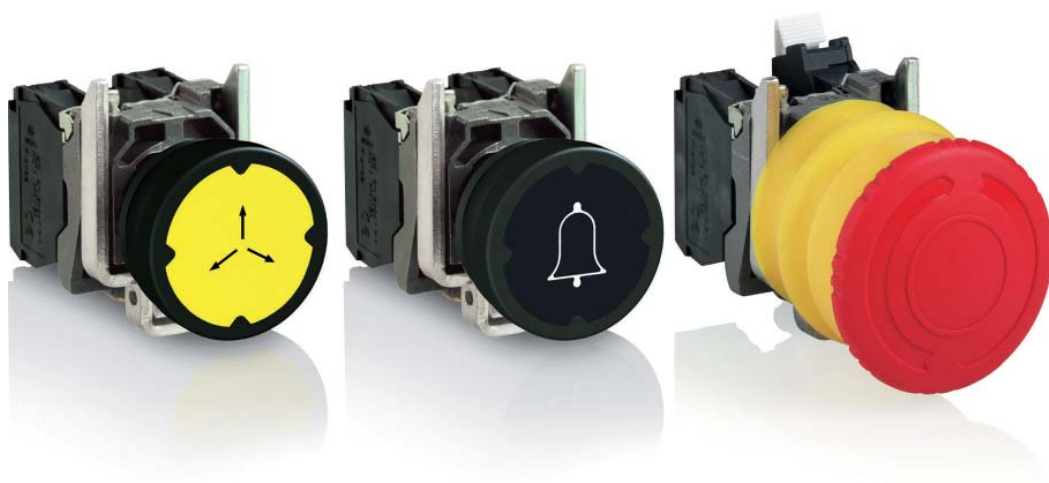


# Harmony XB4/XB5 control and signalling units for harsh environments

Catalogue

June 2011





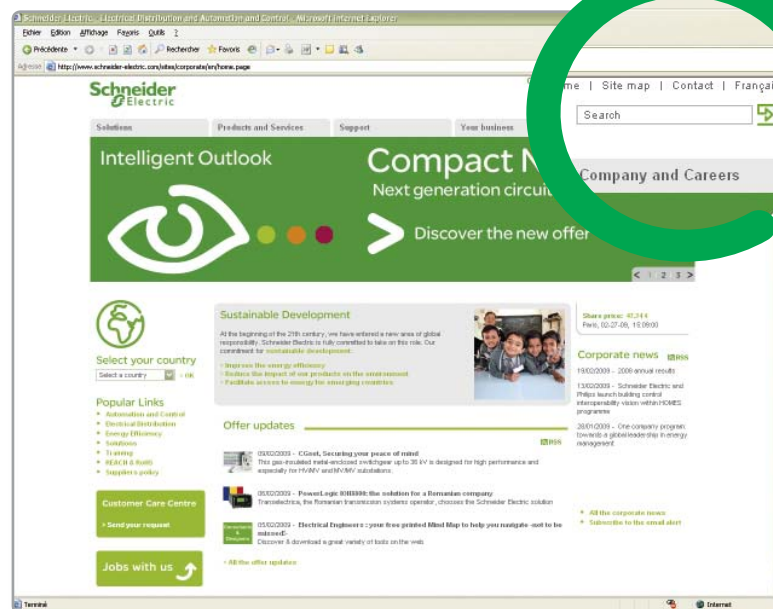
All technical information about products listed in this catalogue are now available on:

[www.schneider-electric.com](http://www.schneider-electric.com)

Browse the “product data sheet” to check out :

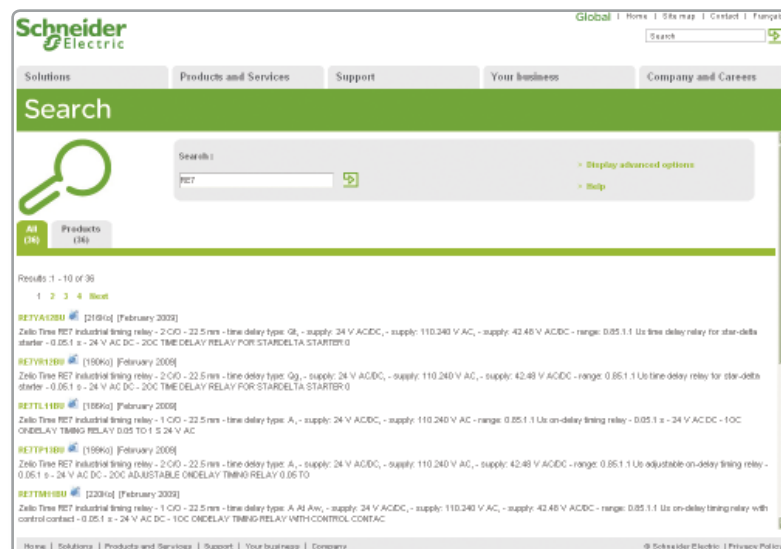
- characteristics,
- dimensions,
- curves, ...
- and also the links to the user guides and the CAD files.

**1** From the home page, type the model number\* into the “Search” box.



\* type the model number without any blank, replace “.” by “\*”

**2** Under “All” tab, click the model number that interests you.



### 3 The product data sheet displays.

Example : Zelio Time data sheet

**Zelio Time-RE 7 / RE 8 / RE 9**  
Timer relays that are simply ingenious

range of product	Zelio Time
product or component type	Industrial timing relay
discrete output type	relay
width (pitch dimension)	22.5 mm
contacts type and composition	2 C/O
component name	RE7
contacts material	80/10 silver nickel contacts
line relay type	CR
time delay range	0.05 ... 300 h
UL listed supply voltage	24 V AC/DC 50/60 Hz 110...240 V AC 50/60 Hz 42...48 V AC/DC 50/60 Hz
product weight	0.15 kg
voltage range	0.05...1.1 Us
lightening torque	0.6...1.1 N.m
CAD overall width	22.5 mm
CAD overall height	78 mm
CAD overall depth	80 mm

#### Discover this product

- Characteristics
- Functions
- Connection
- Dimensions
- Download & Documents

#### Other products

- Help me to choose
- #### Accessories
- Plug
  - Sockets

Example : Zelio Time data sheet

**Zelio Time-RE 7 / RE 8 / RE 9**  
Timer relays that are simply ingenious

Technical drawings showing dimensions: 80 mm width, 89.5 mm height, 82 mm depth, and 78 mm height for the terminal block.

Example : Zelio Time data sheet

**Zelio Time-RE 7 / RE 8 / RE 9**  
Timer relays that are simply ingenious

Terminal block diagrams showing connections for U, C, G, R, L1, L2, L3, N, PE.

☑ You can get this information in one single pdf file.



# Harmony XB4/XB5 provides a complete control & signalling solution for harsh environments

Applications today demand high performance in harsh environments. Outdoor use of machinery, high pressure cleaning and exposure to extreme temperature conditions are common and can adversely affect the performance of devices for human machine interfacing.

## > Designed to perform

Complete offer for all applications in harsh environments

## > Built on proven quality

A robust and rugged design with high performance and long life in use

## > Common accessories and complementary functions

Proven quality and worldwide availability

## Contents

Harmony benefits for harsh environments ..... 1 to 3

### Control and signalling units ø 22

Harmony XB4 metal ..... 4 to 9

Harmony XB5 plastic ..... 10 to 15

Harmony XB4 & XB5 common components ..... 16 to 17

Make the most of your energy





# Designed to perform

Harmony for harsh Environments is designed for the most difficult of applications. As the market leader in control and signalling, Schneider Electric has the knowledge and experience to meet your exacting demands.

## > Rugged design and protection

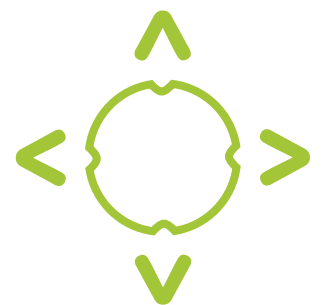
- External boot to prevent ingress of water and dust into the head as well as the panel
- Large diameter head for operation by gloved hand.

**IP66  
IP69K**  
performance



## > Unique and innovative marking system

- Clear marking, with high contrast symbols or text
- UV resistant for high performance and long life
- Marking is customizable to your application.



**100%**  
customizable head  
marking



## Built on proven quality

Harmony for harsh environments perfectly complements the world leading XB4 and XB5 families with over 10 years of proven quality and performance.

### > Complete range

These pushbuttons are available in XB4 metal bodied and XB5 plastic bodied versions, and both are fitted with an external boot to protect against liquid and dust ingress into the head itself.

More than  
**200 million**  
products in service



## Common accessories

Uses fixing collars and contact blocks from the XB4 and XB5 families – over 10 years of proven quality and performance.

### > ... and complementary functions to complete your solution

- Booted pushbuttons, selector switches, key operated switches
- Emergency Stop devices
- Illuminated functions for status indication
- Protective guard to limit accidental operation
- Protective boot for high dust environments to limit contact block pollution.



**100%**  
Worldwide availability



Harmony XB4



Harmony XB5



Assembly of other products using body/contact assemblies: see page 16



ZB4 BC580



ZB4 BC28001



ZBZ 1902



ZBZ 60




Contact + ZB4 BC28001




Contact + ZB4 BC28001RA

### Pushbuttons with integrated bellow

Shape of head	Colour of push	Symbol	Reference	Weight kg
<b>Heads only, Ø 37 mm (IP 66 + IP 69K) without marking</b>				
Flush 	White	–	ZB4 BC180	0.036
	Black	–	ZB4 BC280	0.036
	Green	–	ZB4 BC380	0.036
	Red	–	ZB4 BC480	0.036
	Yellow	–	ZB4 BC580	0.036
	Blue	–	ZB4 BC680	0.036
	Grey	–	ZB4 BC780	0.036
	Light blue	–	ZB4 BC980	0.036

### Heads only, Ø 37 mm (IP 66 + IP 69K) with marking (1)

Flush 	Black	Bell	ZB4 BC28001	0.036
		0	ZB4 BC28021	0.036
	White	I	ZB4 BC18023	0.036
		0	ZB4 BC48021	0.036
	Red	I	ZB4 BC38023	0.036
		0		

### Accessories

Description	Function	Reference	Weight kg
Protective guard in plastic	Protection against accidental operation	ZBZ 1902 (2)	0.010
Boot for contact block ZBE 10●, ZBE 10●3 and ZBE 50● (3)	Protection against liquid and dust ingress	ZBZ 60 ▲	0.098

(1) Heads are fixed relative to the position of the contact blocks:

- contact blocks are normally used in the "vertical" position.

- to mount the contact block in the "horizontal" position, it is necessary to order an alternative head with the symbol rotated by 90°. Please add the suffix «RA» in the end of the references for alternative heads of your choice. Example: ZB4 BC28001 becomes ZB4 BC28001RA.

(2) For heads with the RA suffix (ZB4 BC●●●●RA) used with a guard, it is necessary to order the dedicated guard ZBZ 1902RA.

(3) Restriction for use: refer to the product instruction sheet on [www.schneider-electric.com](http://www.schneider-electric.com).

### Other versions

Customization with other texts or symbols  
Please consult our Customer Care Centre.



▲ Available: 3rd quarter 2011.




Assembly of other products using body/contact assemblies: see page 16

### Pushbuttons with silicone booted head



Screw clamp terminal connections (Schneider Electric anti-retightening system)

Shape of head	Type of push	Type of contact		Colour of push	Reference	Weight
						kg
		N/O	N/C			



#### Complete units (IP 66 + IP 69K)

	Booted, clear silicone (colour of push unobscured)	1	–	Black	<b>XB4 BP21</b> (ZB4 BZ101 + ZB4 BP2)	0.082
		–	–	Green	<b>XB4 BP31</b> (ZB4 BZ101 + ZB4 BP3)	0.082
		–	–	Yellow	<b>XB4 BP51</b> (ZB4 BZ101 + ZB4 BP5)	0.082
		–	–	Blue	<b>XB4 BP61</b> (ZB4 BZ101 + ZB4 BP6)	0.082
		–	1	Red	<b>XB4 BP42</b> (ZB4 BZ102 + ZB4 BP4)	0.082

#### Silicone booted heads only, with increased protection (IP 66 + IP 69K)

	Flush	Clear boot (1) For insertion of protected legend within head (2)	–	–	White	<b>ZB4 BP18</b>	0.034
			–	–	Green	<b>ZB4 BP38</b>	0.034
			–	–	Red	<b>ZB4 BP48</b>	0.034
			–	–	Yellow	<b>ZB4 BP58</b>	0.034
			–	–	Blue	<b>ZB4 BP68</b>	0.034
	Projecting	Clear boot (1)	–	–	White	<b>ZB4 BP1</b>	0.031
			–	–	Black	<b>ZB4 BP2</b>	0.031
			–	–	Green	<b>ZB4 BP3</b>	0.031
			–	–	Red	<b>ZB4 BP4</b>	0.031
			–	–	Yellow	<b>ZB4 BP5</b>	0.031
			–	–	Blue	<b>ZB4 BP6</b>	0.031

#### Silicone booted heads only, standard for mounting with legend holder (IP 66)

	Flush	Coloured boot	–	–	White	<b>ZB4 BP1S</b>	0.034
			–	–	Black	<b>ZB4 BP2S</b>	0.034
			–	–	Green	<b>ZB4 BP3S</b>	0.034
			–	–	Red	<b>ZB4 BP4S</b>	0.034
			–	–	Yellow	<b>ZB4 BP5S</b>	0.034
			–	–	Blue	<b>ZB4 BP6S</b>	0.034
	Flush	Clear membrane For insertion of protected legend within head (2)	–	–	White	<b>ZB4 BP183</b>	0.026
			–	–	Green	<b>ZB4 BP383</b>	0.026
			–	–	Red	<b>ZB4 BP483</b>	0.026
			–	–	Yellow	<b>ZB4 BP583</b>	0.026
			–	–	Blue	<b>ZB4 BP683</b>	0.026

#### Transparent boots for pushbuttons

Description	For use with pushbutton types	Sold in lots of	Unit reference	Weight kg
Single boots (1)	Flush with circular head	10	<b>ZBP A</b>	0.002
	Projecting with circular head and push-push version	10	<b>ZBP 0</b>	0.002
	Flush or projecting with circular head for food industry applications	10	<b>ZBP 0A</b>	0.002

#### Coloured boots

Description	Colour	For use with	Sold in lots of	Unit reference	Weight kg
Coloured boots (3)	Black	ZB4 BP2S	10	<b>ZBP 012</b>	0.003
	Green	ZB4 BP3S	10	<b>ZBP 013</b>	0.003
	Red	ZB4 BP4S	10	<b>ZBP 014</b>	0.003
	Yellow	ZB4 BP5S	10	<b>ZBP 015</b>	0.003
	Blue	ZB4 BP6S	10	<b>ZBP 016</b>	0.003

#### Heads with black metal bezel

To order, add a figure 7 to the references selected from above.

Example: **ZB4 BP18** becomes **ZB4 BP187**.

(1) Permissible panel thickness 1 to 5 mm, cannot be used with legend holders.

(2) To order a legend for insertion within the head, please consult our site [www.schneider-electric.com](http://www.schneider-electric.com).

(3) Can be replaced without dismantling the head.



XB4 BP42



ZB4 BP58



ZB4 BP3S



ZB4 BP183



ZBP 0

# Control and signalling units Ø 22

Harmony® XB4 metal



Pushbuttons and switches for harsh environment


Multiple headed pushbuttons, spring return


Assembly of other products using body/contact assemblies: see page 16


## Double-headed pushbuttons (1)

Screw clamp terminal connections (Schneider Electric anti-retightening system)

Shape of head	Description	Type of contact		Colour and marking of caps (2)	Reference	Weight
						kg
		N/O	N/C			



Complete units (IP 66 + IP 69K)						
	2 pushes (1 flush black + 1 projecting red)	1	1	White "I" on green background White "0" on red background	<b>XB4 BL73415</b>	0.116


Heads only (IP 66 + IP 69K)						
	2 flush black pushes			White background + black background, unmarked	<b>ZB4 BA7120</b>	0.056
				Black "I" on white background White "0" on black background	<b>ZB4 BA7121</b>	0.056
				Green background + red background, unmarked	<b>ZB4 BA7340</b>	0.056
				White "I" on green background White "0" on red background	<b>ZB4 BA7341</b>	0.056
				Without cap (3)	<b>ZB4 BA79</b>	0.056


	1 flush black push 1 projecting red push			Green background + red background, unmarked	<b>ZB4 BL7340</b>	0.056
				White "I" on green background White "0" on red background	<b>ZB4 BL7341</b>	0.056


## Double-headed pushbuttons + 1 white central pilot light block (1)

Screw clamp terminal connections (Schneider Electric anti-retightening system)

Shape of head	Description	Type of contact		Colour and marking of caps (2)	Pilot light voltage	Reference	Weight
					V		kg
		N/O	N/C				

Complete units (IP 66 + IP 69K)							
	1 flush black push 1 projecting red push 1 white central pilot light block	1	1	White "I" on green background White "0" on red background	24	<b>XB4 BW73731B5</b>	0.130
					120	<b>XB4 BW73731G5</b>	0.130
					240	<b>XB4 BW73731M5</b>	0.130

Heads only (IP 66 + IP 69K) (5)							
	2 flush black pushes 1 clear central pilot light (4)			White background + black background, unmarked		<b>ZB4 BW7A1720</b>	0.056
				Black "I" on white background White "0" on black background		<b>ZB4 BW7A1721</b>	0.056
				Green background + red background, unmarked		<b>ZB4 BW7A3740</b>	0.056
				White "I" on green background White "0" on red background		<b>ZB4 BW7A3741</b>	0.056
				Black "I" on white background White "0" on black background		<b>ZB4 BW7A1724</b>	0.056
				Black "+" on white background Black "-" on white background		<b>ZB4 BW7A1715</b>	0.056
				Without cap (3)		<b>ZB4 BW7A9</b>	0.056

	1 flush black push 1 projecting red push 1 clear central pilot light (4)			Green background + red background, unmarked		<b>ZB4 BW7L3740</b>	0.056
				White "I" on green background White "0" on red background		<b>ZB4 BW7L3741</b>	0.056

## Heads with black metal bezel

To order, add the suffix 7 to the references selected above. Example: **ZB4 BA7120** becomes **ZB4 BA71207**.

- (1) Recommended maximum number of contacts constituting the body (fixing collar + contact) associated with the head, please consult our site [www.schneider-electric.com](http://www.schneider-electric.com).
- (2) These caps are fitted by Schneider Electric and cannot be removed (risk of damage).
- (3) Caps to be ordered separately; see page opposite.
- (4) Colour of centrally positioned pilot light determined by the colour of the LED incorporated in the body sub-assembly.
- (5) Only for use with bodies comprising a light source with integral LED.



Assembly of other products using body/contact assemblies: see page 16

Triple-headed pushbuttons (1) (2)							
Screw clamp terminal connections (Schneider Electric anti-retightening system)							
Shape of head	Description	Type of contact			Colour and marking of caps (3)	Reference	Weight
							kg
		N/O	N/C	N/O			

Complete units (IP 66 + IP 69K)							
	2 flush black pushes + 1 central projecting red push marked "Stop" in white	1	1	1	White "I" on green background White "II" on green background	<b>XB4 BA731327</b>	0.128
					Black "→" on white background White "←" on black background	<b>XB4 BA711237</b>	0.128

Heads only (IP 66 + IP 69K)							
	2 flush black pushes + 1 central projecting red push marked "Stop" in white				White "I" on green background White "II" on green background	<b>ZB4 BA73132</b>	0.056
					White "←" on green background White "→" on green background	<b>ZB4 BA73133</b>	0.056
					White "↑" on green background White "↓" on green background	<b>ZB4 BA73134</b>	0.056
					White "+" on green background White "-" on green background	<b>ZB4 BA73135</b>	0.056
					Black "+" on white background Black "-" on white background	<b>ZB4 BA71115</b>	0.056
					Black "→" on white background White "←" on black background	<b>ZB4 BA71123</b>	0.056
					Black "↑" on white background White "↓" on black background	<b>ZB4 BA71124</b>	0.056
					White "↑" on black background White "↓" on black background	<b>ZB4 BA72124</b>	0.056
					Without cap (4)	<b>ZB4 BA791</b>	0.056

Specific accessories for multiple-headed pushbuttons						
Description	Background colour	Marking	Sold in lots of	Reference	Weight	kg
Caps only for clip-on mounting (5) on: - ZB4 BA79 double-headed pushbuttons - ZB4 BW7A9 double-headed pushbuttons + central pilot light block - ZB4 BA791 triple-headed pushbuttons	White	Unmarked	10	<b>ZBA 71</b>	0.010	
		"I" black	10	<b>ZBA 7131</b>	0.010	
		"→" black	10	<b>ZBA 7134</b>	0.010	
		"+" black	10	<b>ZBA 7138</b>	0.010	
	Black	Unmarked	10	<b>ZBA 72</b>	0.010	
		"O" white	10	<b>ZBA 7232</b>	0.010	
		"+" white	10	<b>ZBA 7233</b>	0.010	
		"→" white	10	<b>ZBA 7235</b>	0.010	
		"I" white	10	<b>ZBA 7237</b>	0.010	
Green	Unmarked	10	<b>ZBA 73</b>	0.010		
	"I" white	10	<b>ZBA 7331</b>	0.010		
	"+" white	10	<b>ZBA 7333</b>	0.010		
	"↑" white	10	<b>ZBA 7335</b>	0.010		
	"II" white	10	<b>ZBA 7336</b>	0.010		
Red	Unmarked	10	<b>ZBA 74</b>	0.010		
	"O" white	10	<b>ZBA 7432</b>	0.010		
Yellow	Unmarked	10	<b>ZBA 75</b>	0.010		
Blue	Unmarked	10	<b>ZBA 76</b>	0.010		
Clear silicone boots (6)	For 2 flush pushes	-	10	<b>ZBA 708</b>	0.055	
	For 3 pushes	-	10	<b>ZBA 709</b>	0.055	
	For 1 flush push + 1 projecting push	-	10	<b>ZBA 710</b>	0.055	

### Heads with black metal bezel

To order, add the suffix 7 to the references selected above.

Example: **ZB4 BA73132** becomes **ZB4 BA731327**.

(1) Recommended maximum number of contacts constituting the body (fixing collar + contact) associated with the head, please consult our site [www.schneider-electric.com](http://www.schneider-electric.com).

(2) Not compatible with high power switching contacts and contacts for printed circuit board.

(3) These caps are fitted by Schneider Electric and cannot be removed (risk of damage).

(4) Caps to be ordered separately: see accessories on this page.

(5) Can be clipped-in at 90° steps, through 360°.

(6) Can be replaced without dismantling the head.



XB4 BA731327



ZB4 BA73133



ZB4 BA71124



ZBA 7235



ZBA 7331



ZBA 7432



ZBA 709




Assembly of other products using body/contact assemblies: see page 16

Mushroom head Emergency stop trigger action and mechanical latching pushbuttons conform to standards EN/IEC 60204-1 and EN/ISO 13850, to Machinery Directive 2006/42/EC and to standard EN/IEC 60947-5-5. Please consult your Customer Care Centre for a full explanation of these standards and directives.

### Emergency stop trigger action and mechanical latching pushbuttons (1)

Screw clamp terminal connections (Schneider Electric anti-retightening system)

Complete units (IP 66)

Shape of head	Type of reset	Type of contact		Push		Reference	Weight kg
		N/O	N/C	Ø (mm)	Colour		
	Push-pull	1	1	40	Red	<b>XB4 BT845</b> (ZB4 BZ105 + ZB4 BT84)	0.136
		1	1	40	Red		
	Turn to release	1	1	40	Red	<b>XB4 BS8445</b> (ZB4 BZ105 + ZB4 BS844)	0.130
		–	2	40	Red		
		1	2	40	Red		
	Key release (key n° 455)	1	1	40	Red	<b>XB4 BS9445</b> (ZB4 BZ105 + ZB4 BS944)	0.170






XB4 BT845



XB4 BS9445

Heads only (IP 66)

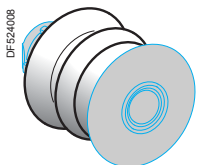
Shape of head	Type of reset	Push Ø mm	Colour	Reference	Weight kg
	Push-pull	30	Red	<b>ZB4 BT844</b>	0.078
		40	Red	<b>ZB4 BT84</b>	0.078
		60	Red	<b>ZB4 BX84</b>	0.098
	Turn to release	30	Red	<b>ZB4 BS834</b>	0.068
		40	Red	<b>ZB4 BS844</b>	0.073
		60	Red	<b>ZB4 BS864</b>	0.093
	Key release (key n° 455) 2 keys included with head (3)	30	Red	<b>ZB4 BS934</b>	0.094
		40	Red	<b>ZB4 BS944</b>	0.098
		60	Red	<b>ZB4 BS964</b>	0.118



XB4 BS834

Bellows for harsh environment (IP 69K) (4)

For use in	Material	Colour	Sold in lots of	Unit reference	Weight kg
Environment subject to humidity, dust, high pressure cleaning, etc.	Silicone	Red	2	<b>ZBZ 48</b>	0.009
	EPDM	Black	2	<b>ZBZ 28</b>	0.009
		Yellow	2	<b>ZBZ 58</b>	0.009




ZBZ ●8

### Heads with black metal bezel

To order, add a figure 7 to the references selected above.  
Example: **ZB4 BT844** becomes **ZB4 BT8447**.

(1) It is recommended that a legend or yellow background is used.

(2) The symbol  indicates key withdrawal position(s).




















(3) For specific keys with other numbers, please consult your Customer Care Centre.

(4) Not compatible with Ø 30 Emergency Stop head.

Assembly of other products using body/contact assemblies: see page 16

### Selector switches with standard handle and key switches

Screw clamp terminal connections (Schneider Electric anti-retightening system)

Shape of head	Type of operator	Positions Number	Type		Reference	Weight kg		
<b>Heads only (IP 66 + IP 69K)</b>								
	Selector switch with standard handle, black	2-position 90°	Stay put		ZB4 BD2	0.040		
			Spring return from right to left		ZB4 BD4	0.045		
		3-position ± 45°	Stay put		ZB4 BD3	0.040		
			Spring return to centre		ZB4 BD5	0.040		
			Spring return from left to centre		ZB4 BD7	0.040		
			Spring return from right to centre		ZB4 BD8	0.040		
			Key switch with key n° 455 (1) (2)	2-position 90°	Stay put		ZB4 BG2	0.098
							ZB4 BG02	0.098
					ZB4 BG4	0.098		
Spring return from right to left					ZB4 BG6	0.098		
3-position ± 45°	Stay put				ZB4 BG0	0.098		
					ZB4 BG03	0.098		
					ZB4 BG04	0.098		
					ZB4 BG3	0.098		
					ZB4 BG5	0.098		
					ZB4 BG9	0.098		
		ZB4 BG09	0.098					



### Heads with black metal bezel

For heads with standard black handle only. To order, add the suffix 7 to the references selected from above.

Example: ZB4 BD2 becomes ZB4 BD27.

### Replacement keys

Description	Key number	Reference	Weight kg
<b>Keys for booted selector switches</b>			
Sets of 2 keys, one of which supplied booted (rubber boot)	455	ZBG 455P	–
	421E	ZBG 421EP	–
	458A	ZBG 458AP	–
	520E	ZBG 520EP	–
	3131A	ZBG 3131AP	–

### Accessory for key switches (3)

Description	Function	Reference	Weight kg
Keyhole cover (rubber cover)	Protection of lock barrel when no key inserted in lock	ZBG P	0.005

### Boot for standard handle

Description	For use with	Sold in lots of	Unit reference	Weight kg
Boot for standard handle	ZB4 BD●	5	ZBD D2	0.005

(1) The symbol  indicates key withdrawal position(s).

(2) For specific keys with other numbers, please consult your Customer Care Centre.

(3) Not compatible with products with key TEC10.




Assembly of other products using body/contact assemblies: see page 16

PF101212



ZB5 AC680

Pushbuttons with integrated bellow			
Shape of head	Colour of push	Reference	Weight
			kg
<b>Heads only, Ø 37 mm (IP 66 + IP 69K) without marking</b>			
Flush 	White	ZB5 AC180	0.024
	Black	ZB5 AC280	0.024
	Green	ZB5 AC380	0.024
	Red	ZB5 AC480	0.024
	Yellow	ZB5 AC580	0.024
	Blue	ZB5 AC680	0.024
	Grey	ZB5 AC780	0.024
	Light blue	ZB5 AC980	0.024

Heads only, Ø 37 mm (IP 66 + IP 69K) with marking	
<b>Other versions</b>	Customization with marking at your choice (texts or symbols) Rotation of head for horizontal mounting of the contact block (1) Please consult our Customer Care Centre.

PF101203



ZBZ 1902

Accessories			
Description	Function	Reference	Weight
			kg
Protective guard in plastic	Protection against accidental operation	ZBZ 1902 (2)	0.010
Boot for contact block ZBE 10●, ZBE 10●3 and ZBE 50● (3)	Protection against liquid and dust ingress	ZBZ 60 ▲	0.098

PF101214



ZBZ 60

(1) Heads are fixed relative to the position of the contact blocks: contact blocks are normally used in the "vertical" position. It is necessary to order an alternative head with the symbol rotated by 90° in order to mount the contact block in the "horizontal" position (see images page 2). Please add the suffix «RA» in the end of the references for alternative heads of your choice.  
 (2) For heads with the RA suffix (ZB5 AC●●●●RA) used with a guard, it is necessary to order the dedicated guard ZBZ 1902RA.  
 (3) Restriction for use: refer to the product instruction sheet on [www.schneider-electric.com](http://www.schneider-electric.com).

▲ Available: 3<sup>rd</sup> quarter 2011.

## Control and signalling units Ø 22

Harmony® XB5 plastic

Pushbuttons and switches for harsh environment

Spring return pushbuttons, unmarked



XB5 AP51



ZB5 AP4



ZB5 AP6S



ZB5 AP183



ZBP 0

### Pushbuttons with silicone booted head

Screw clamp terminal connections (Schneider Electric anti-retightening system)

Shape of head	Type of push	Type of contact		Colour of push	Reference	Weight
						kg
		N/O	N/C			
<b>Complete units (IP 66 + IP 69K)</b>						
	Booted, clear silicone (colour of push unobscured)	1	–	Black	<b>XB5 AP21</b> (ZB5 AZ101 + ZB5 AP2)	0.039
		–	–	Green	<b>XB5 AP31</b> (ZB5 AZ101 + ZB5 AP3)	0.039
		–	–	Yellow	<b>XB5 AP51</b> (ZB5 AZ101 + ZB5 AP5)	0.039
		–	–	Blue	<b>XB5 AP61</b> (ZB5 AZ101 + ZB5 AP6)	0.039
		–	1	Red	<b>XB5 AP42</b> (ZB5 AZ102 + ZB5 AP4)	0.039

### Silicone booted heads only, with increased protection (IP 66 + IP 69K)

Flush	Clear boot (1) For insertion of protected legend within head (2)	Colour	Reference	Weight
		White	<b>ZB5 AP18</b>	0.023
		Green	<b>ZB5 AP38</b>	0.023
		Red	<b>ZB5 AP48</b>	0.023
		Yellow	<b>ZB5 AP58</b>	0.023
		Blue	<b>ZB5 AP68</b>	0.023
Projecting	Clear boot (1)	White	<b>ZB5 AP1</b>	0.014
		Black	<b>ZB5 AP2</b>	0.014
		Green	<b>ZB5 AP3</b>	0.014
		Red	<b>ZB5 AP4</b>	0.014
		Yellow	<b>ZB5 AP5</b>	0.014
		Blue	<b>ZB5 AP6</b>	0.014

### Silicone booted heads only, standard for mounting with legend holder (IP 66)

Flush	Coloured boot	Colour	Reference	Weight
		White	<b>ZB5 AP1S</b>	0.021
		Black	<b>ZB5 AP2S</b>	0.021
		Green	<b>ZB5 AP3S</b>	0.021
		Red	<b>ZB5 AP4S</b>	0.021
		Yellow	<b>ZB5 AP5S</b>	0.021
		Blue	<b>ZB5 AP6S</b>	0.021
	Clear membrane For insertion of protected legend within head (2)	White	<b>ZB5 AP183</b>	0.010
		Green	<b>ZB5 AP383</b>	0.010
		Red	<b>ZB5 AP483</b>	0.010
		Yellow	<b>ZB5 AP583</b>	0.010
		Blue	<b>ZB5 AP683</b>	0.010

### Transparent boots for pushbuttons

Description	For use with pushbutton types	Sold in lots of	Unit reference	Weight kg
Single boots (1)	Flush with circular head	10	<b>ZBP A</b>	0.002
	Projecting with circular head and push-push version	10	<b>ZBP 0</b>	0.002
	Flush or projecting with circular head for food industry applications	10	<b>ZBP 0A</b>	0.002

### Coloured boots

Description	Colour	For use with	Sold in lots of	Unit reference	Weight kg
Coloured boots (3)	Black	ZB5 AP2S	10	<b>ZBP 012</b>	0.003
	Green	ZB5 AP3S	10	<b>ZBP 013</b>	0.003
	Red	ZB5 AP4S	10	<b>ZBP 014</b>	0.003
	Yellow	ZB5 AP5S	10	<b>ZBP 015</b>	0.003
	Blue	ZB5 AP6S	10	<b>ZBP 016</b>	0.003

### Heads with black metal bezel

To order, add a figure 7 to the references selected from above.

Example: **ZB5 AP18** becomes **ZB5 AP187**.

(1) Permissible panel thickness 1 to 5 mm, cannot be used with legend holders.

(2) To order a legend for insertion within the head, please consult our site [www.schneider-electric.com](http://www.schneider-electric.com).

(3) Can be replaced without dismantling the head.

# Control and signalling units Ø 22

Harmony® XB5 plastic

Pushbuttons and switches for harsh environment

Multiple-headed pushbuttons, spring return

Assembly of other products using body/contact assemblies: see page 16



XB5 AL73415



ZB5 AA7121



ZB5 AL7341



XB5 AW73731M5



ZB5 AW7A1721



ZB5 AW7A3741

Double-headed pushbuttons <sup>(1)</sup>						
Screw clamp terminal connections (Schneider Electric anti-retightening system)						
Shape of head	Description	Type of contact		Colour and marking of caps <sup>(2)</sup>	Reference	Weight
						kg
		N/O	N/C			
<b>Complete units (IP 66 + IP 69K)</b>						
	2 pushes (1 flush black + 1 projecting red)	1	1	White "I" on green background White "0" on red background	<b>XB5 AL73415</b>	0.053
<b>Heads only (IP 66 + IP 69K)</b>						
	2 flush black pushes			White background + black background, unmarked	<b>ZB5 AA7120</b>	0.023
				Black "I" on white background	<b>ZB5 AA7121</b>	0.023
				White "0" on black background	<b>ZB5 AA7340</b>	0.023
				Green background + red background, unmarked	<b>ZB5 AA7341</b>	0.023
				White "I" on green background	<b>ZB5 AA79</b>	0.023
				White "0" on red background		
				Without cap <sup>(3)</sup>		
	1 flush black push 1 projecting red push			Green background + red background, unmarked	<b>ZB5 AL7340</b>	0.023
				White "I" on green background	<b>ZB5 AL7341</b>	0.023
				White "0" on red background		

Double-headed pushbuttons + 1 white central pilot light block <sup>(1)</sup>							
Screw clamp terminal connections (Schneider Electric anti-retightening system)							
Shape of head	Description	Type of contact		Colour and marking of caps <sup>(2)</sup>	Pilot light voltage	Reference	Weight
					V		kg
		N/O	N/C				
<b>Complete units (IP 66 + IP 69K)</b>							
	1 flush black push 1 projecting red push 1 white central pilot light block	1	1	White "I" on green background White "0" on red background	24	<b>XB5 AW73731B5</b>	0.066
					120	<b>XB5 AW73731G5</b>	0.066
					240	<b>XB5 AW73731M5</b>	0.066
<b>Heads only (IP 66 + IP 69K) <sup>(5)</sup></b>							
	2 flush black pushes 1 clear central pilot light <sup>(4)</sup>			White background + black background, unmarked		<b>ZB5 AW7A1720</b>	0.023
				Black "I" on white background		<b>ZB5 AW7A1721</b>	0.023
				White "0" on black background		<b>ZB5 AW7A3740</b>	0.023
				Green background + red background, unmarked		<b>ZB5 AW7A3741</b>	0.023
				White "I" on green background		<b>ZB5 AW7A1724</b>	0.023
				White "0" on red background		<b>ZB5 AW7A1715</b>	0.023
				Black "↑" on white background		<b>ZB5 AW7A1715</b>	0.023
				White "⊕" on black background		<b>ZB5 AW7A9</b>	0.023
				Black "+" on white background			
				Black "-" on white background			
				Without cap <sup>(3)</sup>			
	1 flush black push 1 projecting red push 1 clear central pilot light <sup>(4)</sup>			Green background + red background, unmarked		<b>ZB5 AW7L3740</b>	0.023
				White "I" on green background		<b>ZB5 AW7L3741</b>	0.023
				White "0" on red background			

(1) Recommended maximum number of contacts constituting the body (fixing collar + contact) associated with the head, please consult our site [www.schneider-electric.com](http://www.schneider-electric.com).

(2) These caps are fitted by Schneider Electric and cannot be removed (risk of damage).

(3) Caps to be ordered separately: see page opposite.

(4) Colour of centrally positioned pilot light determined by the colour of the LED incorporated in the body sub-assembly.

(5) Only for use with bodies comprising a light source with integral LED.



Assembly of other products using body/contact assemblies: see page 16

#### Triple-headed pushbuttons (1) (2)

Screw clamp terminal connections (Schneider Electric anti-retightening system)

Shape of head	Description	Type of contact			Colour and marking of caps (3)	Reference	Weight
							kg
		N/O	N/C	N/O			

#### Complete units (IP 66 + IP 69K)

	2 flush black pushes + 1 central projecting red push marked "Stop" in white	1	1	1	White "I" on green background White "II" on green background	<b>XB5 AA731327</b>	0.063
					Black "→" on white background White "←" on black background	<b>XB5 AA711237</b>	0.063

#### Heads only (IP 66 + IP 69K)

	2 flush black pushes + 1 central projecting red push marked "Stop" in white				White "I" on green background White "II" on green background	<b>ZB5 AA73132</b>	0.023
					White "←" on green background White "→" on green background	<b>ZB5 AA73133</b>	0.023
					White "↑" on green background White "↓" on green background	<b>ZB5 AA73134</b>	0.023
					White "+" on green background White "-" on green background	<b>ZB5 AA73135</b>	0.023
					Black "+" on white background Black "-" on white background	<b>ZB5 AA71115</b>	0.023
					Black "→" on white background White "←" on black background	<b>ZB5 AA71123</b>	0.023
					Black "↑" on white background White "↓" on black background	<b>ZB5 AA71124</b>	0.023
					White "↑" on black background White "↓" on black background	<b>ZB5 AA72124</b>	0.023
					Without cap (4)	<b>ZB5 AA791</b>	0.023

#### Specific accessories for multiple-headed pushbuttons

Description	Background colour	Marking	Sold in lots of	Reference	Weight	
Caps only for clip-on mounting (5) on: - ZB5 AA79 double-headed pushbuttons - ZB5 AW7A9 double-headed pushbuttons + central pilot light block - ZB5 AA791 triple-headed pushbuttons	White	Unmarked	10	<b>ZBA 71</b>	0.010	
		"I" black	10	<b>ZBA 7131</b>	0.010	
		"→" black	10	<b>ZBA 7134</b>	0.010	
		"+" black	10	<b>ZBA 7138</b>	0.010	
	Black	Unmarked	10	<b>ZBA 72</b>	0.010	
		"O" white	10	<b>ZBA 7232</b>	0.010	
		"+" white	10	<b>ZBA 7233</b>	0.010	
		"→" white	10	<b>ZBA 7235</b>	0.010	
			"I" white	10	<b>ZBA 7237</b>	0.010
	Green	Unmarked	10	<b>ZBA 73</b>	0.010	
		"I" white	10	<b>ZBA 7331</b>	0.010	
		"+" white	10	<b>ZBA 7333</b>	0.010	
"↑" white		10	<b>ZBA 7335</b>	0.010		
		"II" white	10	<b>ZBA 7336</b>	0.010	
Red	Unmarked	10	<b>ZBA 74</b>	0.010		
	"O" white	10	<b>ZBA 7432</b>	0.010		
Yellow	Unmarked	10	<b>ZBA 75</b>	0.010		
Blue	Unmarked	10	<b>ZBA 76</b>	0.010		
Clear silicone boots (6)	For 2 flush pushes	–	10	<b>ZBA 708</b>	0.055	
	For 3 pushes	–	10	<b>ZBA 709</b>	0.055	
	For 1 flush push + 1 projecting push	–	10	<b>ZBA 710</b>	0.055	

(1) Recommended maximum number of contacts constituting the body (fixing collar + contact) associated with the head, please consult our site [www.schneider-electric.com](http://www.schneider-electric.com).

(2) Not compatible with high power switching contacts and contacts for printed circuit board.

(3) These caps are fitted by Schneider Electric and cannot be removed (risk of damage).

(4) Caps to be ordered separately: see accessories on this page.

(5) Can be clipped-in at 90° steps, through 360°.

(6) Can be replaced without dismantling the head.



XB5 AA731327



ZB5 AA73133



ZB5 AA71124



ZBA 7235



ZBA 7331



ZBA 7432



ZBA 709

## Control and signalling units Ø 22

### Harmony® XB5 plastic



Pushbuttons and switches for harsh environment

Emergency stop devices conforming to EN/IEC 60204-1, to EN/ISO 13850 and Machinery Directive 2006/42/EC





Mushroom head Emergency stop trigger action and mechanical latching pushbuttons conform to standards EN/IEC 60204-1 and EN/ISO 13850, to Machinery Directive 2006/42/EC and to standard EN/IEC 60947-5-5. Please consult your Customer Care Centre for a full explanation of these standards and directives.

#### Emergency stop trigger action and mechanical latching pushbuttons <sup>(1)</sup>





Screw clamp terminal connections (Schneider Electric anti-retightening system)

Shape of head	Type of reset	Type of contact		Push Ø (mm)	Colour	Reference	Weight kg
							
		N/O	N/C				

#### Complete units (IP 66)

	Push-pull	1	1	40	Red	<b>XB5 AT845</b> (ZB5 AZ105 + ZB5 AT84)	0.076
	Turn to release	1	1	40	Red	<b>XB5 AS8445</b> (ZB5 AZ105 + ZB5 AS844)	0.072
		–	2	40	Red	<b>XB5 AS8444</b> (ZB5 AZ104 + ZB5 AS844)	0.072
	Key release (key n° 455)  <sup>(2)</sup>	1	1	40	Red	<b>XB5 AS9445</b> (ZB5 AZ105 + ZB5 AS944)	0.112


#### Heads only (IP 66)

Shape of head	Type of reset	Push Ø (mm)	Colour	Reference	Weight kg
	Push-pull	30	Red	<b>ZB5 AT844</b>	0.050
		40	Red	<b>ZB5 AT84</b>	0.050
		60	Red	<b>ZB5 AX84</b>	0.050
	Turn to release	30	Red	<b>ZB5 AS834</b>	0.042
		40	Red	<b>ZB5 AS844</b>	0.046
	Key release (key n° 455) <sup>(3)</sup> 2 keys included with head  <sup>(2)</sup>	30	Red	<b>ZB5 AS934</b>	0.068
		40	Red	<b>ZB5 AS944</b>	0.071
		60	Red	<b>ZB5 AS964</b>	0.092
	Key release (key n° 4A185) <sup>(3)</sup>	40	Red	<b>ZB5 AS944D</b>	0.071

#### Bellows for harsh environment (IP 69K) <sup>(4)</sup>

For use in	Material	Colour	Sold in lots of	Unit reference	Weight kg
Environment subject to humidity, dust, high pressure cleaning, etc.	Silicone	Red	2	<b>ZBZ 48</b>	0.009
	EPDM	Black	2	<b>ZBZ 28</b>	0.009
		Yellow	2	<b>ZBZ 58</b>	0.009

<sup>(1)</sup> It is recommended that a legend or yellow background is used.

<sup>(2)</sup> The symbol  indicates key withdrawal position(s).

<sup>(3)</sup> For specific keys with other numbers, please consult your Customer Care Centre.

<sup>(4)</sup> Not compatible with Ø 30 Emergency Stop head.



XB5 AT845



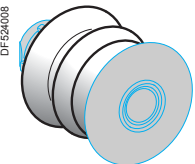
XB5 AS8445



XB5 AS9445



ZB5 AS844



ZBZ ●8



ZB5 AD2



ZB5 AG3



ZBG 455P



ZBG P



ZBD D2

### Selector switches with standard handle and key switches

Screw clamp terminal connections (Schneider Electric anti-retightening system)

Shape of head	Type of operator	Positions		Reference	Weight kg			
		Number	Type					
<b>Heads only (IP 66 + IP 69K)</b>								
	Standard handle, black	2-position 90°	Stay put		ZB5 AD2	0.017		
			Spring return from right to left		ZB5 AD4	0.020		
		3-position ± 45°	Stay put		ZB5 AD3	0.017		
			Spring return to centre		ZB5 AD5	0.017		
			Spring return from left to centre		ZB5 AD7	0.017		
			Spring return from right to centre		ZB5 AD8	0.017		
			Key switch with key n° 455 (1) (2)	2-position 90°	Stay put		ZB5 AG2	0.057
							ZB5 AG02	0.057
				3-position ± 45°			ZB5 AG4	0.057
					Spring return from right to left		ZB5 AG6	0.061
					ZB5 AG0	0.057		
					ZB5 AG3	0.057		
					ZB5 AG5	0.057		
					ZB5 AG9	0.057		
					ZB5 AG09	0.057		
Spring return from left to centre					ZB5 AG1	0.057		
Spring return to centre		ZB5 AG7	0.057					
Spring return from right to center		ZB5 AG8	0.057					
		ZB5 AG05	0.057					

### Heads with black metal bezel

For heads with standard black handle only. To order, add the suffix 7 to the references selected from above. Example: ZB5 AD2 becomes ZB5 AD27.

### Replacement keys

Description	Key number	Reference	Weight kg
<b>Keys for booted selector switches</b>			
Sets of 2 keys, one of which supplied booted (rubber boot)	455	ZBG 455P	—
	421E	ZBG 421EP	—
	458A	ZBG 458AP	—
	520E	ZBG 520EP	—
	3131A	ZBG 3131AP	—

### Accessory for key switches (3)

Description	Function	Reference	Weight kg
Keyhole cover (rubber cover)	Protection of lock barrel when no key inserted in lock	ZBG P	0.005

### Boot for standard handle

Description	For use with	Sold in lots of	Unit reference	Weight kg
Boot for standard handle	ZB5 AD●	5	ZBD D2	0.005

(1) The symbol indicates key withdrawal position(s).

(2) For specific keys with other numbers, please consult your Customer Care Centre.

(3) Not compatible with products with key TEC10.

To combine with XB4 metal heads, see page 4  
 To combine with XB5 plastic heads, see page 10

# Control and signalling units Ø 22

Harmony® XB4 metal and XB5 plastic  
 Pushbuttons and switches for harsh environment  
 Body/contact assemblies

## Contact functions - Screw clamp terminal connections (Schneider Electric anti-retightening system)

### Contacts for standard applications

Description	Type of contact	Symbol		Sold in lots of	Unit reference	Weight kg
		N/O	N/C			
<b>Contacts blocks</b> (for Harmony XB4 metal range)	Single with body/fixing collar	1	–	1	<b>ZB4 BZ101</b>	0.053
		–	1	1	<b>ZB4 BZ102</b>	0.053
		2	–	1	<b>ZB4 BZ103</b>	0.062
		–	2	1	<b>ZB4 BZ104</b>	0.062
		1	1	1	<b>ZB4 BZ105</b>	0.062
		1	2	1	<b>ZB4 BZ141</b>	0.072
<b>Contacts blocks</b> (for Harmony XB5 metal range)	Single with body/fixing collar	1	–	1	<b>ZB5 AZ101</b>	0.021
		–	1	1	<b>ZB5 AZ102</b>	0.021
		2	–	1	<b>ZB5 AZ103</b>	0.030
		–	2	1	<b>ZB5 AZ104</b>	0.030
		1	1	1	<b>ZB5 AZ105</b>	0.030
		1	2	1	<b>ZB5 AZ141</b>	0.040



## Contact functions - Spring clamp terminal connections

### Contacts for standard applications

Description	Type of contact	Symbol		Sold in lots of	Unit reference	Weight kg
		N/O	N/C			
<b>Contacts blocks</b> (for Harmony XB4 metal range)	Single with body/fixing collar	1	–	1	<b>ZB4 BZ1015</b>	0.053
		–	1	1	<b>ZB4 BZ1025</b>	0.053
		2	–	1	<b>ZB4 BZ1035</b>	0.062
		–	2	1	<b>ZB4 BZ1045</b>	0.062
		1	1	1	<b>ZB4 BZ1055</b>	0.062
		<b>Contacts blocks</b> (for Harmony XB5 metal range)	Single with body/fixing collar	1	–	1
–	1			1	<b>ZB5 AZ1025</b>	0.021
2	–			1	<b>ZB5 AZ1035</b>	0.030
–	2			1	<b>ZB5 AZ1045</b>	0.030
1	1			1	<b>ZB5 AZ1055</b>	0.030



To combine with XB4 metal heads, see page 4  
 To combine with XB5 plastic heads, see page 10

## Control and signalling units Ø 22

Harmony® XB4 metal and XB5 plastic

Pushbuttons and switches for harsh environment

Body/contact assemblies



ZB4 BZ009

### Body/fixing collar

#### Contacts for standard applications

For use with	Type of range	Sold in lots of	Unit reference	Weight kg
Electrical block (contact or light)	Harmony XB4 metal	10	ZB4 BZ009	0.038
	Harmony XB5 plastic	10	ZB5 AZ009	0.038



ZB5 AZ009

### Contact functions - Screw clamp terminal connections (Schneider Electric anti-retightening system)

#### Contacts for standard applications

Description	Type of contact	N/O	N/C	Sold in lots of	Unit reference	Weight kg
Contact blocks (for Harmony XB4 metal and XB5 plastic ranges)	Single	1	–	5	ZBE 101	0.011
		–	1	5	ZBE 102	0.011
	Double	2	–	5	ZBE 203	0.020
		–	2	5	ZBE 204	0.020
		1	1	5	ZBE 205	0.020



ZBE 101

#### Contacts for specific applications

Application	Type of contact	Description	N/O	N/C	Sold in lots of	Unit reference	Weight kg
Contact blocks for low power switching (for Harmony XB4 metal and XB5 plastic ranges)	Single	Standard	1	–	5	ZBE 1016	0.012
			–	1	5	ZBE 1026	0.012
		Dusty environment (1) (IP5X, 50 µm dust)	1	–	5	ZBE 1016P	0.012
			–	1	5	ZBE 1026P	0.012
Contact blocks for high power switching (for Harmony XB4 metal and XB5 plastic ranges)	Single	Standard (2)	1	–	1	ZBE 501	0.020
			–	1	1	ZBE 502	0.020
			2	–	1	ZBE 503	0.032
			–	2	1	ZBE 504	0.032
			1	1	1	ZBE 505	0.032



ZBE 203



ZBE 501

### Contact functions - Spring clamp terminal connections

#### Contacts for standard applications

Description	Type of contact	N/O	N/C	Sold in lots of	Unit reference	Weight kg
Contact blocks (for Harmony XB4 metal and XB5 plastic ranges)	Single	1	–	4	ZBE 1015	0.011
		–	1	4	ZBE 1025	0.011



ZBE 1015

(1) It is not possible to fit an additional contact block on the back of these contact blocks.

(2) It is not possible to add further contacts to these assemblies.

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