH357**	**A9XPH457**	**A9XPH557***	**A9XAH157**	**A9XAH257**	**A9XAH357**	**A9XAH457**	**A9XAH657**	**A9XAH557***

* This comb busbar is only compatible in top feeding for simple lug devices and bottom feeding on double lug devices.

Installation


PB110290-40.eps


PB110793-40.eps

Accessories

Number of poles	**1P**	**2P**	**3P**	**4P**	**-**	**-**	**-**
	 DB404806.eps				 DB404808.eps	 PB110258-22.eps	 PB110259-15.eps
	Side plates				**Tooth covers**	**Connectors**	
						Monoconnect	**Double terminals**
	Lateral end-caps providing IP20 protection				To insulate teeth that have been left free	Comb busbar power supply. Horizontal incomer on each side. For 35 mm2 cable. Tightening torque 4 N.m  PB108138-25.eps	
Set of	10	10	10	10	20	4	4
Catalogue numbers	**A9XPE110**	**A9XPE210**	**A9XPE310**	**A9XPE410**	**A9XPT920**	**A9XPCM04**	**A9XPCD04**

Linergy FH
Horizontal comb busbar for 18 mm pitch for Acti 9

IEC 60947-7-1, IEC 61439-2

Description
Comb busbars make it easier to install Acti 9 circuit breakers.
The phases are identified by symbols on each side of the comb busbar.
Dismountability of devices with Acti 9.

Acti 9	18 mm poles, not cuttable				
Number of poles	**1P**	**2P**	**3P**	**4P**	**3 (N+P)**
					
Rated operational current at 40 °C (Ie)	100 A				
Rated conditional short-circuit current of an assembly (Isc)	Compatible with the breaking capacity of Acti 9 circuit breaker				
Insulation voltage (Ui)	500 V AC				
Rated voltage (Ue)	415 V AC				
Fire resistance to IEC 695-2-1	Self-extinguishing 960 °C, 30 s				
Colour	RAL 7016 (anthracite grey)				
Use					
	Power supply by connector recommended				
Type	L1	L1L2	L1L2L3	NL1L2L3	NL1NL2NL3
Set of	1	1	1	1	1
Catalogue numbers					
12 modules of 18 mm	**A9XPM112**	**A9XPM212**	**A9XPM312**	**A9XPM412**	**A9XPM512** (1)

(1) This comb busbar is only compatible in top feeding for simple lug devices and bottom feeding on double lug devices.

Installation

Accessories

	Tooth covers	**Connectors**	
		Double terminals	**Monoconnect**
	To insulate teeth that have been left free	Comb busbar power supply	
Use			
		Horizontal incomer on each side For 35 mm² cable Tightening torque 4 N.m	
Set of	20	4	4
Catalogue numbers	**A9XPT920**	**A9XPCD04**	**A9XPCM04**
Installation			
			

Linergy FH
Horizontal comb busbar for 9 mm pitch for Acti 9, C60

IEC 60439-1

Description

Comb busbars ensure:
- Easy, reliable mounting of 1P+N and 3P+N, TL, CT, ID, V, BP and Cm switchgear: tooth positioning opposite the device terminals is ensured by indexing of copper parts

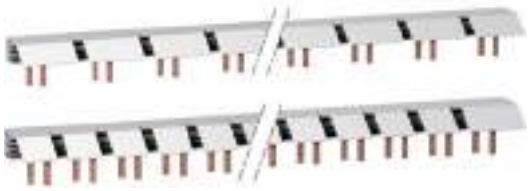
C60/ID Group Feeder comb busbars contain two different parts:
- connection of Group Feeder switchgear: C60 (3P + N) or ID (3P + N) circuit breaker in 18 mm modules, powered by cables, through the bottom, directly by the terminals
- connection of Acti 9 switchgear in 9 mm modules.

Acti 9 Ph+N		9 mm poles, cuttable					
Number of poles		**1P+N**			**3P+N**		
		 DB123729.eps 21501			 DB123730.eps 21505		
		Complete comb busbars (supplied with 4 side plates and 1 tooth-cover)					
Rated operational current at 40 °C	(Ie)	80 A					
Rated conditional short-circuit current of an assembly	(Isc)	Compatible with the breaking capacity of Acti 9 and C60 circuit breakers					
Insulation voltage	(Ui)	440 V AC					
Rated voltage	(Ue)	230 V AC (P + N) - 400 V AC (3P + N)					
Rated impulse withstand voltage	(Uimp)	6 kV					
Degree of protection		IP20					
Fire resistance to IEC 695-2-1		Self-extinguishing 960 °C, 30 s					
Colour		RAL 7035					
Number of 18 mm modules	Comb busbar	12	18	24	12	18	24
	Tooth cover	3	3	6	3	3	6
Catalogue numbers		**21501**	**19512**	**21503**	**21505**	**19516**	**21507**
Comb busbars alone							
Number of 18 mm modules	Comb busbar	48			48		
Catalogue numbers		**21089**			**21093**		

C60/ID Group Feeder comb busbars alone				
Number of poles		**3P+N**		
		 PB101184-10.eps		
Rated operational current at 40 °C	(Ie)	80 A		
Rated conditional short-circuit current of an assembly	(Isc)	Compatible with the breaking capacity of Schneider Electric circuit breakers		
Insulation voltage	(Ui)	440 V AC		
Rated voltage	(Ue)	230 V AC (P + N) - 400 V AC (3P + N)		
Rated impulse withstand voltage	(Uimp)	6 kV		
Degree of protection		IP20		
Fire resistance to IEC 695-2-1		Self-extinguishing 960 °C 30 s		
Colour		RAL 7035		
Number of 18 mm modules		12	48	48
Power supply		Through left-hand	Through left-hand	Through right-hand
Catalogue numbers		**10545**	**10546**	**10547**

Accessories					
Number of poles	**1P+N**	**3P+N**			
	 DB123732.eps		 DB123733.eps		 DB123731.eps
	Side plates		**Tooth caps (3 x 18-mm module)**	**Tooth caps (1 x 18-mm module)**	**Connectors (grey)**
Set of	40		12	10	4
Catalogue numbers	**21094**	**21095**	**21096**	**10405**	**21098**

Linergy FH
Horizontal comb busbar for 9 mm pitch for Acti 9



IEC 60439-1

Description

- Connection of Clario, Prodis and Librio switchgear in 9 mm modules.
- The special comb busbars for circuit breaker have a gap of 9 mm for inserting OF, SD, OF-SD/OF auxiliaries.
- The comb busbars for 3P + N circuit breakers and auxiliaries are compatible with Prisma switchboard.
- 1P + N comb busbars are compatible with Prisma and Pragma 24.

Acti 9		9 mm poles, cuttable			
Number of poles		**1P + N**	**3P + N**	**1P + N**	**3P + N**
		 PB110801-10.eps			
		A9N21036			
		Comb busbars		**Comb busbars DPN Vigi**	
Rated operational current at 40 °C	(Ie)	63 A			
Rated conditional short-circuit current of an assembly	(Isc)	Compatible with the breaking capacity of Acti 9 circuit breaker			
Insulation voltage	(Ui)	500 V AC			
Rated voltage	(Ue)	230 V AC (P + N) - 400 V AC (3P + N)			
Degree of protection		IP20			
Degree of pollution		3			
Fire resistance to IEC 695-2-1		Self-extinguishing 960 °C, 30 s			
Colour		RAL 7035			
Number of 18 mm modules		56	56	56	56
Catalogue numbers		**A9N21035**	**A9N21036**	**A9N21037**	**A9N21038**

Accessories

Number of poles	**1P+N**	**3P+N**			
	 PB110804-10.eps		 PB110805-10.eps	 PB110806-10.eps	 PB110807-10.eps
	Side plates		**Connectors (grey)**	**Neutral connectors (blue)**	**Tooth caps (1 x 18 mm module)**
Set of	20		10	10	10
Catalogue numbers	**A9N21039**	**A9N21040**	**A9N21041**	**A9N21042**	**A9N21050**

Linergy TR
Introduction

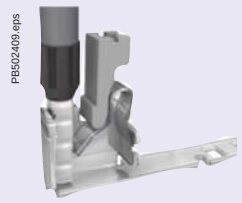
A Push-in technology terminal blocks

Presentation

The new **NSYTRP** push-in terminal blocks use the most cost effective connection technique in the market. This technique drastically reduces wiring time and eliminates the need for regular re-tightening.

The insertion force of the **NSYTRP** push-in terminal blocks is up to 50 % lower companing with other terminal blocks with direct connection.

This allows easy and direct plugging of solid conductors or flexible conductors with cable-ends (ferrules) of 0.34 mm^2 and up to 6 mm^2.

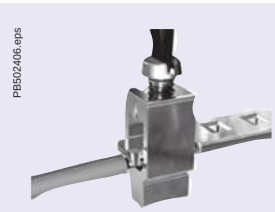


Principle of push-in connection.

B Screw technology terminal blocks

Presentation

NSYTRV screw technology terminal blocks are components which are well-known and widely used throughout the world and are suitable for the vast majority of connection applications, due to their wide range of functions and connection possibilities.
NSYTRV terminal blocks ensure quality, safety and the operational availability of equipment.
In addition to these advantages, they optimise the setting up and operation of installations, due to their simplicity and integrated functions.



Principle of screw connection.

C Spring technology terminal blocks

Presentation

Spring technology is a type of connection that requires no maintenance and ensures the separation of mechanical and electrical functions.

NSYTRR spring terminals significantly reduces wiring time and eliminates the need for regular re-tightening. This technology allows the connection of flexible conductors with or without cable ends, but also of solid conductors with nominal c.s.a. of 0.13 mm^2 up to 25 mm^2.

NSYTRR terminal blocks ensure quality, safety and the operational availability of equipment.
In addition to these advantages, they optimise the setting up and operation of installations, due to their simplicity and integrated functions.

Principle of spring connection.

Linergy TR
Terminal blocks

			Connection technology					
Type of terminal block	**Cross-section area**	**Colour**	**Screw tech**	**Spring tech**	**Push-in tech**	**Miniature screw for 15 mm DIN rail**	**Miniature spring for 15 mm DIN rail**	**Miniature spring for direct mount**
Passthrough	2.5 mm² (2 pts)	Grey	**NSYTR V22**	**NSYTR R22**	**NSYTR P22**	**NSYTR V22M**	**NSYTR R22M**	**NSYTR R22MF**
		Blue	**NSYTR V22BL**	**NSYTR R22BL**	**NSYTR P22BL**	**NSYTR V22MBL**	**NSYTR R22MBL**	**NSYTR R22MFBL**
		Orange	**NSYTR V22AR**	**NSYTR R22AR**	**NSYTR P22AR**	-	-	**NSYTR R22MFF***
	2.5 mm² (3 pts)	Grey	-	**NSYTR R23**	**NSYTR P23**	-	-	-
		Blue	-	**NSYTR R23BL**	**NSYTR P23BL**	-	-	-
		Orange	-	**NSYTR R23AR**	**NSYTR P23AR**	-	-	-
	2.5 mm² (4 pts, 1 level)	Grey	-	**NSYTR R24**	**NSYTR P24**	-	**NSYTR R24M**	**NSYTR R24M**
		Blue	-	**NSYTR R24BL**	**NSYTR P24BL**	-	**NSYTR R24MBL**	**NSYTR R24MBL**
	2.5 mm² (4 pts, 2 levels)	Grey	**NSYTR V24D**	**NSYTR R24D**	**NSYTR P24D**	-	-	-
		Blue	**NSYTR V24DBL**	**NSYTR R24DBL**	**NSYTR P24DBL**	-	-	-
	4 mm² (2 pts)	Grey	**NSYTR V42**	**NSYTR R42**	**NSYTR P42**	**NSYTR V42M**	-	-
		Blue	**NSYTR V42BL**	**NSYTR R42BL**	**NSYTR P42BL**	**NSYTR V42MBL**	-	-
		Orange	**NSYTR V42AR**	**NSYTR R42AR**	-	-	-	-
	4 mm² (3 pts)	Grey	**NSYTR V43**	**NSYTR R43**	**NSYTR P43**	-	-	-
		Blue	**NSYTR V43BL**	**NSYTR R43BL**	**NSYTR P43BL**	-	-	-
		Orange	-	-	-	-	-	-
	4 mm² (4 pts, 1 level)	Grey	**NSYTR V44**	**NSYTR R44**	**NSYTR P44**	-	-	-
		Blue	**NSYTR V44BL**	**NSYTR R44BL**	**NSYTR P44BL**	-	-	-
	4 mm² (4 pts, 2 levels)	Grey	**NSYTR V44D**	**NSYTR R44D**	-	-	-	-
		Blue	**NSYTR V44DBL**	**NSYTR R44DBL**	-	-	-	-
	6 mm² (2 pts)	Grey	**NSYTR V62**	**NSYTR R62**	-	-	-	-
		Blue	**NSYTR V62BL**	**NSYTR R62BL**	-	-	-	-
	10 mm² (2 pts)	Grey	**NSYTR V102**	**NSYTR R102**	-	-	-	-
		Blue	**NSYTR V102BL**	**NSYTR R102BL**	-	-	-	-
	16 mm² (2 pts)	Grey	**NSYTR V162**	**NSYTR R162**	-	-	-	-
		Blue	**NSYTR V162BL**	**NSYTR R162BL**	-	-	-	-
	150 mm² (2 pts)	Grey	**NSYTRV1502BB**	-	-	**NSYTR V22MPE**	**NSYTR R22MPE**	
Earth protection	2.5 mm² (2 pts)	Green	**NSYTR V22PE**	**NSYTR R22PE**	**NSYTR P22PE**	-	-	-
	2.5 mm² (3 pts)	Green	-	**NSYTR R23PE**	**NSYTR P23PE**	-	-	-
	2.5 mm² (4 pts)	Green	-	**NSYTR R24PE**	**NSYTR P24PE**	-	-	-
	4 mm² (2 pts)	Green	**NSYTR V42PE**	**NSYTR R42PE**	**NSYTR P42PE**	**NSYTR V42MPE**	-	-
	4 mm² (3 pts)	Green	**NSYTR V43PE**	**NSYTR R43PE**	**NSYTR P43PE**	-	-	-
	4 mm² (4 pts)	Green	**NSYTR V44PE**	**NSYTR R44PE**	**NSYTR P44PE**	-	-	-
	6 mm² (2 pts)	Green	**NSYTR V62PE**	**NSYTR R62PE**	-	-	-	-
	10 mm² (2 pts)	Green	**NSYTR V102PE**	**NSYTR R102PE**	-	-	-	-
	16 mm² (2 pts)	Green	**NSYTR V162PE**	**NSYTR R162PE**	-	-	-	-
Knife disconnect	2.5 mm² (2 pts)	Grey	**NSYTR V42ST** (1)	**NSYTR R22SC**	**NSYTR P22SC**	-	-	-
		Orange	**NSYTR V42STAR** (1)	**NSYTR R22SCAR**	-	-	-	-
	2.5 mm² (3 pts)	Grey	-	**NSYTR R23SC**	**NSYTR P23SC**	-	-	-
		Orange	-	**NSYTR R23SCAR**	-	-	-	-
	2.5 mm² (2 levels)	Grey	**NSYTRV42SCD** (1)	**NSYTRR24SCD**	-	-	-	-
Fuse disconnect	4 mm² (2 pts) Fusible 5 x 20 mm	Black	**NSYTR V42SF5**	-	-	-	-	-
		Black (12 V)	**NSYTR V42SF5LD** (2)	-	-	-	-	-
		Black (230 V)	**NSYTR V42SF5LA** (2)	-	-	-	-	-
Basic disconnect (3)	4 mm² (2 pts)	Grey	**NSYTRV 42TB**	**NSYTR R22TB**	**NSYTR P42TB**	-	-	-
Measuring transducer	6 mm² (2 pts) Disconnect	Grey/Orange	**NSYTR V62TTD**	-	-	-	-	-
	6 mm² (2 pts)	Grey	**NSYTR V62TT**	-	-	-	-	-
	6 mm² (2 pts)	Green	**NSYTR V62TTPE**	-	-	-	-	-

** Grey terminal with flange.*

(1) 4 mm² terminal, with 2 test points.
(2) With light indicator.
(3) Fuse or component carrier not supplied.

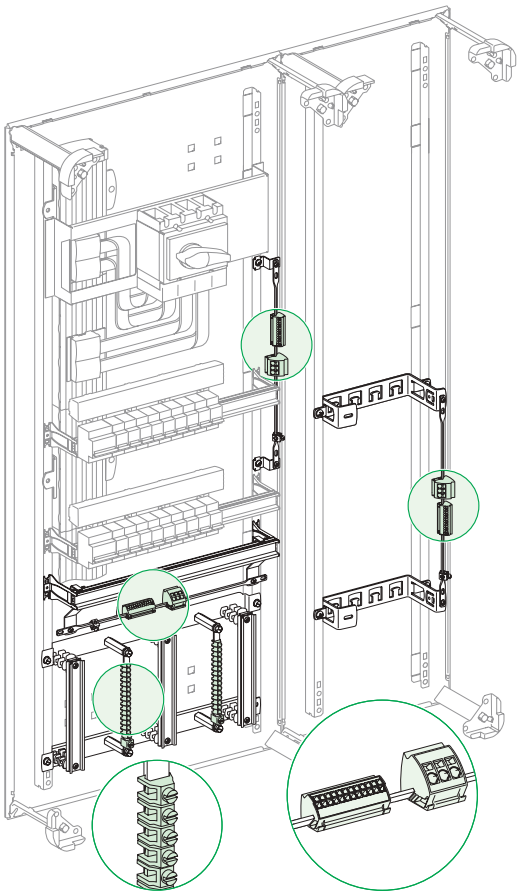
Linergy TR
Terminal blocks





Connection technology	Accessories				
Miniature spring for direct mount	End plate for screw TBs	End plate for spring TBs	End plate for push-in TBs	Plug-in bridge	Marking strips 10 characters
NSYTR R22MP	NSYTRA C22	NSYTRA CR22	NSYTRA CR22	NSYTRA L22	NSYTRA B510
NSYTR R22MPBL	NSYTRA C22BL	NSYTRA CR22BL	NSYTRA CR22BL	NSYTRA L23	NSYTRA B520
-	-	-		NSYTRA L24	NSYTRA B530
-	-	NSYTRA CR23	NSYTRA CR23	NSYTRA L25	NSYTRA B540
-	-	NSYTRA CR23BL	NSYTRA CR23BL	NSYTRA L210	NSYTRA B550
-	-	-	-	NSYTRA L210BL	...
NSYTR R24MP	-	NSYTRA CR24	NSYTRA CR24	NSYTRA L210GR	NSYTRA B590
NSYTR R24MPBL	-	NSYTRA CR24BL	NSYTRA CR24BL	NSYTRA L220	NSYTRA B5100
-	NSYTRA CE24	NSYTRA CRE24	NSYTRA CRE24		NSYTRA B51100
-	-	-	-		
-	NSYTRA C22	NSYTRA CR42	NSYTRA CR42	NSYTRA L42	NSYTRA B610
-	NSYTRA C22BL	-	-	NSYTRA L43	NSYTRA B620
-	-	-	-	NSYTRA L44	NSYTRA B630
-	NSYTRA C23	NSYTRA CR43	NSYTRA CP43	NSYTRA L45	NSYTRA B640
-	-	-	-	NSYTRA L410	NSYTRA B650
-	-	-	-	NSYTRA L410BL	...
-	NSYTRA C24	NSYTRA CR44	NSYTRA CP44	NSYTRA L410GR	NSYTRA B690
-	-	-	-	NSYTRA L420	NSYTRA B6100
-	NSYTRA CE24	NSYTRA CRE44	-		NSYTRA B61100
-	-	-	-		
-	NSYTRA C22	NSYTRA CR62	-	NSYTRA L62	NSYTRA B810
-	NSYTRA C22BL	-	-	NSYTRA L610	NSYTRA B820
-	NSYTRA C22	NSYTRA CR102	-	NSYTRA L102	NSYTRA B1010
-	NSYTRA C22BL	-	-		NSYTRA B1020
-	NSYTRA C162	NSYTRA CR162	-	NSYTRA L162	NSYTRA B1010
-	-	-	-		NSYTRA B1020
	NSYTRAC952	-	-	NSYTRA L1502	-
-	NSYTRA C22	NSYTRA CR22	NSYTRA CR22		
-	-	NSYTRA CR23	NSYTRA CR23		
-	-	NSYTRA CR24	NSYTRA CR24		
-	NSYTRA C22	NSYTRA CR42	NSYTRA CR42		
-	NSYTRA C23	NSYTRA CR43	NSYTRA CP43		
-	NSYTRA C24	NSYTRA CR44	NSYTRA CP44		
-	NSYTRA C22	NSYTRA CR62	-		
-	NSYTRA C22	NSYTRA CR102	-		
-	NSYTRA C162	NSYTRA CR162	-		
-	Included	NSYTRA CR23	NSYTRA CPK22		
-	Included	-	-		
-	-	NSYTRA CR24	NSYTRA CPK23		
-	-	-	-		
-	NSYTRA CE24	Included	-		
-	Included	-	-		
-	Included	-	-		
-	Included	-	-		
-	Included	NSYTRA CR23	NSYTRA CR42		
-	NSYTRA CT22	-	-		
-	NSYTRA CT22	-	-		
-	NSYTRA CT22	-	-		

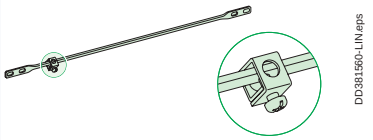
Linergy TB
Earth bars



Description

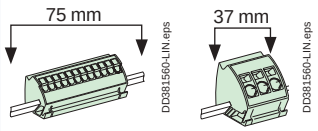
This range of earth bars is installed:
- in the duct which can constitute a dedicated area, completely separate from the equipment
- or in the switchgear compartment, at the top or the bottom.

Fast-connecting earth bar



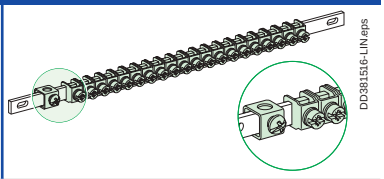
	Copper earth bar
Cross-section (mm)	12 x 3
Effective length (mm)	330
Total length (mm)	450
Composition	Copper bar with 1 terminal 16 to 35 mm²
Catalogue numbers	**04201**

Accessories



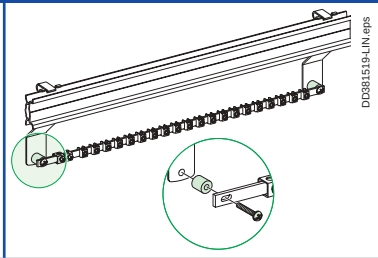
	Earth blocks with terminals	
	Spring-fixing (clip onto the earth bar)	
Total connection capacity	12 x 4 mm²	3 x 16 mm²
Composition	4 earth blocks	4 earth blocks
Catalogue numbers	**04214**	**04215**

Accessories



	Earth bar with jumper	
Total connection capacity	40 x 2.5 to 16 mm²	20 x 2.5 to 16 mm²
Cross-section (mm)	12 x 3	12 x 3
Length (mm)	450	200
Composition	40 jumpers and a terminal (16 to 35 mm²)	20 jumpers and a terminal (16 to 35 mm²)
Catalogue numbers	**04200**	**04202**

Accessories

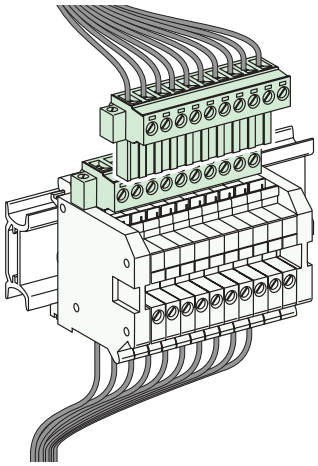


	Neutral bar
	Converts an earth bar to a neutral bar
Composition	2 insulating spacers
Catalogue numbers	**04210**

Installation accessories

> pages 70 to 72.

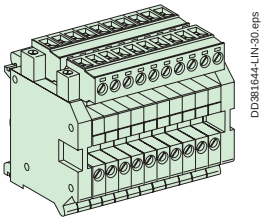
Linergy TA
Auxiliary connections



Description

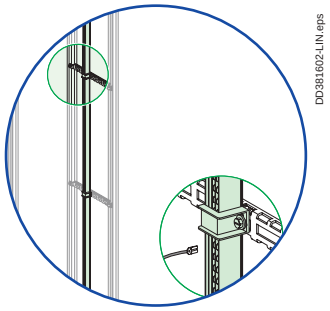
For distributing auxiliary voltages in power and regulation equipment.

Terminal block for auxiliary wiring



Standards		IEC	UL
Rated operational current at 40 °C	(Ie)	12 A	20 A
Rated operational voltage	(Ue)	250 V AC	300 V AC
Rated impulse withstand voltage	(Uimp)	4 kV	
Connection capacity	Input	10 (grey)	
	Output	2 x 10 (grey)	
Dimensions (H x W x D)	(mm)	61 x 48 x 45	
Cross-section		0.2 to 4 mm	
Tightening torque		0.5 to 0.6 Nm	
Composition		3.5 18-mm modules	
Catalogue numbers		**04228**	

Four-pole auxiliary bus duct



		Duct for 4 conductors
		166 tap-off points with Faston connectors, per linear meter
Rated operational current at 40 °C	(Ie)	32 A
Rated insulation voltage	(Ui)	660 V AC
Length (mm)		1755
Composition		Supplied with 2 end clamps and 1 lateral clamp for mounting on cable-tie supports
Catalogue numbers		**04203**

Prisma G enclosures

Contents

Prisma G W600, W300

Prisma G W850

Prisma G enclosures
IP30, IP31, IP43

IP30, IP31, IP43

For safe and upgradeable electrical switchboards

- > Safety of people and property
- > Continuity of service
- > Optimisation and upgradeability
- > Ergonomics and complete accessibility
- > Controlled costs (installation, maintenance) and delivery times

> 100 % reliable and in compliance with existing standards
All the components (switchgear, splitter blocks, prefabricated connections, etc.) have been designed to work together. All switchboard configurations have been tested.

> Optimised, upgradeable installation
With Prisma G, you can build the right switchboard for your customer, sized precisely to fit costs and needs. Thanks to the organisation around functional units, the installation evolves simply while preserving its original performance.

> **Ease of setup**
The complete accessibility of all mounting and connection points facilitates assembly and cabling in the workshop. The functional units are clearly identified: operations are intuitive and reliable, and connection and checking are performed naturally.

Presentation
Enclosures

Metallic indoor enclosures to compose.
Commercial buildings: hotels, offices, shops, etc.
Industry: technical room, etc.

Enclosure delivered flat: total accessibility
Designed for electrical continuity

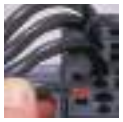
- 630 A
- IP30
- IK07/08

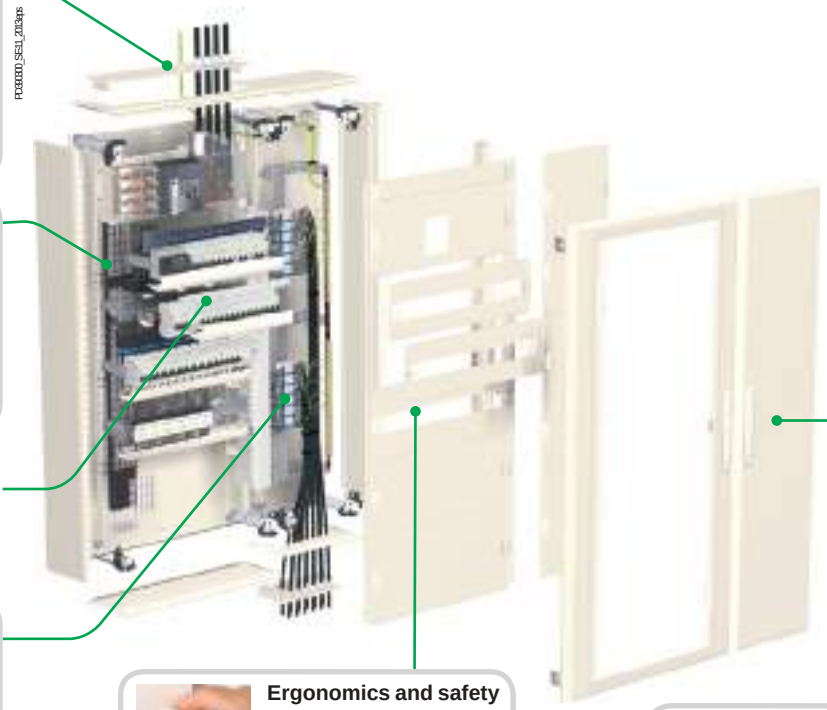
Gland plate
- Dismountable and cuttable

Safety
- Insulated Linergy BW busbars, IPxxB, pre-fitted

Fast operation and easy maintenance
- Straightforward organisation in functional units

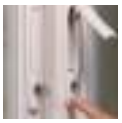
Quick-connect Linergy TB terminal blocks





Quick fastening on hook-on rail
- Easy wall mounting

Ergonomic handle



Ergonomics and safety
- Easy front plate handling thanks to the ergonomic gripper
- Legible "Open/closed" positions of front plate
- Integrated front plate sealing function

Continuity of service
- Direct accessibility of functional unit thanks to the front plate hinges kit
- Total accessibility of switchgear thanks to the installation of hinges on all front plate (allows the front panel to be made swivelling)

Main characteristics

Steel sheet metal with electrophoresis treatment + hot-polymerised polyester epoxy powder.
Enclosure:
- width: 595 mm, with duct: 305 mm
- height: 330 to 1380 mm
- depth: 205 mm without door / 250 mm with door
- properties of metal enclosures *> page 198*.

Designation

G IP30 - IP31 - IP43 enclosure	
Rated operational current	630 A - Isc = 50 kA, Icw = 25 kA rms / 1 s, Ipk = 53 kÂ
Colour	White colour RAL 9001
Standards conformity	EN 62208, IEC 61439-2
Degree of protection	IP30 with or without door, IP31 with canopy + door, IP43 with canopy + door + gasket
Degree of protection against mechanical impacts	IK08 with door, IK07 without door
Isolation	Class 1
Doors	■ Plain or transparent, opening to right or left ■ By design, electrical continuity of moving parts (hinges…) ■ Supplied with a handle and keylock (key 405) Distance behind door = 58 mm (possibility of push-buttons, lamps installation).
Mounting	Surface mounting, floor-standing, flush mounting via a kit *> page 117*

Easy design with
Rapsody software
> see page 27

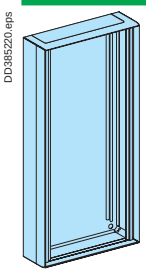
Wall-mounted and floor-standing enclosures

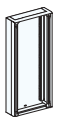
IP30, IP31, IP43

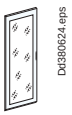
IP30 630 A enclosures

Reversible doors (opening to left or right), equipped with a handle and keylock (key 405).

Wall-mounted enclosures, W600

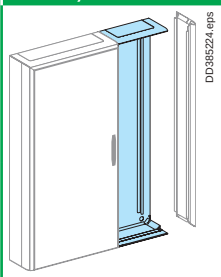


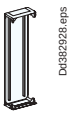




Nb. of vertical modules of 50 mm	Height in mm	Enclosure	Plain door	Transparent door
6	330	**08102**	**08122**	**08132**
9	480	**08103**	**08123**	**08133**
12	630	**08104**	**08124**	**08134**
15	780	**08105**	**08125**	**08135**
18	930	**08106**	**08126**	**08136**
21	1080	**08107**	**08127**	**08137**
24	1230	**08108**	**08128**	**08138**
27	1380	**08109 / 08119** (2)	**08222**	**08232**

Ducts, W300





Nb. of vertical modules of 50 mm	Height in mm	Rear + top and bottom plates (1)	Plain door	Transparent door
6	330	**08172**	**08182**	**-**
9	480	**08173**	**08183**	**-**
12	630	**08174**	**08184**	**-**
15	780	**08175**	**08185**	**-**
18	930	**08176**	**08186**	**-**
21	1080	**08177**	**08187**	**08197**
24	1230	**08178**	**08188**	**08198**
27	1380	**08179**	**08282**	**08292**

(1) *Supplied with a combination kit for enclosure + duct association.*

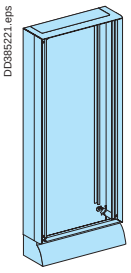
(2) *Wall-mounted enclosure extension.*

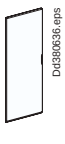
Floor-standing enclosures IP30

Reversible doors (opening to left or right), equipped with a handle and keylock (key 405).

- Two basic floor-standing enclosures cannot be combined.
- To create a switchboard comprising a number of enclosures, use a basic floor-standing enclosure and one or more floor-standing enclosure extensions.
- Floor-standing enclosure extensions are supplied with a combination kit for the basic floor-standing enclosure.
- Cables can be run on the sides of the plinth (diameter ⩽ 140 mm).

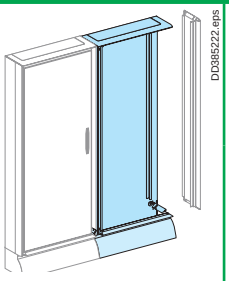
Floor-standing enclosures, W600





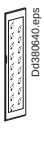
Nb. of vertical modules of 50 mm	Height in mm	Basic enclosure	Plain door	Transparent door
27	1530	**08202**	**08222**	**08232**
30	1680	**08203**	**08223**	**08233**
33	1830	**08204**	**08224**	**08234**

Enclosure extensions, W600



Nb. of vertical modules of 50 mm	Height in mm	Rear	Plain door	Transparent door
27	1530	**08212**	**08222**	**08232**
30	1680	**08213**	**08223**	**08233**
33	1830	**08214**	**08224**	**08234**

Ducts, W300



Rear + top and bottom plates	Plain door	Transparent door
08272	**08282**	**08292**
08273	**08283**	**08293**
08274	**08284**	**08294**

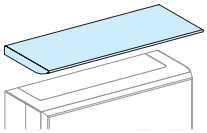
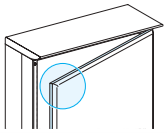
Partitionning
> page 67

Switchgear on the door
> pages 60 à 61
Spare parts (rear accessories, door accessories, sides, uprights, etc.)
> page 137

Wall-mounted and floor-standing enclosures

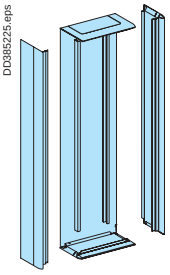
IP30, IP31, IP43

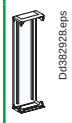
Accessories to increase the degree of protection IP

	Canopy to increase the IP value from IP30 to IP31					Gasket for the door to increase the IP value from IP31 to IP43
						
Used with	**1 wall-mounted enclosure**	**1 wall-mounted enclosure + 1 duct** (1)	**2 wall-mounted enclosures**	**2 wall-mounted enclosures + 1 duct** (1)	**1 wall-mounted enclosure + 2 ducts** (2)	**Enclosures or a duct from 6 to 33 modules**
						
Catalogue numbers	**08830**	**08832**	**08831**	**08833**	**08827**	**08841**
Designation	The addition of a canopy over a wall-mounted or floor-standing enclosure equipped with a door ensures compliance with the degree of protection IP31.					When the switchboard is equipped with a canopy, a gasket for the doors ensures compliance with the degree of protection IP43. L = 5.3 m

(1) Whatever the duct position.
(2) Ducts on the sides.

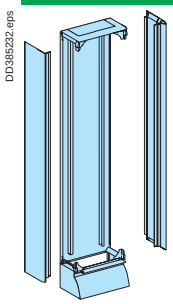
Wall-mounted enclosures, W300

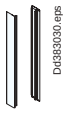


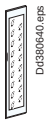


Nb. of vertical modules of 50 mm	Height in mm	Rear + top and bottom plates	Side panels	Plain door	Transparent door
6	330	**08172**	2 x **01040**	**08182**	-
9	480	**08173**	2 x **01041**	**08183**	-
12	630	**08174**	2 x **01042**	**08184**	-
15	780	**08175**	2 x **01043**	**08185**	-
18	930	**08176**	2 x **01044**	**08186**	-
21	1080	**08177**	2 x **01045**	**08187**	**08197**
24	1230	**08178**	2 x **01046**	**08188**	**08198**
27	1380	**08179**	2 x **01035**	**08282**	**08292**

Floor-standing enclosures, W300







Nb. of vertical modules of 50 mm	Height in mm	Rear + top and bottom plates	Side panels	Plain door	Transparent door
27	1530	**08272**	2 x **01035**	**08282**	**08292**
30	1680	**08273**	2 x **01034**	**08283**	**08293**
33	1830	**08274**	2 x **01033**	**08284**	**08294**

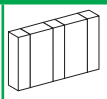
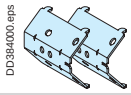
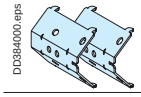
Spare parts (rear accessories, door accessories, sides, uprights, etc.)
> page 137

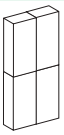
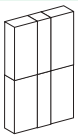
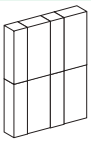
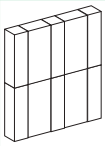
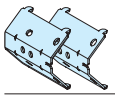
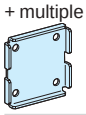
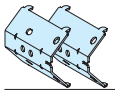
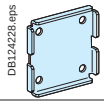
Combinations

IP30, IP31, IP43

Combinations

To make the combination more rigid, particularly during transport, it is mandatory to use a set of cross-members secured to the rear of the switchboard.

Combination kits	Horizontal						Vertical
Possible combinations							
For wall-mounted enclosure	**1 wall-mounted enclos. + 1 duct**	**1 wall-mounted enclos. + 2 ducts**	**2 wall-mounted enclos.**	**2 wall-mounted enclos. + 1 duct**	**2 wall-mounted enclos. + 2 ducts**	**2 wall-mounted enclos. + 3 ducts**	**2 wall-mounted enclos.**
Set of two lifting/reinforcement cross-members or vertical uprights	**08812**	**08811**	**08811**	**08813**	**08814**	**08826**	**08817** (1)
+ combination kit (2) 	-	-	**08816**	**08816**	**08816**	**08816**	**08816**
For floor-standing enclosure	**1 fl. standing enclos. + 1 duct**	**1 fl. standing enclos. + 2 ducts**	**1 fl. standing enclos. + 1 enclos. extension**	**1 fl. standing enclos. + 1 duct + 1 enclos. extension**	**1 fl. standing enclos. + 2 ducts + 1 enclos. extension**	**1 wall-mounted enclos. + 3 ducts + 1 enclos. extension**	**1 fl. standing enclos. + 1 wall-mounted enclos.**
Set of two lifting/reinforcement cross-members or vertical uprights	**08812**	**08811**	**08811**	**08813**	**08814**	**08826**	**08817** (1)
+ combination kit (2) 	-	-	-	-	-	-	**08816**
+ plain plate	-	-	-	-	-	-	**08882**

Combination kits	Multiple						
Possible combinations							
For wall-mounted enclosures	**2 wall-mounted enclosures + 2 ducts**	**4 wall-mounted enclosures**	**4 wall-mounted enclosures + 2 ducts**	**4 wall-mounted enclosures + 4 ducts**	**4 wall-mounted enclosures + 6 ducts**	**2 additional ducts**	**2 additional wall-mounted enclosures**
Set of two lifting/reinforcement cross-members	**08812**	**08811**	**08813**	**08814**	**08826**	must be made	must be made
Set of two vertical uprights (1)	**08817**	**08817**	**08817**	**08817**	**08817**	-	-
+ combination kit (2) 	**08816**	**08816**	**08816**	**08816**	**08816**	2 supplied with the ducts	2 supplied with the enclosure extensions
+ multiple combination kit 	**08818**	**08818**	2 x **08818**	3 x **08818**	4 x **08818**	**08818**	**08818**
For floor-standing enclosure	**1 fl. standing enclos. + 1 wall-mounted enclos. + 2 ducts**	**1 fl. standing enclos. + 1 enclos. extension + 2 wall-mounted enclos.**	**1 fl. standing enclos. + 1 enclos. extension + 2 ducts + 2 wall-mounted enclos.**	**1 fl. standing enclos. + 1 enclos. extension + 4 ducts + 2 wall-mounted enclos.**	**1 fl. standing enclos. + 1 enclos. extension + 6 ducts + 2 wall-mounted enclos.**	**2 additional ducts**	**2 fl. standing enclos. + 2 additional wall-mounted enclos.**
Set of two lifting/reinforcement cross-members	**08812**	**08811**	**08813**	**08814**	**08826**	must be made	must be made
Set of two vertical uprights	**08817**	**08817**	**08817**	**08817**	**08817**	-	-
+ combination kit (2) 	**08815**	**08815**	-	-	-	-	-
+ multiple combination kit 	**08818**	**08818**	2 x **08818**	3 x **08818**	4 x **08818**	**08818**	**08818**
+ plain plate	**08882**	2 x **08882**	2 x **08882**	2 x **08882**	2 x **08882**	-	**08882**

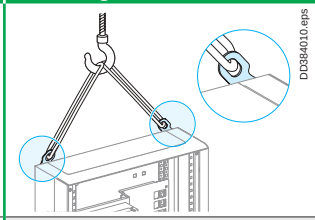
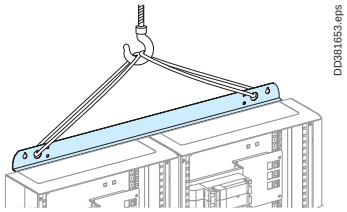
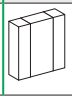
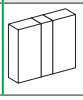
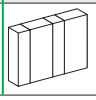
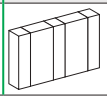
(1) For more than 33 combined modules, these vertical uprights are mandatory.
(2) A combination kit is supplied with each duct or enclosure extension. It can be necessary to use one kit more than those already supplied.

Installation / lifting accessories

IP30, IP31, IP43

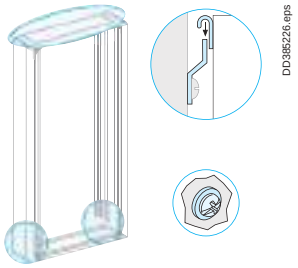
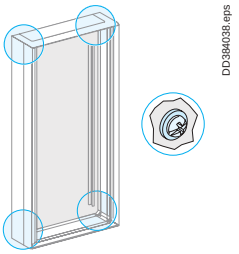
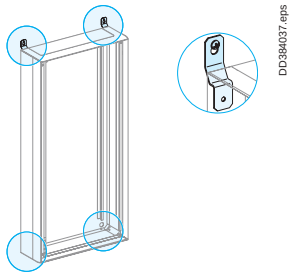
Lifting accessories

The lifting rings are used to move a single wall-mounted or floor-standing enclosure. For combined enclosures, use the lifting/reinforcement cross-members (see below).

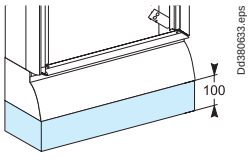
	2 lifting rings for single wall-mounted or floor standing enclosures	Lifting/reinforcement cross-members for combined enclosures					
							
Catalogue numbers	**08801**	**08812**	**08811**	**08811**	**08813**	**08814**	**08826**
Characteristics							
	Set of two lifting rings	Have 2 types of holes: for lifting and for mounting on a wall					

Installation possibilities

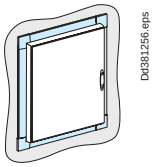
Switchboards can be mounted on a wall in three manners: with the hook-on rail system, via the inside of the enclosure or using external wall-mounted brackets. Combined enclosures can be mounted using the lifting/reinforcement cross-members set of two lifting/reinforcement cross-members.

	Hook-on rail system	Mounting via the inside	Mounting using the external wall-mounted brackets
			
Catalogue numbers	Delivered with the enclosure	-	**08804**
Characteristics	The enclosure comes with 2 cross-members secured to the back of the enclosure (top and bottom) and a support rail (with levelling adjustment) for screw-mounting on the wall. The enclosure is easily mounted on the hook-on rail system. End the fixation with 2x 8mm diameter screws, at the bottom of enclosure	The enclosure can be mounted through the spacers in the 4 holes provided on the enclosure using 8 mm diameter screws (2 knockouts can be removed if necessary to provide 2 other holes).	4 external wall-mounted brackets.

Plinth raiser

For floor-standing enclosure		
		
Catalogue numbers	**08805**	**08807**
Characteristics	For basic floor-standing enclosure or extension W = 600 mm	For a duct W = 300 mm

Flush-mounting kit

For wall-mounted enclosure		
		
Catalogue numbers	**08819**	**08820**
Characteristics	6 to 18 modules	21 to 27 modules

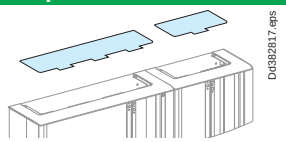
Gland plates

IP30, IP31, IP43

Cut-out metal plates

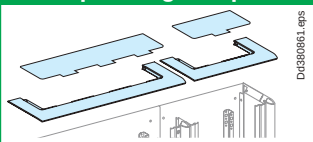
Enclosures (wall-mounted, floor-standing, ducts) are supplied with a plastic gland plate installed on the top or bottom for wall-mounted enclosures and the top for floor-standing enclosures. For some connections needs, the existing plastic gland plate can be replaced by this metal gland plate.

Plain metal gland plates



Used with	At the top or bottom of a wall-mounted enclos. or duct, at the top of a floor-standing enclos.	
	Wall-mounted or floor-standing enclos.	Duct
Catalogue numbers	**08870**	**08874**

Metal plates with cut-outs + plastic gland plates



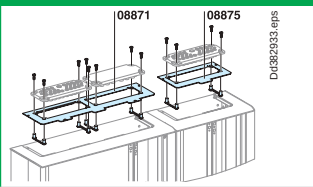
Used with	Using at the top or bottom of a wall-mounted enclosure (+ duct) at he top of a floor-standing enclosure (+ duct)	
	Wall-mounted or floor-standing enclosure.	Duct
Catalogue numbers	**08880**	**08884**

Gland plates

Metal plate with cut-outs

This plastic gland plate can be replaced by an interface plate with cut-outs for special cable entry systems made of an insulating material (plain, with knockouts or membrane-type).

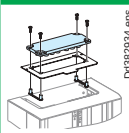
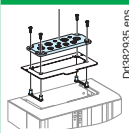
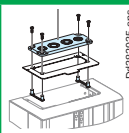
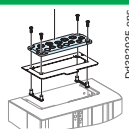
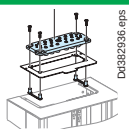
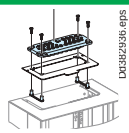
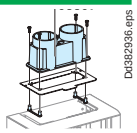
Metal plate with cut-outs



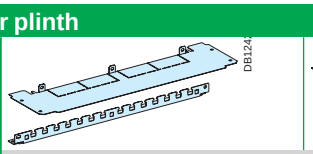
Used with	Wall-mounted or floor-standing enclosure	Duct
Catalogue numbers	**08871**	**08875**

Gland plates, plain with knockouts or membrane-type

The gland plates are easy to install using the mounting kit (supplied with each gland plate) that positions and holds the nuts during installation.
This makes it possible to mount the gland plates using a single tool.

Gland plates	Plain	With knockouts			Membrane-type			
								
Catalogue numbers	**08881**	**08891**	**08892**	**08895**		**08872**	**08896**	**08897**
M12	-	4	-	-	From 5 to 7 mm diam.	4	2	-
M12 or M20	-	4	-	-	From 6 to 10 mm diam.	-	6	-
M16 or M25	-	4	-	5	From 7 to 12 mm diam.	-	8	-
M20	-	-	-	8	From 8 to 12 mm diam.	4	-	-
M20 or M32	-	-	2	-	From 10 to 14 mm diam.	12	16	-
M25 or M40	-	-	2	-	From 12 to 18 mm diam.	-	2	-
					From 14 to 20 mm diam.	4	-	-
					From 17 to 32 mm diam.	-	1	-
					From 20 to 26 mm diam.	1	-	-
					From 28 to 60 mm diam.	-	-	2
Number of entries	-	**12**	**4**	**13**		**25**	**35**	**2**

Metal gland plates for plinth

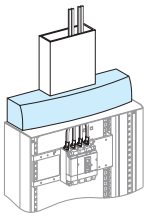


Used with	Between the plinth and the bottom of a floor-standing enclosure or duct, for ensuring IP20	
	Floor-standing enclosure	Duct
Catalogue numbers	**08887**	**08888**

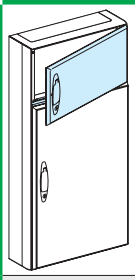
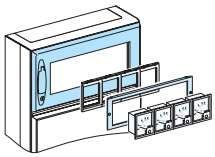
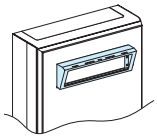
Accessories

IP30, IP31, IP43

Trunking spreader

Trunking spreader	
	 DD381636.eps
Cat. no.	**08824**
Characteristics	For a professional-looking connection between the trunking and the enclosure. Can be installed at the top or bottom. The spreader is marked for cut-outs for standard trunking sizes. The maximum capacity is two 250 x 80 mm trunking sections.

Partial doors, Plain door ready to be equipped

Type	Plain partial door	Partial door with cut-out	Plain door with cut-out W600, W850
	 Dd381266.eps	 Dd381267.eps	 DD385473.eps
Catalogue numbers	**08850**	**08851** + **03904** (1) **08851** + **03928**	**08850** + **03928**
Characteristics	Height: 6 modules. Useful height behind a partial door: 5 modules. Installation on a wall-mounted enclosure at least 12 modules high (H ⩾ 630 mm). Reversible (opening to left or right), equipped with a handle and keylock (key 405). ***Note:*** *each wall-mounted enclosure and basic floor-standing enclosure or extension can be equipped with only one partial door. The front must be completed with another door.*		Inclined visor by 30 °. Allows mounting of measurement, inspection, indication 72 x 72, 96 x 96, ø 16 or ø 22 mm, 45 x 45 devices. *See page 61.*

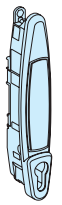
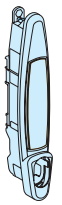
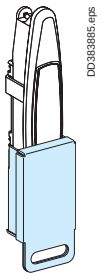
(1) *For mounting of devices, see page 61.*

Partitionning > page 67
Canopy - Gasket > page 115.

Door accessories

IP30, IP31, IP43

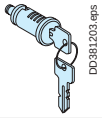
Door handles and padlocking

	EURO handle	ASSA/ABLOY handle	Standard handle	Padlocking
				
Catalogue numbers	**08932**	**08933**	**08931**	**08938**
Characteristics	Supplied without barrel	Supplied without barrel	Supplied with barrel lock (key no. 405) RAL 7016	The kit can be installed on the door handles equipped with any of the barrel locks and inserts above.

Barrel locks, inserts

The barrel locks and inserts below can be mounted on handle 08931 and on all the door handles of the Prisma G IP30.

Barrel locks

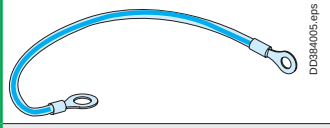
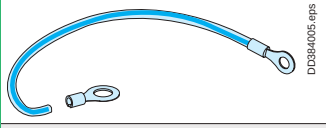
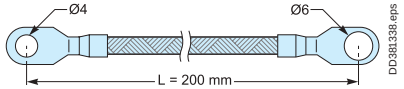
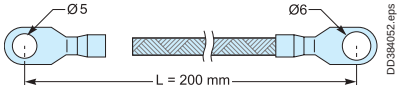
						
Catalogue numbers	**08940**	**08941**	**08942**	**08943**	**08944**	**08956**
Characteristics	1 key no. 405	2 keys no. 455	2 keys no. 1242E	2 keys no. 3113A	2 keys no. 2433A	2 keys no.2432E

Inserts

										
Catalogue numbers	**08945**	**08946**	**08947**	**08948**	**08949**	**08950**	**08951**	**08952**	**08953**	**08955**
Characteristics	DIN double bar insert	Screwdriver slot insert	Male triangle insert				Male square insert			Female square insert
			6.5 mm	7 mm	8 mm	9 mm	6 mm	7 mm	8 mm	6 mm

Earthing braid

The earthing braid is used to earth a door or partial door with devices.

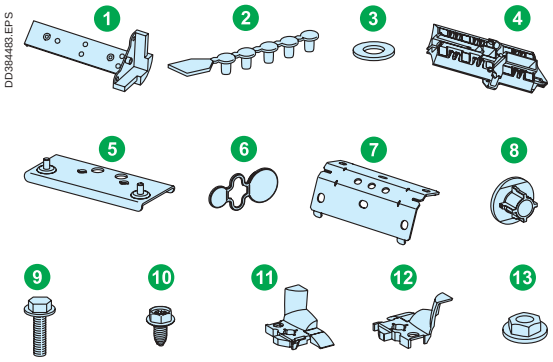
	Earthing braid, 6 mm²	Earthing wire, 6 mm²
		
Catalogue numbers	**08910**	**08911**
Characteristics	Equipped with a 4 mm diameter lug at one end and a 6 mm diameter lug on the other	Equipped with a 5 mm diameter lug at one end and a 6 mm diameter lug on the other
		

Finishing parts > *see page 73*

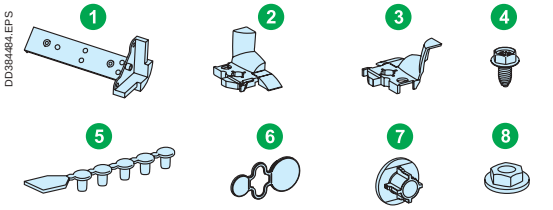
Spare parts

IP30, IP31, IP43

Accessories (IP30)



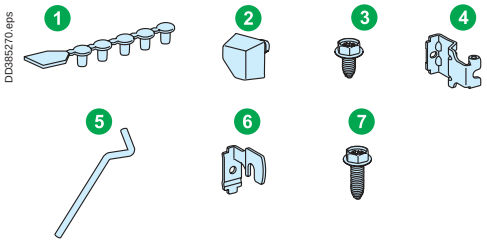
Duct accessories	01036
1 4 kit pillars + pillar heads	
2 1 earthing braid plug	
3 4 washers	
4 2 combination uprights	
5 2 short combination crossbars	
6 2 base blanking plugs	
7 2 association fasteners	
8 4 spacers	
9 2 screws with flange	
10 1 self threading screw	
11 2 A-angle parts	
12 2 B-angle parts	
13 7 nuts HX grooved	



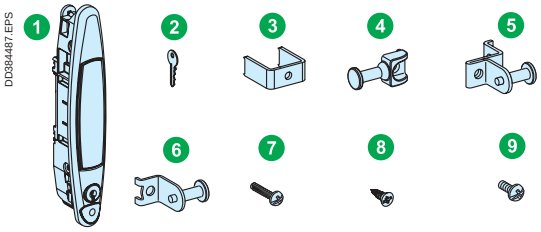
Wall-mounted and floor-standing enclosure accessories	01018
1 4 kit pillars + pillar head	
2 2 A-angle parts	
3 2 B-angle parts	
4 8 self threading screws	
5 1 earthing braid plug	
6 4 base blanking plugs	
7 4 spacers	
8 4 nuts HX grooved	

4 spacers	01098

Door accessories (IP30)



Accessory for closing, wall-mounted and floor-standing enclosure	01032
1 1 earthing braid plug	
2 2 door stops	
3 3 self threading screws M5 x 10	
4 3 fixed hinges	
5 3 hinge pins	
6 3 stop bolts	
7 4 self threading screws M5 x 17	



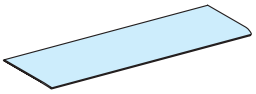
Retrofit Pack, G enclosures IP30	01220
1 1 handle	
2 1 key no.405	
3 1 handle staple	
4 1 Pack kit pin	
5 1 assembled rod angle	
6 1 peg and angle assembly for G cubicle	
7 1 pozidriv screw for handle staple	
8 1 self threading screw for Pack enclosure	
9 1 pozidriv screw for wall-mounted and floor standinbg enclosures	

Spare parts

IP30, IP31, IP43

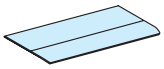
Gland plates (IP30)

DD384488.EPS



Plain bottom gland plate	**01017**

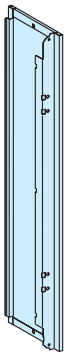
DD384490.EPS



Duct bottom plate	**01039**

Side (IP30)

DD384491.EPS

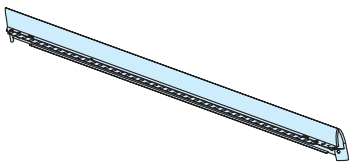


Wall-mounted enclosures	
Side for 6-module wall-mounted enclosures	**01040**
Side for 9-module wall-mounted enclosures	**01041**
Side for 12-module wall-mounted enclosures	**01042**
Side for 15-module wall-mounted enclosures	**01043**
Side for 18-module wall-mounted enclosures	**01044**
Side for 21-module wall-mounted enclosures	**01045**
Side for 24-module wall-mounted enclosures	**01046**

Floor-standing enclosures	
Side for 27-module floor-standing enclosures	**01035**
Side for 30-module floor-standing enclosures	**01034**
Side for 33-module floor-standing enclosures	**01033**

Central uprights (IP30)

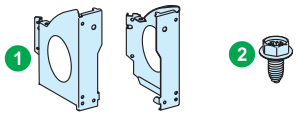
DD384492.EPS



Floor-standing enclosures	
Association profile for 27-module wall-mounted / floor-standing enclosures	**01030**
Association profile for 30-module floor-standing enclosures	**01029**
Association profile for 33-module floor-standing enclosures	**01028**

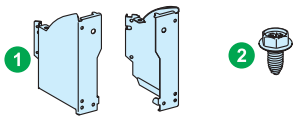
Plinths (IP30)

DD384493.EPS



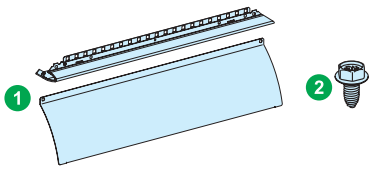
Floor-standing enclosures	**01050**
1 Left drilled base bracket + Right drilled base bracket	
2 4 self-threading screws	

DD384494.EPS



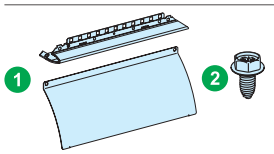
Accessories for plinth	**01051**
1 Left base bracket + Right base bracket	
2 4 self-threading screws	

DD384495.EPS



Plinth front, 600 mm	**01052**
1 Base cover + plinth	
2 2 self-threading screws	

DD384496.EPS



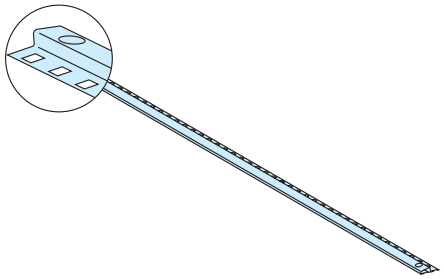
Plinth front, 300 mm	**01053**
1 Base cover + plinth	
2 2 self-threading screws	

Spare parts

IP30, IP31, IP43

Front cover support uprights (IP30)

DD384500

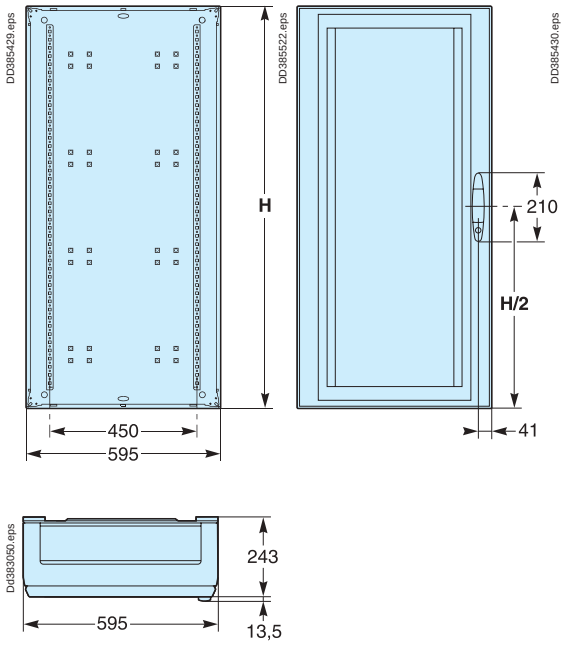


2 front cover support uprights - 6 modules	**01250**
2 front cover support uprights - 9 modules	**01251**
2 front cover support uprights - 12 modules	**01252**
2 front cover support uprights - 15 modules	**01253**
2 front cover support uprights - 18 modules	**01254**
2 front cover support uprights - 21 modules	**01255**
2 front cover support uprights - 24 modules	**01256**
2 front cover support uprights - 27 modules	**01257**
2 front cover support uprights - 30 modules	**01258**
2 front cover support uprights - 33 modules	**01259**

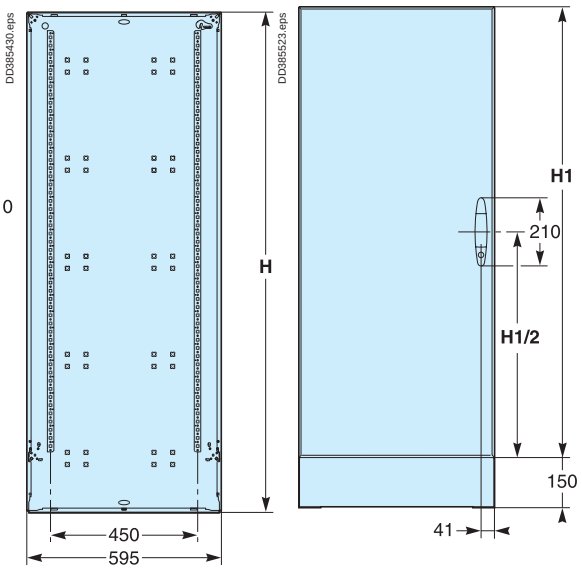
Dimensions

IP30, IP31, IP43

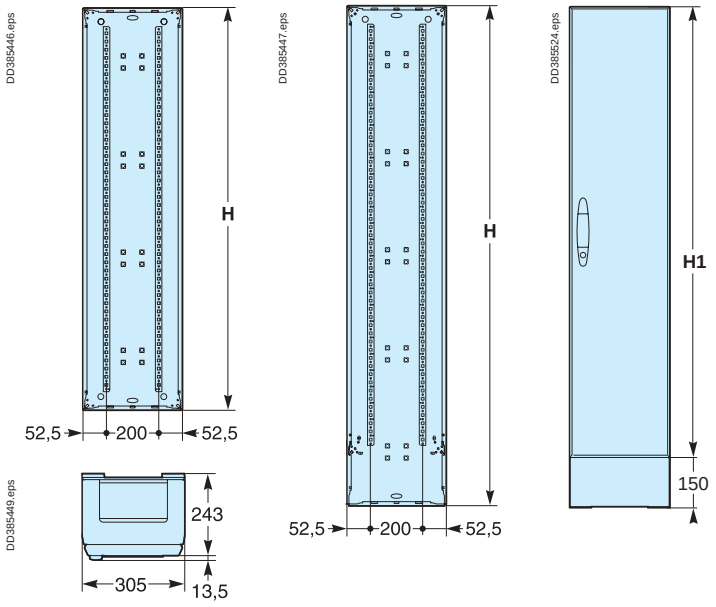
Wall-mounted enclosures



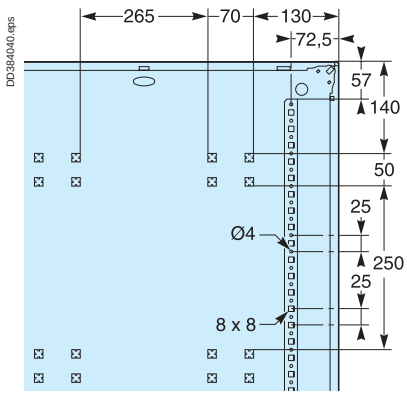
Floor-standing enclosures



Ducts



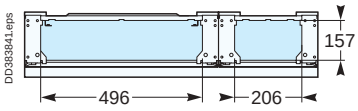
	Nb. of vertical modules	H	H1
Wall-mounted enclosures / duct	6	330	-
	9	480	-
	12	630	-
	15	780	-
	18	930	-
	21	1080	-
	24	1230	-
	27	1380	-
Floor-standing enclosures / duct	27	1530	1380
	30	1680	1530
	33	1830	1680



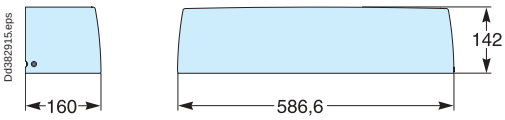
Dimensions

IP30, IP31, IP43

Cable entry

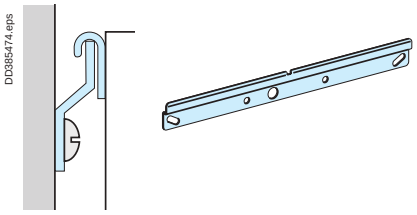


Trunking spreader

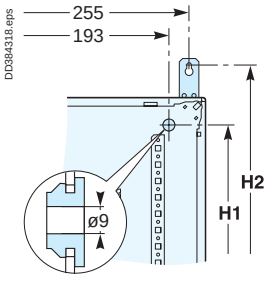


Wall-mounted installation

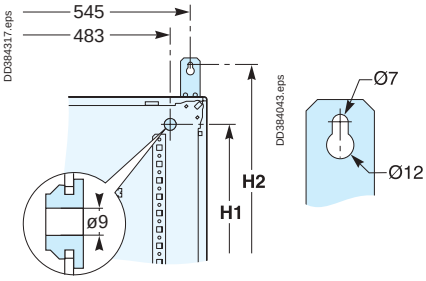
Wall-mounted enclosures and ducts



Wall-mounted and floor-standing enclosures

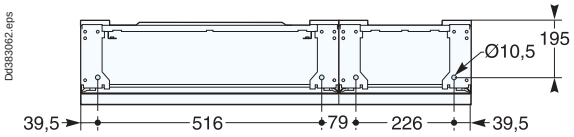


Ducts



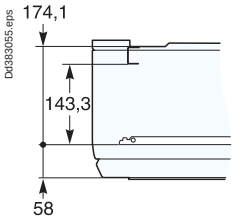
	Nb. of vertical modules	H1	H2
Wall-mounted enclosures	6	246	430
	9	396	580
	12	546	730
	15	696	880
	18	846	1030
	21	996	1180
	24	1146	1330
	27	1296	1480
Floor-standing enclosures	27	1488	1580
	30	1638	1730
	33	1788	1880

Floor-standing plinth fixation

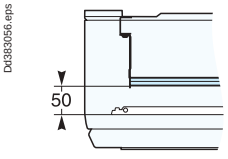


Depth behind front plate

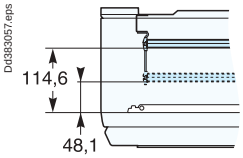
Functional uprights



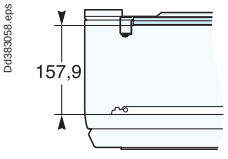
Modular rail



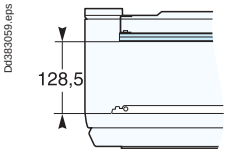
Fixed rail
Cat. no. 03001 or 03010



Adjustable rail
Cat. no. 03002 or 03011

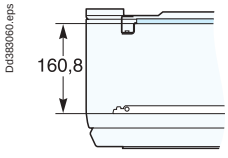


Recessed rail
Cat. no. 03003

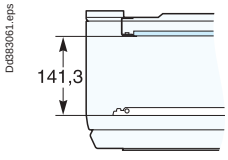


Rear rail
Cat. no. 03004

Slotted mounting plate



Recessed mounting plate
Cat. no. 03171, 03172, 03173, 03176, 03177 or 03178



Flat plate
Cat. no. 03170 or 03175

Prisma G enclosures
IP55

IP55

Great capability for meeting the requirements of your installation

- > Safety of people and property
- > Continuity of service
- > Robustness
- > Ergonomics and complete accessibility
- > Optimisation and upgradeability

> 100 % reliable and in compliance with existing standards
All the components (switchgear, splitter blocks, prefabricated connections, etc.) have been designed to work together. All switchboard configurations have been tested. Even the most demanding.

> **Optimised, upgradeable installation**
Prisma G IP55 is the only switchboard in this category designed as a “kit”.
All configurations and combinations are possible, with full access. Thanks to the organisation around functional units, the installation evolves simply while preserving its original performance.

> **Ease of setup**
The complete accessibility of all mounting and connection points facilitates assembly and cabling in the workshop. The functional units are clearly identified: operations are intuitive and reliable, and connection and checking are performed naturally.

Presentation
Weatherproof enclosures

IP55

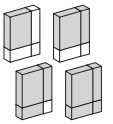
Metallic indoor enclosures to compose
Severe environments: industrial and agricultural buildings, basements, kitchens, etc.

Enclosure delivered flat: total accessibility
Designed for electrical continuity

- 630 A
- IP55
- IK10

Practical
- Functionalized installation of push buttons, power sockets, etc.
- Installation of power sockets on the side

Continuity of service
- Direct accessibility of functional unit if front plates are equiped with hinges



Wide range of combination possibilities
- Vertical, horizontal with duct, etc.

Weatherproofing
- Broad choice of IP55 gland plates

PE60330

Ergonomics and safety
- Easy panel handling thanks to the ergonomic gripper
- Legible “Open/closed” positions of front plate,
- Integrated front plate sealing function

Numerous installation possibilities
- Direct installation on: self-supporting structure, pole-mounted, wall mounted

PE60331

Description

Steel sheet metal with electrophoresis treatment + hot-polymerised polyester epoxy powder.
Enclosure:
- width: 575 mm, with duct: 325 mm
- height: 450 to 1750 mm
- depth: 260 mm with door
- properties of metal enclosures > *page 198*

Main characteristics

IP55 enclosure	
Rated operational current	630 A - Isc = 50 kA, Icw = 25 kA rms / 1 s, Ipk = 53 kÂ
Colour	White colour RAL 9001
Standards conformity	EN 62208, IEC 61439-2
Degree of protection	IP55 with door
Degree of protection against mechanical impacts	IK10
Isolation	Class 1
Doors	■ Plain or transparent, opening to right or left ■ Supplied with a handle and keylock (key 405) Distance behind plain door = 78 mm, Distance behind transparent door = 73 mm
Earthing	Earthing braid delivered with enclosure
Combination	*> page 131*

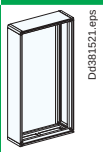
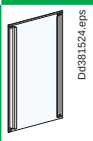
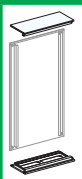
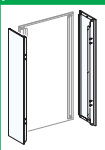
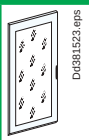
Easy design with
Rapsody software
> page 27

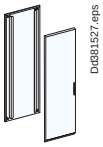
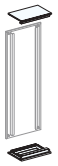
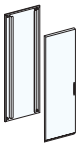
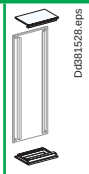
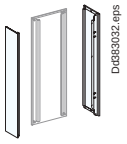
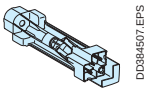
Enclosures

IP55

Enclosures and doors

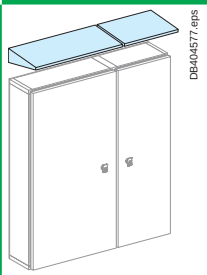
Reversible doors (opening to left or right), equipped with a handle and keylock (key 405).

Type		Basic enclosure, W600			Extension enclosures, W600				
									
Nb. of vertical modules of 50 mm	Height in mm	Basic enclosure	Frame + plain door	Frame + transparent door	Rear	Top and bottom plates for side-by-side combination	Side panels for vertical combination	Frame + plain door	Frame + transparent door
7	450	**08302**	**08322**	**08332**	**08312**	**08371**	**08352**	**08322**	**08332**
11	650	**08303**	**08323**	**08333**	**08313**	**08371**	**08353**	**08323**	**08333**
15	850	**08304**	**08324**	**08334**	**08314**	**08371**	**08354**	**08324**	**08334**
19	1050	**08305**	**08325**	**08335**	**08315**	**08371**	**08355**	**08325**	**08335**
23	1250	**08306**	**08326**	**08336**	**08316**	**08371**	**08356**	**08326**	**08336**
27	1450	**08307**	**08327**	**08337**	**08317**	**08371**	**08357**	**08327**	**08337**
33	1750	**08309**	**08329**	**08339**	**08319**	**08371**	**08359**	**08329**	**08339**

Type		Ducts, W300		Wall-mounted enclosures, W300			
							
Nb. of vertical modules of 50 mm	Height in mm	Rear + plain door	Top and bottom plates	Rear + plain door	Top and bottom plates	Side panels	Struts (set of 2)
7	450	**08342**	**08372**	**08342**	**08372**	**08352**	2 x **01025**
11	650	**08343**	**08372**	**08343**	**08372**	**08353**	2 x **01025**
15	850	**08344**	**08372**	**08344**	**08372**	**08354**	2 x **01025**
19	1050	**08345**	**08372**	**08345**	**08372**	**08355**	2 x **01025**
23	1250	**08346**	**08372**	**08346**	**08372**	**08356**	2 x **01025**
27	1450	**08347**	**08372**	**08347**	**08372**	**08357**	2 x **01025**
33	1750	**08349**	**08372**	**08349**	**08372**	**08359**	2 x **01025**

Spare parts > *page 137*
Dimensions > *page 138*

Canopy

Using	For wall-mounted enclosures	For duct
		
Catalogue numbers	**08386**	**08387**
Characteristics	■ Installed on the mounting uprights or directly on the wall, canopies improve switchboard protection against vertically falling water and objects. ■ Colour: RAL 7016. ■ Supplied with: □ the hardware required for mounting on the uprights □ the components required for combination with another canopy.	

Dimensions > *page 138*

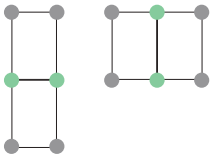
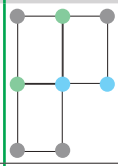
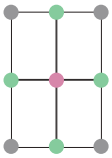
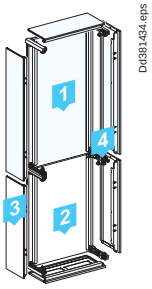
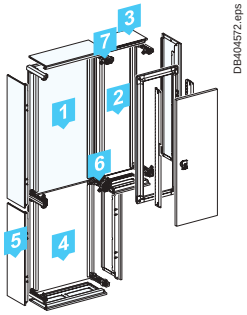
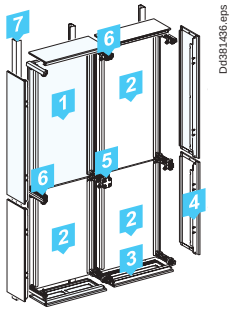
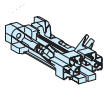
Partitioning > *page 67*

Multiple combinations

IP55

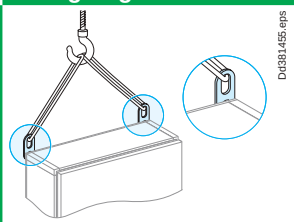
Combination kits

	Components catalogue numbers				
	Horizontal/vertical combination kit	"L" combination kit	Square combination kit	Single pillar	Mounting upright
Catalogue numbers	**08381**	**08382**	**08383**	**-**	**08391**
Characteristics	2 double pillars	1 triple pillar + 1 single pillar	1 quadruple pillar	Supplied with basic enclosures	L = 1950 mm

	Mounting example		
	Simple	**In L**	**In square**
			
			
Wall-mounted enclosures	1 Basic enclosure 2 Rear plate for enclosure extension 3 1 set of two side panels	1 1 basic enclosure 2 1 rear + door for duct 3 1 set of two top and bottom plates for duct 4 1 rear plate for enclosure extension 5 1 set of two side panels	1 1 basic enclosure 2 3 rear plates for enclosure extensions 3 1 set of two top and bottom plates for enclosure extensions 4 1 set of two side panels
Combination kits 	4 1 horizontal/vertical combination kit **08381**	6 1 "L" combination kit **08382** 7 1 horizontal/vertical combination kit **08381**	5 1 square combination kit **08383** 6 2 horizontal/vertical combination kits 2 x **08381**
Mounting uprights	-	-	7 3 mounting uprights W = 1950 mm (to reinforce the switchboard) 3 x **08391**

Note: *for combinations of more than two enclosures, the switchboard must be reinforced using mounting uprights (08391).*

Lifting

	Lifting rings
	
Catalogue number	**08396**
Characteristics	Set of two. supplied with mounting hardware. The lifting rings are secured directly to the switchboard or to the mounting uprights.

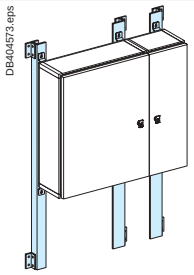
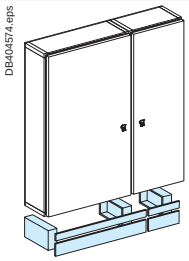
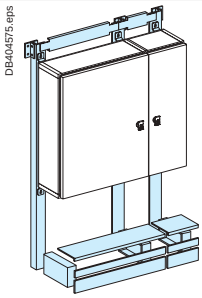
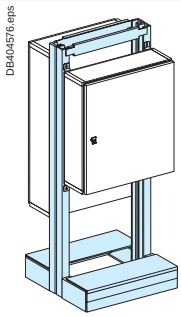
Enclosures mounting

IP55

Mounting accessories

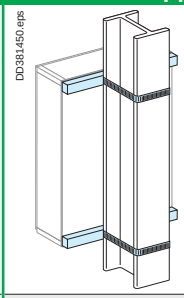
Upright		Plinth		
	Mounting uprights	**Plinth gusset**	**Plinth cover panel (for enclosure)**	**Plinth cover panel (for duct)**
Catalogue numbers	**08391**	**08392**	**08393**	**08394**
Characteristics	■ W = 1950 mm ■ Colour: RAL 7016 ■ Supplied with: □ two adjustable fixing brackets, □ one joint for combination with a plinth or another upright. Leave space behind the switchboard for cable running and to improve ventilation.	■ H = 150 mm ■ Colour: RAL 7016	■ W = 600 mm ■ Colour: RAL 7016	■ W = 300 mm ■ Colour: RAL 7016
Quantity to order	For one enclosure, order two uprights. For each enclosure extension or duct, order one additional upright.	For the basic enclosure, order two gussets and one 600 mm wide plinth cover panel. For each enclosure extension or duct, order one additional gusset and the corresponding cover panel.		

Mounting example

	On uprights	**On plinth**	**On wall structure**	**Free-standing structure**
				
Catalogue numbers	3 x **08391**	3 x **08392** + **08393** + **08394**	3 x **08391** + 3 x **08392** + **08393** + **08394**	4 x **08391** + 4 x **08392** + 2 x **08393**
Designation	3 mounting uprights	3 gussets + 1 plinth cover panel for enclosure + 1 plinth cover panel for duct	3 uprights + 3 gussets + 1 plinth cover panel for enclosure + 1 plinth cover panel for duct	4 uprights + 4 gussets + 2 plinth cover panels for enclosure
Remarks	The uprights are used to mount on a wall one or more enclosures combined horizontally or vertically.	The plinth, installed in the factory or on-site, raises the switchboard to protect it and facilitate spreading of cables arriving from a trough. The wall-fixing brackets supplied with the plinth ensure that the switchboard cannot topple over.	The switchboard can be mounted on the structure in the factory or on site. Two wall-fixing brackets supplied with the basic enclosure ensure that the switchboard cannot topple over.	The free-standing structure is simply two wall structures combined back-to-back. The switchboard can be positioned anywhere. It can be fixed to the floor and moved easily using the lifting rings (08396). It can be equipped with one or more enclosures with Schneider sockets.

Mounting on a pole

2 reinforcement cross-members to support the enclosure



Catalogue number	**08395**
Characteristics	The kit is used to mount an enclosure or an enclosure + duct combination, without drilling, to an I-beam or concrete pole that can be rectangular or cylindrical. The maximum circumference of the pole is 580 mm. Supplied with mounting hardware.

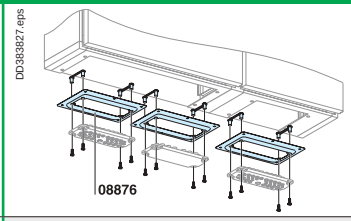
Wall-mounted enclosures gland plates

IP55

Gland plates

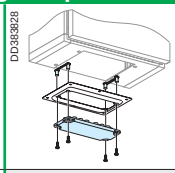
Enclosures are supplied with metal gland plates installed on the top or bottom panel of the enclosures (2 plates) or 300 mm wide ducts (1 plate).
These plates can be replaced by metal plates with cut-outs for special cable entry systems made of an insulating material (plain, with knockouts or membrane-type). They are designed for entry of cables of different cross-sectional areas via the bottom of a switchboard while maintaining the IP55 degree of protection.
The gland plates are easy to install using the mounting kit (supplied with each gland plate) that positions and holds the nuts during installation.
This makes it possible to mount the gland plates using a single tool.

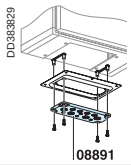
Metal plate with cut-outs

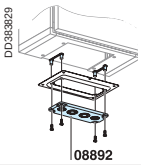


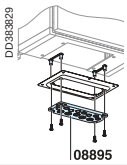
Catalogue number	**08876**

Plain gland plates and gland plates with knockouts



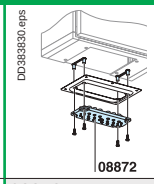


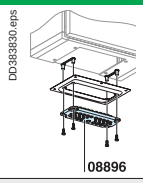


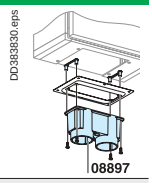


Catalogue numbers	**08881**	**08891**	**08892**	**08895**
M12	-	4	-	-
M12 or M20	-	4	-	-
M16 or M25	-	4	-	5
M20	-	-	-	8
M20 or M32	-	-	2	-
M25 or M40	-	-	2	-
Total number of entries	**-**	**12**	**4**	**13**

Membrane-type gland plates

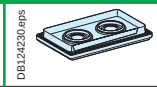






Catalogue numbers	**08872**	**08896**	**08897**
From 5 to 7 mm cable diameters	4	2	-
From 6 to 10 mm cable diameters	-	6	-
From 7 to 12 mm cable diameters	-	8	-
From 8 to 12 mm cable diameters	4	-	-
From 10 to 14 mm cable diameters	12	16	-
From 12 to 18 mm cable diameters	-	2	-
From 14 to 20 mm cable diameters	4	-	-
From 17 to 32 mm cable diameters	-	1	-
From 20 to 26 mm cable diameters	1	-	-
From 28 to 60 mm cable diameters	-	-	2
Total number of entries	**25**	**35**	**2**

Other gland plates



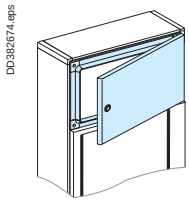
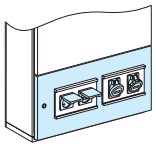
Catalogue numbers	**08898**	**08899**
From 7 to 26 mm diameters	39	-
From 33 to 72 mm diameters	-	2
Total number of entries	**39**	**2**

Spare parts > *page 137*
Dimensions > *page 138*

Partial doors and functional units for partial door

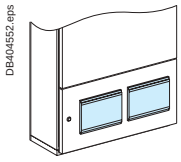
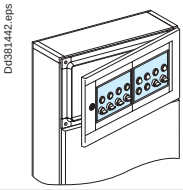
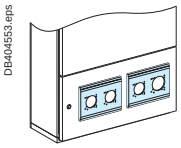
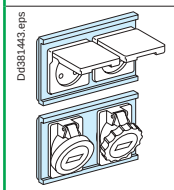
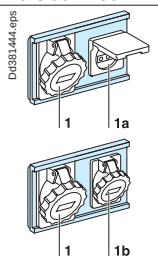
IP55

Partial doors

Type	Plain	With cut-outs
		
4 modules (H = 200 mm) for enclosure from 11 to 27 modules	**08374**	**08376**
6 modules (H = 300 mm) for enclosure at least 33 modules high	**08375**	**08377**
Installation	■ On a wall-mounted enclosure at least 11 modules high (H = 650 mm). ■ The front must be completed with another door (plain or transparent). ■ Each enclosure or extension can be equipped with only one partial door.	
Characteristics	-	■ Designed for two mounting plates with 22 mm diameter devices or Schneider Electric industrial sockets. ■ They are supplied with an insulating plain mounting plate that can be used to: □ blank off a reserve hole, □ install all types of devices (sockets, EPO devices, measurement devices). ■ The dimensions of the two holes are 200 mm x 112 mm.
	■ Hinges that open 170° ■ Equipped with a 8 mm male triangle insert (key not supplied).	

Functional units for partial doors

They can be installed:
- horizontally on the partial doors with cut-outs
- horizontally or vertically at any point on a door or side panel.

Type	Plain	For 22 mm diameter devices	For industrial sockets	
				
Catalogue numbers	**08861**	**08862**	**08863**	**08864**
Characteristics	■ Can be used to: □ blank off partial doors with cut-outs □ mount any type of device (EPO devices, measurement devices, sockets)	■ For installation of eight 22 mm diameter devices (lights, switches, pushbuttons, etc.) ■ Supplied with 4 blanking plug	■ With two 65 x 85 mm holes ■ Intended for the installation of: □ 10/16 A residential sockets □ flush-mount 16 A sockets, inclined or straight, IP44/IP67	■ Intended for the installation of: □ residential sockets (10 /16 A) in the 65 x 85 mm hole **(1a)** or flush-mounted inclined or straight 16 A sockets, IP44/IP67, IK08, in the 65 x 85 mm hole **(1b)** □ inclined 16 and 32 A sockets IP44 and IP67 in the 90 x 100 mm hole **(1)**
				

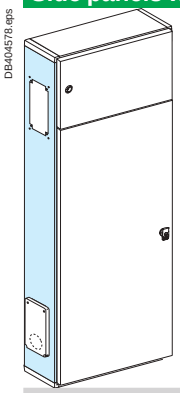
Side panels

IP55

Side panels with cut-outs

These panels are designed to replace the standard side panel.
They can be mounted on the left or right-hand side.

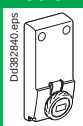
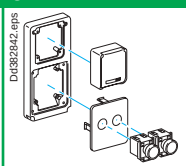
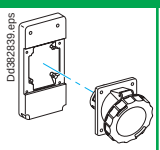
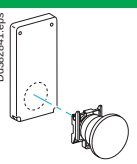
Side panels with cut-out



Nb. of vertical modules of 50 mm	Height in mm	Nb. of 103 x 255 mm holes	Catalogue numbers
7	450	1	**08362**
11	650	2	**08363**
15	850	2	**08364**
19	1050	2	**08365**
23	1250	2	**08366**
27	1450	2	**08367**
33	1750	2	**08369**

The cut-outs are designed for the installation of Pratika PK industrial sockets up to 63 A either directly or on 103 x 225 mm adaptation plates of the Kaedra enclosure range.
Installation is direct (in 103 x 225 mm cut-outs) for:
- 16/32 A interlocked LV sockets, IP44/IP65, IK08
- 16 A VLV sockets with 160 VA safety transformers, IP44/IP65, IK08.

Industrial sockets and functional units 103 x 225 mm

					
Industrial sockets and functional units	■ 16/32 A interlocked LV sockets ■ 16 A VLV sockets with safety transformers	■ 16 A and 32 A LV ■ VLV sockets ■ RJ45 sockets	■ 63 A LV sockets	■ 16 or 32 A VLV sockets (after uncapping of the opening) ■ Pushbuttons	■ blanking plate
Size for industrial sockets	103 x 225 mm	65 x 85 mm + 90 x 100 mm	100 x 107 mm	65 x 65 mm	-
Functional units catalogue numbers	Direct installation	**13142**	**13144**	**13143**	**13143**

Door accessories

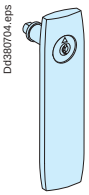
IP55

Locks

■ The small plain and transparent doors (7 to 23 modules) are supplied with a small handle comprising a barrel lock no. 405.
■ The large plain and transparent doors (27 to 33 modules) are supplied with a large handle comprising a barrel lock no. 405.
■ The partial doors are supplied with an 8 mm male triangle insert.
■ All doors can receive as optional equipment:
□ a large or small handle with a barrel lock no. 405. The latter can be replaced by other barrel locks or special inserts
□ a large EURO handle, supplied without a barrel lock
□ door inserts (squares, triangles, double bars, screwdriver slots).

Handles for replacement

Handles

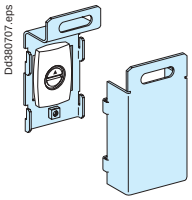


Catalogue numbers	08936	08935	08934
Designation	Door latch with lock and 2 no. 405 keys	Handle (W = 155 mm) with lock and 2 no. 405 keys	EURO handle without a barrel lock (1)

(1) Do not suit to barrels with an automatic return stroke of the key.

Padlocking

Padlocking

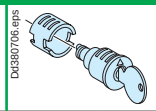


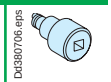
Catalogue number	08939
Designation	The kit can be installed on all IP55 doors, except those equipped with an EURO lock. Kit designed for three padlocks.

Handle barrel locks and inserts

These components may equip handles after removing the standard barrel lock no. 405.

Handle barrel locks (1)





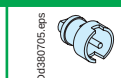
Supplied with	2 keys no. 2433A	2 keys no. 455	2 keys no. 1242E	2 keys no. 3113A	Screwdriver slot insert	Double bar insert 3 mm	Male triangle insert			Male square insert			Female square insert 6 mm
							7 mm	8 mm (CNOMO)	9 mm	6 mm	7 mm	8 mm	
Catalogue numbers	**09933**	**09945**	**09942**	**09943**	**09931**	**09932**	**09937**	**09934**	**09939**	**09949**	**09947**	**09948**	**09946**

(1) Others A and E combinations are available from Ronis, please contact us.

Partial door inserts

These inserts simply replace the standard male triangle insert (8 mm).

Door insert



Type	Screwdriver slot insert	3 mm double bar insert	Male triangle insert			Male square insert		6 mm female square insert
			7 mm	8 mm (CNOMO)	9 mm	6 mm	8 mm	
Catalogue numbers	**09981**	**09982**	**09983**	**09984**	**09985**	**09986**	**09988**	**09989**

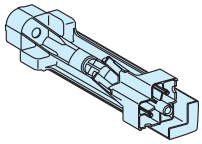
Finishing parts > see page 73

Spare-parts

IP55

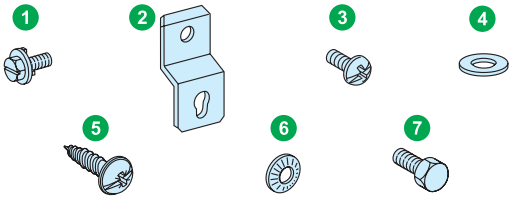
Accessories (IP55)

DD384507_1.EPS



2 pillars — **01025**

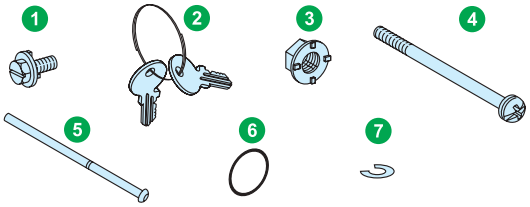
DD384508.EPS



Set of spare parts for wall-mounted enclosure — **01247**

1. 24 screws M6 x 12 + stubs contact
2. 4 simple fixing brackets
3. 4 screws pillar/seating
4. 12 nylon washers
5. 12 self threading screws
6. 4 conical washers
7. 4 screws M8 x 16

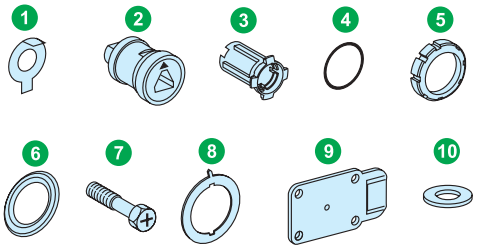
DD384509.EPS



Set of spare parts for door — **01248**

1. 1 screw M6 x 12 + stub washers
2. 2 keys no.405
3. 1 spring nut
4. 4 screws frame/pillar
5. 3 hinge pins
6. 8 o-ring joints
7. 3 stop rings

DD384510.EPS



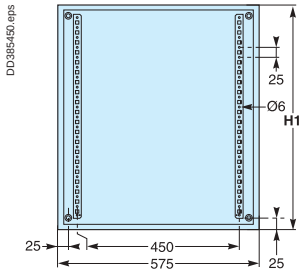
Spare parts for closing system — **01249**

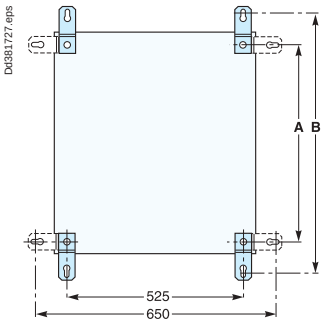
1. 1 stop washer
2. 1 screw body
3. 1 screw cap
4. 1 o-ring
5. 1 screw nut
6. 1 composite seal
7. 1 captive screw
8. 1 special washer
9. 1 cam
10. 1 washer

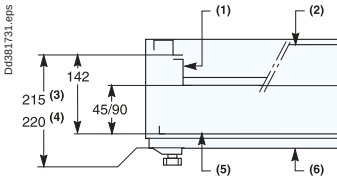
Dimensions

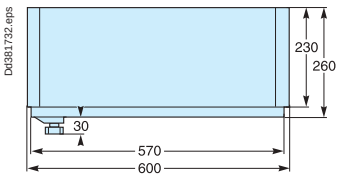
IP55

Wall-mounted enclosures

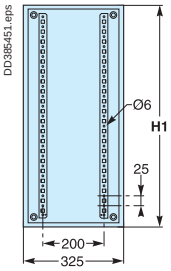




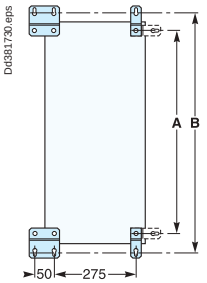


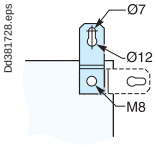


Ducts



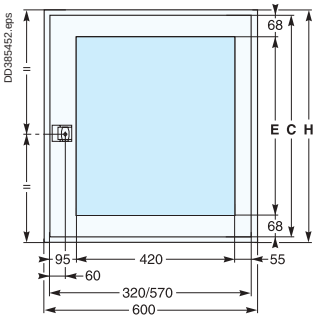
Nb. of vertical modules	H1	A	B
7	425	375	525
11	625	575	725
15	825	775	925
19	1025	975	1125
23	1225	1175	1325
27	1425	1375	1525
33	1725	1675	1825

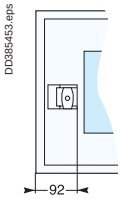


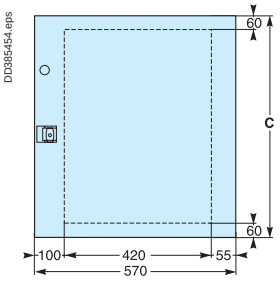


(1) Multifix rail.
(2) Recessed slotted mounting plate.
(3) Transparent door.
(4) Plain door.
(5) Front plate.
(6) Door.

Doors



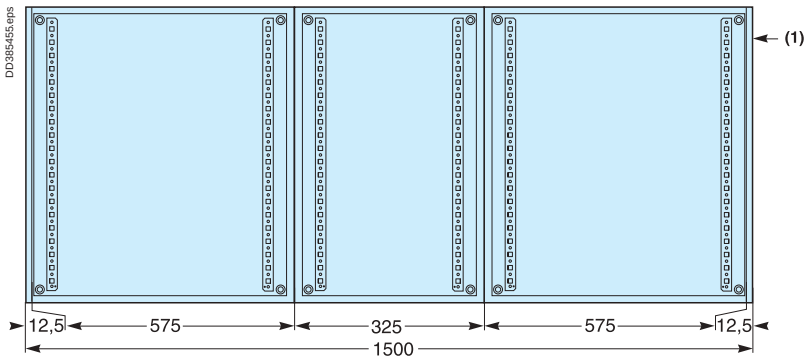




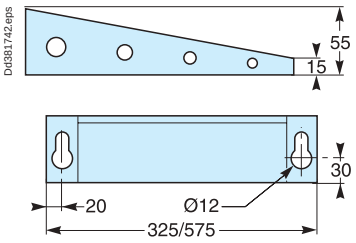
Surface utile

Nb. of vertical modules	C	E	H
7	420	284	450
11	620	484	650
15	820	684	850
19	1020	884	1050
23	1220	1084	1250
27	1420	1284	1450
33	1720	1584	1750

Enclosure combinations



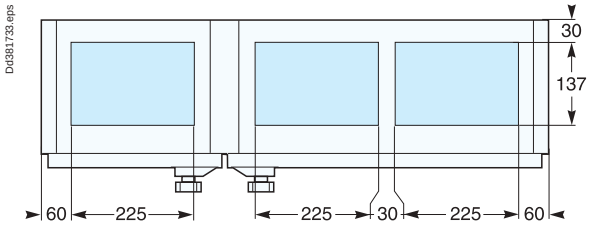
Canopy



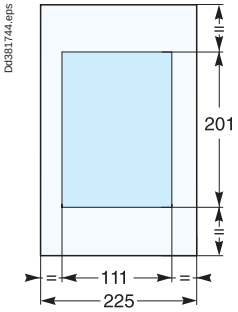
Dimensions

IP55

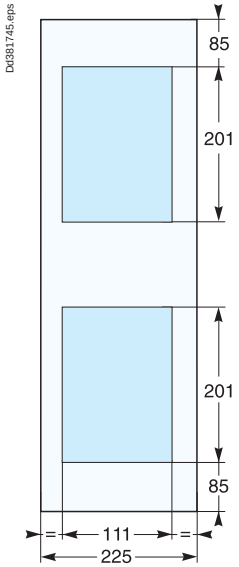
Gland plates



Side panels with cut-outs

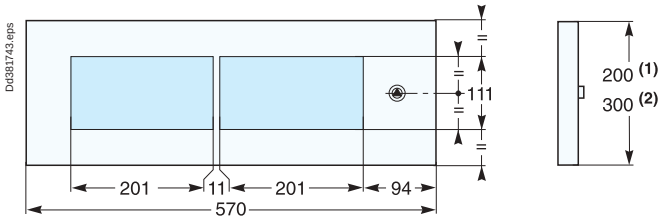


7 modules



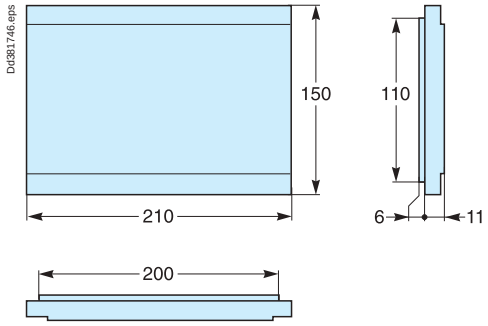
From 11 to 33 modules

Partial door with cut-outs

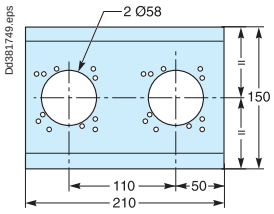


***(1)** Cat. no. 08376 for wall-mounted enclosures from 11 to 27 modules*
***(2)** Cat. no. 08377 for wall-mounted enclosures at least 33 modules*

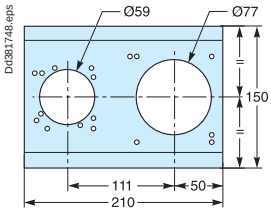
Functional mounting plates



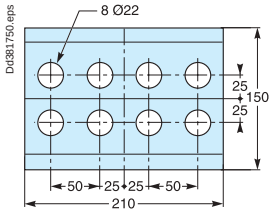
Cat. no 08861



Cat. no 08863

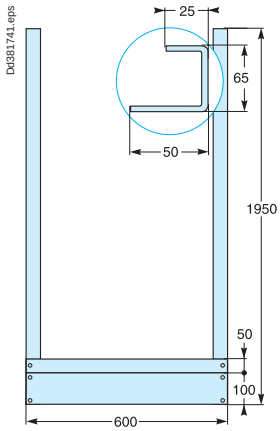


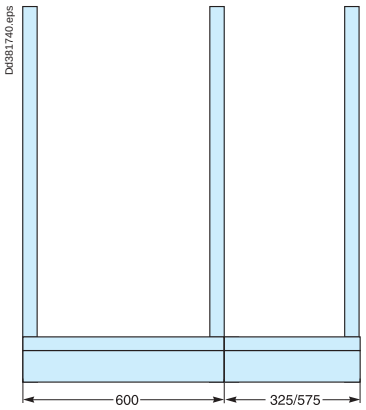
Cat. no 08864

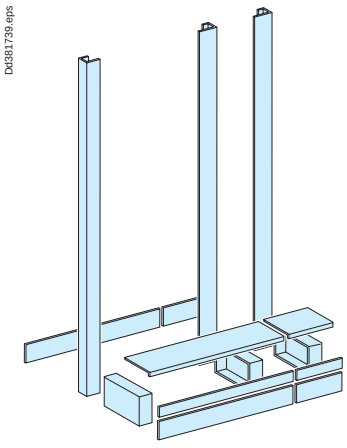


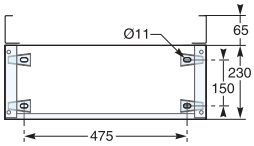
Cat. no 08862

Wall structure









Presentation

IP30, IP55

For **safe and upgradeable** electrical switchboards, a range of **850 mm width** enclosures, available in IP30 and IP55

> **Due to dimensional constraints**
> **Safety of people and property**
> **Continuity of service**
> **Optimisation and upgradeability**
> **Ergonomics and complete accessibility**
> **Controlled costs (installation, maintenance) and delivery times**

These offers are fully compatible with Prisma G IP30 and IP55, 300 and 600 mm widths, with all horizontal combinations possible.

Presentation
Floor-standing enclosures

IP30, IP31, IP43

Metallic indoor enclosures to compose.
- Commercial buildings: hotels, offices, shops, etc.
- Industry: technical room, etc.

Floor-standing enclosure delivered flat:
total accessibility
Designed for electrical continuity

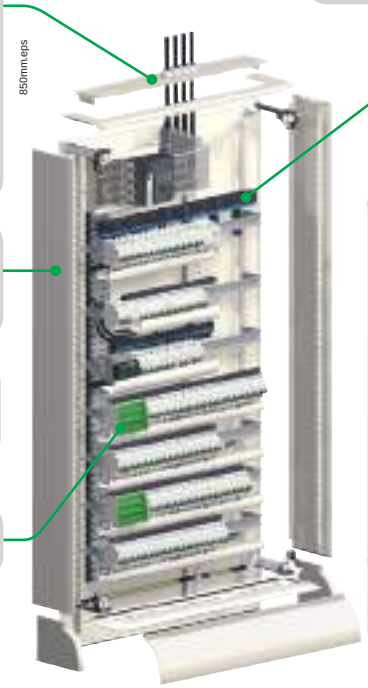
- 630 A
- IP30
- IK07/08

Gland plate
- Dismountable and cuttable

Complete accessibility
- Side panels dismountable

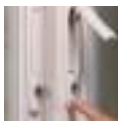
Common accessories with Prisma G

36 modules of 18 mm per row



Linergy FM 36 modules
- Easy connection and fast balancing of phases

Ergonomic handle



Ergonomics and safety
- Easy panel handling thanks to the ergonomic gripper
- Legible "Open/closed" positions of front plate,
- Integrated front plate sealing function

Continuity of service
- Direct accessibility of functional unit thanks to the front plate hinges kit
- Total accessibility of switchgear thanks to the installation of hinges on all front plate (allows the front panel to be made swivelling)

Description

Steel sheet metal with electrophoresis treatment + hot-polymerised polyester epoxy powder.
Floor-standing enclosures:
- width: 850 mm
- height: 1830 mm
- depth: 205 mm without door / 238 mm with door, + 13.5 mm (handle)
- properties of metal enclosures *> page 198*

Main characteristics

Prisma G enclosures IP30 - IP31 - IP43	
Rated operational current	In = 630 A, Isc = 50 kA, Icw =25 A rms/1s, Ipk = 52.5 kÂ
Colour	White colour RAL 9001
Standards conformity	EN 62208, IEC 61439-1/2
Degree of protection	IP30 with or without door, IP31 with canopy + door, IP43 with canopy + door + gasket
Degree of protection against mechanical impacts	IK08 with door, IK07 without door
Isolation	Class 1
Doors	■ Plain or transparent, opening to right or left ■ By design, electrical continuity of moving parts ■ Supplied with a handle and keylock (key 405) Distance behind door = 58 mm (possibility of push-buttons, lamps installation).
Mounting	*> page 116*

Easy design with
Rapsody software
> see page 27

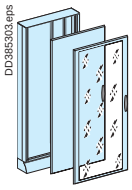
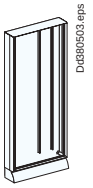
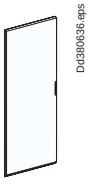
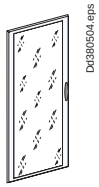
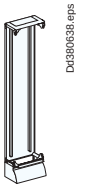
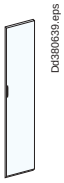
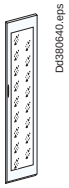
Floor-standing enclosures

IP30, IP31, IP43

Floor-standing enclosures IP30

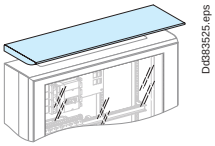
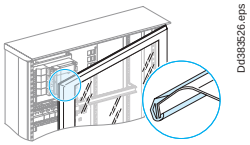
Reversible doors (opening to left or right), equipped with a handle and keylock (key 405).

■ Cables can be run on the sides of the plinth (diameter ⩽ 140 mm).

Floor-standing enclosures, width 850 mm					Ducts, width 300 mm		
							
Nb. of 50 mm vertical modules	**Height in mm**	**Enclosure** [2]	**Plain door** [1]	**Transparent door** [1]	**Rear + top and bottom plates** [2]	**Plain door** [1]	**Transparent door** [1]
33	1830	**08244**	**08254**	**08264**	**08274**	**08284**	**08294**

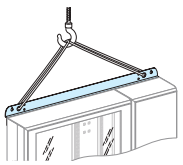
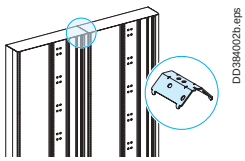
(1) See page 148 for doors accessories.
(2) See page 148 for plain gland plates.

Accessories to increase the degree of protection IP

	Canopy to increase the IP value from IP30 to IP31		Gasket for the door to increase the IP value from IP31 to IP43
			
Used with	**1 floor-standing enclosure W = 850**	**1 floor-standing enclosure + 1 duct W850 + 300** [1]	**Enclosures or a duct from 6 to 33 modules**
			
Catalogue numbers	**08836**	**08837**	**08841** x 2
Designation	The addition of a canopy over a wall-mounted or floor-standing enclosure equipped with a door ensures compliance with the degree of protection IP31.		When the switchboard is equipped with a canopy, a gasket for the doors ensures compliance with the degree of protection IP43. L = 5.3 m

(1) Whatever the duct position.

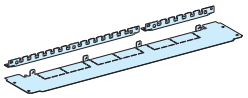
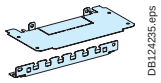
Multiple combinations and lifting

	Floor-standing enclosure + 300 mm wide duct	Two floor-standing enclosures
		
	Set of two lifting/reinforcement cross-members for floor-standing enclosure, W = 850 mm + duct W = 300 mm	**IP30 combination kit for floor-standing enclosures**
Catalogue numbers	**08809**	**08815**
Characteristics	The combination kit (two combination brackets) is supplied with the duct. To make the combination more rigid, particularly during transport, it is mandatory to use a set of cross-members secured to the rear of the switchboard.	

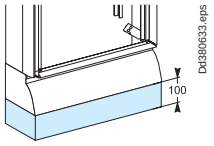
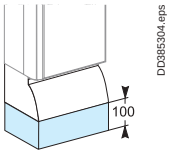
Floor-standing enclosures

IP30, IP31, IP43

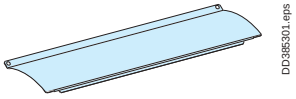
Plain gland plates for plinth

Metal gland plates for plinth		
	 DD385302.eps	 DB124235.eps
Used with	**Between the plinth and the bottom of a floor-standing enclosure or duct, for ensuring IP20**	
Catalogue numbers	**08889**	**08888**
	Floor-standing enclosure	For a duct

Plinth raiser

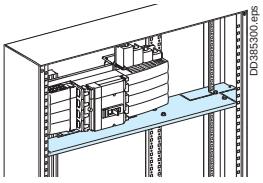
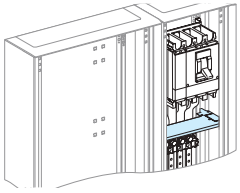
Plinth raiser		
	 Dd380633.eps	 DD385304.eps
	L850	**L300**
Catalogue numbers	**08806**	**08807**
Characteristics	For floor-standing enclosure	For a duct

Plinth: spare part

Plinth: spare part	
 DD385301.eps	
	L850
Catalogue numbers	**01054**
Characteristics	Front plinth

IP30 Horizontal partitioning

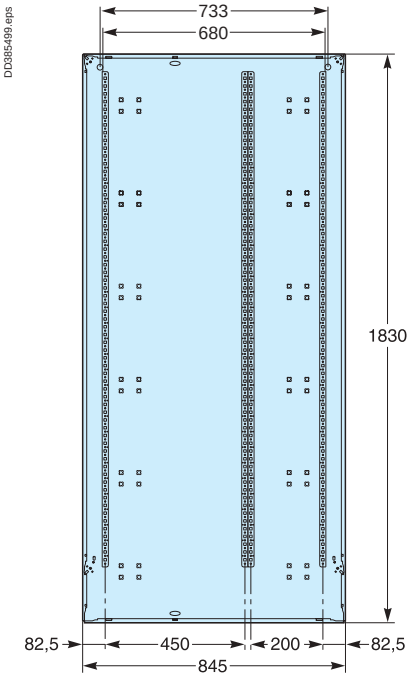
The metal partitions are used to:
- separate the functional units from one to another
- create a physical separation between devices and a terminal block, for example.

Used for	Floor-standing enclosure W850	Duct W300
	 DD385300.eps	 DD381419.eps
Catalogue numbers	**04336**	**04332**
Characteristics	■ Metal ■ It is mounted directly on the functional uprights. ■ Lateral and rear cut-outs are available for cable running or the installation of busbars at the rear of the switchboard.	

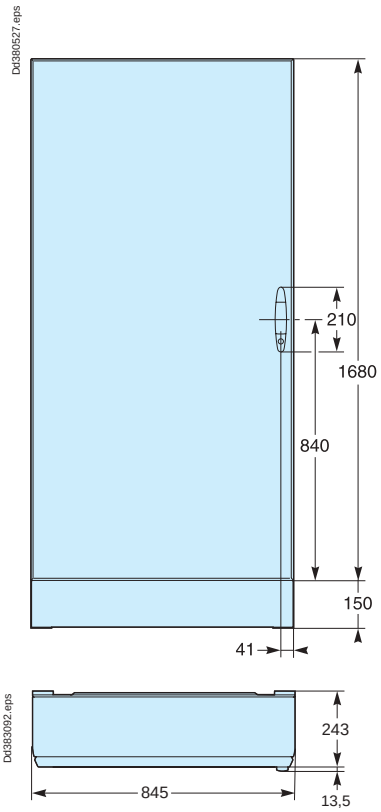
Dimensions

IP30, IP31, IP43

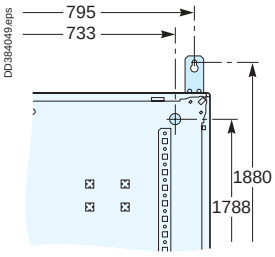
850 mm wide enclosure



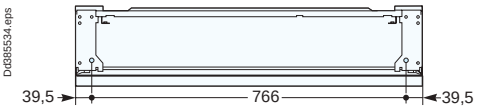
Door



Wall-mounted

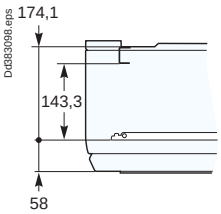


Fixing to floor

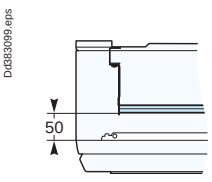


Depth behind front plate

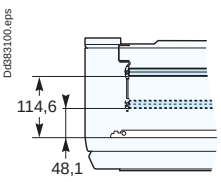
Functional uprights



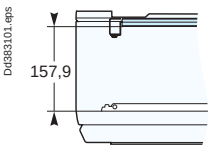
Modular rail



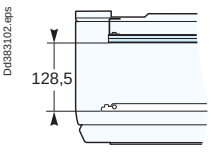
03001/03010.



03002/03011.

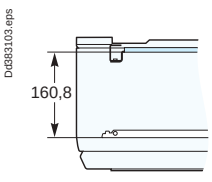


03003.

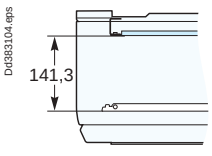


03004.

Slotted mounting plate



03171/03172/03173/03176/03177/ 03178.



03170/03175.

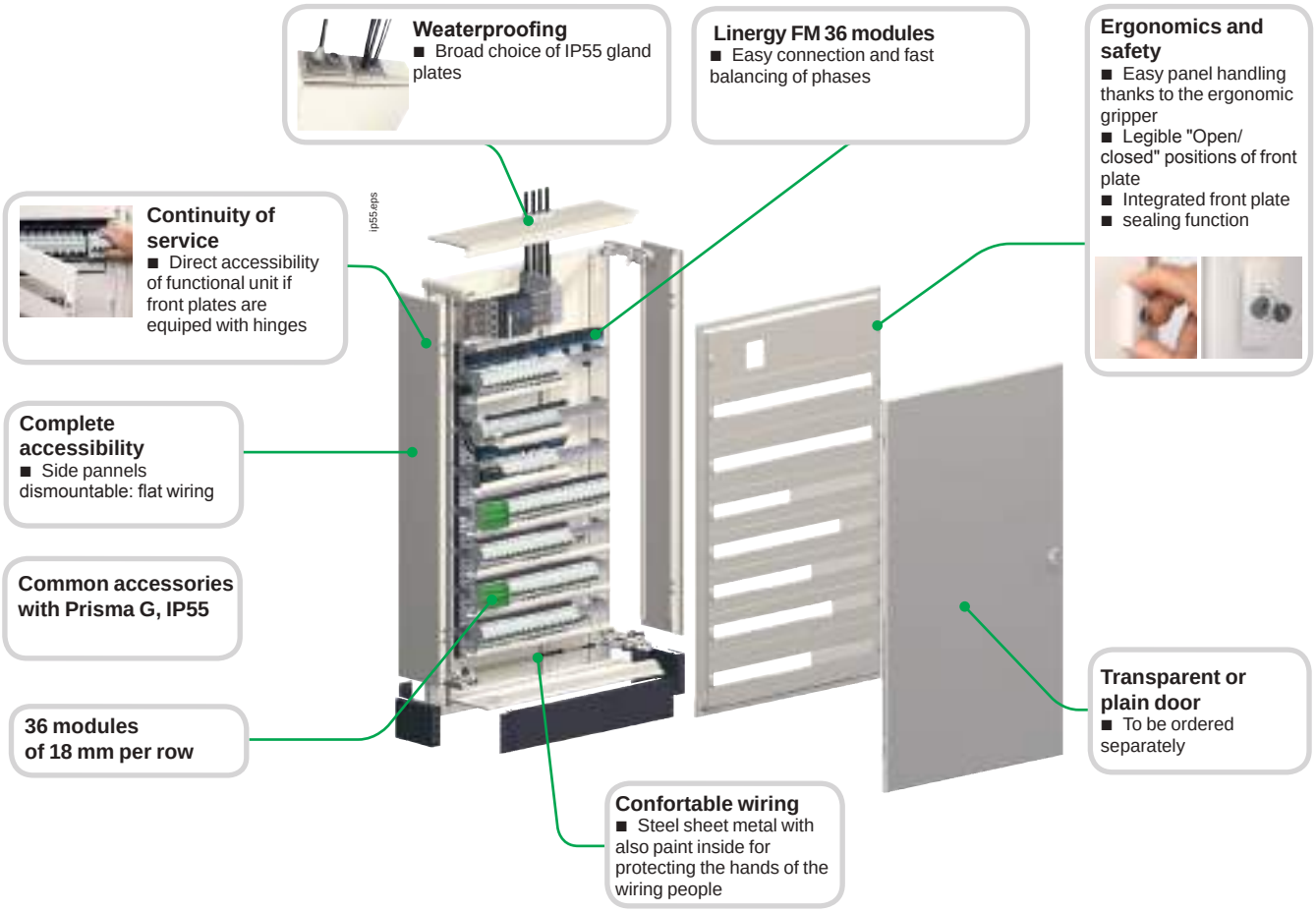
Presentation
Weather proof enclosures

IP55

Metallic indoor enclosures to compose.
Severe environments: industrial and agricultural buildings, basements, kitchens, etc.

Floor-standing enclosure delivered flat: total accessibility
Designed for electrical continuity

- 630 A
- IP55
- IK10



Weaterproofing
- Broad choice of IP55 gland plates

Linergy FM 36 modules
- Easy connection and fast balancing of phases

Ergonomics and safety
- Easy panel handling thanks to the ergonomic gripper
- Legible "Open/ closed" positions of front plate
- Integrated front plate
- sealing function

Continuity of service
- Direct accessibility of functional unit if front plates are equiped with hinges

Complete accessibility
- Side pannels dismountable: flat wiring

Common accessories with Prisma G, IP55

36 modules of 18 mm per row

Transparent or plain door
- To be ordered separately

Confortable wiring
- Steel sheet metal with also paint inside for protecting the hands of the wiring people

Description

Steel sheet metal with electrophoresis treatment + hot-polymerised polyester epoxy powder.
Floor-standing enclosures:
- width: 850 mm
- height: 1750 mm + socle 150 mm
- depth: 260 mm with door.
- properties of metal enclosures *> page 198*

Main characteristics

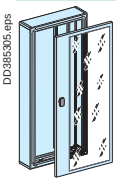
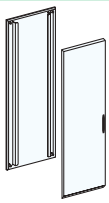
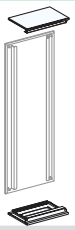
Prisma G enclosures IP55	
Rated operational current	630 A, Isc = 50 kA, Icw =25 A rms/1s, Ipk = 52.5 kÂ
Color	White colour RAL 9001
Standards conformity	EN 62208, IEC 61439-2
Degree of protection	IP55 with door
Degree of protection against mechanical impacts	IK10
Isolation	Class 1
Doors	■ Plain or transparent, opening to right or left ■ Supplied with a handle and keylock (key 405) Distance behind plain door = 78 mm, Distance behind transparent door = 73 mm
Earthing	Earthing braid delivered with enclosure
Combinations	*> page 116*

Floor-standing enclosures

IP55

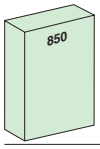
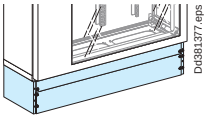
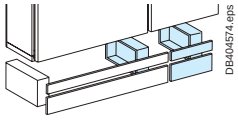
Floor-standing enclosures

Reversible doors (opening to left or right), equipped with a handle and keylock (key 405).

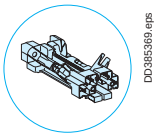
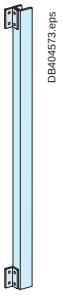
Floor-standing enclosures, W850				Ducts W300	
					
Nb. of vertical modules of 50 mm	**Height in mm**	**Enclosure**	**Transparent door**	**Rear + plain door**	**Top and bottom plates**
33	1750	**08311**	**08340**	**08349**	**08372**

Plinth

Sold separately.

H = 150 mm	Floor-standing enclosures, width 850 mm	Ducts W300
		
Catalogue numbers	**08802**	2 x **08392** + **08394**

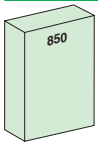
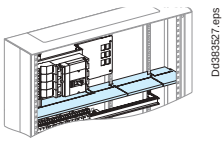
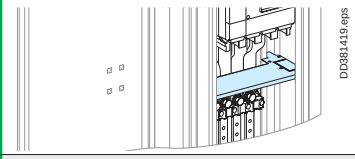
Combination

	Components catalogue numbers	
		
	Horizontal or vertical combination kit	Fixing mounting
Catalogue numbers	**08381**	**08391**
Characteristics	2 double struts	L = 1950 mm sold individually

Horizontal partitioning

The metal partitions are used to:

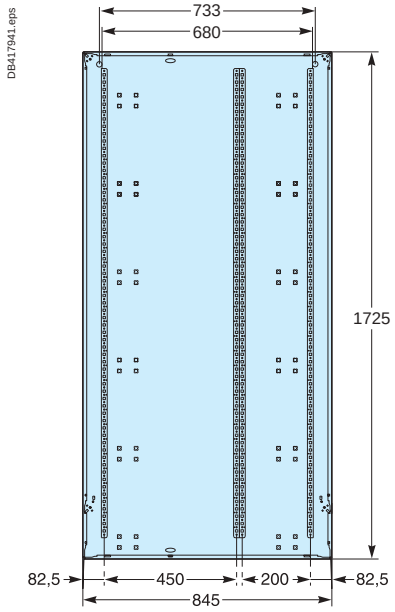
- separate the functional units from one to another
- create a physical separation between devices and a terminal block, for example.

Used for	Floor-standing enclosures, width 850 mm	Ducts W300
		
Catalogue numbers	**04336**	**04332**
Characteristics	■ Metal. ■ It is mounted directly on the functional uprights. ■ Lateral and rear cut-outs are available for cable running or the installation of busbars at the rear of the switchboard.	

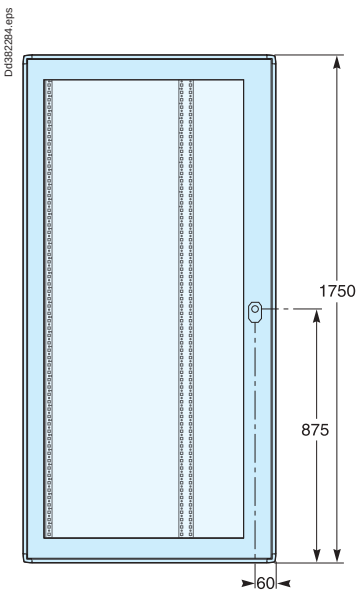
Dimensions

IP55

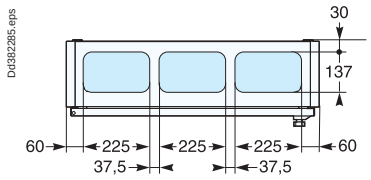
Enclosure



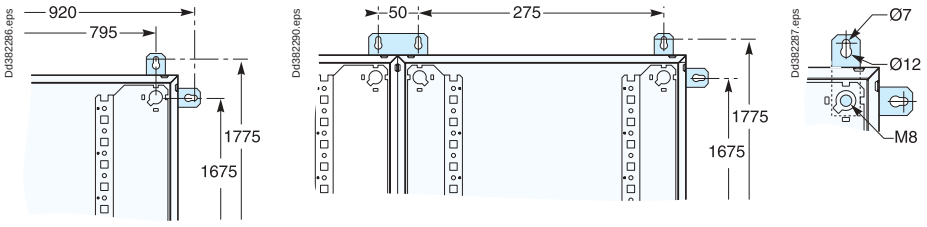
Door



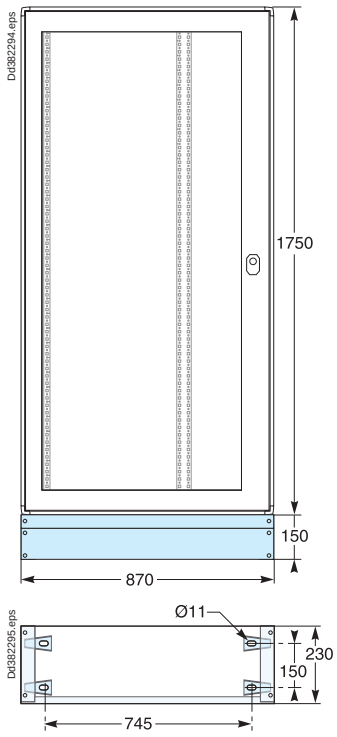
Cable entry



Wall-mounted

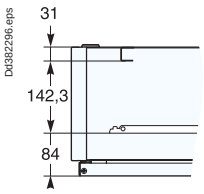


Fixing to floor

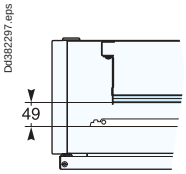


Depth behind front plate

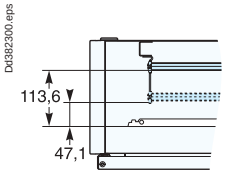
Functional uprights



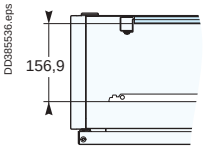
Modular rail



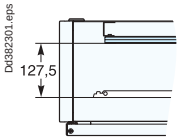
03001.



03002.

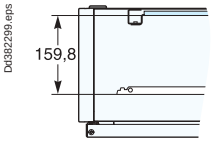


03003.

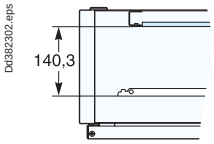


03004.

Slotted mounting plate



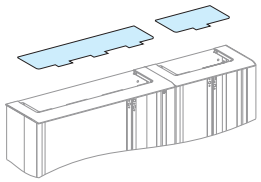
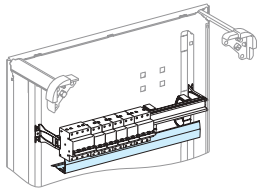
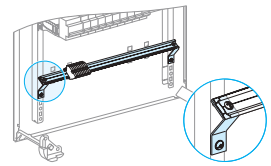
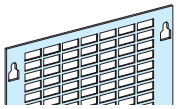
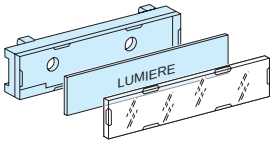
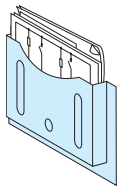
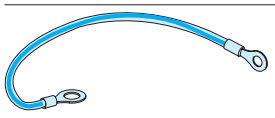
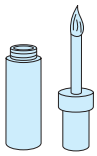
03171/03172/03173/03176/ 03177/03178.



03170/03175.

Common accessories
W850 mm

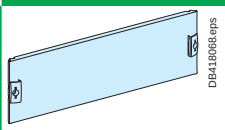
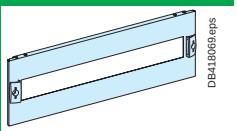
Accessories

	Designation	Pages
Dd382817.eps 	IP30 gland plates	118
	IP55 gland plates	133
Dd883484.eps 	Cable running	74, 75
Dd383504.eps 	Installation accessories	70
DD381369.eps 	Slotted mounting plate	69
DD381714.eps 	Identification labels	73
Dd381208.eps 	Adhesive drawing holder	73
DD383883.eps 	IP30/ IP31/ IP43 handle	120
	IP55 handle	136
DD384005.eps 	Earth connection	120
DD381008.eps 	Touch-up paint brush	73

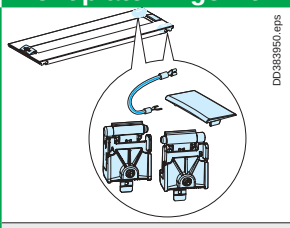
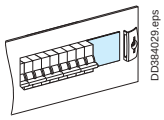
Front plates, rails
W850 mm

Accessories

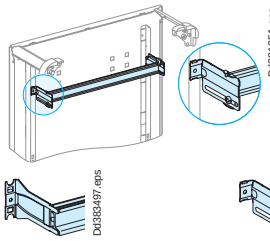
Plain and modular front plates

Used for		W850 enclosures	
		 DB418068.eps	 DB418069.eps
Nb. of vertical modules	Height (mm)	Plain	Modular device 1 row
1	50	**03851**	-
3	150	**03853**	**03216**
4	200	**03854**	**03217**
5	250	-	**03218**
6	300	**03856**	-
11	550	**03861**	-

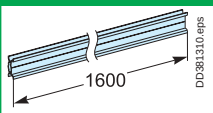
Accessories for front plates

Used for	Front plate hinge kit	Blanking plates	
	 DD383950.eps	 DD384029.eps	
Catalogue numbers	**08585**	**03220**	**03221**
Characteristics	Set of 2 hinges	■ Blanking strip ■ H = 46 mm, L = 1 m	■ Divisible ■ Set of 4 ■ H = 46 mm, L = 90 mm

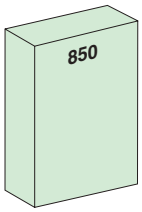
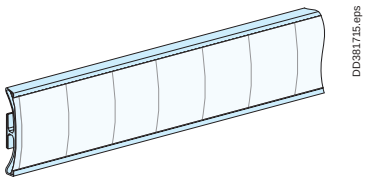
Rails

Used for	W850 Enclosures	
	 DD381351.eps Dd383497.eps DD381371.eps	
	Fixed	Adjustable
Catalogue numbers	**03006**	**03007**
Useful length (mm)	648	648
9 mm pitch number	72 (36 modules)	72 (36 modules)
Useful depth behind front plate (mm)	50	From 47 to 114

Adjustable rails

Rail to be cut	
	 1600 DD381310.eps
Catalogue number	**04226**
Characteristics	Set of 2 rails, useful length: 1600 mm with 4 holes, ø 6.4 mm, 450 mm between centres

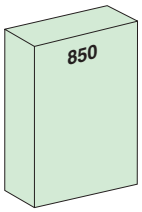
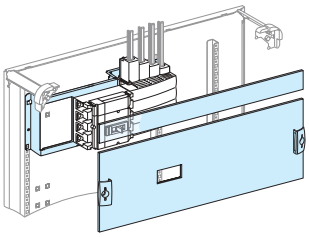
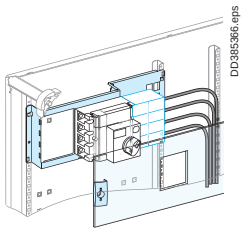
Identification labels

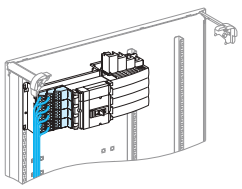
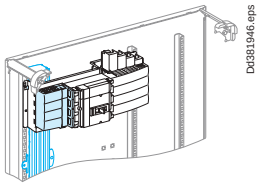
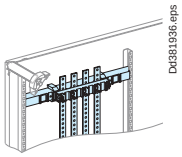
	Adhesive identification labels	
 850	 DD381715.eps	
	12 divisible sheets W = 650	
	H = 24 mm	H = 36 mm
Catalogue numbers	**08907**	**08908**

The adhesive label holders are supplied with a paper label and a transparent cover.

Compact NSX100/630 horizontal mounting
W850 mm

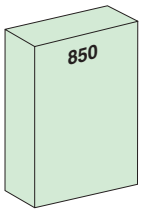
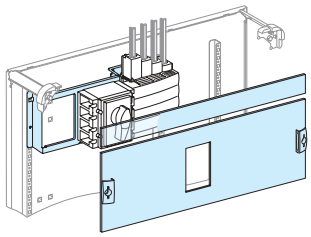
Functional units

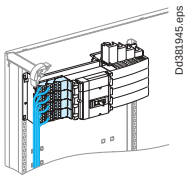
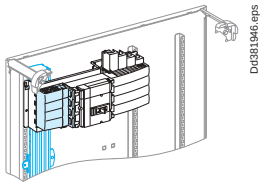
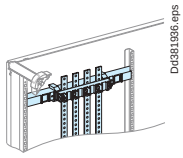
Mounting	Horizontal fixed				
					
Devices	**Toggle**				**Direct rotary handle**
	Compact NSX100/250	**Vigicompact NSX100/250**	**Compact NSX400**	**Compact NSX630**	**Compact NSX100/250**
Nb. of vertical modules	**5**	**4**	**9**	**9**	**7**
Mounting plates	**03030**	**03033**	**03070**	**03070**	**03031**
Front plates [Nb. of vertical modules] cut-out	**03294** [4]	**03295** [4]	**03289** [6]	**03289** [6]	**03301** [4]
Front plates [Nb. of vertical modules] upstream	**03851** [1]	-	**03853** [3]	**03853** [3]	**03853** [3]
Upstream connection					
Connection block	upstream incoming: **04066** downstream incoming: **04067**	**-**	upstream incoming: **04076** downstream incoming: **04076**	upstream incoming: **04076** downstream incoming: **04076**	**-**
Long terminal shield	-	**3P: LV429517** **4P: LV429518**	-	-	**3P: LV429517** **4P: LV429518**
Cable-ties	**08866 + 08867**				**08866 + 08867**

Downstream distribution	Linergy DP 250 A		Insulated Linergy BW busbars				Rear Linergy BS busbars	
								
Devices	**Compact NSX250**	**Vigicompact NSX250**	**Compact NSX100/250**	**Compact NSX400**	**Compact NSX630**	**Vigicompact NSX100/250**	**Compact NSX250**	**Compact NSX400/630**
Busbars / Distribution blocks	**3P: 04033** **4P: 04034**	*> page 92*	*> page 84*	*> page 84*	*> page 84*	*> page 84*	*> page 86*	*> page 86*
Power supply block with connection	-	-	**04060**	**04070**	**04071**	**04060**	connection must be made	
Long terminal shield	-	-	3P: **LV429517** 4P: **LV429518**	-	-	3P: **LV429517** 4P: **LV429518**	3P: **LV429517** 4P: **LV429518**	3P: **LV432593** 4P: **LV432594**

Functional units

Compact INS-INV 100/630 horizontal mounting
W850 mm

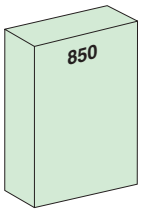
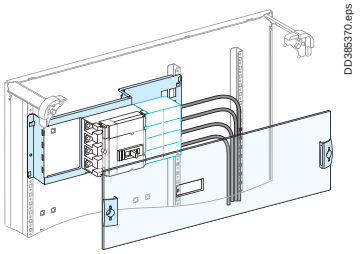
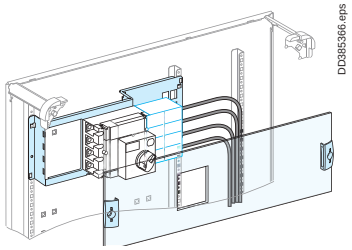
Mounting	Horizontal fixed	
		
Devices		
	Compact INS250 INV100/250	**Compact INS-INV320/630**
Nb. of vertical modules	**5**	**9**
Mounting plates	**03030**	**03070**
Front plates [Nb. of vertical modules] cut-out	**03239** [4]	**03287** [6]
Front plates [Nb. of vertical modules] upstream	**03851** [1]	**03853** [3]
Upstream connection		
Connection block	upstream incoming: **04066** downstream incoming: **04067**	upstream incoming: **04076** downstream incoming: **04076**
Cable-ties	**08866 + 08867**	**08866 + 08867**

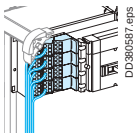
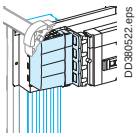
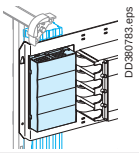
Downstream distribution	Linergy DP 250 A	Insulated Linergy BW busbars			Rear Linergy BS busbars	
						
Devices	**Compact INS250-INV100/250**	**Compact INS250-INV100/250**	**Compact INS-INV320/400**	**Compact INS400/630-INS-INV500/630**	**Compact INS-INV250**	**Compact INS-INV 320/630**
Busbars / Distribution blocks	**3P: 04033** **4P: 04034** *> page 92*	*> page 84*	*> page 84*	*> page 84*	*> page 86*	*> page 86*
Power supply block with connection	-	**04060**	**04070**	**04071**	connection must be made	
Long terminal shield	-	-			**LV429518**	**LV432594**

Easypact CVS100/630 horizontal mounting

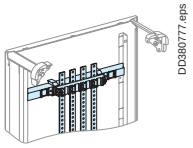
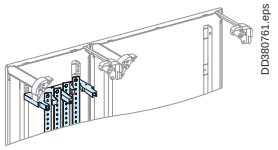
W850 mm

Functional units

Mounting	Horizontal fixed			
				
Devices	**Toggle**			**Direct rotary handle**
	Easypact CVS100/250	**Vigi CVS100/250**	**Easypact CVS400/630**	**Easypact CVS100/250**
Nb. of vertical modules	**5**	**7**	**9**	**7**
Mounting plates	**03030**	**03033**	**03070**	**03031**
Front plates [Nb. of vertical modules] cut-out	**03256** [4]	**03257** [4]	**03286** [6]	**03301** [4]
Front plates [Nb. of vertical modules] upstream	**03851** [1]	**03853** [3]	**03853** [3]	**03853** [3]
Upstream connection				
Long terminal shield	3P: **LV429517** 4P: **LV429518**		3P: **LV429593** 4P: **LV429594**	3P: **LV429517** 4P: **LV429518**
Cable-ties	**08866 + 08867**		-	**08866 + 08867**

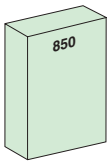
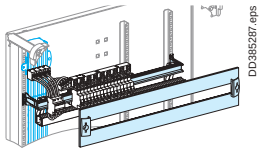
Downstream distribution	Distribution block Linergy DP 250 A	Insulated Linergy BW busbars				
						
Type of connected devices	**All types**	**Toggle**				**Direct rotary handle**
		CVS100/250	**CVS100/250 or Vigi CVS100/250**	**CVS400**	**CVS630**	
Busbars / Distribution blocks	3P: **04033** 4P: **04034** *> page 92*	*> page 84*				
Power supply block with connections	-	**04060**	**04060**	**04070**	**04071**	**04061** (1) + connection must be made
Long terminal shields	-	-	-	-	-	3P: **LV429517** 4P: **LV429518**

(1) *Connection must be made.*

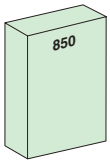
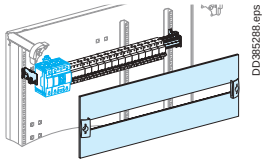
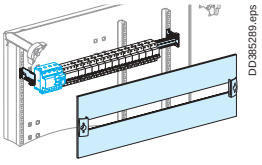
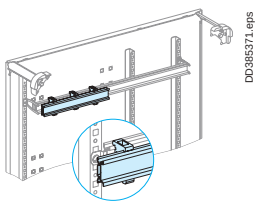
Downstream distribution	Rear Linergy BS busbars		Linergy BS multi-stage busbars	
				
Type of connected devices	**CVS100/250**	**CVS400/630**	**CVS100/250**	**CVS400/630**
Busbars / Distribution blocks	*> page 86*		*> page 87*	
Power supply block with connections	connection must be made		connection must be made	
Long terminal shields	3P: **LV429517** 4P: **LV429518**	3P: **LV432593** 4P: **LV432594**	3P: **LV429517** 4P: **LV429518**	3P: **LV432593** 4P: **LV432594**

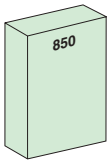
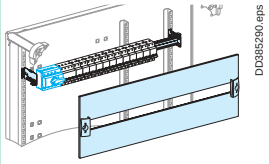
Modular devices switchboard incomer 80/160 A

Functional units

Mounting	Modular devices	
		
Devices	**All modular devices type of Acti 9**	**Modular devices type of Acti 9 ≤ 40 A**
Type of power supply	All supply systems (Linergy FH, Linergy FM) with cable straps or trunking	Supply via 63/80 A Linergy FM or Linergy FH with cable straps
Modular rail (1)	**03006**	
Modular front plates [Nb. of vertical modules]	**03217** [4]	**03216** [3]

Note: *for a modular row with a 160 A (half row) and Linergy FM 200 A distribution block positioned directly below a non-modular mounting plate (Compact, etc.), or at the top of a switchboard, add one vertical module (i.e. 4 + 1) and a plain upstream front plate.*

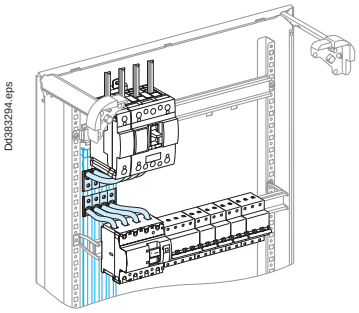
Mounting	Circuit breaker		
			
Devices	**NG160, Vigi NG160**	**NG125, Vigi NG125, iC120, Vigi iC120**	**Rail + 4 raisers (±33 mm)**
Adjustable modular rail (1)	**03007**	**03006**	**04227** (2)
Modular front plates [Nb. of vertical modules]	**03218** [5]	**03218** [5]	

Mounting	Compact INS switches	
		
Devices	**Compact INS40/160**	**Compact INS100/160 with long terminal shields**
Adjustable modular rail (1)	**03006**	
Modular front plates [Nb. of vertical modules]	**03217** [4]	**03218** [5]

(1) *Capacity of modular rail: 36 modules (18 mm).*
(2) *To add modular devices to the row, order a raised DIN rail (W = 342 mm).*

Linergy distribution and accessories

Linergy distribution system



Presentation *See pages 82 and 83*

At the head of a switchboard, the incoming device can be supplied by one of the following:
- busbars mounted in rear of the enclosure
- centralised distribution blocks
- row distribution blocks.

All the products of Linergy range < 630 A are compatible with the 850 mm width offers and their mounting rules are similar.

A specific device feeder Linergy FM, with 750 mm length, has been designed to answer to your needs:
- a reliable stable electrical connection, no maintenance required (tightness guaranteed over time)
- quick connection
- easy phase balancing
- easy upgradeability.

Note: *to discover all the available prefabricated connections concerning the Linergy distribution systems, see pages 64, 65, 66.*

Pack 160 enclosures, Prisma G Pack 250

Contents

Pack 160 enclosures

Prisma G Pack 250

Presentation

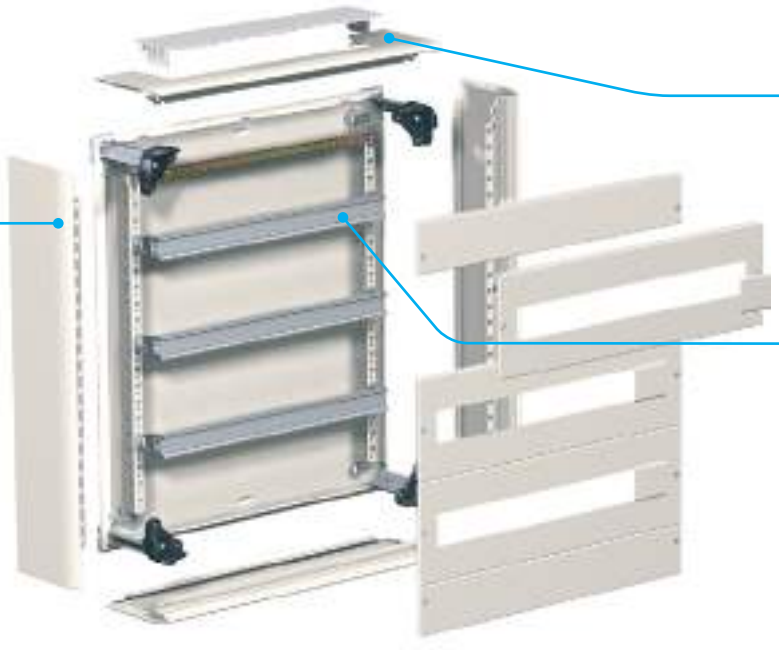
Premounted metallic indoor enclosures can be ordered with a single catalogue number.

An enclosure + modular rails + front plates + blanking plates + a plastic gland plate + an earth bar + a template for drilling wall-mounting holes.

1 product reference = a complete modular enclosure ready to be equipped

- 160 A
- IP30
- IK07/08

PD391279



Gland plate
- Removable, easy-to-install and easy-to-cut

Accessibility
- Side panels dismountable for full access

Double rail
- Double rail supplied premounted in the 4-, 5- and 6-row enclosures allowing mixing of devices of different depths

Installation
- Door easy to install without tools
- Plain or transparent reversible door

PD390161

Description

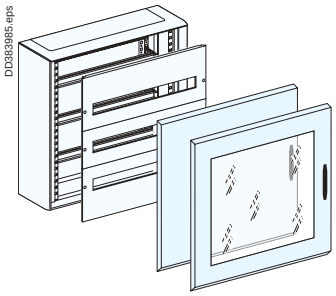
Steel sheet metal with electrophoresis treatment + hot-polymerised polyester epoxy powder.
Enclosure:
- width: 555 mm
- height: 480 to 1080 mm
- depth: 157 mm without door / 186 mm with door
- properties of metal enclosures > *page 198*.

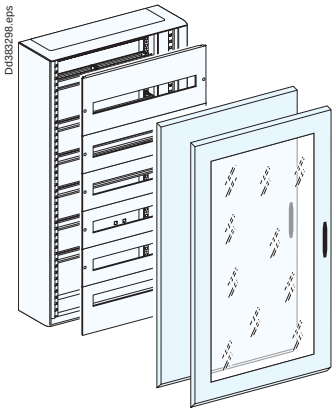
Main characteristics

Pack enclosures	
Rated operational current	160 A - Isc = 50 kA, Icw =10 kA rms/1s, Ipk = 30 kÂ
Colour	White RAL 9001
Compliance with standards	EN 62208, IEC 61439-2, NFC 61-910
Degree of protection	IP30 with or without door
Degree of protection against mechanical impact	IK08 with door IK07 without door
Insulation	Class 1
Doors	■ Plain or transparent, opening to right or left ■ By design, electrical continuity of moving parts (hinges…) ■ Supplied with a handle and keylock (key 405) ■ No possibility to install push buttons (distance behind door = 42 mm)
Mounting	Pact enclosures easily integrated in using flush-mounting kit

The design of Pack enclosures ensures easy device access and mounting. Optimised depth and an extra-thin door ensure perfect integration in all environments.
Models with 4, 5 and 6 rows are particularly well-suited for the incomer function:
- more space available for wiring of the incoming device
- optimised number of front plates.

Pack wall-mounted and flush-mounted enclosures





Wall-mounted enclosures for modular devices

Enclosures include:

■ 1 modular rail per row (L= 24 modules of 18mm).
The recessed rail at the top of 4, 5, 6-row enclosures is for NG160 installation and supplied with another rail + 4 raisers to complete the row with modular devices.
■ 1 front plate with cut-out per row (height depending on model)
■ 1 plastic gland plate
■ divisible blanking plates: 3 for 2 and 3 rows enclosures, 6 for 4 to 6 rows enclosures
■ earth bar with 40 straples

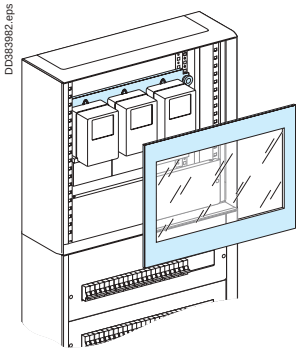
Doors are:

■ reversible, opening to left or right,
■ supplied with a handle and barrel with keylock (key 405)
■ **barrel locks and inserts** *> see page 120.*

Enclosure W555

Nb. of rows	Nb. of vertical modules of 50 mm	Height in mm	Enclosure 	Plain door 	Transparent door 
2	9	480	**08002**	**08082**	**08092**
3	12	630	**08003**	**08083**	**08093**
4	15	780	**08004**	**08084**	**08094**
5	18	930	**08005**	**08085**	**08095**
6	21	1080	**08006**	**08086**	**08096**

Flush-mounting kit *> see page 163*



Enclosure extension

Meters can be installed at different levels on the functional uprights of enclosures.
Class 1: Depending on preferences and needs, meters can be installed directly on mounting plates equipped with earthing braids and combined with partitioning or front plates.
The mounting plates can be raised using M5 spacers.

Doors are:

■ reversible, opening to left or right
■ supplied with a handle and barrel with keylock (key 405),
■ **barrel locks and inserts** *> see page 120*

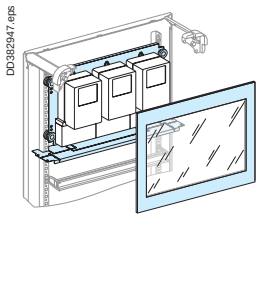
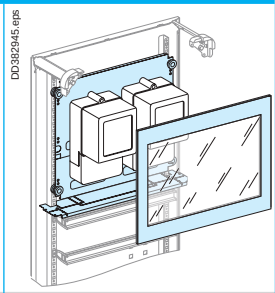
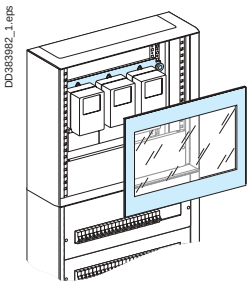
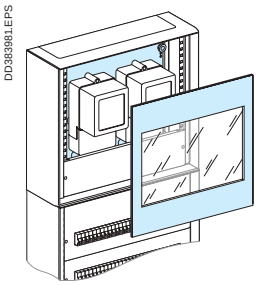
Enclosure extension W555

Nb. of vertical modules of 50 mm	Height in mm	Enclosure 	Plain door 	Transparent door 
9	480	**08012**	**08082**	**08092**
12	630	**08013**	**08083**	**08093**

Kilowatt-hour meters
Other functional units for extension enclosures

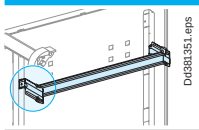
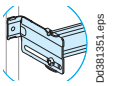
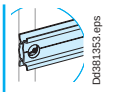
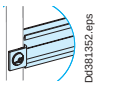
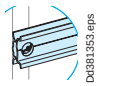
Kilowatt-hour meters, Class 2

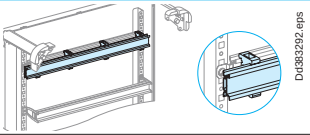
Class 1: Depending on preferences and needs, meters can be installed directly on mounting plates (without insulating plate) equipped with earthing braids of 6 mm² (08910) and combined with partitioning or front plates. The mounting plates can be raised using **M5 spacers** > *see page 70.*

Installation	In Pack wall-mounted enclosures		In an enclosure extension	
				
Device	**Single-phase meters**	**3-phase meters**	**Single-phase meters**	**3-phase meters**
Nb. of devices per row	3	2	3	2
Nb. of vertical modules	6	9	6	9
Mounting plate	**03157**	**03152**	**03157**	**03152**
Insulating plate	**03154**	**03154**	**03154**	**03154**
Horizontal partitioning (1)	**04333**	**04333**	-	-
Front plate transparent	**03343**	**03344**	**03343**	**03344**
Front plate plain	or **03806**	or **03807**	or **03806**	or **03807**
Enclosure	Pack enclosure	Pack enclosure	**08012**	**08013**
Door	Depending on enclosure	Depending on enclosure	**08092** (transparent) or **08082** (plain)	**08093** (transparent) or **08083** (plain)
Earthing wire 6 mm²	**08911**	**08911**	**08911**	**08911**
Combination uprights (set of 2)	-	-	**08817** (2)	**08817** (2)

(1) If not installed at the top of a Pack enclosure, order an addition horizontal partition (04333).

(2) To make the combination more rigid, particularly during transport, it is mandatory to use a set of combination uprights secured to the rear of the switchboard.

	Modular rails, L555			
					
	Fixed	**Rear**	**Recessed**	**For NG160**
Catalogue numbers	**01260**	**03004**	**03003**	**03008**
Useful length	432 mm	432 mm	432 mm	432 mm
9 mm modules number	48	48	48	48
Depth behind front plate	50 mm	80 mm	110 mm	83 mm

	DIN rail + 4 raisers
	
Catalogue numbers	**04227**
Characteristics	Raiser height: + 33 mm Rail length: 342 mm (19 modules of 18 mm)

Use

Allows adding modular devices to the row, if the 03008 rail is used.

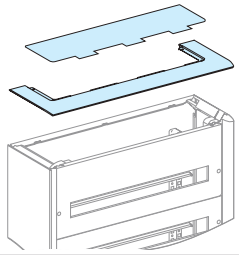
Front plates, W600

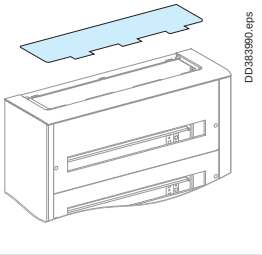
> *page 68* and *page 164*.

Accessories

Gland plates

Gland plates

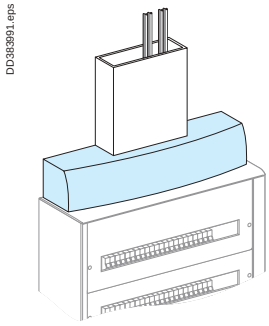




	Top or bottom plate with plastic gland plate	Metal gland plate
Catalogue numbers	**08878**	**08879**
Characteristics	-	Plain metal gland plate

Trunking spreader

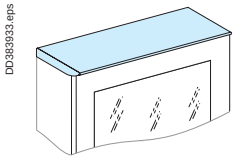
Trunking spreader



Catalogue numbers	**08821**

Canopy

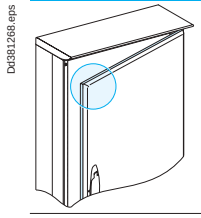
Canopy for IP31



Catalogue numbers	**08823**
Characteristics	The canopy cannot be mounted on the existing top plate. It therefore comes with a special top plate that must be mounted in place of the existing top plate. The existing top plate is remounted at the bottom of the enclosure to allow cable entry and exit via the bottom. The addition of a canopy over a wall-mounted or floor-standing enclosure equipped with a door ensures compliance with the degree of protection IP31.

Gasket

Gasket for IP43



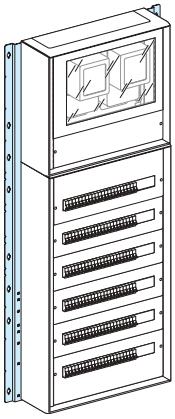
Catalogue numbers	**08841**
Characteristics	When the switchboard is equipped with a canopy, a gasket for the doors ensures compliance with the degree of protection IP43. L = 5.3 m

Accessories

Combination uprights

Combination uprights

DD383984.EPS

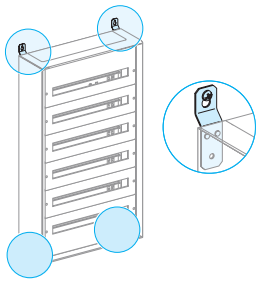


Catalogue numbers	**08817**
Characteristics	Set of 2 uprights. Particularly during transport, it is mandatory to use a set of combination uprights secured to the rear of the switchboard, to make the combination more rigid.

Wall mounting

Wall mounting

DD385482.eps

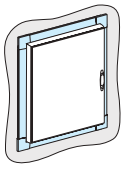


Catalogue numbers	**08803**
Characteristics	4 external wall-mounted brackets

Flush-mounting kit

Flush-mount kit

Dd381256.eps

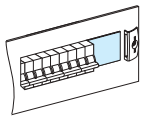


Catalogue numbers	**08822**

Blanking plates

Blanking plates

DD384029.eps



Catalogue numbers	**03220**	**03221**
Characteristics	■ Blanking strip ■ H = 46 mm, L = 1 m	■ Divisible ■ Set of 4 ■ H = 46 mm, L = 90 mm

Finishing parts > *page 73*

Accessories
Spare-parts

Cable-tie supports

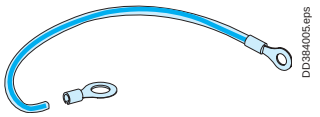
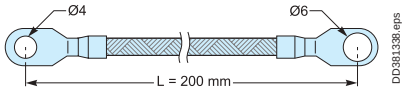
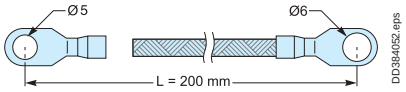
> page 75.

Cable running

> page 74.

Earthing braid

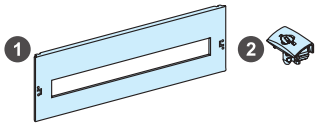
The earthing braid is used to earth a door or wicket door with devices.

	Earthing braid, 6 mm²	Earthing wire, 6 mm²
	 DD384005.eps	 DD384005.eps
Catalogue numbers	**08910**	**08911**
Characteristics	The braid is equipped with a 4 mm diameter lug at one end and a 6 mm diameter lug on the other	Equipped with a 5 mm diameter lug at one end and a 6 mm diameter lug on the other
	 DD381338.eps	 DD384052.eps

Spare-parts

Front plate (IP30)

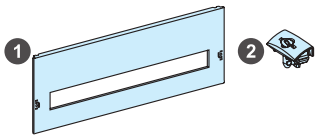
DD384498nb.eps



4 modules Pack decentered plate — **01264**

1. 1 front plate
2. 2 front plates locking mechanisms

DD384499nb.eps

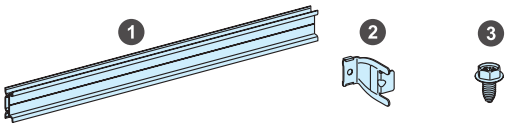


4.5 modules Pack decentered plate — **01265**

1. 1 front plate
2. 2 front plates locking mechanisms

Modular rail

DD384506nb.eps

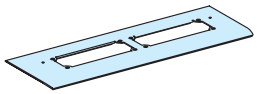


Pack modular rail — **01260**

1. 1 DIN rail 432 mm lenght
2. 2 fixing brackets
3. 2 self threading screws M5 x 10

Gland plate (IP30)

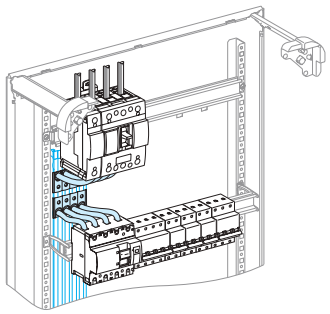
DD384489.EPS



Cut-out gland plate for Pack enclosure — **01020**

Distribution and connection in Pack enclosures with Linergy

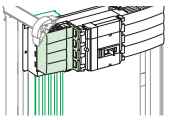
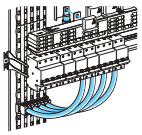
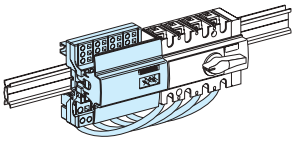
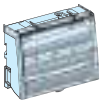
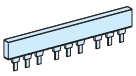
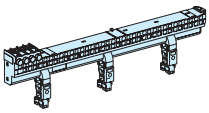
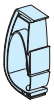
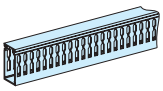
Dd388294.eps



Presentation

At the head of a switchboard, the incoming device can be supplied by one of the following:

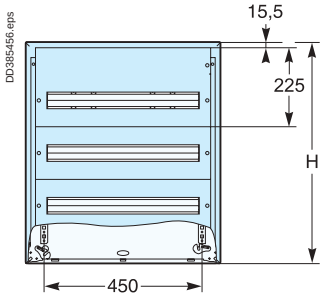
- busbars mounted in rear of the enclosure
- centralised distribution blocks
- row distribution blocks.

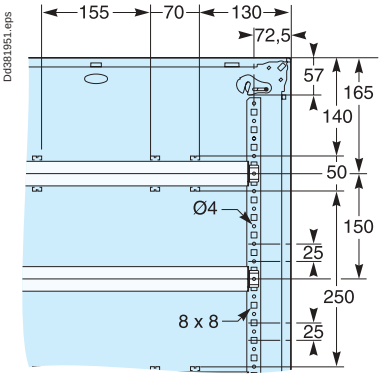
Linergy distribution	Catalogue numbers	Pages
Linergy BW busbars 125 to 160 A		
DD380522-LIN.eps 	**04103, 04107, 04104, 04108, 01210, 01201**	84
Prefabricated connections 125 to 160 A		
Dd383472.eps 	**04145, 04146, 04147, 04148, 04151, 04152**	84, 85
Linergy DX distribution block		
PBS02370-55.eps 	**04031, 04149, 04040, 04041, 04045, 04047, 04046**	90, 91
Linergy DS distribution block		
DD385267.eps 	**LGY112510, LGY116013, LGY125014, LGY410028, LGYN1007, LGY412548, LGYN12512, LGY412560, LGY416048, LGYN12515**	94, 95
Linergy FH comb busbars		
DD382484.eps 		98 à 102
Linergy FM distribution block		
DD384088-LIN.eps 	**04008, 04000, 04018, 04012, 04013, 04014, 04026**	96, 97
Cable straps		
Dd381618.eps 	**04239, 04243**	74
Trunking		
Dd381638.eps 	**04257, 04255, 04206, 04265, 04267, 04256**	74, 75
Cable-tie supports		
Dd381820.eps	**08867**	75

Dimensions

Wall-mounted enclosures of 2 and 3 rows

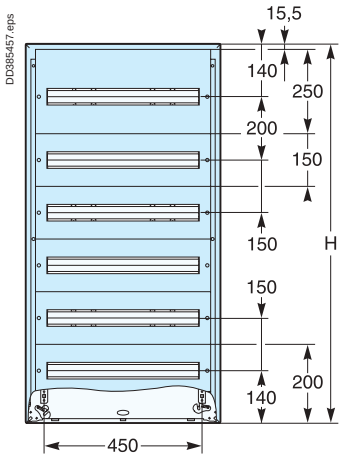
Nb. of rows	H
2	480
3	630

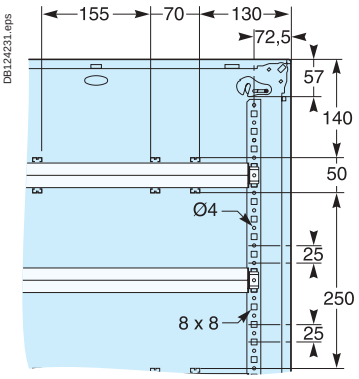


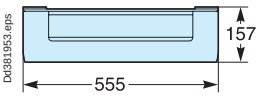


Wall-mounted enclosures of 4, 5 and 6 rows

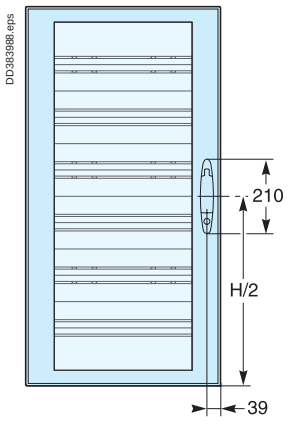
Nb. of rows	H
4	780
5	930
6	1080

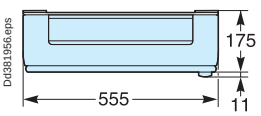






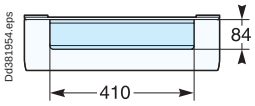
Door



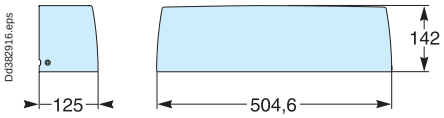


Dimensions

Gland plates

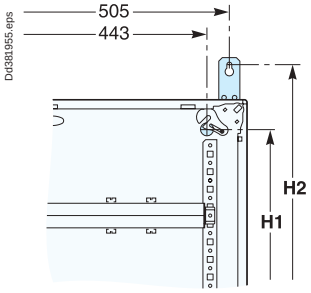


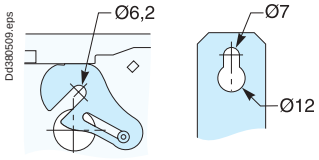
Trunking spreader



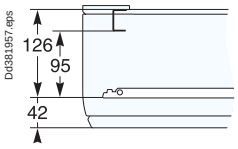
Wall-mounted

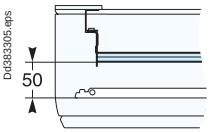
Nb. of rows	H1	H2
2	396	546
3	546	696
4	696	846
5	846	996
6	996	1146



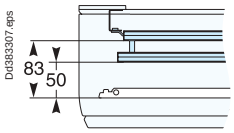


Useful depth behind front plate

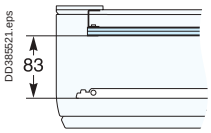




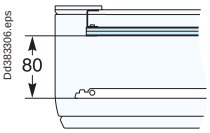
Supplied modular rail.



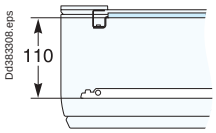
Upper rail in wall-mounted enclosures of 4, 5 and 6 rows.



Rail cat. no. 03008.



Rail cat. no. 03004.



Rail cat. no. 03003.

Presentation

Wall-mounted and floor-standing enclosures

Metallic indoor wall-mounted and floor-standing enclosures delivered in a kit with a limited number of references.
- Commercial buildings: hotels, offices,shops, etc.

Wall-mounted and floor-standing enclosures delivered flat: total accessibility
Designed for electrical continuity

- 250 A
- IP30
- IK07/08

Gland plate
- Dismountable and cuttable

PD390300_R.eps

Free space
- H = 300 mm for incomer device installation at your choice

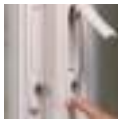
Quick fastening on hook-on rail
- Easy wall mounting

Total accessibility
- Dismountable side panels: flat wiring

Confortable wiring
- Steel sheet metal with inside painting, not aggressive for the hands of the wiring staffs

Common accessories with Prisma G

Ergonomic handle



Optional, plain door or transparent door
- To be ordered separately

Ergonomics and safety
- Easy panel handling thanks to the ergonomic gripper
- Legible "Open/closed" positions of front plate
- Integrated front plate sealing function

PD390240_R.eps

Description

Steel sheet metal with electrophoresis treatment + hot-polymerised polyester epoxy powder.
Enclosure:
- width: 595 mm
- height: 630 to 1830 mm
- depth: 205 mm without door / 238 mm with door, + 13.5 mm (handle)
- properties of metal enclosures > page 198

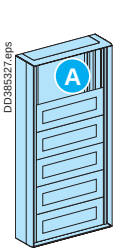
Main characteristics

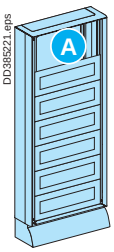
Prisma G Pack 250 A enclosures, IP30	
Rated operational current	In = 250 A, Isc = 50 kA, Icw = 25 kA rms/1 s, Ipk = 52.5 kA
Colour	White colour RAL 9001
Standards conformity	EN 62208, IEC 61439-1 and 2
Degree of protection	IP30 with or without door
Degree of protection against mechanical impacts	IK08 with door, IK07 without door
Isolation	Class 1
Doors	■ Plain or transparent, opening to right or left ■ By design, electrical continuity of moving parts ■ Supplied with a handle and keylock (key 405) ■ Distance behind door = 58 mm
Mounting	Surface mounting, floor-standing

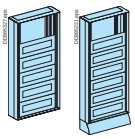
Wall-mounted and floor standing enclosures
W600 mm

Each enclosure is delivered with H = 150 mm front plates and rails for modular devices (quantity according the number of rows) and a plastic gland plate.

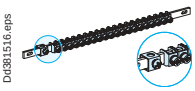
Wall-mounted and floor standing enclosures W600







Optional



Capacity		Nb of row + Zone A to complete height 300 mm (6 modules)	H x W x D (in mm)	Wall-mounted and floor-standing	Plain door (1)	Transparent door (1)	Earth bar with 40 staples (16 mm²) and 1 incoming terminal (35 mm²)
9-mm pitches	18-mm modules						
Wall-mounted							
96 + 96	48 + 48	**2R +** A	630 x 600 x 205	**08064**	**08124**	**08134**	1
144 + 96	72 + 48	**3R +** A	780 x 600 x 205	**08065**	**08125**	**08135**	1
192 + 96	96 + 48	**4R +** A	930 x 600 x 205	**08066**	**08126**	**08136**	1
240 + 96	120 + 48	**5R +** A	1080 x 600 x 205	**08067**	**08127**	**08137**	2
288 + 96	144 + 48	**6R +** A	1230 x 600 x 205	**08068**	**08128**	**08138**	2
336 + 96	168 + 48	**7R +** A	1380 x 600 x 205	**08069**	**08222**	**08232**	2
Floor-standing							
336 + 96	168 + 48	**7R +** A	1530 x 600 x 205	**08072**	**08222**	**08232**	2
384 + 96	192 + 48	**8R +** A	1680 x 600 x 205	**08073**	**08223**	**08233**	2
432 + 96	216 + 48	**9R +** A	1830 x 600 x 205	**08074**	**08224**	**08234**	2

(1) Reversible doors, opening to left or right, equipped with a handle and keylock (key 405).

Zone A to complete depending on the incoming device

Zone A (H = 300 mm) to complete

03260

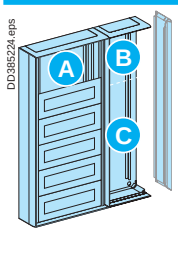
03264

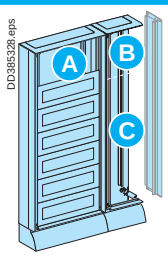
Zone A incoming device	Cat. no.	Composition
Modular devices ⩽ 40 A (2 rows)	**03001** x 2 + **03203** x 2	2 modular rails 2 modular front plates (H = 2 x 150 mm)
Modular devices ⩽ 63 A (1 row)	**03001** + **03204** + **03802**	1 modular rail 1 modular front plate H = 200 mm 1 plain front plate H = 100 mm
Compact INS40-160, NG125, Vigi NG125, iC120, Vigi iC120 + Modular devices Acti 9	**03260**	1 modular rail + 1 modular front plate H = 250 mm + 1 plain front plate H = 50 mm
NG160 or Vigi NG160 + modular	**03261**	1 adjustable modular rail + 1 modular rail + 2 raisers (1) + 1 modular front plate H = 250 mm + 1 plain front plate H = 50 mm
Compact INS/INV250 horizontal fixed, toggle	**03264**	1 mounting plate + 1 front plate INS/INV250 H = 200 mm + 2 plain front plates H = 50 mm
Compact NSX100/250 horizontal fixed, toggle	**03030** + **03232** + **03802**	1 mounting plate + 1 front plate with cut-out H = 200 mm + 1 plain front plate H = 100 mm
Vigicompact NSX100/250 horizontal fixed, toggle	**03033** + **03292** + **03802**	1 mounting plate + 1 front plate with cut-out H = 200 mm + 1 plain front plate H = 100 mm
Easypact CVS 100/250, 3P/4P, horizontal fixed, toggle	**03030** + **03230** + **03802**	1 mounting plate + 1 front plate with cut-out H = 200 mm + 1 plain front plate H = 100 mm
Easypact Vigi CVS 100/250, 3P/4P, horizontal fixed, toggle	**03033** + **03238** + **03802**	1 mounting plate + 1 front plate with cut-out H = 200 mm + 1 plain front plate H = 100 mm
Fupact ISFT160, horizontal fixed	**03121** + **03326** + **03801** + **03802**	1 mounting plate + 1 front plate with cut-out H = 150 mm + 1 plain front plate H = 50 mm + 1 plain front plate H = 100 mm
Fupact ISFT250, horizontal fixed	**03124** + **03328** + **03801**	1 mounting plate + 1 front plate with cut-out H = 250 mm + 1 plain front plate H = 50 mm

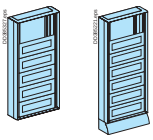
(1) To add modular devices to the row.

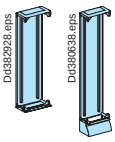
Wall-mounted and floor standing enclosures + duct
W600 mm + W300 mm

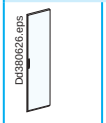
Wall-mounted and floor standing enclosures W600 + Ducts W300

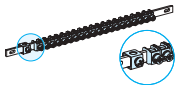






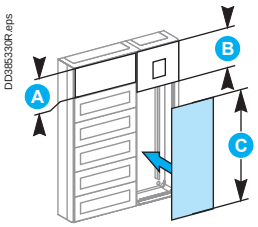






Nb of row + Zone A to complete height 300 mm (6 modules)	Height in mm	Wall-mounted and floor-standing	Plain door (2)	Transparent door (2)	Ducts (1)	Plain door	Transparent door	Earth bar with 40 staples
Wall-mounted								
2R + A	630	08064	08124	08134	08174	08184	-	1
3R + A	780	08065	08125	08135	08175	08185	-	1
4R + A	930	08066	08126	08136	08176	08186	-	1
5R + A	1080	08067	08127	08137	08177	08187	08197	2
6R + A	1230	08068	08128	08138	08178	08188	08198	2
7R + A	1380	08069	08222	08232	08179	08282	08292	2
Floor-standing								
7R + A	1530	08072	08222	08232	08272	08282	08292	2
8R + A	1680	08073	08223	08233	08273	08283	08293	2
9R + A	1830	08074	08224	08234	08274	08284	08294	2

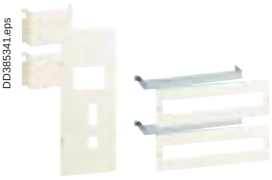
(1) Supplied with a combination kit for enclosure + duct association.
(2) Reversible doors, opening to left or right, equipped with a handle and keylock (key 405).



Location of zones to complete

Zone A to complete with 2 rails (Ref. 03001) + 2 front plates (Ref. 03203)

Zone B to complete (H = 450 mm) with the incoming device



03267

Incoming device Zone B	Cat. no.	Composition
Compact INV250	**03267**	1 mounting plate INV 1 front plate INV 2 modular rails L = 600 mm 2 front plates L = 600 mm
Compact NSX100/250 Vertical fixed, toggle	**03050** + **03253**	1 mounting plate 1 front plate
Vigicompact NSX100/250 Vertical fixed, toggle	**03050** + **03293**	1 mounting plate 1 front plate
Easypact CVS100/250 Vertical fixed, toggle	**03050** + **03250**	1 mounting plate 1 front plate
Fupact ISFT160 Vertical fixed, toggle	**03123** + **03327** + **03813**	1 mounting plate 1 front plate H = 300 mm 1 front plate H = 150 mm
Fupact ISFT250 Vertical fixed, toggle	**03125** + **03329**	1 mounting plate 1 front plate

Zone C to complete

The table below gives the cat. no of plain front plates to be installed to complete the duct.

Cat. no. of the duct	Dimensions of zone C (mm) to complete	Cat. no.
08174	150	**03813** x 1
08175	300	**03816** x 1
08176	450	**03817** x 1
08177	600	**03816** x 2
08178	750	**03815** x 3
08179	900	**03816** x 3
08272	900	**03817** x 2
08273	1050	**03817** x 2 + **03813** x 1
08274	1200	**03816** x 4

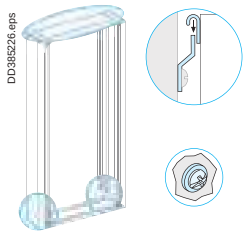
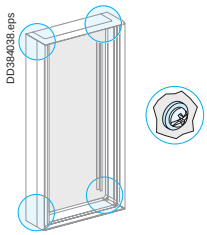
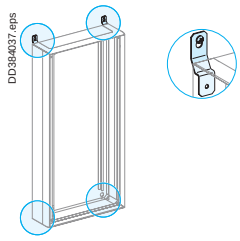
Other combinations are possible to complete the zone C, including 7 heights of 300 mm width front-plates:

Height (mm)	Cat. no.
50	**03811**
100	**03812**
150	**03813**
200	**03814**
250	**03815**
300	**03816**
450	**03817**

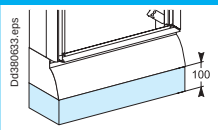
Installation / lifting accessories
Accessories to increase the degree of protection IP

Installation possibilities

Switchboards can be mounted on a wall in three manners: with the hook-on rail system, via the inside of the enclosure or using external wall-mounted brackets. Combined enclosures can be mounted using the lifting/reinforcement crossmembers set of two lifting/reinforcement cross-members.

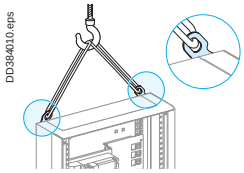
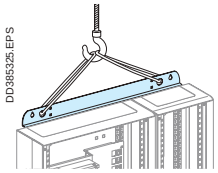
	Hook-on rail system	Mounting via the inside	Mounting using the external wall-mounted brackets
			
Catalogue numbers	Delivered with the enclosure	-	**08804**
Characteristics	The enclosure comes with 2 cross-members secured to the back of the enclosure (top and bottom) and a support rail (with levelling adjustment) for screw-mounting on the wall. The enclosure is easily mounted on the hook-on rail system. End the fixation with 2x 8mm diameter screws, at the bottom of enclosure	The enclosure can be mounted through the spacers in the 4 holes provided on the enclosure using 8 mm diameter screws (2 knockouts can be removed if necessary to provide 2 other holes).	4 external wall-mounted brackets.

Plinth raiser

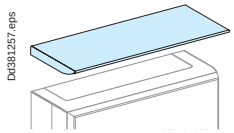
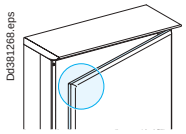
Plinth raiser		
		
Catalogue numbers	**08805**	**08807**
Characteristics	For basic floor-standing enclosure or extension W = 600 mm	For a duct W = 300 mm

Lifting accessories

The lifting rings are used to move a single wall-mounted or floor-standing enclosure. For combined enclosures, use the lifting/reinforcement cross-members (see below).

	2 lifting rings for single wall-mounted or floor-standing enclosures	Lifting/reinforcement cross-members for combined enclosures
		
Catalogue numbers	**08801**	**08812**
Characteristics	 Set of two lifting rings	 Have 2 types of holes: for lifting and for mounting on a wall

Accessories to increase the degree of protection IP

	Canopy to increase the IP value from IP30 to IP31		Gasket for the door to increase the IP value from IP31 to IP43
			
Used with	**1 wall-mounted enclosure**	**1 wall-mounted enclosure + 1 duct** (1)	**Enclosures or a duct from 6 to 33 modules**
			
Catalogue numbers	**08830**	**08832**	**08841**
Designation	The addition of a canopy over a wall-mounted or floor-standing enclosure equipped with a door ensures compliance with the degree of protection IP31.		When the switchboard is equipped with a canopy, a gasket for the doors ensures compliance with the degree of protection IP43. L = 5.3 m

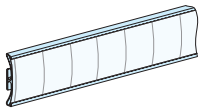
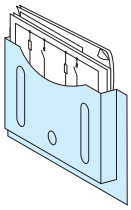
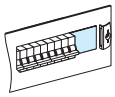
(1) Whatever the duct position.

Gland plates
Cable running

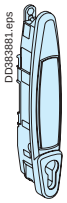
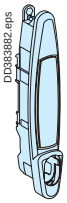
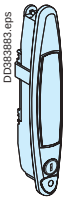
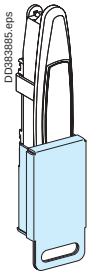
Gland plates

Enclosures (wall-mounted, floor-standing, ducts) are supplied with a plastic gland plate installed on the top or bottom for wall-mounted enclosures and the top for floor-standing enclosures.
The existing plastic gland plate can be replaced by this metal gland plate or by an interface plate with cut-out.

Door accessories

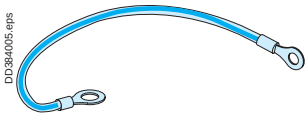
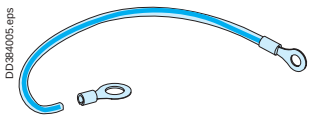
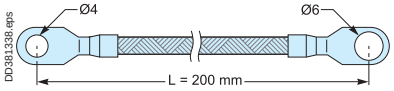
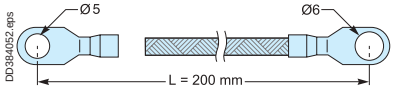
Finishing parts labels	Pages
Adhesive labels	
	71
Adhesive drawing holder	
	71
Blanking plates modular device (blanking strip or divisible)	
	145

Door handles and padlocking *See page 120*

	EURO handle	ASSA/ABLOY handle	Standard handle	Padlocking
				
Catalogue numbers	**08932**	**08933**	**08931**	**08938**
Characteristics	Supplied without barrel	Supplied without barrel	Supplied with barrel lock (key no. 405) RAL 7016	The kit can be installed on the door handles equipped with any of the barrel locks and inserts above

Earthing braid *See page 120*

The earthing braid is used to earth a door or partial door with devices.

	Earthing braid, 6 mm²	Earthing wire, 6 mm²
		
Catalogue numbers	**08910**	**08911**
Characteristics	Equipped with a 4 mm diameter lug at one end and a 6 mm diameter lug on the other	Equipped with a 5 mm diameter lug at one end and a 6 mm diameter lug on the other
		

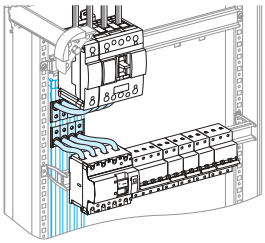
Spare parts

> see pages 121 to 123.

Dimensions

> see page 124.

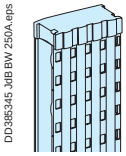
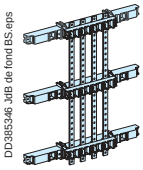
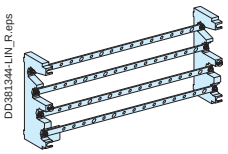
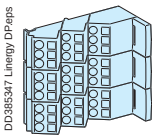
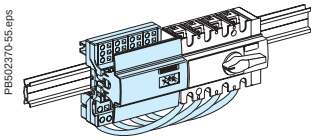
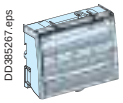
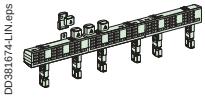
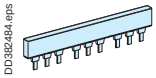
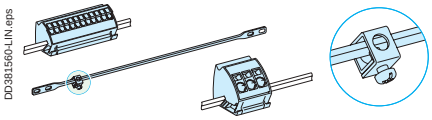
Linergy distribution and accessories



Presentation *pages 82 and 83.*

At the head of a switchboard, the incoming device can be supplied by one of the following:

- busbars mounted in rear of the enclosure
- centralised distribution blocks
- row distribution blocks.

Linergy distribution	Catalogue numbers	Pages
Linergy BW insulated busbars up to 250 A		
	**04103, 04104, 04107, 04108, 04111, 04121, 04116, 04126, 04112, 04122, 04117, 04127**	84
Linergy BS rear busbars		
	**04161, 04171, 04162, 04172**	86
Linergy BS multi-stage distribution block up to 250 A/ Linergy BS multi-stage busbars up to 250 A		
	**04161, 04171, 04162, 04172, 04052, 04053**	87, 88
Linergy DP quick distribution blocks		
	**04033, 04034, 04155, 04156**	92
Linergy DX distribution block		
	**04031, 04149, 04040, 04041, 04045, 04047, 04046**	90, 91
Linergy DS screw distribution blocks		
	**LGY112510, LGY116013, LGY125014, LGY410028, LGYN1007, LGY412548, LGYN12512, LGY412560, LGY416048, LGYN12515**	94, 95
Linergy FM quick device feeders		
	**04008, 04000, 04018, 04012, 04013, 04014, 04026**	96, 97
Horizontal comb busbars Linergy FH		
		98 to 102
Linergy TB earth bar, neutral bar		
	**04201, 04214, 04215, 04200, 04202, 04210**	106

Note: *see pages 64, 65, 66 for Linergy distribution connections.*

Additional information

Contents

Designing Prisma power circuits
Presentation and approach

The Prisma Plus system takes into account the installation and connection conditions of Schneider Electric devices.
The entire installation complies with standard IEC 61439-1 and 2 of tested switchboard.

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In the following pages you will find a number of examples, validated for Prisma switchboards, intended to assist in determining the busbars as well as the upstream and downstream connections for the installation.
The examples assume that the devices have already been selected.
A complete process involves a number of steps before making final choices (transformer, conductors, protection, etc.).
Schneider Electric offers a number of tools to assist in designing a complete installation (technical guides, software).

Busbar sizing

The factors that must be taken into account in determining the size of busbars include:
■ the diversity factor.
Not all the loads supplied by a set of busbars are used at full rated load or at the same time. The diversity factor is the means to determine the maximum load current used to size the busbars.

Standard IEC 61439-1 and 2 §4.7 specifies the table below:

Number of circuits	Rated diversity factor (RDF)
2 and 3	0.9
4 and 5	0.8
6 and 9	0.7
10 and more	0.6

■ the degree of protection IP.
■ the ambient temperature around the switchboard.

Supply of devices for outgoers ⩽ 630 A

Flexible copper bars with an insulating cover.
To determine the required sizes for flexible bars, see the tables starting on *> see page 179* which indicate the correct size for each type of connected device.
■ an insulated flexible bar (not connected) must meet standards IEC 60243-1, (dielectric, *> see page 179*), NFC 32201 (insulation) and IEC 60332-1 (fire)
■ a flexible bar connected to a device in an enclosure must comply with standard IEC 61439-1 and 2.

Cables
To determine the cables required, see the tables. on *> see page 181*.
They can be used to determine:
■ the size of cables as a function of:
□ the circuit breaker rating
□ the current
□ the ambient temperature around the switchboard
■ the permissible current for individually tied cables or touching cables as a function of:
□ the size of the cables
□ the degree of protection for the switchboard.

Easy design with
Rapsody software
> see page

Designing connections ⩽ 630 A
Device connections

Flexible copper bars with an insulating sheath

Switchboards that comply with standard IEC 61439-1 and 2

It is imperative to use the values indicated below that have been validated for the installation of devices in Prisma switchboards.
The parameters determining the size of flexible bars are:
- ■ the environment in which the devices are installed:
  - □ position in the enclosure
  - □ dimensions of other conductors in the circuit
  - □ ambient temperature around the switchboard
- ■ the characteristics of the connected devices:
  - □ device heat losses
  - □ the type of installation (horizontal or vertical)
  - □ the type of device (fixed or withdrawable).

Only the equipment manufacturer with in-depth knowledge on:
- ■ the characteristics of the installed devices
- ■ the configuration of the installation in the enclosure can provide the correct sizes of flexible bars for a given permissible current.

Insulated flexible bars brings flexibility, easy ans quick installation.

Insulated flexible bars are better solution than cables:

- ■ better insulation temperature withstand (125 °C for bars, 105 °C for cables) and a larger exchange surface for an equivalent size, i.e. a smaller size for a given current
- ■ greater rigidity offering better electrodynamic characteristics for short-circuit currents
- ■ no intermediate parts (lugs) for a direct connection between the device and the busbars therefore less temperature rise and less risk of error
- ■ fast implementation of prefabricated connections already cut to length, formed and drilled.

Technical characteristics

- ■ thickness of the insulation: variable depending on the bar size, 2 mm on average
- ■ rated insulation level Ui = 1000 V
- ■ impulse withstand voltage Uimp = 12 kV
- ■ maximum withstand temperature of insulating material = 125 °C.

Connection

In all enclosures with IP ⩽ 55
- ■ the switchboard internal temperature is 60 °C
- ■ the withstand temperature of the insulating material is 125 °C.

If the withstand temperature of the insulation is only 105 °C, use the next largest flexible bar.
The bar sizes (S) indicated below take into account the derating curves of devices.

Connection of devices and distribution blocks to busbars

Device	INS125	INS160	INS250	INS320 INS400	INS500 INS630	INF250 ISFT250	INF400 ISFT400	INF630 ISFT630
S (mm)	20 x 2	20 x 2	20 x 3	32 x 5	32 x 6	24 x 5	32 x 5	32 x 8

To connect a Compact NSX250 to Linergy BW busbars, use a 24 x 5 mm flexible bar (04746).

Device	Linergy FM distribution block (200 A)
S (mm)	20 x 3

Disconnectors, terminal blocks, connections, busbars to busbars

I max. (60 °C)	200 A	250 A	400 A	400 A	480 A	520 A	580 A	660 A
S (mm)	20 x 2	20 x 3	24 x 5	24 x 5	24 x 6	32 x 5	32 x 6	32 x 8

Note: *the values indicated above have been validated for Prisma switchboards.*

Designing connections ⩽ 630 A
Compact circuit breakers NSX100 to 630

Compact NSX100 to NSX250

Insulated flexible copper bars

Devices		Rated current of a circuit I_{nc} (A)					
		Ambient temperature around the switchboard					
		25 °C	30 °C	35 °C	40 °C	45 °C	50 °C
IP ⩽ 55							
NSX100 TMD-TMG	Size per phase	20 x 2	20 x 2	20 x 2	20 x 2	20 x 2	20 x 2
	I_{nc} (A)	100	97.5	95	92.5	90	85
NSX125 TMD-TMG	Size per phase	20 x 2	20 x 2	20 x 2	20 x 2	20 x 2	20 x 2
	I_{nc} (A)	125	122	119	116	113	100
NSX160 (1) TMD-TMG	Size per phase	20 x 3	20 x 3	20 x 3	20 x 3	20 x 3	20 x 3
	I_{nc} (A)	160	156	152	147	144	140
NSX250 (1) TMD-TMG	Size per phase	20 x 3	20 x 3	20 x 3	20 x 3	20 x 3	20 x 3
	I_{nc} (A)	250	244	238	231	225	198
NSX100 STR	Size per phase	20 x 2	20 x 2	20 x 2	20 x 2	20 x 2	20 x 2
	I_{nc} (A)	100	100	100	100	100	100
NSX160 STR	Size per phase	20 x 3	20 x 3	20 x 3	20 x 3	20 x 3	20 x 3
	I_{nc} (A)	160	160	160	160	160	160
NSX250 (2) STR	Size per phase	20 x 3	20 x 3	20 x 3	20 x 3	20 x 3	20 x 3
	I_{nc} (A)	250	250	237.5	237.5	225	225

(1) For a withdrawable NSX160 or NSX250 equipped with a Vigi or an insulation-monitoring module, multiply the In values by 0.9.
(2) For a withdrawable NSX250 equipped with a Vigi or an insulation-monitoring module, multiply the In values by 0.86.

Compact NSX400 to NSX630

Insulated flexible copper bars

Devices		Rated current of a circuit I_{nc} (A)					
		Ambient temperature around the switchboard					
		25 °C	30 °C	35 °C	40 °C	45 °C	50 °C
IP ⩽ 55							
NSX400B/F/N/H/S/L fixed	Size per phase	32 x 5	32 x 5	32 x 5	32 x 5	32 x 5	32 x 5
	I_{nc} (A)	400	400	400	390	380	370
NSX400B/F/N/H/S/L with Vigi	Size per phase	32 x 5	32 x 5	32 x 5	32 x 5	32 x 5	32 x 5
	I_{nc} (A)	400	390	380	370	360	350
NSX400B/F/N/H/S/L withdrawable	Size per phase	32 x 5	32 x 5	32 x 5	32 x 5	32 x 5	32 x 5
	I_{nc} (A)	400	390	380	370	360	350
NSX630B/F/N/H/S/L fixed	Size per phase	32 x 6	32 x 6	32 x 6	32 x 6	32 x 6	32 x 6
	I_{nc} (A)	630	615	600	585	570	550
NSX630B/F/N/H/S/L with Vigi or withdrawable	Size per phase	32 x 8	32 x 8	32 x 8	32 x 8	32 x 8	32 x 8
	I_{nc} (A)	570	550	535	520	505	490

***Note:** the values indicated above have been validated for Prisma switchboards.*

Designing connections ⩽ 630 A
Compact circuit breakers NSX100 to 630

Cables

Schneider Electric provides cabling recommendations according to the rating of the circuit breaker.
The size of cables must be selected according to:
- the level of current
- the ambient temperature around the conductors
- the degree of protection for the switchboard.

When mounting Schneider Electric prefabricated connections, short terminal shields can be used or not if the function is already integrated in prefabricated connections.

Note: *For some devices, it is recommended to use Schneider Electric prefabricated connections. If not, switchgears must be equipped with long terminal shields for personnel safety.*

Compact NSX100 to NSX250

Copper cable, withstand temperature = 105 °C

Devices		Rated current of a circuit I_{nc} (A)					
		Ambient temperature around the switchboard					
		25 °C	30 °C	35 °C	40 °C	45 °C	50 °C
IP ⩽ 55							
NSX100 TMD-TMG	Size	50 mm²	50 mm²	50 mm²	50 mm²	50 mm²	50 mm²
	I_{nc} (A)	100	97.5	95	92.5	90	85
NSX125 TMD-TMG	Size	70 mm²	70 mm²	70 mm²	70 mm²	70 mm²	70 mm²
	I_{nc} (A)	125	122	119	116	113	100
NSX160 (1) TMD-TMG	Size	95 mm²	95 mm²	95 mm²	95 mm²	95 mm²	95 mm²
	I_{nc} (A)	160	156	152	147	144	140
NSX250 (1) TMD-TMG	Size	120 mm²	120 mm²	120 mm²	120 mm²	120 mm²	120 mm²
	I_{nc} (A)	250	244	238	231	225	198
NSX100 STR	Size	50 mm²	50 mm²	50 mm²	50 mm²	50 mm²	50 mm²
	I_{nc} (A)	100	100	100	100	100	100
NSX160 STR	Size	95 mm²	95 mm²	95 mm²	95 mm²	95 mm²	95 mm²
	I_{nc} (A)	160	160	160	160	160	160
NSX250 (2) STR	Size	120 mm²	120 mm²	120 mm²	120 mm²	120 mm²	120 mm²
	I_{nc} (A)	250	250	237.5	237.5	225	225

(1) *For a withdrawable NSX160 or NSX250 equipped with a Vigi or an insulation-monitoring module, multiply the In values by 0.9.*
(2) *For a withdrawable NSX250 equipped with a Vigi or an insulation-monitoring module, multiply the In values by 0.86.*

Compact NSX400 to NSX630

In case of cable connection

Cable connection is not recommended if the cable sizes are too large. Choose insulated flexible bar (see table opposite and list of insulated flexible bars).

Designing connections ⩽ 630 A
Incoming connection block and power supply block on Linergy BW busbars

Compact NSX100 to NSX630

Horizontal mounting

Determining the permissible current of NSX100 to NSX630 connection and power supply blocks as a function of the ambient temperature around the switchboard and their IP degree of protection.

Device				Rated current of a circuit I_{nc} (A)											
				Ambient temperature around the switchboard											
				25 °C		30 °C		35 °C		40 °C		45 °C		50 °C	
				IP ⩽ 31	IP > 31	IP ⩽ 31	IP > 31	IP ⩽ 31	IP > 31	IP ⩽ 31	IP > 31	IP ⩽ 31	IP > 31	IP ⩽ 31	IP > 31
NSX100 TMD-TMG	Incoming connection block	via the top	**04066**	100	95	100	92	100	90	97	87	95	85	92	■
		via the bottom	**04067**												
	Power supply block		**04060**												
NSX100STR	Incoming connection block	via the top	**04066**	100	100	100	97	100	95	100	92	100	90	97	■
		via the bottom	**04067**												
	Power supply block		**04060**												
NSX160 TMD-TMG	Incoming connection block	via the top	**04066**	160	152	160	147	160	144	156	140	152	136	147	■
		via the bottom	**04067**												
	Power supply block		**04060**												
NSX160STR	Incoming connection block	via the top	**04066**	160	160	160	156	160	152	160	147	160	144	156	■
		via the bottom	**04067**												
	Power supply block		**04060**												
NSX250 TMD-TMG	Incoming connection block	via the top	**04066**	238	213	231	207	225	200	219	193	213	185	207	■
		via the bottom	**04067**												
	Power supply block		**04060**												
NSX250STR	Incoming connection block	via the top	**04066**	250	219	245	213	238	207	225	200	219	193	213	■
		via the bottom	**04067**												
	Power supply block		**04060**												
NSX400B/F/ N/H/S/L fixed	Incoming connection block		**04076**	400	360	390	350	380	340	370	330	360	320	350	■
	Power supply block		**04070**												
NSX630B/F/ N/H/S/L fixed	Incoming connection block		**04076**	570	520	555	505	540	490	525	470	510	450	495	■
	Power supply block		**04071**												

■ *connection not possible.*

The indicated performance characteristics are valid for:
- ■ Compact NSX100/160/250/400 circuit breakers used as incoming or outgoing devices
- ■ Compact NSX630 circuit breakers used as incoming device.

Note: *the values indicated above have been validated for Prisma switchboards.*

Designing connections with cables
Tubular lugs

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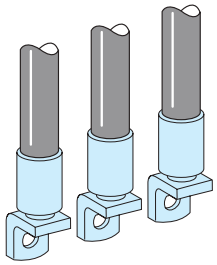


Tubular lugs for incoming connection blocks

Maximum size of lugs for connection to the different incoming connection blocks.

	Standard Cu lugs	*Narrow Cu lugs*	*Narrow bimetal lugs*
Incoming connection block for NSX-INS250 supplied via the top or bottom, cat. no. 04066 and 04067	150 mm²	240 mm²	185 mm²
In-duct incoming connection block for NSX630, cat. no. 04076	240 mm²	300 mm²	300 mm²

Narrow bimetal lugs

Catalogue numbers selection

Catalogue numbers	*Cable size (mm²)*	*Quantity*
Lugs for aluminium cable(1)		
29504	150	3
29505	150	4
29506	185	3
29507	185	4
32504	240	3
32505	240	4
32506	300	3
32507	300	4

(1) Supplied with 2 or 3 interphase barriers.

Designing the PEN conductor
Power circuit

Size of PEN protective conductor

Practical guidelines

The size of the PEN is determined in the same manner as a neutral conductor, i.e.:
■ for copper single-phase circuits or sized y 16mm², it must be the same size as the phase conductors
■ for copper three-phase circuits sized > 16 mm², it can be:
□ the same size as the phase conductors
□ smaller on the condition that:
- the current likely to flow in the neutral during normal operation is less than the permissible current for the conductor
- the power rating of single-phase loads does not exceed 10 % of the total rating.

The conductor must be accessible to enable connections both in the factory and on site, as well as checks on the tightness of connections.

Implementing the PEN protective conductor

Practical guidelines

According to standard IEC 61439-1 and 2, the practical guidelines for implementing the PEN are the following:
■ at the entry to the assembly, the PEN connection must be next to the phase connections
■ within the assembly, the PEN does not need to be insulated from the exposed conductive parts (except on sites where there is a risk of fire or explosion)
■ the size of the conductor must be at least equal to that of the neutral
■ the size must remain constant throughout the main busbars
■ the change from a TNC to a TNS system must take place at a single point in the switchboard, via a marked neutral-disconnection bar that is accessible and can be dismantled to facilitate the impedance measurement of the fault loop
■ after the TNS creation point, it is forbidden to recreate a TNC system.

The PE and the neutral must meet their specific requirements.

Connection of power cables

■ To ensure protection of persons, first connect the switchboard protective conductor to the earth electrode.
■ Tie the cables as close as possible to the connections to avoid any mechanical stresses on the device terminals. When not using cable glands, also attach the cables near to the electrical switchboard.
■ Cables must never be in contact with or passed between live conductors.
■ Sharp edges of the framework must be protected where cables pass to avoid damaging the conductors.
■ Comply with a minimum radius of curvature of 6 to 8 times the cable outside diameter.
■ All power connections must be made with class 8.8 mounting hardware and elastic contact washers, tightened to the torque indicated in the table below.
■ When connecting aluminium cables to copper terminals, use bimetal lugs or interfaces.
■ Separate the different types of circuits into separate cable bundles (power, control, 48 V, 24 V, DC, AC, etc).

Cable bundles

Cable cross-sectional area (mm^2)	Max. number of cables per bundle
CSA ≤ 10	8
16 < CSA ≤ 50	4
CSA ≥ 50	Tie individually

Tying the cable bundles

Type of tie	Maximum Icw (kA/rms 1s)	Distance between ties (mm)
Width: 4.5 mm Load: 22 kg	10 15 20	200 100 50
Width: 9 mm Load: 80 kg	20 25 35 45	350 200 100 70

For cable sizes of 50 mm^2 or more, use 9 mm wide fixing ties.

Recommended tightening torque for mechanical and electrical connections with 8.8 class screws.

Diameter of screw	Tightening torque (Nm) (with nut + contact washer)
M3	1.5
M4	3.5
M5	7
M6	13
M8	28
M10	50
M12	75

Standards

What is a standard?

A common reference

"A standard helps to define a common language between economic stakeholders (producers, users and consumers), to clarify and harmonize practices and to define the levels of quality, safety, compatibility, and least environmental impact of products, services and practices.
Standards facilitate trade, both national and international, and help to better structure the economy and facilitate the everyday life of everyone."

Afnor definition

IEC international standards

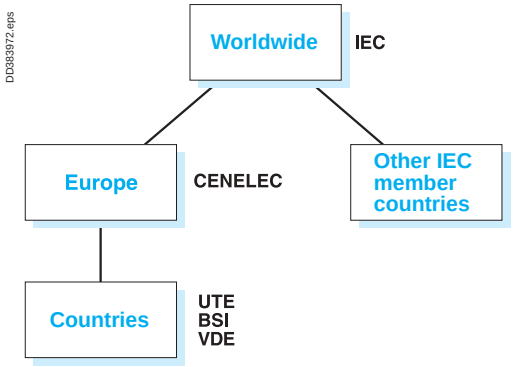
The IEC (International Electrotechnical Commission) is a worldwide organisation for standardisation comprising all national electrotechnical committees (IEC National Committees).
The object of the IEC is to promote international cooperation on all questions concerning standardisation in the electrical and electronic fields.
To that end, the IEC publishes International Standards.
Their preparation is entrusted to technical committees and any IEC National Committee interested in the subject dealt with may participate in the preparatory work.

National standards

In Europe
The IEC documents are first studied by CENELEC, which establishes:
■ either a European standard (EN), often identical to the IEC standard, which then becomes the applicable national standard in all the member countries
■ or, in the event of differences, a harmonisation document (HD).

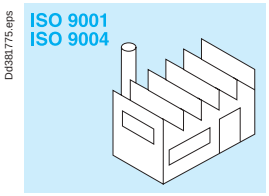
Other IEC member countries
Each country is autonomous and can accept the IEC standard as the national standard, with or without modifications.
Even though they are IEC members, countries such as Japan and the United States continue to develop their own standardisation systems.

Countries without a standardisation system
It is possible to refer to an IEC standard in the framework of a project.

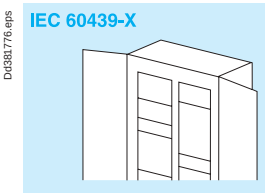


CEI / IEC
Commission Electrotechnique Internationale
CENELEC
Comité Européen de Normalisation ELECtrotechnique
UTE
Union Technique de l'Électricité
VDE
Verband der Elektrotechnik, Elektronik und Informationstechnik e.v. (German electrotechnical, electronics and computer technology standardisation organisation)
BSI
British Standards Institution

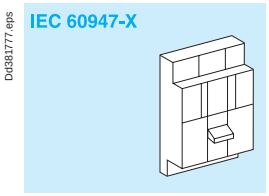
Standards



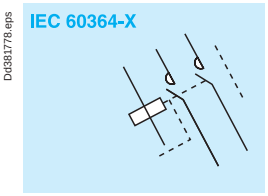
Design and manufacture.



Switchgear and controlgear assemblies.



Switchgear and controlgear.



Installation.

The different types of standards

There are different types of standards, including:
- management standards
- installation standards
- product standards.

Management standards

ISO 9004: Quality-management systems - guidelines for performance improvements. Used in setting up a quality-management system.

ISO 9001: Quality management systems - requirements. Used for certification audits.

ISO 14004: Environmental-management systems. General guidelines on the principles, systems and supporting techniques.

ISO 14001: Environmental-management systems. Specification with guidance for use.

The majority of Schneider Electric development centres and factories are certified ISO 9001 and ISO 14001.

Low voltage installation standards

The set of IEC 60364 standards defines the main principles and rules for the design and the mounting of the electrical installation:
- determining general characteristics of installations
- protection
- selection and installation of equipment
- verification and maintenance of installations.

Switchgears standards

They apply to devices or assemblies and are aimed at ensuring correct operation and safety of the concerned products:

- standards on low voltage switchgear and controlgear:
  - IEC 60947-1: general rules
  - IEC 60947-2: circuit breakers
  - IEC 60947-3: switches and disconnectors
  - IEC 60947-4: contactors
  - IEC 60947-7-1: terminal blocks for copper conductors
  - IEC 62208: empty enclosures.

- The IEC 61439 switchboard standard:
  - characterizes the electrical switchboard and specifies the design, construction and verification rules
  - describes in detail all low voltage switchgear and controlgear: definitions, technical characteristics, conditions of use, and construction and verification requirements
  - applies to power switchgear and controlgear assemblies (PSC assemblies) whose rated voltage does not exceed 1000 V in alternating current or 1500 V in direct current.

Regulations in a given country may make certain standards legally binding and may also create additional safety requirements.

In addition to providing proof of the conformity of its quality-management system, a product manufacturer can demonstrate the quality of products by providing proof that the design and manufacture comply with the requirements in the applicable standard.
Proof of conformity may be a declaration by the manufacturer or a certificate supplied by an independent organisation.

> More informations in *pages 20* to *23*.

Standards

Enclosure standards

Standard IEC 62208 lay down definitions, classifications, characteristics and test requirements for enclosures used for switchgear and controlgear assemblies.
They apply to empty enclosures before installation of the devices by the panelbuilder, as supplied by the manufacturer.
They apply to one-piece enclosures and to enclosures supplied in kit form.

Type tests of standard IEC 62208

1 - Static load
2 - Hoisting
3 - Axial loads of metal inserts
4 - IK code
5 - IP code
6 - Thermal stability
7 - Resistance to heat
8 - Resistance to abnormal heat and to fire
9 - Dielectric strength
10 - Protective-circuit continuity
11 - Weather resistance
12 - Corrosion resistance
13 - Marking

CE marking

CE marking is a regulatory symbol attributed under the sole responsibility of the manufacturer and intended for the verification authorities of the European countries that enforce the European regulations.
It allows free circulation of a product in the European Union and certifies that it complies with the basic requirements in all the applicable European directives.
CE marking is not a quality symbol and does not indicate conformity with a standard

The CE declaration is intended exclusively for the authorities in charge of verifying compliance with the applicable regulations and it is drafted, signed and held for presentation to the authorities by the manufacturer.
For the Prisma range, the declaration is the responsibility of the Schneider Electric unit that has designed and developed the product.
For LV switchboards, the declaration is the responsibility of the panelbuilder.

The following products receive CE marking:
■ all products that are liable to endanger the safety of persons, animals and property (LV directive)
■ all products likely to emit electromagnetic disturbances above a standardised threshold or to be disturbed during operation (EMC directive).

Consequences:
■ the Prisma range falls under the LV directive only
■ LV switchboards are covered by the LV directive and may also fall under the EMC directive, depending on the type of devices incorporated.

CE

For the Prisma range, CE marking is applied:
■ on the packing of "mechanical" components
■ on the product itself for "electrical" components.
For the LV assemblies created by the panelbuilder, CE marking is applied:
■ on the packing
■ on the rating plate (if applicable)
■ on one of the documents accompanying the switchboard when it is shipped.

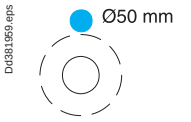
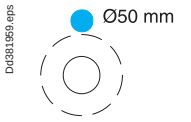
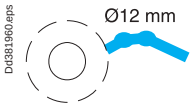
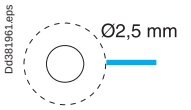
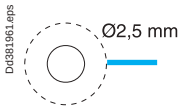
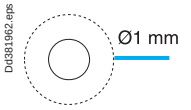
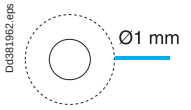
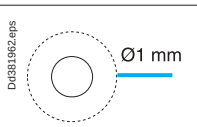
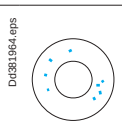
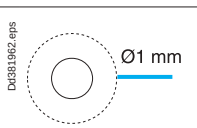
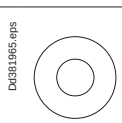
Standards

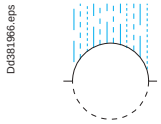
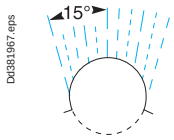
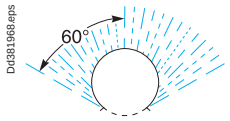
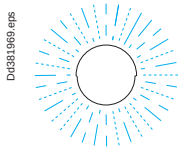
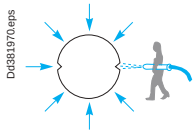
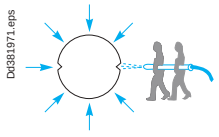
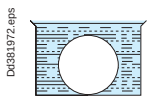
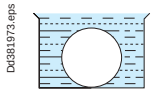
Degree of protection

Standard IEC 60364-5-51 lists and codifies a large number of external influences to which electrical installations can be subjected, including the presence of water, solid objects, shocks, vibrations, corrosive substances, etc.

IP code

Standard IEC 60529 (IP code, February 2001) indicates the degrees of protection provided by an enclosure for electrical devices against access to hazardous parts, against penetration of solid foreign objects and against penetration of water.
These standards do not apply for the protection against the risks of explosion or conditions such a humidity, corrosive vapour, fungus or vermin.
The IP code is made up of two characteristic numerals and can include an additional letter when the actual protection for persons against access to the hazardous parts is better than that indicated by the first numeral.
The first numeral characterises the protection provided against the ingress of solid foreign objects and the protection of persons. The second numeral characterises the protection provided against the ingress of water with harmful effects.

1st numeral Protection of persons		Protection against ingress of solid objects	
1	Protected against access with back of hand 	Protection against solid foreign objects larger than 50 mm 
2	2 Protected against access with a finger 	Protection against solid foreign objects larger than 12.5 mm 
3	Protected against access with a tool 	Protection against solid foreign objects larger than 2.5 mm 
4	4 Protected against access with a wire 	Protection against solid foreign objects larger than 1 mm 
5	Protected against access with a wire 	Protected against dust (dust protected) 
6	Protected against access with a wire 	Dust tight 

2nd numeral Protection against ingress of water	
1	Protected against vertically dripping water (condensation) 
2	Protected against dripping water up to 15° from vertical 
3	Protected against spraying water up to 60° from vertical 
4	Protected against splashing water from all directions 
5	Protected against water jets from all directions 
6	Protected against powerful water jets from all directions 
7	Protected against the effects of temporary immersion in water 
8	Protected against the effects of continuous immersion in water 

Standards

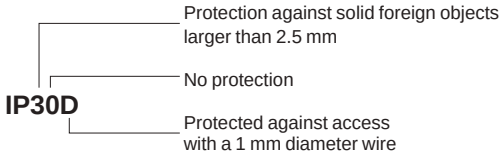
Additional letter

The additional letter is used only if the actual protection of persons is higher than that indicated by the first characteristic numeral of the IP code.

Additional letter	Protection
A	A Protected against access with back of hand
B	B Protected against access with a 12 mm diameter finger
C	C Protected against access with a 2.5 mm diameter tool
D	D Protected against access with a 1 mm diameter wire

If only the protection of persons is of interest, the two characteristic numerals are replaced by the letter "X", e.g. IPXXB.

Illustration of the above explanations:



Remarks

■ The degree of protection IP must always be read and understood numeral by numeral and not as a whole.
For example, an IP31 wall-mount enclosure is suitable for an environment that requires a minimum degree of protection IP21. However an IP30 wall-mount enclosure is not suitable.

■ the degrees of protection indicated in this catalogue are valid for the enclosures as presented. However, the indicated degree of protection is guaranteed only when installation and device mounting are carried out in accordance with professional standards that conserve the initial degree of protection.

IK code

Standard IEC 62262 defines an IK code characterising the capacity of products to resist mechanical impacts from all sides.

IK code	Impact energy (joules)
01	0.14
02	0.2
03	0.35
04	0.5
05	0.7
06	1
07	2
08	5
09	10
10	20

IK codes can be selected according to the risks of impacts on a given site.

	Site	Recommended IK
No risk of major impact	Technical premises	07
Significant risk of impact that can damage devices	Hallways	08 (switchboard with door)
Maximum risk of impact that can damage the switchboard	Workshops	10

Selection of enclosures according to the premises

The IP and IK degrees of protection provided by an enclosure must be specified as a function of the various external influences defined by standard IEC 30364-5-51, in particular:
- presence of foreign solid bodies (code AE)
- presence of water (code AD)
- mechanical stress (code not specified)
- capability of persons (code BA)
- ...

Prisma switchboards are designed for indoor installation.
Unless the rules, standards and regulations of a specific country stipulate otherwise, Schneider Electric recommends the following IP and IK values based on French guide UTE C 15-103 (March 2004).

Using the table

1. Opposite the relevant premises, read the recommended IP and IK values.
2. The ■ symbol indicates the enclosure or cubicle satisfying the criteria of the UTE guide.
   Any enclosure or cubicle with a higher degree of protection can also be used.
3. If several degrees of protection are possible (refer to the standard for more details) and the □ and ■ symbols are indicated (e.g. 24□/25■), enclosures that correspond to the higher degree of protection (■) are suitable for the lower degree of protection (□).

Example:
Selection of an enclosure for a laundry room.
Minimum degree of protection: IP21/IK02
A wall-mounted enclosure with a door (plain or transparent), a canopy and a gasket offer IP43/IK08 degrees of protection and are therefore suitable for this application.

Type of premises	Enclosures						
	Wall-mounted enclosure		without door	with door	with door + canopy	with door + canopy + gasket	IP55
	Floor-standing enclosure		without door	with door	with door + canopy	with door + canopy+ gasket	
	Min. IP/IK required		IP30/IK07	IP30/IK08	IP31/IK08	IP43/IK08	IP55/IK10
	IP	**IK**					
Domestic or comparable premises or locations							
Porch	24	07					■
Bathrooms (see washrooms)							
Bicycles, motorcycles, tricycles, etc. (premises for)	20	07	■				
Water, sewer and heating connections	23	02				■	
Laundries	21	02			■		
Cellars, garages, furnace rooms	20	02/07	■				
Bedrooms	20	02	■				
Trash rooms	25	07					■
Halls in cellars	20	07					
Courtyards	24/25	02/07					■
Kitchens	20	02	■				
Shower rooms (see washrooms)							
Indoor stairways and alleys	20	02/07	■				
Outdoor stairways and outdoor alleys without roofs	24	07					
Outdoor alleys with roofs	21	02			■		
Attics (roof space)	20	02	■				
Garden shelters	24/25	02/07					■
Latrines	20	02	■				
Dustbin rooms	25	02/07					■
Ironing room	20	02	■				
Access ramps to garages	25	07					■

N/A

Selection of enclosures according to the premises

Type of premises		Enclosures						
		Wall-mounted enclosure		without door	with door	with door + canopy	with door + canopy + gasket	IP55
		Floor-standing enclosure		without door	with door	with door + canopy	with door + canopy + gasket	
		Min. IP/IK required		IP30/IK07	IP30/IK08	IP31/IK08	IP43/IK08	IP55/IK10
		IP	IK					
Washrooms, rooms containing a bathtub or shower	volume 0	27	02					
	volume 1	24	02					■
	volume 2	23	02				■	
	volume 3	21	02			■		
Lounges, living rooms, etc		20	02	■				
Drying rooms		21	02			■		
Covered terraces		21	02			■		
WCs		20	02	■				
Verandas		20	02	■				
Crawl spaces		23	07					
Commercial premises and adjoining areas								
Gunsmiths (storage area, workshop)		30	08		■			
Laundries (wash room)		24	07					■
Butchers	shop	24	07					■
	cold room: ≤ -10 °C	23	07				■	
Bakers, cake shops (kitchens)		50	07					■
Coffee roasters		21	02			■		
Coal, wood, oil		20	08		■			
Delicatessen (production)		24	07					■
Sweets (production)		20	02	■				
Shoe repair shops		20	02	■				
Dairies		24	02					■
Hardware stores (storage areas for chemicals and paint)		33	07				■	
Wood workers		50	07					■
Art galleries		20	02/07	■				
Florists		24	07					■
Furriers		20	07	■				
Fruit and vegetable merchants		24	07					■
Grain shops		50	07					■
Bookshops, stationers		20	02	■				
Motorcycle and bicycle repairs and accessories		20	08		■			
Messenger services		20	08		■			
Furniture shops (antiques, secondhand)		20	07	■				
Glass and mirror merchants (workshop)		20	07	■				
Wallpaper shop (storage area)		20	07	■				
Cosmetics shop (storage area)		20	02	■				
Chemists (storage area)		20	02	■				
Photographers (dark room)		23	02				■	
Plumbers (storage area)		20	08		■			
Fishmongers		25	07					■
Dry cleaners		23	02				■	
Hardware stores (without paint, chemicals, etc.)		20	07	■				
Locksmiths		20	07□/08■	□	■			
Vintners, spirits		20	07	■				
Interior decorator (carding)		50	07					■
Tailors, clothing retailers (storage area)		20	02	■				
Pet care		35	07					■

N/A

Selection of enclosures according to the premises

Type of premises			Enclosures						
			Wall-mounted enclosure		without door	with door	with door + canopy	with door + canopy + gasket	IP55
			Floor-standing enclosure		without door	with door	with door + canopy	with door + canopy + gasket	
			Min. IP/IK required		IP30/IK07	IP30/IK08	IP31/IK08	IP43/IK08	IP55/IK10
			IP	IK					
Buildings open to the general public									
Shared premises of buildings open to the general public		storage rooms	20	08		■			
		packing rooms	20	08		■			
		archive rooms	20	02	■				
		film and magnetic media storage	20	02	■				
		linen rooms	20	02	■				
		laundry rooms	24	07					■
		misc. shops	21	07/08			■		
		kitchens (large)							
J	Reception old and handicapped people		20	02	■				
L	Lecture halls, meeting rooms, auditoriums, halls used for several purposes	halls	20	02/07	■				
		stage areas	20	08		■			
		scenery storage rooms	20	08		■			
		costume rooms	20	07	■				
M	Retail premises, shopping malls	sales premises	20	08		■			
		areas for storage and handling of packing	20	08		■			
N	Restaurants and cafes		20	08		■			
O	Hotels and boarding houses		20	02	■				
P	Dance halls and gaming parlours		20	07	■				
R	Teaching establishments, holiday camps	classrooms	20	02	■				
		dormitories	20	08		■			
S	Libraries and documentation centres		20	02	■				
T	Exhibitions	halls and rooms	20	02	■				
		areas for reception of equipment and merchandise	20	07	■				
U	Healthcare establishments	bedrooms	20	02	■				
		incineration	21	07/08			■		
		operating rooms	20	07	■				
		centralised sterilisation	24	02/07					■
		pharmacies and labs with more than 10 l of inflammable liquids	21▫/23▪	02▫/07▪			□	■	
V	Places of worship		20	02	■				
W	Administrative premises, banks		20	02	■				
X	Indoor sports facilities	halls	20	07▫/08▪	□	■			
		premises containing refrigeration facilities	21	08			■		
Y	Museums		20	02	■				
PA	Covered open air facilities		23▫/25▪	08▫/10▪				□	■
CTS	Marquees and tents		44	08					■
SG	Inflatable structures		44	08					■
PS	Covered parking lots		21	08▫/10▪			□		■

Selection of enclosures according to the premises

Type of premises		Enclosures						
		Wall-mounted enclosure		without door	with door	with door + canopy	with door + canopy + gasket	IP55
		Floor-standing enclosure		without door	with door	with door + canopy	with door + canopy + gasket	
		Min. IP/IK required		IP30/IK07	IP30/IK08	IP31/IK08	IP43/IK08	IP55/IK10
		IP	IK					
Technical premises								
Battery rooms		23	02/07				■	
Lifts (machine rooms and pulley rooms)		20	07□/08■	□	■			
Electrical rooms		20	07	■				
Control rooms		20	02	■				
Workshops		21□/23■	07□/08■			□	■	
Laboratories		21□/23■	02□/07■			□	■	
Air conditioning washers		24	07					■
Garages (used exclusively for parking vehicles) of an area not exceeding 100 m²		21	07			■		
Machine rooms		31	07/08			■		
Water pressurisers		23	07/08				■	
Boiler houses and adjoining premises (power in excess of 70 kW)								
Boiler rooms	coal fuel	51□/61■	07□/08■					□
	other fuel	21	07/08			■		
	electrical	21	07/08			■		
Fuel storage areas	coal	50□/60■	08					□
	oil	20	07□/08■	□	■			
	liquefied gas	20	07□/08■	□	■			
Cinder tips		50	08					■
Pump rooms		21□/23■	07□/08■			□	■	
Pressure reduction rooms (gas)		20	07□/08■	□	■			
Steam or hot water facilities		21□/23■	07□/08■			□	■	
Expansion vessel rooms		21	02			■		
Garages and car parks of an area exceeding 100 m²								
Parking lots		21	07□/10■			□		■
Carwash areas (inside premises)		25	07					■
Petrol stations	inside	21	07			■		
	outside							
Lubrication areas		23	08				■	
Battery recharging areas		23	07				■	
Workshops		21	08			■		
Public building (other than for the general public)								
Offices		20	02	■				
Libraries		20	02	■				
Archives		20	02	■				
Computer rooms		20	02	■				
Design offices		20	02	■				
Rooms containing reprographic machines		20	02	■				
Sorting rooms		20	07	■				
Refectories in restaurants or canteens		21	07			■		
Large kitchens								
Sports rooms		20	07□/08■	□	■			
Barracks		20	07	■				
Meeting rooms		20	02	■				
Waiting rooms, lounges, halls		20	02	■				
Medical consulting rooms, not fitted with specific equipment		20	02	■				
Demonstration and exhibition rooms		20	02/07	■				

N/A

Selection of enclosures according to the premises

Type of premises			Enclosures				
	Wall-mounted enclosure		without door	with door	with door + canopy	with door + canopy + gasket	IP55
	Floor-standing enclosure		without door	with door	with door + canopy	with door + canopy + gasket	
	Min. IP/IK required		IP30/IK07	IP30/IK08	IP31/IK08	IP43/IK08	IP55/IK10
	IP	**IK**					
Farm premises or locations							
Alcohol (storage)	23	07				■	
Closed cattle sheds	35	07					■
Laundries	24	07					■
Wood storage rooms	30	10					■
Threshing floors	50	07					■
Distilling cellars	23	07				■	
Vat rooms (wine)	23	07				■	
Courtyards	35	07					■
Poultry barns	35	07					■
Stables	35	07					■
Fertiliser (storage)	50	07					■
Stables	35	07					■
Manure heaps	24	07					■
Haylofts	50	07					■
Haystacks, forage (storage)	50	07					■
Granaries, barns	50	07					■
Straw (storage)	50	07					■
Greenhouses	23	07				■	
Grain silos	50	07					■
Milking rooms	35	07					■
Pig sties	35	07					■
Chicken houses	35	07					■
Miscellaneous installations							
Fair facilities	33	08				■	
Water treatment facilities	24/25	07/08					■
Thermodynamic installations, air-conditioned rooms and cold rooms							
Height above ground: from 0 to 1.10 m	25	07					■
Height above ground: from 1.10 to 2 m	24	07					■
Height above ground: above 2 m under evaporator or water drain pipe	21	07			■		
Height above ground: ceiling and up to 10 cm underneath	23	07				■	
Temperature ≤ -10 °C	23	07				■	
Compressor: room	21	08			■		
Compressor: integral unit located outside or on a terrace	34	08					

N/A

Selection of enclosures according to the premises

Type of premises	Enclosures						
	Wall-mounted enclosure		without door	with door	with door + canopy	with door + canopy + gasket	IP55
	Floor-standing enclosure		without door	with door	with door + canopy	with door + canopy + gasket	
	Min. IP/IK required		IP30/IK07	IP30/IK08	IP31/IK08	IP43/IK08	IP55/IK10
	IP	IK					
Industrial facilities							
Slaughter houses	55	08					■
Batteries (manufacture)	33	07				■	
Acid (manufacture and storage)	33	07				■	
Alcohol (manufacture and storage)	33	07				■	
Aluminium (manufacture and storage)	51	08					■
Livestock (raising, fattening and sale)	45	07					■
Asphalt and bitumen storage	53	07					■
Wool beating and carding	50	08					■
Industrial laundry	24/25	07					■
Wood (processing)	50	08					■
Meat packers	24/25	07					■
Bakeries	50	07					■
Breweries	24	07					■
Brickworks	53	08					■
Rubber (production and processing)	54	07					■
Carbide (manufacture and storage)	51	07					■
Ammunition factories	53	08					■
Carton board (production)	33	07				■	
Quarries	55	08					■
Celluloid (manufacture of objects)	30	08		■			
Cellulose (manufacture)	34	08					■
Coal (depots)	53	08					■
Pork products	24/25	07					■
Boiler-making works	30	08		■			
Lime kilns	50	08					■
Rag (storage)	30	07	■				
Chlorine (manufacture and storage)	33	07				■	
Chrome-plating	33	07				■	
Cement works	50	08					■
Coking plant	53	08					■
Adhesives (production)	33	07					
Bottling lines	35	08					■
Liquid fuels (storage)	31□/33■	08			□		
Fats (processing)	51	07					■
Leather (tanning and storage)	31	08			■		
Copper (ore processing)	31	08			■		
Paint stripping	54	08					■
Detergents (manufacture)	53	07					■
Distilleries	33	07				■	
Electrolysis	33	08				■	
Ink manufacturing	31	07			■		
Fertilisers (manufacture and storage)	53	07					■
Explosives (manufacture and storage)	55	08					■
Iron (production and processing)	51	08					■
Spinning mills	50	07					■
Furriers (beating process)	50	07					■
Cheese factories	25	07					■
Gas (production and storage)	31	08			■		
Tar (processing)	33	05				■	
Seed production	50	07					■
Metal engraving	33	07				■	
Oils (extraction)	31	07			■		
Petroleum products (manufacture)	33□/34■	08				□	■
Printworks	20	08					

Selection of enclosures according to the premises

Type of premises	Enclosures						
	Wall-mounted enclosure		without door	with door	with door + canopy	with door + canopy + gasket	IP55
	Floor-standing enclosure		without door	with door	with door + canopy	with door + canopy + gasket	
	Min. IP/IK required		IP30/IK07	IP30/IK08	IP31/IK08	IP43/IK08	IP55/IK10
	IP	IK					
Industrial establishments (continued)							
Dairies	25	07					■
Public wash-houses	25	07					■
Liqueurs (production)	21	07			■		
Halogenated liquids (use)	21	08			■		
Inflammable products (storage and workshops where they are used)	21	08			■		
Magnesium (production, storage and use)	31	08			■		
Machine rooms	20	08		■			
Plastics (production)	51	08					■
Cabinet makers	50	08					■
Metals (processing)	31□/33■	08			□	■	
Combustion engines (testing of)	30	08		■			
Ammunition storage	33	08				■	
Nickel (ore processing)	33	08				■	
Household waste (processing)	54	07					■
Paper (production)	33□/34■	07				□	■
Paper (storage)	31	07			■		
Perfume (production and storage)	31	07			■		
Pulp mill	34/35	07					■
Paint (production and storage)	33	08				■	
Plaster (processing and storage)	50	07					■
Gunpowder factory	55	08					■
Chemicals (production)	30□/50■	08		□			■
Oil refineries	34/35	07					■
Salt preserve factories	33	07				■	
Soap (production)	31	07			■		
Saw mills	50	08					■
Metalwork shops	30	08		■			
Grain or sugar silos	50	07					■
Silk and artificial hair factories	50	08					■
Sodium carbonate (processing and storage)	33	07				■	
Sulphur (processing)	51	07					■
Spirits (storage)	33	07				■	
Sugar mills	55	07					■
Tanners	35	07					■
Dye works	35	07					■
Textile and fabric (production)	51	08					■
Varnish (production and application)	33	08				■	
Glass works	33	08				■	
Zinc works	31	08			■		

Properties of metal enclosures

Schneider Electric enclosures comply with standard IEC 62208 for empty enclosures. The sheet metal used for Schneider Electric enclosures receives an anti-corrosion epoxy electrophoresis treatment and a coating of a thermosetting, polyester-resinmodified epoxy powder for colour and appearance.
This two-coat system provides excellent finish and corrosion protection.
The characteristics of this coating are much better than those of traditional epoxy powders:
- improved colour stability
- wider operating temperature range.

Mechanical properties of enclosures

Static load on doors, wall-mounted and floor-standing enclosures and cubicles	
Floor-standing enclosure	64 kg
Wall-mounted enclosure	48 kg
Floor-standing enclosure door	4 kg
Wall-mounted enclosure door	4 kg

Mechanical properties of powder coated surfaces

Test conditions
Test piece made of 1 mm thick steel sheet, degreased, iron phosphated, final rinsing with 100000 Ω cm DI water, 15 microns of anti-corrosion electrophoresis treatment and 35 microns of powder paint.

Adhesion (cross-hatch and pull-off)	class 0 required	(ISO 2409)
Impact strength (1)	> 1 kg/50 cm	(ISO 6272)
Mandrel bending test (2)	< 10 mm	(ISO 6860)
Persoz hardness	300 s	(ISO 1522)

(1) No cracking of the paint film after dropping a weight of one kilogram on the test piece from a height of 50 centimetres.
(2) Film cracks over a length of 10 millimetres maximum.

Artificial ageing test on powder coating

Test conditions: two tests carried out on the same 1 mm thick steel sheet test piece.
- cyclical damp-heat test:
  - as per standard IEC 68-2-30
  - six 24-hour cycles at temperatures higher than 40 °C
- continuous resistance to neutral salt mist:
  - the tests were carried out over a period of 400 hours, far more than the 48 hours required by the standard for indoor installations
  - as per standard IEC 68-2-11 and ISO 7253
  - 400 hours without blistering for normal surface on test piece
  - 250 hours for a scratched surface.

Evaluation of corrosion as per ISO 4628:
- adhesion: class y 1
- blistering: degree 1 dim.1
- rusting: Ri 1
- cracking: class 1
- flaking imp. 1 dim. 1
- propagation of corrosion under scratch with respect to the scratch axis: 3 mm max.

Chemical properties of powder coating

Tests carried out at ambient temperature on phosphated test pieces coated with a 150 to 200 micron film.

Test duration (months)			**2**	**4**	**6**	**8**	**10**	**12**
Acids		Concentration						
	Acetic	20 %						
	Sulphuric	30 %						
	Nitric	30 %						
	Phosphoric	30 %						
	Hydrochloric	30 %						
	Lactic	10 %						
	Citric	10 %						
Bases	Soda	10 %						
	Ammonia	10 %						
Water	Distilled water							
	Seawater							
	Tap water							
	Diluted bleach							
Solvents	Petrol							
	High alcohols							
	Aliphatics							
	Aromatics							
	Ketones, esters							
	Tri-perchlorethylene							

Film intact.

Film damaged (blisters, yellowing, loss of shine).

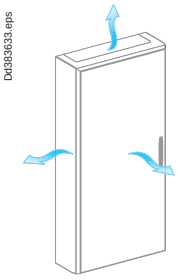
Thermal management of switchboards
General

A switchboard is designed for operation under normal ambient conditions.
Most devices do not operation correctly outside a temperature range of -10 and +70 °C.
It is therefore important to maintain the switchboard internal temperature within this temperature range by:
- correctly sizing the switchboard during design
- correcting the temperature using suitable means.

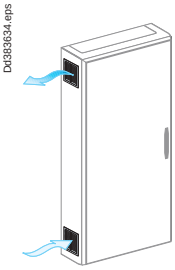
Management of the internal temperature

Cooling
There are a number of way to dissipate heat from the switchboard.
The drawings below present the various means.

Convection

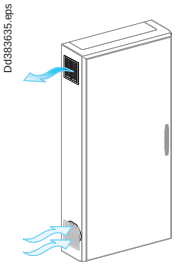


IP > 31
Ensured naturally in Prisma enclosures.



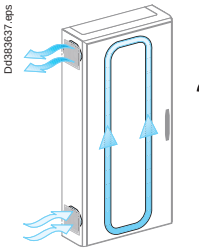
IP ⩽ 31

Forced-air ventilation



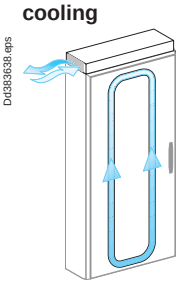
IP ⩽ 54
Using fans, it significantly increases the thermal capacity of an enclosure.

Forced-air ventilation with air-air exchanger



IP > 31
On special request.

Forced convection and cooling

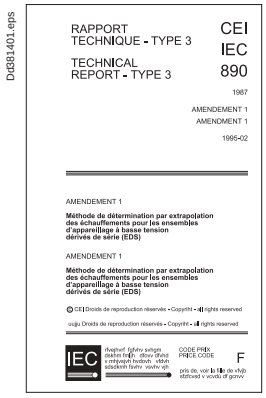


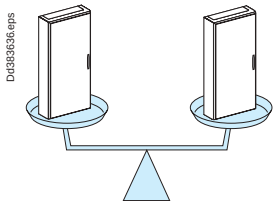
IP > 31

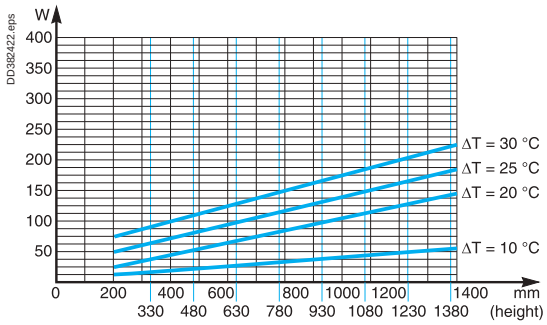
For these extreme cases, many installers prefer to set up the switchboards with other electrotechnical and electronic devices in air-conditioned electrical rooms.

Heating
The means employed to raise the internal temperature in a switchboard is a resistorbased heater, used to:
- avoid condensation by limiting variations in temperature
- ensure that the switchboard does not freeze.

Thermal management of switchboards
General







Calculation of the internal temperature

Calculation of the temperature is the means to check that the enclosure can evacuate the dissipated power of the installed devices.

Important note

Correct thermal management of the switchboard depends on compliance with the installation requirements for the distribution system (power circuits).
Incorrect installation will have major consequences on the connected device, but almost none on the internal temperature of the enclosure.
Once the circuit has been correctly sized, it is necessary to check whether the assembly (devices + distribution system + cables) have a level of dissipated power P(W) ⩽ the P(W) that the enclosure can handle.

Method defined by IEC 890 technical report

This IEC guide for switchboards proposes a calculation method to determine three levels of internal temperature, depending on the dissipated power of the devices and distribution blocks installed in the switchboard.
Users can consult this document when it is necessary to determine precisely the internal temperature in view of optimising the switchboard.
On request, Schneider Electric can carry out a thermal study to check that the installed assembly and the thermal capacity of the enclosure are compatible.

Comparative method

A number of qualified and tested configurations serve as the basis for indicating the thermal capacity of Prisma enclosures.
This is en empirical means to check whether the dissipated power of the desired configuration is close to that of a tested configuration.

Method using charts taking into account enclosure characteristics

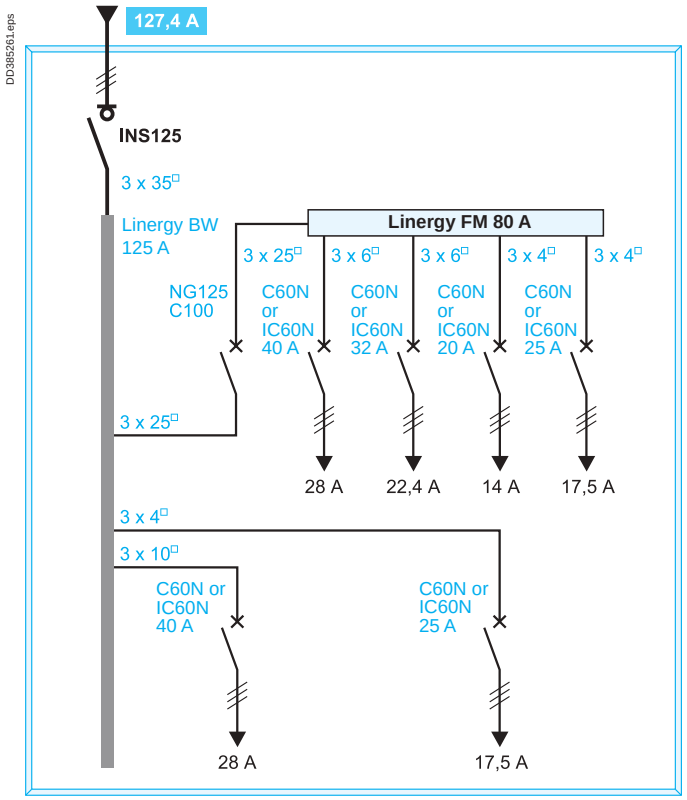
To speed up calculations, Schneider Electric produces charts based on the company's experience and a number of assumptions on the installation.
They can be used sufficiently precisely to determine the variations in temperature and the dissipated-power levels for the different types of wall-mount enclosures, floor-standing enclosures and cubicles.

Thermal management of switchboards
Comparative method

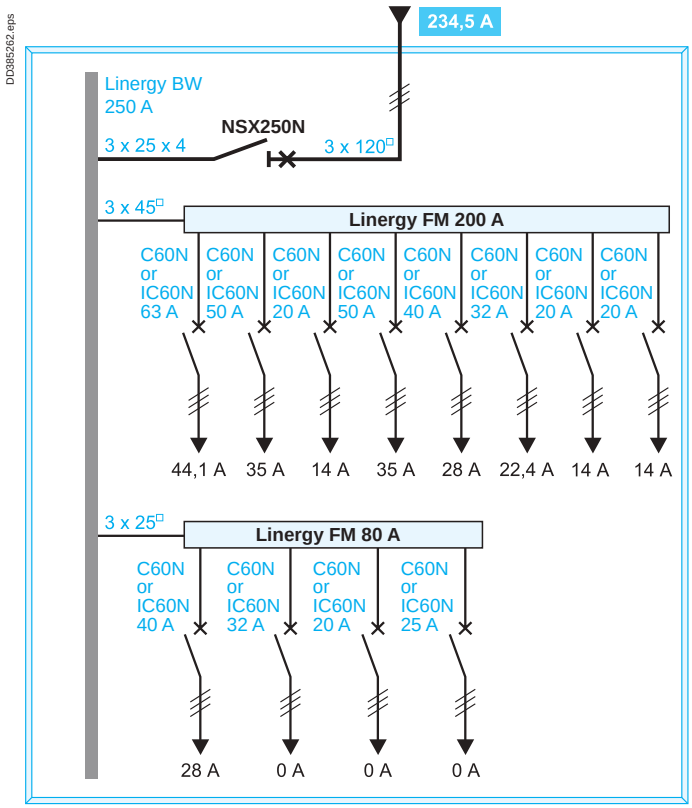
Comparative method

You will have no problems with your switchboard if:
- the volume of the enclosure is greater than that of the tested enclosure with a similar assembly
- the P(W) of the installed assembly is less than the P(W) of the tested configuration in the same size enclosure.

Pack enclosure, 3 rows, IP30
Diversity factor: 0.7
Ambient temperature around the switchboard: 35 °C
P(W) = 95 W



Wall-mounted enclosure, 23 modules, IP30
Diversity factor: 0.7
Ambient temperature around the switchboard: 35 °C
P(W) = 170 W

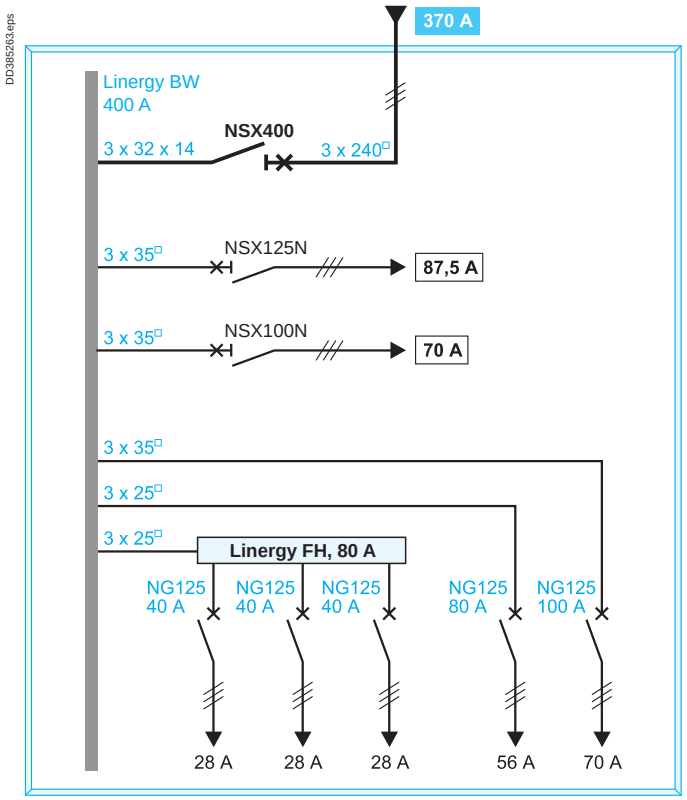


Thermal management of switchboards
Comparative method

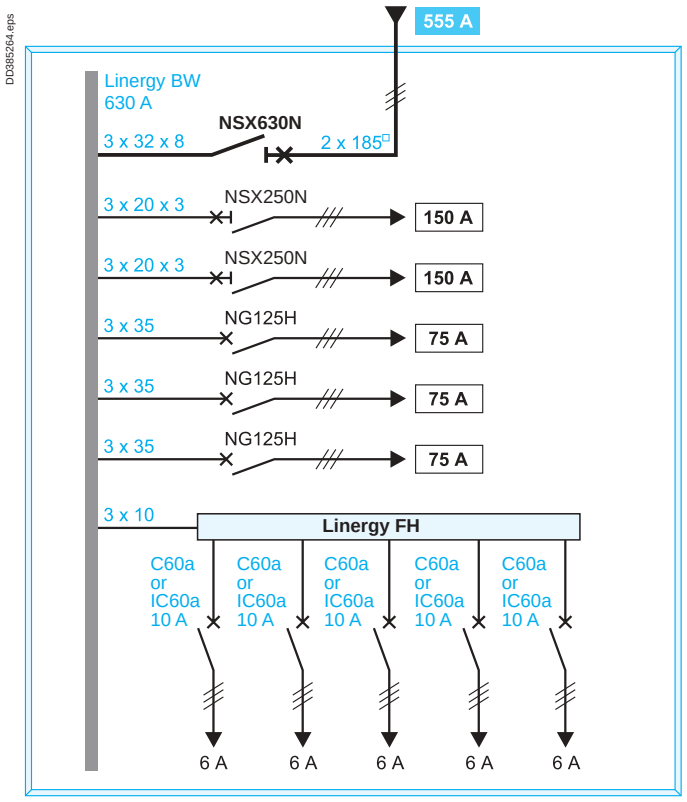
Comparative method

You will have no problems with your switchboard if:
- the volume of the enclosure is greater than that of the tested enclosure with a similar assembly
- the P(W) of the installed assembly is less than the P(W) of the tested configuration in the same size enclosure.

Wall-mounted enclosure, 23 modules, plain door, IP30
Diversity factor: 0.7
Ambient temperature around the switchboard: 35 °C
P(W) = 200 W

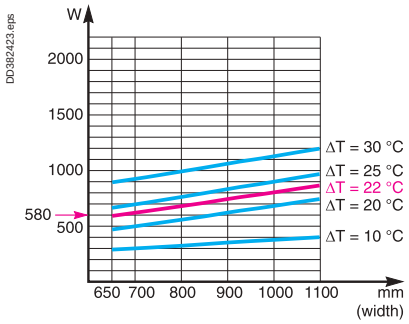


Floor-standing enclosure, 33 modules, IP30
Diversity factor: 0.7
Ambient temperature around the switchboard: 35 °C
P(W) = 270 W



Thermal management of switchboards
Example

Once the dissipated power of the devices has been determined and the enclosure with its IP selected, transfer the results (sum of the dissipated power and width of the device zone) to the chart corresponding to the enclosure IP.



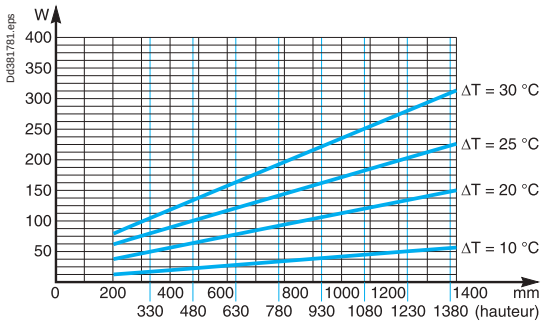
Draw a line parallel to the others on the chart and read the corresponding difference in temperature.
For the given example, the heat rise is 22 °C at mid-height in the enclosure.
The internal temperature = external temperature + heat rise
= 35 °C + 22 °C = 57 °C
57 °C < 60 °C stipulated by the standard, i.e. the result is acceptable for an IP3 cubicle.
This gives roughly:
Internal temperature = 60 °C at mid-height in the enclosure for a low IP value.
= 70 °C at mid-height in the enclosure for a high IP value.

Thermal management of switchboards
Charts

Quick calculation charts for internal temperatures

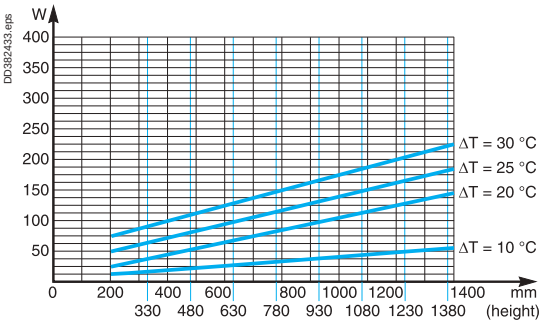
The indicated internal heat rise is that measured at mid-height in the enclosure.

IP3X wall-mounted enclosure



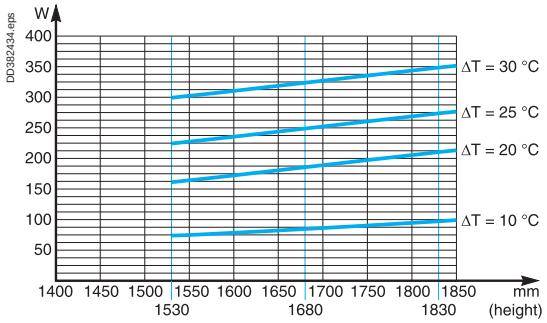
Test conditions:
600 mm wide enclosure mounted directly on wall without fixing lugs.

IP43 wall-mounted enclosure



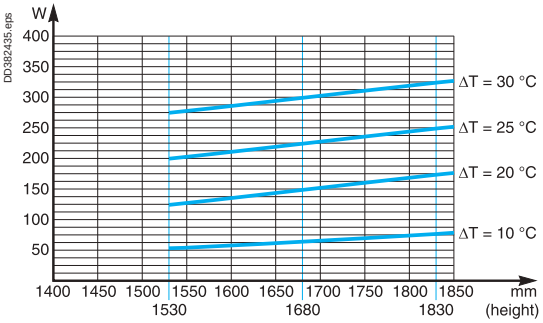
Test conditions:
600 mm wide enclosure mounted directly on wall without fixing lugs.

IP3X floor-standing enclosure



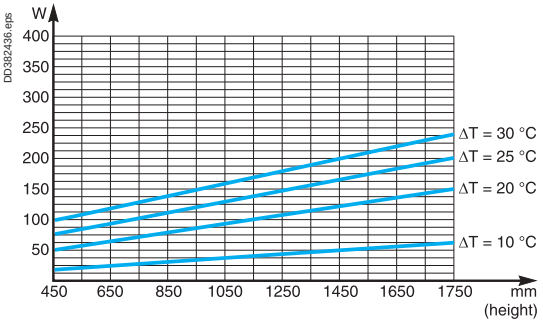
Test conditions:
600 mm wide enclosure on floor against a wall.

IP43 floor-standing enclosure



Test conditions:
Mounted on wall with fixing lugs or on mounting uprights.

IP55 wall-mounted and floor-standing enclosures



Test conditions:
600 mm wide enclosure mounted directly on wall without fixing lugs or mounting uprights.

Thermal management of switchboards
Ventilation

Switchboard ventilation

The air enters the lower section via the fans and exits the upper section:
- through a ventilated roof
- or through a ventilation opening.

The air throughput of the fans is determined by the equation:

$$D = 3{,}1 \times \left(\frac{P}{\Delta T} - KS\right)$$

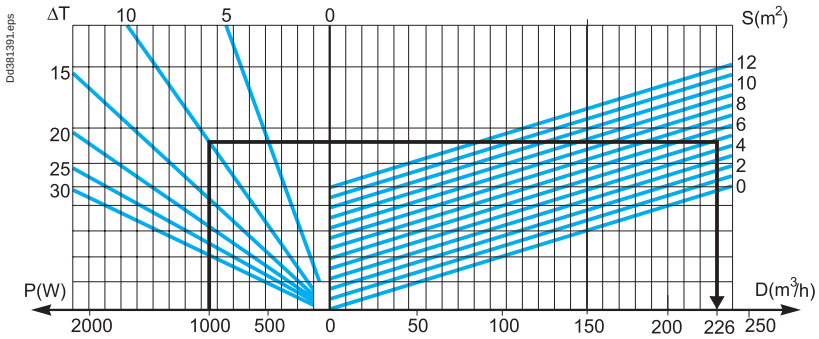
The chart below can be used to determine the necessary throughput, based on the dissipated power, the difference in temperature (internal - external) and the exposed surface area of the enclosure.

Example

Consider an IP3X cubicle, 650 mm wide and 400 mm deep, containing components (devices, connections, busbars, etc.) dissipating 1000 W.
The ambient temperature around the cubicle is 50 °C.
Given that the average temperature at mid-height should not exceed 60 °C, the difference in temperature DT is equal to 60 - 50 = 10 °C.
The exposed surface of the cubicle (non adjacent to a wall or other cubicle) is 4.46 m².
(back = 1.3 m², front = 1.3 m², roof = 0.26 m², side panels = 1.6 m²).
What is the necessary throughput of the ventilation system?
The throughput can be calculated as:

$$D = 3{,}1 \times \left(\frac{1000}{10} - 5{,}5 \times 4{,}46\right)$$

D = 234 m³/h.
In the range of Prisma accessories, select a system with a throughput of 300 m³/h.



Calculation data

P : power dissipated by the devices, connections and busbars (in Watts)
P_r : power of the heating resistor (in Watts)
T_m : maximum internal temperature in the device zone (in °C)
T_i : average internal temperature (in °C)
T_e : average external temperature (in °C)
$\Delta T_m = T_m - T_e$
$\Delta T = T_i - T_e$
S : total free surface area of the enclosure (expressed in m²)
K : thermal-conduction coefficient of the material (W/m² °C)
K = 5.5 W/m² °C for painted sheet metal
D : ventilation throughput (in m³/h)

Note: *the dissipated power of each device is provided by the manufacturer. Add approximately 30 % to account for the connections and the busbars.*

Thermal management of switchboards
Heating

Switchboard heating

The heating resistor, placed in the bottom of the switchboard, maintains the internal temperature 10 °C higher than the external temperature.
When the switchboard is not in operation, the heater compensates the dissipated power normally emitted by the switchboard.
The power of the heating resistor is calculated:
■ using the equation: Pr = (ΔT x S x K) - P
■ or using the charts below, based on the exposed surface area of the enclosure and the desired difference in temperature.

Chart to determine the heating resistor for small wall-mounted enclosures (exposed surfaces ≤ 1 m²)

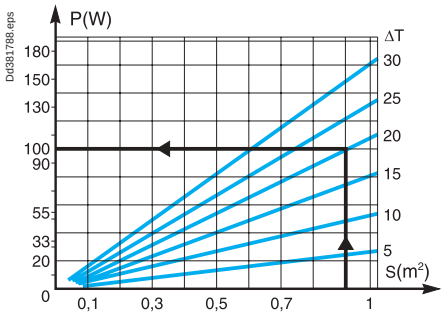
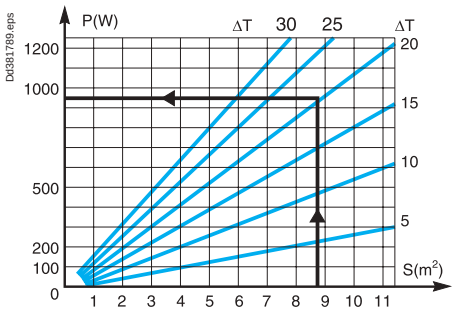


Chart to determine the heating resistor for all types of enclosures



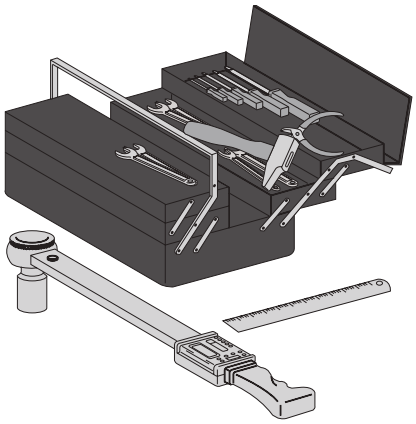
Calculation data

P : power dissipated by the devices, connections and busbars (in Watts)
$\mathbf{P_r}$: power of the heating resistor (in Watts)
$\mathbf{T_m}$: maximum internal temperature in the device zone (in °C)
$\mathbf{T_i}$: average internal temperature (in °C)
$\mathbf{T_e}$: average external temperature (in °C)
$\Delta\mathbf{T_m} = T_m - T_e$
$\Delta\mathbf{T} = T_i - T_e$
S : total free surface area of the enclosure (expressed in m²)
K : thermal-conduction coefficient of the material (W/m² °C)
K = 5.5 W/m² °C for painted sheet metal
D : ventilation throughput (in m³/h)

Note: *the dissipated power of each device is provided by the manufacturer. Add approximately 30 % to account for the connections and the busbars.*

Tools required for mounting and connection

DD383904.eps



- Vacuum cleaner to clean the switchboards
- Ratchet wrench with sockets
- Torque wrench with sockets and ring bits to tighten the electrical connections to the correct torque (max. torque 50 Nm)
- Open-ended spanners (15 to 27 mm)
- Electrician's knife
- 7, 8, 10, 13, 16, 17 and 19 mm sockets
- Bit holder socket
- 4, 5, 6, 8 and 10 mm hexagonal-head bits
- Pozidriv no. 1, 2 and 3 bits
- Rubber mallet
- Level
- Measurement and inspection tools and instruments
- Drill
- Semi-circuit nosed pliers
- Cable-tie pliers
- Wire stripper
- Crimping tool
- Diagonal cutter
- Wire cutters
- Flat-nosed pliers
- Bit holder for screwdriver
- Extension
- Electric saw
- Jig saw
- Clamp for cubicle alignment
- Buzzer or tester
- 3, 4, 5, 5.5 and 8 mm flat screwdrivers
- Posidriv no. 2 crosshead screwdriver (to mount handle)
- Hydraulic jacks that can be operated in horizontal position to lift cubicles and move them sideways if necessary
- Coloured, indelible and temperature resistant acrylic varnish
- Electric screwdriver

Energy management has never been simpler

Simple-to-install Smart Panels connect your building to real savings in 3 steps

Smart Panels digitized by Enerlin'X

1 Measure

Embedded and stand-alone metering & control capabilities

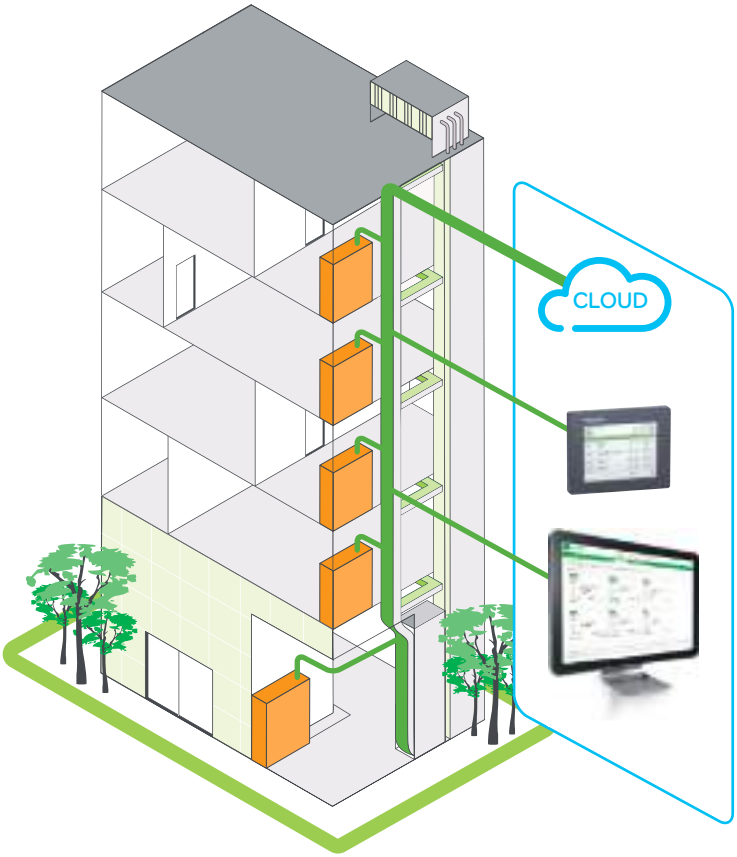
2 Connect

- Integrated communication interfaces
- Ready to connect to energy management platforms

3 Save

- Data-driven energy efficiency actions
- Real time monitoring and control
- Access to energy and site information through on-line services

Smart Panels connect you to energy savings



1 MEASURE

"Smart Panels" mean visible information

Grouping most of the electrical protection, command and metering components, the switchboards are now significant sources of data locally displayed and sent via communication networks.

2 CONNECT

... and ready to be linked to expertise

Smart Panels use reliable, simple to install and use displays, and Ethernet and Modbus interfaces on the Enerlin'X communication system.

Information is safely transmitted through the most efficient networks:

- Modbus SL inside switchboards, between components
- Ethernet, on cable or WiFi, inside the building and connecting switchboards, computers,
- Ethernet on DSL or GPRS, for access to on-line services by Schneider Electric.

Energy experts, wherever they are, are now able to provide advises based on permanently updated data of the building.

3 SAVE

On-site real time monitoring and control

On a touch screen display connected to Ethernet

- shows essential electrical information and alarms concerning the electrical network,
- allows control (open, close, reset…) of various equipments.

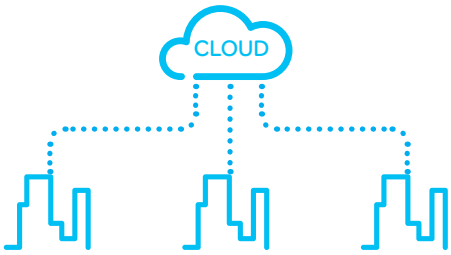
This touch screen is well appreciated for real time value checking and control, directly on the front panel of the main switchboard.

On a PC display with common browser

- shows monitoring web pages hosted into the local Ethernet interface,
- alarm events generate automatic email notifications,
- allows control (open, close, reset…) of various equipments.

Data displayed on graphics or recorded into files are of a great interest for optimizing the use of energy in the building.

As an example, they definitely help validating the change of temperature settings, time scheduling in a Building Management System or other automated devices.



On-line Energy Management services

StruXureWare Energy Operation automates data collection via an open, scalable, and secure energy management information system.

With the help of the Schneider Electric energy management services team, data is then turned into actionable information to enable customers to understand their facilities' performance on an ongoing basis.

Energy Operation leverages companies' current investments in their existing systems, and can be used to communicate advanced results and performance to a broad audience for a shared understanding throughout an organisation.

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