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<b>Type of applications</b>	<b>All applications</b>			
<b>Enclosures</b>	<b>Plastic</b>			<b>Glass-reinforced polyester</b>
	<b>Complete stations and separate components for customer assembly</b>			<b>Empty insulated enclosures</b>
<b>Main feature</b>	Pre-drilled-control stations			Pre-drilled or undrilled enclosures
<b>Associated control and signalling units</b>	Harmony XB5 with plastic bezel		Harmony XB7, monolithic, plastic	Harmony XB4 with metal bezel Harmony XB5 with plastic bezel
	1, 2, 3, 4 or 5	1, 2 or 3 (complete stations) 1, 2, 3, 4 or 5 (empty enclosures)	1, 2 or 3	1, 2, 4, 8 or 16
<b>Material</b>	Polycarbonate		ABS	Glass-reinforced polyester
<b>Colour</b>	Yellow lid Light grey base	Dark grey lid Light grey base	Light grey or yellow lid Light grey base	Coloured grey throughout
<b>Degree of protection</b>	IP 66		IP 54	IP 65
<b>Function</b>	Emergency Stop	Start or Stop Start-Stop with pilot light Movement control	According to equipment fitted: <input type="checkbox"/> Start or Stop <input type="checkbox"/> Start-Stop with pilot light <input type="checkbox"/> Movement control <input type="checkbox"/> Emergency stop	
<b>Cable entries</b>	Knock-outs			Tapped for cable gland
<b>Type references</b>	<b>XAL K</b>	<b>XAL D</b>	<b>XAL E</b>	<b>XAP A</b>
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**Specific applications**

<b>Metal</b>	<b>Metal front plate, insulated protective rear cover</b>	<b>Plastic</b>		<b>Metal</b>
<b>Empty enclosures</b>	<b>Empty, flush mounting enclosures: front plate + rear cover</b>	<b>Control stations for severe environments</b>	<b>Lift inspection stations</b>	<b>Key operated control stations</b>



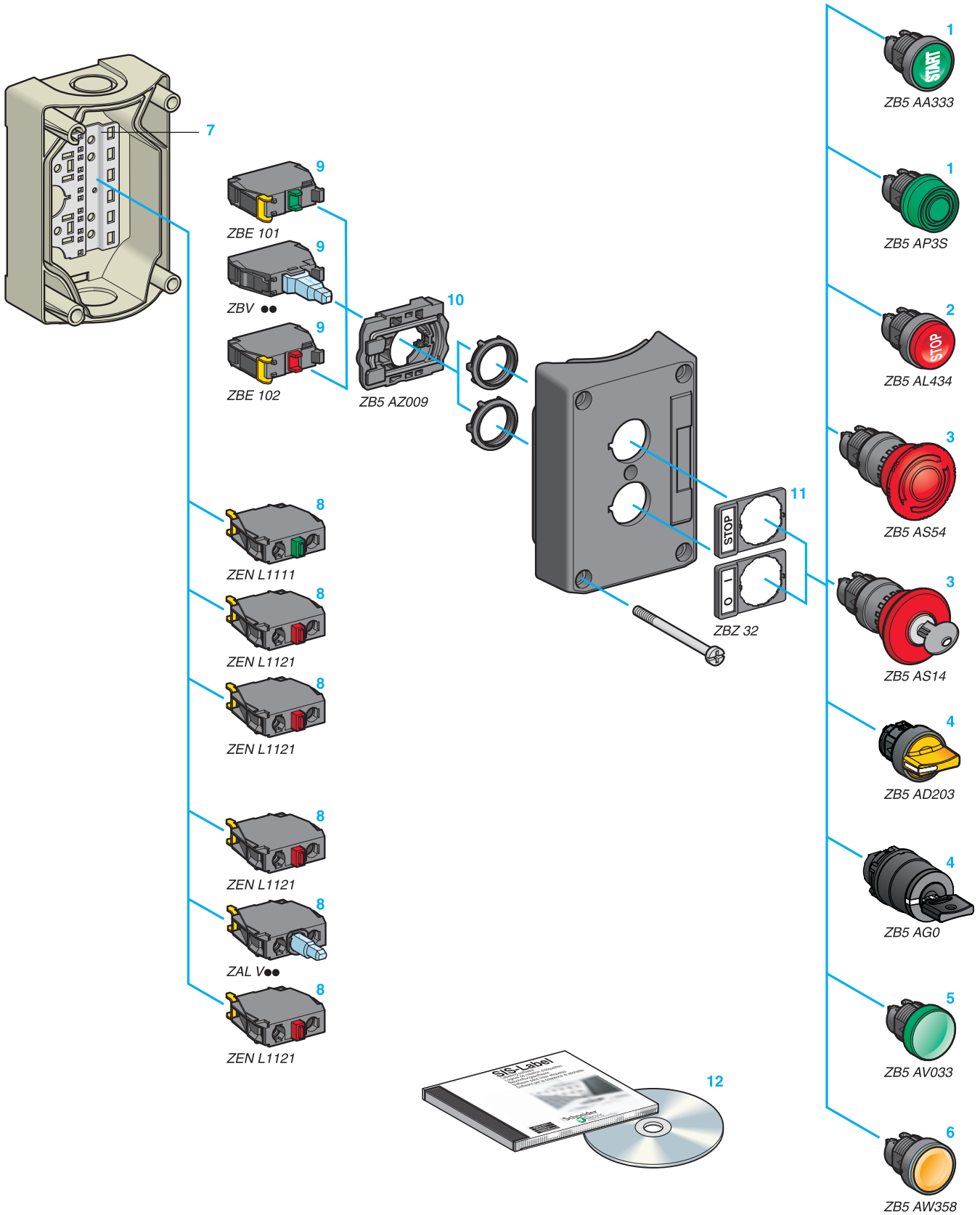
Pre-drilled enclosures	Pre-drilled or undrilled enclosures	Pre-drilled front plates & rear covers	Pre-drilled empty control stations	Pre-drilled empty enclosures or fitted stations	Fitted stations
Harmony XB4 with metal bezel Harmony XB5 with plastic bezel			Harmony XB5 with plastic bezel	Harmony XB5 or XB7 with plastic bezel	With key lock bezel
8, 16, 24, 30 or 40	1, 2, 3, 4, 6, 8 or 12	1, 2, 3, 4 or 5	1, 2, 3, 4 or 5	1, 2, 3, 4, 5 or 6 with or without power socket	–
Aluminium alloy or sheet steel	Zinc or aluminium alloy	Front plate: brushed aluminium Rear cover: polystyrene	Mineral reinforced polyamide	Polycarbonate	Zinc alloy
Blue lid and base	<b>XAP M:</b> Blue lid Blue base <b>XAP J:</b> Yellow lid Blue base	Unpainted aluminium	Black lid Black base	Yellow lid Light grey base	Grey
IP 54	IP 65		IP 66 IP 69K	IP 44, IP 55 or IP 66 depending on model	IP 54
According to equipment fitted: <input type="checkbox"/> Start or Stop <input type="checkbox"/> Start-Stop with pilot light <input type="checkbox"/> Movement control <input type="checkbox"/> Emergency stop					Start-Stop
Drilled		Knock-outs	ISO 20	Knock-outs	Tapped for cable gland
<b>XB2 SL</b>	<b>XAP M, XAP J</b>	<b>XAP E</b>	<b>XAL G</b>	<b>XAL F</b>	<b>XAP S</b>
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# Control stations and enclosures

Plastic control stations XAL D and XAL K

For Harmony® Ø 22 control and signalling units XB5

2



# Control stations and enclosures

## Plastic control stations XAL D and XAL K

### For Harmony® Ø 22 control and signalling units XB5

XAL D and XAL K control stations are available in two forms:

- Complete.
- For customer assembly

These control stations use the plastic bezel pushbuttons, switches and pilot lights of the Harmony XB5 range, which offers a wide choice of circular and square types of head.

#### Complete stations

##### Pre-assembled

These are complete, ready to install, stations fitted with 1 to 3 buttons to cater for the most commonly encountered functions:

- **Start or Stop**, with:

- 1 flush spring return pushbutton,
- 1 red, spring return, mushroom head pushbutton.

- **Emergency stop or Emergency switching off**, with:

- 1 red, latching, mushroom head pushbutton **3** (standard or trigger action), either push-pull or turn to release, with or without key.

- **Start-Stop**, with:

- 2 flush spring return pushbuttons,
- 1 flush spring return pushbutton **1** + 1 projecting spring return pushbutton **2**,
- 1 2-position selector switch **4** + 1 pilot light with integral red LED, if required.

- **Two functions**, with:

- 2 flush spring return pushbuttons **1**.

- **Three functions**, with:

- 3 flush spring return pushbuttons **1**,
- 2 flush spring return pushbuttons **1** + 1 projecting spring return pushbutton **2**,
- 2 flush spring return pushbuttons **1** + 1 red, latching, mushroom head pushbutton **3**.

These pushbuttons, switches and pilot lights comprise plastic heads from the Harmony XB5 range and electrical blocks (contact or light) **8** that are mounted in the back of the enclosure.

#### Stations for customer assembly

##### For customer assembly

These stations are for assembly by the user and offer a choice of 2 assembly methods:

- **Box method**

Identical to the pre-assembled versions. The electrical blocks **8** are mounted on a metal mounting plate in the back of the enclosure **7**.

- **Station method**

The electrical blocks **9** are mounted directly beneath the heads using a body/fixing collar **10**.

It is possible to assemble stations with 1 to 5 heads, each of which can be combined with 3 electrical blocks **8** or **9** (contact or light).

The XAL range offers a wide choice of head types for:

- Spring return pushbuttons **1** or **2**, either marked or unmarked.
- Spring return mushroom head pushbuttons.
- Latching mushroom head pushbuttons **3**.
- Selector switches with standard or long handle and key switches **4**.
- Toggle switches.
- Pilot lights **5**.
- Illuminated spring return pushbuttons **6**.
- Illuminated selector switches with standard handle **4**.

#### Accessories

##### For heads

Markings can be customised by using legend holders **11** which can either be fitted with pre-marked legends or legends engraved by the user. Alternatively, paper legends (protected), prepared using "SIS Label" software **12**, or peel-off legends (supplied on sheet for marking by laser printer) can be used.

### Environment characteristics

<b>Protective treatment</b>	Standard version		"TH"
<b>Ambient air temperature</b> around the device	For storage	°C	- 40...+ 70
	For operation	°C	- 25...+ 70 unless otherwise stated
<b>Electric shock protection</b>			Conforming to IEC 61140: class II
<b>Degree of protection</b>			Conforming to IEC 60529: IP 66
			Conforming to NEMA: NEMA type 4X and 13
<b>High pressure cleaning resistance</b>		Pa	70 x 10 <sup>5</sup> (70 bar); distance: 0.1 m Temperature: 55 °C
<b>Mechanical shock protection</b>	Conforming to EN 50102		With non illuminated heads: IK 03
			With illuminated heads: IK 05
<b>Conformity to standards</b>			EN/IEC 60947-1, EN/IEC 60947-5-1, EN/IEC 60947-5-4, EN/IEC 60947-5-5, EN/IEC 60204-1 and EN/ISO 13850 (trigger action Emergency stops and mechanical latching pushbuttons, see pages 2/9 and 2/16), IEC 60364-5-53 (Emergency switching off mechanical latching pushbuttons, see page 2/39) UL 508, CSA C22-2 n° 14, GB 14048.5
<b>Product certifications</b>	UL Listed, CSA, GOST		Standard single contacts with screw clamp terminals: A600; R300 Light blocks with screw clamp terminals
<b>Terminal referencing</b>			Conforming to EN 50005 and EN 50013
<b>Material and colours</b>			XAL D: polycarbonate, light grey RAL 7035 and dark grey RAL 7016
			XAL K: polycarbonate, light grey RAL 7035 and yellow RAL 1021
<b>Cable entries</b>			Knock-out entries for n° 13 (CM12, Pg 13.5) cable gland and tapped ISO 20

### Contact function characteristics

#### Mechanical characteristics

<b>Contact operation</b>	N/C or N/O		Slow break
<b>Positive operation</b>	Conforming to EN/IEC 60947-5-1 Appendix K		All functions incorporating a N/C contact are positive opening operation
<b>Operating travel</b> (to change electrical state)	Pushbutton	mm	Changing N/C state: 1.5 Changing N/O state: 2.6 Total travel: 4.3
<b>Operating force</b>	Pushbutton	N	Changing N/C state: 3.5 Changing N/O state: 3.8
	Additional contact only (extra to change state)	N	Single N/C contact: 2 Single N/O contact: 2.3
	Emergency stop or Emergency switching off with N/C + N/O	N	Standard push-pull: 45 Trigger action push-pull: 50 Standard turn to release (with or without key): 40 Trigger action turn to release (with or without key): 44
<b>Operating torque</b> (to change electrical state)	Selector switches	N.m	N/O contact: 0.14
	Additional contact only	N.m	N/O contact: 0.05
<b>Mechanical durability</b> (in millions of operating cycles)	Spring return pushbutton		5
	Non illuminated selector switch		1
	Illuminated selector switch		0.5
	Toggle switch		0.5
	Emergency stop or Emergency switching off pushbutton		0.3
<b>Vibration resistance</b>	Conforming to IEC 60068-2-6		Frequency: 12...500 Hz: 5 gn
<b>Shock resistance</b>	Conforming to IEC 60068-2-27		All functions except mushroom head pushbutton, spring return: <input type="checkbox"/> half sine wave acceleration 11 ms: 50 gn <input type="checkbox"/> half sine wave acceleration 18 ms: 30 gn Mushroom head pushbutton, spring return: <input type="checkbox"/> half sine wave acceleration 11 ms: 10 gn

**Contact function characteristics (continued)**

Electrical characteristics					
<b>Cabling capacity</b>	Conforming to EN/IEC 60947-1	mm <sup>2</sup> mm <sup>2</sup>	Screw clamp terminals Min.: 1 x 0.22 without cable end Max.: 2 x 1.5 with cable end Cross head screws (Pozidriv or Philips type 1), slotted for flat 4 and 5.5 mm screwdriver Tightening torque: 0.8 N.m (1.2 N.m max.)		
<b>Contact material</b>			Silver alloy (Ag/Ni)		
<b>Nominal thermal current</b>	Conforming to EN/IEC 60947-5-1	A	Standard blocks with screw clamp terminals: 10		
<b>Short-circuit protection</b>	Conforming to EN/IEC 60947-5-1	A	Standard blocks with screw clamp terminals: 10 (gG cartridge fuse conforming to IEC 269-1)		
<b>Rated insulation voltage</b>	Conforming to EN/IEC 60947-1	V	Standard blocks with screw clamp terminals: Ui = 600 degree of pollution 3		
<b>Rated impulse withstand voltage</b>	Conforming to EN/IEC 60947-1	kV	Standard blocks with screw clamp terminals: Uimp = 6		
<b>Rated operational characteristics</b> Conforming to EN/IEC 60947-5-1	a.c. supply: utilisation category AC-15		A 600: Ue = 600 V and Ie = 1.2 A or Ue = 240 V and Ie = 3 A or Ue = 120 V and Ie = 6 A		
	d.c. supply: utilisation category DC-13		Q 600: Ue = 600 V and Ie = 0.1 A or Ue = 250 V and Ie = 0.27 A or Ue = 125 V and Ie = 0.55 A		
<b>Electrical durability</b> Conforming to EN/IEC 60947-5-1 Appendix C Operating rate: 3600 operating cycles/hour Load factor: 0.5	a.c. supply for 1 million operating cycles: utilisation category AC-15	V A	24 4	120 3	230 2
	d.c. supply for 1 million operating cycles: utilisation category DC-13	V A	24 0.5	110 0.2	
<b>Electrical reliability</b>	Failure rate. Conforming to EN/IEC 60947-5-4		At 17 V and 5 mA, λ < 10 <sup>-8</sup> At 5 V and 1 mA, λ < 10 <sup>-6</sup>		

**Specific characteristics of light functions with integral LED**

**Mechanical characteristics**

<b>Vibration resistance</b>	Conforming to IEC 60068-2-6		Frequency: 12...500 Hz: 5 gn		
<b>Shock resistance</b>	Conforming to IEC 60068-2-27		Half sine wave acceleration 11 ms: 50 gn Half sine wave acceleration 18 ms: 30 gn		

**Electrical characteristics**

<b>Cabling capacity</b>	Conforming to EN/IEC 60947-1	mm <sup>2</sup> mm <sup>2</sup>	Screw clamp terminals Min.: 1 x 0.22 without cable end Max.: 2 x 1.5 with cable end Cross head screws (Pozidriv or Philips type 1), slotted for flat 4 and 5.5 mm screwdriver Tightening torque: 0.8 N.m (1.2 N.m max.)		
<b>Rated insulation voltage</b>	Conforming to EN/IEC 60947-1		V	Pilot light blocks with integral LED: Ui = 250, degree of pollution 3	
<b>Rated impulse withstand voltage</b>	Conforming to EN/IEC 60947-1	kV	Pilot light blocks with integral LED: Uimp = 4		
<b>Voltage limits</b>	At nominal voltage	V	24 V: 19.2...30 ~ and 21.6...26.4 ~ 110...120 V: 40...132 ~ 240 V: 195...264 ~		
<b>Current consumption</b>	For all colours	mA	~ 12 V supply blocks: 18 ~ 24 V supply blocks: 18 ~ 120 V supply blocks: 14 ~ 240 V supply blocks: 14		
<b>Service life</b>	At nominal voltage and at an ambient temperature of 25 °C	H	100,000		
<b>Surge withstand</b>	Conforming to IEC 61000-4-5	kV	1		
<b>Resistance to fast transients</b>	Conforming to IEC 61000-4-4	kV	2		
<b>Resistance to electromagnetic fields</b>	Conforming to IEC 61000-4-3	V/m	10		
<b>Resistance to electrostatic discharges</b>	Conforming to IEC 61000-4-2	kV	8/6		
<b>Direct parallel connection across inductive load</b> e.g. contactor coil or solenoid	Maximum power of load	VA	For applications involving high powers (≥ 30 VA), a <b>ZBZ V●</b> suppressor must be connected across the light block terminals (see page 2/13)		
<b>Electromagnetic emission</b>	Conforming to EN 55011		Class B		

# Control stations and enclosures

Plastic control stations XAL D and XAL K

For Harmony® Ø 22 control and signalling units XB5

Complete stations (screw clamp terminal connections)

## Start or Stop function

Light grey "RAL 7035" base, dark grey "RAL 7016" lid, lid fixing screws and nut material: stainless steel type A4, AISI 316.

Description	Type of push	Type of contact		Marking	Reference	Weight kg
		N/O	N/C			
<b>Marking on pushbutton</b>						
1 spring return pushbutton	Flush, green	1	-	I	XAL D102	0.135
				Marche	XAL D104	0.156
				Start	XAL D103	0.156
	Flush, red	-	1	I	XAL D102E	0.165
				O	XAL D112	0.156
				Arrêt	XAL D117	0.156
	Projecting, red	-	1	Stop	XAL D114	0.165
				O	XAL D112E	0.165
				Stop	XAL D114E	0.165
	Projecting, red	-	1	O	XAL D115	0.157
				Arrêt	XAL D118	0.157
				Stop	XAL D116	0.157
<b>Marking on legend holder and legend below head</b>						
1 spring return pushbutton	Flush, green	1	-	Marche	XAL D101	0.157
				Start	XAL D101H29	0.157
	Flush, red	-	1	Arrêt	XAL D111	0.157
				Stop	XAL D111H29	0.157
1 mushroom head pushbutton, Ø 40 mm, spring return	Red	-	1	Arrêt	XAL D164	0.182

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XAL D102



XAL D115



XAL D101



XAL D111



XAL D164



## Control stations and enclosures




Plastic control stations XAL D and XAL K

For Harmony® Ø 22 control and signalling units XB5

Complete stations (screw clamp terminal connections)

## Emergency stop or Emergency switching off functions

Light grey "RAL 7035" base, yellow "RAL 1021" lid, lid fixing screws and nut material: stainless steel type A4, AISI 316.

Description	Type	Type of contact		Reference	Weight kg			
		N/O	N/C					
<b>Unmarked</b>								
 XAL K178●	1 mushroom head pushbutton, Ø 40 mm, red Turn to release	Trigger action (1) (2)	–	1	XAL K178	0.194		
			–	2	XAL K178F	0.194		
			1	1	XAL K178E	0.194		
			1	2	XAL K178G	0.194		
		Standard (3)	–	1	XAL K174	0.178		
			–	2	XAL K174F	0.188		
			1	1	XAL K174E	0.188		
			1	2	XAL K174G	0.197		
			<b>XAL K188</b>					
			 XAL K188●	1 mushroom head pushbutton, Ø 40 mm, red Key release (key n° 455)	Trigger action (1) (2)	–	1	XAL K188
–	2	XAL K188F				0.188		
1	1	XAL K188E				0.188		
1	2	XAL K188G				0.188		
Standard (3)	–	1			XAL K184	0.178		
	–	2			XAL K184F	0.188		
	1	1			XAL K184E	0.188		
	1	2			XAL K184G	0.197		
	<b>XAL K198</b>							
	 XAL K198	1 mushroom head pushbutton, Ø 40 mm, red Push-pull			Trigger action (1) (2)	–	1	XAL K198
Standard (3)			–	1		XAL K194	0.183	

(1) 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.

(2) Your Customer Care Centre may provide a control station type XAL K1●8 with marking of the Emergency stop function and of the logo in conformity with the requests of EN/ISO 13850 standard, paragraph 4.4.6.

(3) Mushroom head switching off mechanical latching pushbuttons conform to standards IEC 60364-5-53 and EN/IEC 60947-5-5. Please consult your Customer Care Centre for full details of these standards and directives.

# Control stations and enclosures

Plastic control stations XAL D and XAL K

For Harmony® Ø 22 control and signalling units XB5

Complete stations (screw clamp terminal connections)

2



XAL D224



XAL D211H29



XAL D134



XAL D144



XAL D363B

## Start-Stop function

Light grey "RAL 7035" base, dark grey "RAL 7016" lid, lid fixing screws and nut material: stainless steel type A4, AISI 316.

Description	Type of push	Type of contact		Marking	Reference	Weight kg
		N/O	N/C			
<b>Marking on pushbutton (1)</b>						
2 spring return pushbuttons	1 flush, green 1 flush, red	1	–	I	XAL D213	0.233
		–	1	O	XAL D224	0.233
	1 flush, green 1 projecting, red	1	1	Marche	XAL D215	0.233
		1	1	Arrêt	XAL D213E	0.252
1 flush, green 1 projecting, red	1	–	Start	XAL D214	0.234	
	–	1	Stop	XAL D225	0.234	

## Marking on legend holder and legend below head

2 spring return pushbuttons	1 flush, green 1 flush, red	1	–	Marche	XAL D211	0.233
		–	1	Arrêt	XAL D211H29	0.233
	1 flush, green 1 flush, green	1	–	Start	XAL D241	0.233
1 selector switch 2-position stay put	Standard handle	1	–	Fermeture	XAL D134	0.163
		1	–	O-I	XAL D132	0.163
	Key switch (key n° 455) key withdrawal from left-hand position	1	–	Arrêt-Marche	XAL D144	0.187
		1	1	O-I	XAL D142	0.196
		1	1	O-I	XAL D144E	0.196

Description	Type of push	Type of contact		Marking	Pilot light supply V	Reference	Weight kg
		N/O	N/C				
<b>With pilot light and marking on pushbutton (1)</b>							
2 spring return pushbuttons and 1 pilot light with integral red LED	1 flush, green 1 flush, red	1	–	I	≈ 24	XAL D363B	0.261
		–	1	O	~ 120	XAL D363G	0.261
					~ 230	XAL D363M	0.261
<b>With pilot light and marking on legend holder and legend below head</b>							
2 spring return pushbuttons and 1 pilot light with integral red LED	1 flush, green 1 flush, red	1	–	Marche	≈ 24	XAL D361B	0.261
		–	1	Arrêt	~ 230	XAL D361M	0.261

(1) Push supplied with cap not clipped-in, allowing orientation through 90° in 360° steps.

# Control stations and enclosures



## Plastic control stations XAL D and XAL K

### For Harmony® Ø 22 control and signalling units XB5

#### Complete stations (screw clamp terminal connections)

### Two function

Light grey "RAL 7035" base, dark grey "RAL 7016" lid, lid fixing screws and nut material: stainless steel type A4, AISI 316.



Description	Type of push	Type of contact		Marking	Reference	Weight kg
		 N/O	 N/C			
<b>Marking on pushbutton (1)</b>						
2 spring return pushbuttons	1 flush, white	1	–	↑	XAL D222	0.233
	1 flush, black	1	–	↓		
				→	XAL D223	0.233
				↔		
		1	1	↑	XAL D222E	0.233
		1	1	↓		

815206



XAL D222

### Three function (light grey "RAL 7035" base, dark grey "RAL 7016" lid)

Description	Type of push	Type of contact		Marking	Reference	Weight kg
		 N/O	 N/C			
<b>Marking on pushbutton (1)</b>						
3 spring return pushbuttons	1 flush, green	1	–	I	XAL D339	0.298
	1 flush, red	–	1	O		
	1 flush, green	1	–	II		
	1 flush, white	1	–	↑	XAL D324	0.298
				O		
				↓		
	1 flush, red	–	1	↑	XAL D326	0.298
				Stop		
	1 flush, black	1	–	↓	XAL D334	0.298
				↔		
		1	1	↑	XAL D324E	0.317
		1	1	O		
		1	1	↓		
	1 flush, white	1	–	↑	XAL D325	0.299
				O		
				↓		
2 spring return pushbuttons + 1 latching mushroom head pushbutton, Ø 30 mm	1 flush, white	1	–	↑	XAL D328	0.317
	1 mushroom head, red (2)	–	1	O		
	1 flush, black	1	–	↓		
<b>Marking on legend holder and legend below head</b>						
3 spring return pushbuttons	1 flush, green	1	–	Avant	XAL D311	0.299
	1 flush, red	–	1	Arrêt		
	1 flush, green	–	–	Arrière		
				Montée	XAL D321	0.299
				Arrêt		
				Descente		

(1) Push supplied with cap not clipped-in, allowing orientation through 90° in 360° steps.

(2) Standard turn to release.

815209



XAL D339

815208



XAL D334

815207



XAL D321

# Control stations and enclosures

Plastic control stations XAL D and XAL K

For Harmony® Ø 22 control and signalling units XB5

Stations for customer assembly: empty enclosures


2




XAL D02



XAL K01H29

Empty control stations (lid fixing screws and nut material: stainless steel type A4, AISI 316)					
Description	Text and logo	Marking of the control station	Number of cut-outs	Reference	Weight kg
Light grey "RAL 7035" base Dark grey "RAL 7016" lid	Without	–	1	XAL D01	0.136
			2	XAL D02	0.193
			3	XAL D03	0.238
			4	XAL D04	0.278
			5	XAL D05	0.322
Light grey "RAL 7035" base Yellow "RAL 1021" lid For Emergency stop function	Without	–	1	XAL K01	0.136
			2	XAL K02	0.193
			3	XAL K03	0.238
			4	XAL K04	0.278
			5	XAL K05	0.322
	With text (1) and logo (2) 	ARRET D'URGENCE	1	XAL K01HFR	0.136
EMERGENCY STOP		1	XAL K01H29	0.136	
NOT-HALT		1	XAL K01H44	0.136	
<b>CSA + UL certified (3)</b>					
Light grey "RAL 7035" base Dark grey "RAL 7016" lid	Without	–	1	XAL D01H7	0.136
			2	XAL D02H7	0.205
			3	XAL D03H7	0.238

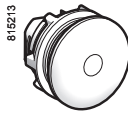
(1) For supply of the text in an other language, please consult your Customer care centre.  
 (2) For complying with ISO 13850 standard, paragraph 4.4.6., Emergency Stop function logo  has been added.  
 (3) Volt-free commoning/earth terminal included.



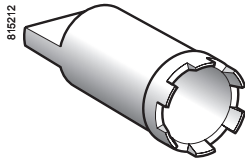
ZEN L1111



ZAL VB



ZB5 SZ3



ZB5 AZ905



ZBE 101



ZBV V



ZB5 AZ009

## Electrical blocks and accessories for mounting in back of enclosure

Description	Description	Colour	Sold in lots of	Unit reference	Weight kg
<b>Electrical blocks with screw clamp terminal connections</b>					
Standard contact blocks (1)	N/O contact	–	5	ZEN L1111	0.015
	N/C contact	–	5	ZEN L1121	0.015
Light blocks with integral LED (1)	≈ 24 V	White	5	ZAL VB1	0.015
		Green	5	ZAL VB3	0.015
		Red	5	ZAL VB4	0.015
		Yellow	5	ZAL VB5	0.015
		Blue	5	ZAL VB6	0.015
		~ 110...120 V	White	5	ZAL VG1
	Green	5	ZAL VG3	0.015	
	Red	5	ZAL VG4	0.015	
	Yellow	5	ZAL VG5	0.015	
	Blue	5	ZAL VG6	0.015	
	~ 230...240 V	White	5	ZAL VM1	0.015
		Green	5	ZAL VM3	0.015
		Red	5	ZAL VM4	0.015
		Yellow	5	ZAL VM5	0.015
		Blue	5	ZAL VM6	0.015

Description	For use with	Sold in lots of	Unit reference	Weight kg
<b>Accessories for electrical blocks</b>				
Blanking plug	Ø 22 mm units	10	ZB5 SZ3	0.008
Nut	Head fixing	10	ZB5 AZ901	0.002
Volt-free terminal	Commoning/earth	10	XAL Z09	0.003
Bezel tool	For tightening nut ZB5 AZ901	1	ZB5 AZ905	0.016

## Electrical blocks and accessories for mounting beneath heads

Description	Description	Colour	Sold in lots of	Unit reference	Weight kg
<b>Electrical blocks with screw clamp terminal connections (2) (for use with body/fixing collar ZB5 AZ009)</b>					
Standard contact blocks	N/O contact	–	5	ZBE 101	0.016
	N/C contact	–	5	ZBE 102	0.016
Light blocks with integral LED	≈ 24 V	White	5	ZBV B1	0.016
		Green	5	ZBV B3	0.016
		Red	5	ZBV B4	0.016
		Yellow	5	ZBV B5	0.016
		Blue	5	ZBV B6	0.016
		~ 110...120 V	White	5	ZBV G1
	Green	5	ZBV G3	0.016	
	Red	5	ZBV G4	0.016	
	Yellow	5	ZBV G5	0.016	
	Blue	5	ZBV G6	0.016	
	~ 230...240 V	White	5	ZBV M1	0.016
		Green	5	ZBV M3	0.016
		Red	5	ZBV M4	0.016
		Yellow	5	ZBV M5	0.016
		Blue	5	ZBV M6	0.016

Description	For use with	Level of protection	Unit reference	Weight kg	
<b>Accessories for electrical blocks</b>					
LED suppressors	Electrical light blocks with integral LED	~ 120 V	25...120 VA	ZBZ VG	0.010
		~ 230 V	30...230 VA	ZBZ VM	0.010
Body/fixing collar Sold in lots of 10	Electrical blocks (contact or light)	–	ZB5 AZ009	0.006	

(1) A maximum of 3 electrical blocks can be fitted per associated head.

(2) For electrical blocks for printed circuit board connection: please consult your customer care centre.


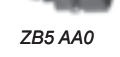

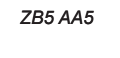


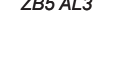



# Control stations and enclosures

Plastic control stations XAL D and XAL K

For Harmony® Ø 22 control and signalling units XB5

Stations for customer assembly: heads

2

Heads for spring return pushbuttons - unmarked					
Shape of head	Type of push	Colour of cap	Reference	Weight	kg
	Without cap (1)	–	ZB5 AA0	0.022	
	Flush, with set of 6 coloured caps	6 colours (2)	ZB5 AA9	0.027	
	Flush	White	ZB5 AA1	0.018	
		Black	ZB5 AA2	0.018	
		Green	ZB5 AA3	0.018	
		Red	ZB5 AA4	0.018	
		Yellow	ZB5 AA5	0.018	
		Blue	ZB5 AA6	0.018	
		Grey	ZB5 AA8	0.018	
	Flush with transparent cap, for insertion of legend (3)	White	ZB5 AA18	0.018	
		Green	ZB5 AA38	0.018	
		Red	ZB5 AA48	0.018	
		Yellow	ZB5 AA58	0.018	
		Blue	ZB5 AA68	0.018	
	Booted (coloured silicone) Can be replaced without dismantling the head	White	ZB5 AP1S	0.014	
		Black	ZB5 AP2S	0.014	
		Green	ZB5 AP3S	0.014	
		Red	ZB5 AP4S	0.014	
		Yellow	ZB5 AP5S	0.014	
		Blue	ZB5 AP6S	0.014	
	Projecting	White	ZB5 AL1	0.019	
		Black	ZB5 AL2	0.019	
		Green	ZB5 AL3	0.019	
		Red	ZB5 AL4	0.019	
		Yellow	ZB5 AL5	0.019	
		Blue	ZB5 AL6	0.019	
	Flush (high guard)	White	ZB5 AA14	0.020	
		Black	ZB5 AA24	0.020	
		Green	ZB5 AA34	0.020	
		Red	ZB5 AA44	0.020	
		Yellow	ZB5 AA54	0.020	
		Blue	ZB5 AA64	0.020	
	Recessed (high guard)	White	ZB5 AA16	0.019	
		Black	ZB5 AA26	0.019	
		Green	ZB5 AA36	0.019	
		Red	ZB5 AA46	0.019	
		Yellow	ZB5 AA56	0.019	
		Blue	ZB5 AA66	0.019	
	Flush	White	ZB5 CA1	0.019	
		Black	ZB5 CA2	0.019	
		Green	ZB5 CA3	0.019	
		Red	ZB5 CA4	0.019	
		Yellow	ZB5 CA5	0.019	
		Blue	ZB5 CA6	0.019	
	Projecting	White	ZB5 CL1	0.021	
		Black	ZB5 CL2	0.021	
		Green	ZB5 CL3	0.021	
		Red	ZB5 CL4	0.021	
		Yellow	ZB5 CL5	0.021	
		Blue	ZB5 CL6	0.021	

(1) Cap to be ordered separately, see page 2/27.

(2) Head supplied with 6 different coloured caps (white, black, green, red, yellow, blue).

(3) For legend ordering information, see page 2/26.

## Control stations and enclosures

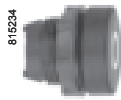
Plastic control stations XAL D and XAL K

For Harmony® Ø 22 control and signalling units XB5

Stations for customer assembly: heads



ZB5 AA331



ZB5 AA432



ZB5 AL232



ZB5 AC24



ZB5 AC2

## Heads for spring return pushbuttons - marked

Shape of head	Type of push	Marking		Colour of cap	Reference	Weight kg	
		Text	Colour				
	Flush (1)	I	White	Green	ZB5 AA331	0.018	
			Black	White	ZB5 AA131	0.018	
		II	White	Green	ZB5 AA336	0.018	
			Black	White	ZB5 AA136	0.018	
		START	White	Green	ZB5 AA333	0.018	
			Black	White	ZB5 AA133	0.018	
		ON	White	Green	ZB5 AA341	0.018	
			Black	White	ZB5 AA141	0.018	
		MARCHE	White	Green	ZB5 AA342	0.018	
			Black	White	ZB5 AA142	0.018	
			White	Black	ZB5 AA245	0.018	
			Black	White	ZB5 AA145	0.018	
		O	White	White	Red	ZB5 AA432	0.018
				Black	Black	ZB5 AA232	0.018
		ARRET	White	White	Red	ZB5 AA433	0.018
				Black	Black	ZB5 AA233	0.018
		STOP	White	White	Red	ZB5 AA434	0.018
				Black	Black	ZB5 AA234	0.018
		OFF	White	White	Red	ZB5 AA435	0.018
				Black	Black	ZB5 AA235	0.018
UP	Black	White	White	ZB5 AA343	0.018		
		Black	Black	ZB5 AA344	0.018		
DOWN	White	White	Black	ZB5 AA335	0.018		
		Black	White	ZB5 AA334	0.018		
	Projecting (1)	O	White	Red	ZB5 AL432	0.019	
			Black	Black	ZB5 AL232	0.019	
		ARRET	White	White	Red	ZB5 AL433	0.019
				Black	Black	ZB5 AL233	0.019
		STOP	White	White	Red	ZB5 AL434	0.019
				Black	Black	ZB5 AL234	0.019
		OFF	White	White	Red	ZB5 AL435	0.019
				Black	Black	ZB5 AL235	0.019
	Flush (1)	I	White	Green	ZB5 CA331	0.019	
		O	White	Red	ZB5 CA432	0.019	
		+	White	Black	ZB5 CA2934	0.019	
		↑	White	Black	ZB5 CA2912	0.019	
		R	White	Blue	ZB5 CA6939	0.019	

## Mushroom heads for spring return pushbuttons

Shape of head	Diameter of push mm	Colour of push	Reference	Weight kg
	30	Black	ZB5 AC24	0.027
		Green	ZB5 AC34	0.027
		Red	ZB5 AC44	0.027
		Yellow	ZB5 AC54	0.027
		Blue	ZB5 AC64	0.027
	40	Black	ZB5 AC2	0.046
		Green	ZB5 AC3	0.046
		Red	ZB5 AC4	0.046
		Yellow	ZB5 AC5	0.046
		Blue	ZB5 AC6	0.046

(1) Push supplied with cap not clipped-in, allowing orientation through 90° in 360° steps.

# Control stations and enclosures

Plastic control stations XAL D and XAL K

For Harmony® Ø 22 control and signalling units XB5

Stations for customer assembly: heads

2

## Mushroom heads for latching pushbuttons (Emergency stop: colour red)

Shape of head	Type of push	Diameter of push mm	Colour of push	Reference	Weight kg
 ZB5 AS844		40	Red	ZB5 AT84 (1)	0.050
		30	Red	ZB5 AS834 (1)	0.042
 ZB5 AS934		40	Red	ZB5 AS844 (1)	0.046
		30	Red	ZB5 AS934 (1) (4)	0.068
		40	Red	ZB5 AS944 (1)	0.071
		60	Red	ZB5 AS964 (1)	0.092
 ZB5 AT44		40	Red	ZB5 AS944D (1)	0.071
		30	Black	ZB5 AT24 (2)	0.044
		40	Red	ZB5 AT44 (2)	0.044
		40	Black	ZB5 AT2 (2)	0.049
		40	Red	ZB5 AT4 (2)	0.049
		30	Black	ZB5 AS42 (2)	0.040
		40	Red	ZB5 AS44 (2)	0.040
		40	Black	ZB5 AS52 (2)	0.044
 ZB5 AS54		30	Red	ZB5 AS54 (2)	0.044
		30	Black	ZB5 AS72 (2)	0.040
		30	Red	ZB5 AS74 (2)	0.040
		40	Black	ZB5 AS12 (2)	0.044
		40	Red	ZB5 AS14 (2) (3)	0.044
		40	Red	ZB5 AS14D (2)	0.044

(1) 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.

(2) Mushroom head switching off mechanical latching pushbuttons conform to standards IEC 60364-5-53 and EN/IEC 60947-5-5. Please consult your customer care centre for full details of these standards and directives.

(3) For specific keys with other numbers, please consult your customer care centre.

(4) Other key numbers:

- key n° 421E: add suffix **12** to the reference.

- key n° 458A: add suffix **10** to the reference.

- key n° 520E: add suffix **14** to the reference.

- key n° 3131A: add suffix **20** to the reference.

Example: The reference for a Ø 40 mushroom head for a trigger action latching pushbutton with release by key n° 421E becomes: **ZB5 AS94412**.



## Control stations and enclosures

Plastic control stations XAL D and XAL K

For Harmony® Ø 22 control and signalling units XB5

Stations for customer assembly: heads



ZB5 AD2

Heads for selector switches (1)				
Shape of head	Type of operator	Number and type of positions	Reference	Weight kg
	Standard handle, black	2 - stay put	ZB5 AD2	0.017
		2 - spring return from right to left	ZB5 AD4	0.020
		3 - stay put	ZB5 AD3	0.017
		3 - spring return to centre	ZB5 AD5	0.017
		3 - spring return from left to centre	ZB5 AD7	0.017
		3 - spring return from right to centre	ZB5 AD8	0.017
	Standard handle, white	2 - stay put	ZB5 AD201	0.017
		2 - spring return from right to left	ZB5 AD401	0.020
		3 - stay put	ZB5 AD301	0.017
		3 - spring return to centre	ZB5 AD501	0.017
		3 - spring return from left to centre	ZB5 AD701	0.017
		3 - spring return from right to centre	ZB5 AD801	0.017
	Standard handle, green	2 - stay put	ZB5 AD203	0.017
		2 - spring return from right to left	ZB5 AD403	0.020
		3 - stay put	ZB5 AD303	0.017
		3 - spring return to centre	ZB5 AD503	0.017
		3 - spring return from left to centre	ZB5 AD703	0.017
		3 - spring return from right to centre	ZB5 AD803	0.017

(1) Can only be used for actuation of end of row (side) mounted contacts.

# Control stations and enclosures

Plastic control stations XAL D and XAL K

For Harmony® Ø 22 control and signalling units XB5

Stations for customer assembly: heads



ZB5 AD●●●



**Heads for selector switches (1) (continued)**

Shape of head	Type of operator	Number and type of positions	Reference	Weight kg
	<b>Standard handle, red</b>	2 - stay put	<b>ZB5 AD204</b>	0.017
		2 - spring return from right to left	<b>ZB5 AD404</b>	0.020
		3 - stay put	<b>ZB5 AD304</b>	0.017
		3 - spring return to centre	<b>ZB5 AD504</b>	0.017
		3 - spring return from left to centre	<b>ZB5 AD704</b>	0.017
		3 - spring return from right to centre	<b>ZB5 AD804</b>	0.017
	<b>Standard handle, yellow</b>	2 - stay put	<b>ZB5 AD205</b>	0.017
		2 - spring return from right to left	<b>ZB5 AD405</b>	0.020
		3 - stay put	<b>ZB5 AD305</b>	0.017
		3 - spring return to centre	<b>ZB5 AD505</b>	0.017
		3 - spring return from left to centre	<b>ZB5 AD705</b>	0.017
		3 - spring return from right to centre	<b>ZB5 AD805</b>	0.017
	<b>Standard handle, blue</b>	2 - stay put	<b>ZB5 AD206</b>	0.017
		2 - spring return from right to left	<b>ZB5 AD406</b>	0.020
		3 - stay put	<b>ZB5 AD306</b>	0.017
		3 - spring return to centre	<b>ZB5 AD506</b>	0.017
		3 - spring return from left to centre	<b>ZB5 AD706</b>	0.017
		3 - spring return from right to centre	<b>ZB5 AD806</b>	0.017
	<b>Long handle, black</b>	2 - stay put	<b>ZB5 AJ2</b>	0.017
		2 - spring return from right to left	<b>ZB5 AJ4</b>	0.020
		3 - stay put	<b>ZB5 AJ3</b>	0.017
		3 - spring return to centre	<b>ZB5 AJ5</b>	0.017
		3 - spring return from left to centre	<b>ZB5 AJ7</b>	0.017
		3 - spring return from right to centre	<b>ZB5 AJ8</b>	0.017

(1) Can only be used for actuation of end of row (side) mounted contacts.

2



ZB5 AJ●

# Control stations and enclosures

Plastic control stations XAL D and XAL K

For Harmony® Ø 22 control and signalling units XB5

Stations for customer assembly: heads

## Heads for selector switches (1) (continued)



ZB5 AD39



Knurled knob, black

2 - stay put



ZB5 AD29

0.020

2 - spring return from right to left



ZB5 AD49

0.024

3 - stay put



ZB5 AD39

0.020

3 - spring return to centre



ZB5 AD59

0.020

3 - spring return from left to centre



ZB5 AD79

0.020

3 - spring return from right to centre



ZB5 AD89

0.020



ZB5 AG2



Key switch with key n° 455 (4)

2 - stay put



ZB5 AG2 (3)

0.057



ZB5 AG02 (3)

0.057



ZB5 AG4 (3)

0.057

2 - spring return from right to left



ZB5 AG6 (3)

0.061

3 - stay put



ZB5 AG0 (3)

0.057



ZB5 AG3 (3)

0.057



ZB5 AG5 (3)

0.057



ZB5 AG9 (3)

0.057



ZB5 AG09 (3)

0.057

3 - spring return from left to centre



ZB5 AG1 (3)

0.057

3 - spring return to centre



ZB5 AG7 (3)

0.057

3 - spring return from right to centre



ZB5 AG8 (3)

0.057



ZB5 AG08 (3)

0.057

(1) Can only be used for actuation of end of row (side) mounted contacts.

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

(3) Other key numbers:

- key n° 421E: add suffix 12 to the reference,
- key n° 458A: add suffix 10 to the reference,
- key n° 520E: add suffix 14 to the reference,
- key n° 3131A: add suffix 20 to the reference.

Example:

For a key switch head with key n° 421E, 2-position stay put with key withdrawal from the left-hand position, the reference becomes: **ZB5 AG212**.

(4) For specific keys with other numbers, please consult your customer care centre.




















## Control stations and enclosures

Plastic control stations XAL D and XAL K


For Harmony® Ø 22 control and signalling units XB5

Stations for customer assembly: heads

## Heads for selector switches (1) (continued)

Shape of head	Type of operator	Number and type of positions (2)		Reference	Weight kg
	Key switch with key n° 8D1	2 - stay put		ZB5 AG2D	0.057
				ZB5 AG02D	0.057
				ZB5 AG4D	0.057
		2 - spring return from right to left		ZB5 AG6D	0.061
		3 - stay put		ZB5 AG0D	0.057
				ZB5 AG3D	0.057
				ZB5 AG5D	0.057
				ZB5 AG9D	0.057
				ZB5 AG09D	0.057
				ZB5 AG03D	0.057
		3 - spring return from left to centre		ZB5 AG06D	0.057
				ZB5 AG1D	0.057
				ZB5 AG07D	0.057
		3 - spring return from right to centre		ZB5 AG8D	0.057
				ZB5 AG08D	0.057
				ZB5 AG05D	0.057
3 - spring return to centre		ZB5 AG7D	0.057		

## Heads for toggle switches

Shape of head	Description	Lever	Type of position	Reference	Weight kg
	2-position	Black	Stay put	ZB5 AD28	0.023
			Spring return	ZB5 AD48	0.023
		White	Stay put	ZB5 AD2801	0.023
			Stay put	ZB5 AD2804	0.023
			Stay put	ZB5 AD2806	0.023
			Stay put	ZB5 AD2806	0.023

(1) Can only be used for actuation of end of row (side) mounted contacts.

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

# Control stations and enclosures

Plastic control stations XAL D and XAL K

For Harmony® Ø 22 control and signalling units XB5

Stations for customer assembly: heads



Heads for pilot lights				
Shape of head	For use with body comprising light source type	Colour of lens	Reference	Weight kg
<b>With plain lens</b>				
	With integral LED <b>Protected LED</b>	White	ZB5 AV013	0.017
		Green	ZB5 AV033	0.017
		Red	ZB5 AV043	0.017
		Yellow	ZB5 AV053	0.017
		Blue	ZB5 AV063	0.017
	With integral LED <b>Protected LED</b>	White	ZB5 CV013	0.020
		Green	ZB5 CV033	0.020
		Red	ZB5 CV043	0.020
		Yellow	ZB5 CV053	0.020
		Blue	ZB5 CV063	0.020
		5 colours (1)	ZB5 CV003	0.028
<b>With plain lens, for insertion of legend (2)</b>				
	With integral LED <b>Protected LED</b>	White	ZB5 AV013E	0.017
		Green	ZB5 AV033E	0.017
		Red	ZB5 AV043E	0.017
		Yellow	ZB5 AV053E	0.017
		Blue	ZB5 AV063E	0.017
<b>With grooved lens (3)</b>				
	With integral LED <b>Protected LED</b>	White	ZB5 AV013S	0.017
		Green	ZB5 AV033S	0.017
		Red	ZB5 AV043S	0.017
		Yellow	ZB5 AV053S	0.017
		Blue	ZB5 AV063S	0.017



Heads for spring return illuminated pushbuttons				
Shape of head	Type of push	Colour	Reference	Weight kg
<b>Only for use with bodies comprising a light source with integral LED</b>				
	Flush, plain lens	White	ZB5 AW313	0.017
		Green	ZB5 AW333	0.017
		Red	ZB5 AW343	0.017
		Yellow	ZB5 AW353	0.017
		Blue	ZB5 AW363	0.017
	Flush, grooved lens (3)	White	ZB5 AW313S	0.016
		Green	ZB5 AW333S	0.016
		Red	ZB5 AW343S	0.016
		Yellow	ZB5 AW353S	0.016
		Blue	ZB5 AW363S	0.016
	Flush for insertion of legend (1)	White	ZB5 AA18	0.018
		Green	ZB5 AA38	0.018
		Red	ZB5 AA48	0.018
		Yellow	ZB5 AA58	0.018
		Blue	ZB5 AA68	0.018
	Projecting	White	ZB5 AW113	0.018
		Green	ZB5 AW133	0.018
		Red	ZB5 AW143	0.018
		Yellow	ZB5 AW153	0.018
		Blue	ZB5 AW163	0.018
	Flush for insertion of legend (1)	White	ZB5 CW313	0.023
		Green	ZB5 CW333	0.023
		Red	ZB5 CW343	0.023
		Yellow	ZB5 CW353	0.023
		Blue	ZB5 CW363	0.023

(1) Head supplied with 5 different coloured lenses (white, green, red, yellow, blue) for insertion of legend. For legend ordering information: see page 2/26.

(2) For legend ordering information: see page 2/26.

(3) For use in bright ambient light conditions (outdoors in sunlight, for example).

**Other versions** Heads for flush pushbuttons with illuminated ring. Please consult your customer care centre.


# Control stations and enclosures




Plastic control stations XAL D and XAL K

For Harmony® Ø 22 control and signalling units XB5

Stations for customer assembly: heads

2

Heads for illuminated selector switches with standard handle					
Shape of head	Number and type of positions	Colour of handle	Reference	Weight kg	
<b>Only for use with bodies comprising a light source with integral LED</b>					
  ZB5 AK1263   ZB5 AK1463   ZBY 4140	 <b>2 - stay put</b>		White	<b>ZB5 AK1213</b>	0.021
		Green	<b>ZB5 AK1233</b>	0.021	
		Red	<b>ZB5 AK1243</b>	0.021	
		Yellow	<b>ZB5 AK1253</b>	0.021	
		Blue	<b>ZB5 AK1263</b>	0.021	
	<b>2 - spring return from right to left</b>		White	<b>ZB5 AK1413</b>	0.021
			Green	<b>ZB5 AK1433</b>	0.021
			Red	<b>ZB5 AK1443</b>	0.021
			Yellow	<b>ZB5 AK1453</b>	0.021
			Blue	<b>ZB5 AK1463</b>	0.021
	<b>3 - stay put</b>		White	<b>ZB5 AK1313</b>	0.021
			Green	<b>ZB5 AK1333</b>	0.021
			Red	<b>ZB5 AK1343</b>	0.021
			Yellow	<b>ZB5 AK1353</b>	0.021
			Blue	<b>ZB5 AK1363</b>	0.021
<b>3 - spring return to centre</b>		White	<b>ZB5 AK1513</b>	0.021	
		Green	<b>ZB5 AK1533</b>	0.021	
		Red	<b>ZB5 AK1543</b>	0.021	
		Yellow	<b>ZB5 AK1553</b>	0.021	
		Blue	<b>ZB5 AK1563</b>	0.021	
<b>3 - spring return from right to centre</b>		White	<b>ZB5 AK1813</b>	0.021	
		Green	<b>ZB5 AK1833</b>	0.021	
		Red	<b>ZB5 AK1843</b>	0.021	
		Yellow	<b>ZB5 AK1853</b>	0.021	
		Blue	<b>ZB5 AK1863</b>	0.021	
<b>3 - spring return from left to centre</b>		White	<b>ZB5 AK1713</b>	0.021	
		Green	<b>ZB5 AK1733</b>	0.021	
		Red	<b>ZB5 AK1743</b>	0.021	
		Yellow	<b>ZB5 AK1753</b>	0.021	
		Blue	<b>ZB5 AK1763</b>	0.021	

Heads for Ø 40 illuminated, latching, mushroom head pushbuttons (1)					
Shape of head	Type of push	Colour of push	Reference	Weight kg	
<b>Only for use with bodies comprising a light source with integral LED</b>					
  ZB5 AW743	 <b>Turn to release</b>	White	<b>ZB5 AW713</b>	0.022	
		Green	<b>ZB5 AW733</b>	0.022	
		Red	<b>ZB5 AW743</b>	0.022	
		Yellow	<b>ZB5 AW753</b>	0.022	
		Blue	<b>ZB5 AW763</b>	0.022	

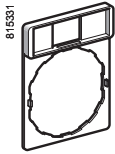
(1) Use electrical blocks type ZBE 10●, specifically designed for "mounting beneath heads", see page 2/13.

# Control stations and enclosures

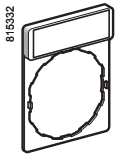
Plastic control stations XAL D and XAL K

For Harmony® Ø 22 control and signalling units XB5

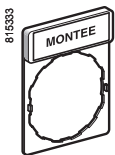
Stations for customer assembly: accessories



ZBZ 32



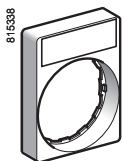
ZBY 101



ZBY 2107



ZBZ 34



ZBY H101

Standard (30 x 40 mm) legend holders for 8 x 27 mm legends (1)							
Description	Legend		Sold in lots of	Unit reference	Weight kg		
	Colour	Marking					
<b>Without legend</b>	–	–	10	ZBZ 32	0.001		
<b>With blank legend</b> (for engraving)	Black or red background	–	10	ZBY 2101	0.002		
	White or yellow background	–	10	ZBY 4101	0.002		
<b>With 8 x 27 mm legend</b> (with international marking)	Black or red background	O (black background)	1	ZBY 2146	0.002		
		O (red background)	1	ZBY 2931	0.002		
		I	1	ZBY 2147	0.002		
		II	1	ZBY 2148	0.002		
		O-I	1	ZBY 2178	0.002		
		I-II	1	ZBY 2179	0.002		
		I-O-II	1	ZBY 2186	0.002		
		AUTO	1	ZBY 2115	0.002		
		STOP	1	ZBY 2304	0.002		
			Yellow background	⊕	1	ZBY 4140 (2)	0.002
		<b>With 8 x 27 mm legend</b> (with French language marking)	Black or red background (3)	ARRET (red background)	1	ZBY 2104	0.002
				ARRET (black background)	1	ZBY 0104	0.002
				ARRET GENERAL	1	ZBY 2129	0.002
				ARRET REARMEMENT	1	ZBY 2133	0.002
				ARRET MARCHE	1	ZBY 2166	0.002
ARRIERE	1			ZBY 2106	0.002		
AUTO CYCLE-CYCLE	1			ZBY 2198	0.002		
AUTO CYCLE-MAIN	1			ZBY 2199	0.002		
AUTO-MAIN	1			ZBY 2164	0.002		
AUTO-O-MAIN	1			ZBY 2185	0.002		
AVANT	1			ZBY 2105	0.002		
AVANT-O-ARRIERE	1			ZBY 2184	0.002		
C-P-C NORMAL	1			ZBY 2165	0.002		
CYCLE-MAIN	1			ZBY 2197	0.002		
DECLenchement	1			ZBY 2132	0.002		
DEFAUT (black background)	1			ZBY 2134	0.002		
DEFAUT (red background)	1			ZBY 2135	0.002		
DEPART CYCLE	1			ZBY 2195	0.002		
DESCENTE	1			ZBY 2108	0.002		
DROITE	1			ZBY 2109	0.002		
ENclenchement	1			ZBY 2131	0.002		
EN SERVICE	1			ZBY 2111	0.002		
FERMETURE	1			ZBY 2114	0.002		
GAUCHE	1			ZBY 2110	0.002		
HORS SERVICE	1			ZBY 2112	0.002		
HORS-EN	1			ZBY 2167	0.002		
LENT	1			ZBY 2127	0.002		
MAIN	1			ZBY 2116	0.002		
MARCHE	1			ZBY 2103	0.002		
MONTEE	1			ZBY 2107	0.002		
Ouverture	1	ZBY 2113	0.002				
PHASE / PHASE	1	ZBY 2196	0.002				
REARMEMENT (red bckgrnd.)	1	ZBY 2123	0.002				
REARMEMENT (black bckgrnd.)	1	ZBY 0123	0.002				
Sous TENSION	1	ZBY 2126	0.002				
VITE	1	ZBY 2128	0.002				
Red background	ARRET D'URGENCE	1	ZBY 2130 (2)	0.002			

30 x 40 mm legend holders (flush mounting with bezel) for 8 x 27 mm legends					
Description	For use with	Colour	Sold in lots of	Unit reference	Weight kg
	Square heads	–	10	ZBC Z34	0.002
<b>With blank legend</b>	Circular heads	Black or red background	10	ZBY 2H101	0.004
		White or yellow background	10	ZBY 4H101	0.004
	Square heads	Black or red background	10	ZBC Y2H101	0.002
		White or yellow background	10	ZBC Y4H101	0.002

(1) Legends: see page 2/24.

(2) For complying with ISO 13850 standard, paragraph 4.4.6., Emergency Stop function logo ⊕ has been added.

(3) "Start" functions: white characters on black background. "Stop" functions: white characters on red background (unless otherwise stated above).

## Control stations and enclosures

Plastic control stations XAL D and XAL K

For Harmony® Ø 22 control and signalling units XB5

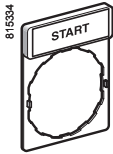
Stations for customer assembly: accessories

## Standard (30 x 40 mm) legend holders with 8 x 27 mm legend (continued)

Description	Legend		Reference	Weight kg		
	Colour	Marking				
With 8 x 27 mm legend (with English marking)	Black or red background (1)	AUTO-HAND	ZBY 2364	0.002		
		AUTO-O-HAND	ZBY 2385	0.002		
		CLOSE	ZBY 2314	0.002		
		DOWN	ZBY 2308	0.002		
		FAST	ZBY 2328	0.002		
		FORWARD	ZBY 2305	0.002		
		HAND	ZBY 2316	0.002		
		HAND-OFF-AUTO	ZBY 2387	0.002		
		INCH	ZBY 2321	0.002		
		LEFT	ZBY 2310	0.002		
		OFF	ZBY 2312	0.002		
		OFF-ON	ZBY 2367	0.002		
		ON	ZBY 2311	0.002		
		OPEN	ZBY 2313	0.002		
		POWER ON	ZBY 2326	0.002		
		RESET (red background)	ZBY 2323	0.002		
		RESET (black background)	ZBY 2322	0.002		
		REVERSE	ZBY 2306	0.002		
		RIGHT	ZBY 2309	0.002		
		RUN	ZBY 2334	0.002		
		SLOW	ZBY 2327	0.002		
		START	ZBY 2303	0.002		
		STOP-START	ZBY 2366	0.002		
		UP	ZBY 2307	0.002		
			Red background	EMERGENCY STOP	ZBY 2330 (2)	0.002
		With 8 x 27 mm legend (with German marking)	Black or red background (1)	AB	ZBY 2208	0.002
				AUF	ZBY 2207	0.002
AUS	ZBY 2204			0.002		
AUS-EIN	ZBY 2266			0.002		
AUS-IN BETRIEB	ZBY 2267			0.002		
AUS-RUCKSTELLUNG	ZBY 2233			0.002		
AUSSCHALTEN	ZBY 2232			0.002		
AUTO-HAND	ZBY 2364			0.002		
AUTO-O-HAND	ZBY 2385			0.002		
AUTOZYKL-HAND	ZBY 2299			0.002		
AUTOZYKL-1 ZYKL	ZBY 2298			0.002		
C-P-C-NORMAL	ZBY 2265			0.002		
EIN	ZBY 2203			0.002		
EINSCHALTEN	ZBY 2231			0.002		
HAND	ZBY 2316			0.002		
LANGSAM	ZBY 2227			0.002		
LINKS	ZBY 2210			0.002		
NOT-AUS (red background)	ZBY 2230			0.002		
ÖFFNEN	ZBY 2213			0.002		
RECHTS	ZBY 2209			0.002		
RUCKSTELLUNG	ZBY 2223			0.002		
SCHLIESSEN	ZBY 2214			0.002		
SCHNELL	ZBY 2228			0.002		
SPANNUNG EIN	ZBY 2226			0.002		
STEUERUNG AUS	ZBY 2212			0.002		
STEUERUNG EIN	ZBY 2211			0.002		
STORUNG (black background)	ZBY 2234			0.002		
STORUNG (red background)	ZBY 2235			0.002		
VOR	ZBY 2205			0.002		
VOR-O-ZURUCK	ZBY 2284			0.002		
ZURUCK	ZBY 2206			0.002		
ZYKLUS-HAND	ZBY 2297			0.002		
ZYKLUS-START	ZBY 2295			0.002		
	Red background			NOT-HALT	ZBY 2229 (2)	0.002
	Yellow background			NOT-HALT	ZBY 22420001 (2)	0.002

(1) "Start" functions: white characters on black background. "Stop" functions: white characters on red background (unless otherwise stated above).

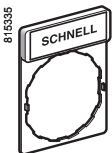
(2) For complying with ISO 13850 standard, paragraph 4.4.6., Emergency Stop function logo  has been added.



ZBY 2303



ZBY 0140



ZBY 2228



# Control stations and enclosures

Plastic control stations XAL D and XAL K

For Harmony® Ø 22 control and signalling units XB5

Stations for customer assembly: accessories

622036



ZAL Y4

Legends (30 x 42 mm) for engraving				
Description	Colour of background	Sold in lots of	Unit reference	Weight kg
Legends for engraving 2 lines of text	Black or red	10	ZAL Y2	0.001
	White or yellow	10	ZAL Y4	0.001

Legends (8 x 27 mm) for engraving				
For use with	Colour of background	Sold in lots of	Unit reference	Weight kg
30 x 40 mm legend holder	Black or red	10	ZBY 0101	0.001
	White or yellow	10	ZBY 0102	0.001
	Yellow	10	ZBY 0140 (1)	0.001

Sheets of 76 (8 x 27 mm) peel-off legends				
For use with	Supplied with	Sold in lots of	Unit reference	Weight kg
30 x 40 mm legend holders ZBZ 32 and ZBZ 34	Backing board and protective transparent cover	10	ZBY 4100	0.043

8 x 27 mm marked legends (for 30 x 40 mm legend holders ZBZ 32 and ZBZ 34)				
Language	Colour of background	Marking	Reference	Weight kg
International	Black or red (2)	O (black background)	ZBY 02146	0.001
		O (red background)	ZBY 02931	0.001
		I	ZBY 02147	0.001
		II	ZBY 02148	0.001
		O-I	ZBY 02178	0.001
		I-II	ZBY 02179	0.001
		I-O-II	ZBY 02186	0.001
		AUTO	ZBY 02115	0.001
		STOP	ZBY 02304	0.001
		French	Black or red (2)	ARRET (red background)
ARRET (black background)	ZBY 00104			0.001
ARRET GENERAL	ZBY 02129			0.001
ARRET REARMEMENT	ZBY 02133			0.001
ARRET-MARCHE	ZBY 02166			0.001
ARRIERE	ZBY 02106			0.001
AUTO CYCLE-CYCLE	ZBY 02198			0.001
AUTO CYCLE-MAIN	ZBY 02199			0.001
AUTO-MAIN	ZBY 02164			0.001
AUTO-O-MAIN	ZBY 02185			0.001
AVANT	ZBY 02105			0.001
AVANT-O-ARRIERE	ZBY 02184			0.001
C-P-C-NORMAL	ZBY 02165			0.001
CYCLE-MAIN	ZBY 02197			0.001
DECLenchement	ZBY 02132			0.001
DEFAULT (black background)	ZBY 02134			0.001
DEFAULT (red background)	ZBY 02135			0.001
DEPART CYCLE	ZBY 02195			0.001
DESCENTE	ZBY 02108			0.001
DROITE	ZBY 02109			0.001
ENCLenchement	ZBY 02131			0.001
EN SERVICE	ZBY 02111			0.001
FERMETURE	ZBY 02114			0.001
GAUCHE	ZBY 02110			0.001
HORS SERVICE	ZBY 02112			0.001
HORS-EN	ZBY 02167			0.001
LENT	ZBY 02127			0.001
MAIN	ZBY 02116			0.001
MARCHE	ZBY 02103			0.001
MONTEE	ZBY 02107			0.001
Ouverture	ZBY 02113	0.001		
PHASE / PHASE	ZBY 02196	0.001		
REARMEMENT (red background)	ZBY 02123	0.001		
REARMEMENT (black background)	ZBY 00123	0.001		
SOUS TENSION	ZBY 02126	0.001		
VITE	ZBY 02128	0.001		
Red	ARRET D'URGENCE	ZBY 02130 (1)	0.001	

815339



ZBY 02178

815340



ZBY 0●104



(1) For complying with ISO 13850 standard, paragraph 4.4.6., Emergency Stop function logo has been added.

(2) "Start" functions: white characters on black background. "Stop" functions: white characters on red background (unless otherwise stated above).

## Control stations and enclosures

Plastic control stations XAL D and XAL K

For Harmony® Ø 22 control and signalling units XB5

Stations for customer assembly: accessories

## 8 x 27 mm marked legends (for 30 x 40 mm legend holders ZBZ 32 and ZBZ 34) (continued)

Language	Colour of background	Marking	Reference	Weight kg
English	Black or red (1)	AUTO-HAND	ZBY 02364	0.001
		AUTO-O-HAND	ZBY 02385	0.001
		CLOSE	ZBY 02314	0.001
		DOWN	ZBY 02308	0.001
		FAST	ZBY 02328	0.001
		FORWARD	ZBY 02305	0.001
		HAND	ZBY 02316	0.001
		HAND-OFF-AUTO	ZBY 02387	0.001
		INCH	ZBY 02321	0.001
		LEFT	ZBY 02310	0.001
		OFF	ZBY 02312	0.001
		OFF-ON	ZBY 02367	0.001
		ON	ZBY 02311	0.001
		OPEN	ZBY 02313	0.001
		POWER ON	ZBY 02326	0.001
		RESET (red background)	ZBY 02323	0.001
		RESET (black background)	ZBY 02322	0.001
		REVERSE	ZBY 02306	0.001
		RIGHT	ZBY 02309	0.001
		RUN	ZBY 02334	0.001
		SLOW	ZBY 02327	0.001
		START	ZBY 02303	0.001
		STOP-START	ZBY 02366	0.001
UP	ZBY 02307	0.001		
	Red	EMERGENCY STOP	ZBY 02330 (2)	0.001
German	Black or red (1)	AB	ZBY 02208	0.001
		AUF	ZBY 02207	0.001
		AUS	ZBY 02204	0.001
		AUS-EIN	ZBY 02266	0.001
		AUS-IN BETRIEB	ZBY 02267	0.001
		AUS-RUCKSTELLUNG	ZBY 02233	0.001
		AUSSCHALLEN	ZBY 02232	0.001
		AUTO-HAND	ZBY 02364	0.001
		AUTO-O-HAND	ZBY 02385	0.001
		AUTOZYKL-HAND	ZBY 02299	0.001
		AUTOZYKL- 1 ZYKL	ZBY 02298	0.001
		C-P-C-NORMAL	ZBY 02265	0.001
		EIN	ZBY 02203	0.001
		EINSCHALTEN	ZBY 02231	0.001
		HAND	ZBY 02316	0.001
		LANGSAM	ZBY 02227	0.001
		LINKS	ZBY 02210	0.001
		NOT-AUS (red background)	ZBY 02230	0.001
		ÖFFNEN	ZBY 02213	0.001
		RECHTS	ZBY 02209	0.001
		RUCKSTELLUNG	ZBY 02223	0.001
		SCHLIESSEN	ZBY 02214	0.001
		SCHNELL	ZBY 02228	0.001
		SPANNUNG EIN	ZBY 02226	0.001
		STEUERUNG AUS	ZBY 02212	0.001
		STEUERUNG EIN	ZBY 02211	0.001
		STORUNG (black background)	ZBY 02234	0.001
		STORUNG (red background)	ZBY 02235	0.001
		VOR	ZBY 02205	0.001
		VOR-O-ZURUCK	ZBY 02284	0.001
		ZURUCK	ZBY 02206	0.001
		ZYKLUS-HAND	ZBY 02297	0.001
		ZYKLUS-START	ZBY 02295	0.001
	Red	NOT-HALT	ZBY 02229 (2)	0.001
	Yellow	NOT-HALT	ZBY 022420001 (2)	0.001

815341

START

ZBY 02303

2

815342

SCHNELL

ZBY 02228



XBY 2U

(1) "Start" functions: white characters on black background. "Stop" functions: white characters on red background (unless otherwise stated above).

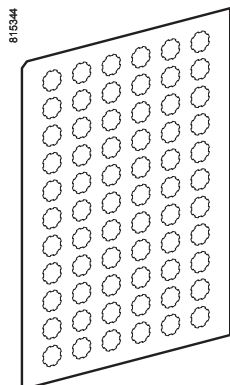
(2) For complying with ISO 13850 standard, paragraph 4.4.6., Emergency Stop function logo  has been added.

## Control stations and enclosures

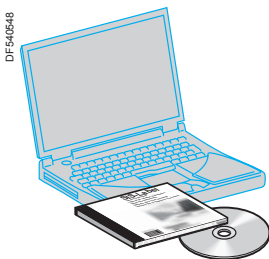
Plastic control stations XAL D and XAL K

For Harmony® Ø 22 control and signalling units XB5

Stations for customer assembly: accessories



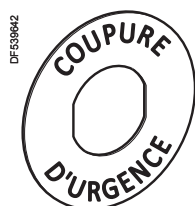
ZBY 1●●●



ZBY 2U



ZBY 9130



ZBY 9160

## Legends for pushbuttons, switches and pilot lights XB5 A

Description	Marking	Sold in lots of	Unit reference	Weight kg	
Sheets of 66 circular peel-off transparent self-adhesive legends	Without	10	ZBY 1101	0.017	
	International	O	10	ZBY 1146	0.017
		I	10	ZBY 1147	0.017
		II	10	ZBY 1148	0.017
		III	10	ZBY 1149	0.017
		AUTO	10	ZBY 1115	0.017
		STOP	10	ZBY 1304	0.017
		↑	10	ZBY 1912	0.017
		French	ARRET	10	ZBY 1104
	ARRIERE		10	ZBY 1106	0.017
	AVANT		10	ZBY 1105	0.017
	AUTO		10	ZBY 1115	0.017
	DESCENTE		10	ZBY 1108	0.017
	MAIN		10	ZBY 1116	0.017
	MARCHE		10	ZBY 1103	0.017
	MONTEE		10	ZBY 1107	0.017
	English	HAND	10	ZBY 1316	0.017
		OFF	10	ZBY 1312	0.017
		ON	10	ZBY 1311	0.017
		START	10	ZBY 1303	0.017
German	AB	10	ZBY 1208	0.017	
	AUF	10	ZBY 1207	0.017	
	AUS	10	ZBY 1204	0.017	
	EIN	10	ZBY 1203	0.017	
	ZU	10	ZBY 1214	0.017	
Strip of 66 square peel-off transparent self-adhesive legends	Without	10	ZBC Y1101	0.017	

## "SIS Label" labelling software (for legend sheets ZBY 1101, ZBY 4100 and ZBC Y1101)

Application	Reference	Weight kg
Legend design for English, French, German, Italian and Spanish	ZBY 2U	0.100


## Circular yellow legends for mushroom head pushbuttons

## Used for "Emergency stop" function (1)

Diameter mm	Conforming to standards	Marking on yellow background	Reference	Weight kg
60	EN/IEC 60204-1 and EN/ISO 13850	–	ZBY 9140	0.004
		ARRET D'URGENCE	ZBY 9130	0.004
		EMERGENCY STOP	ZBY 9330	0.004
		NOT-HALT	ZBY 9230	0.004
		PARADA DE EMERGENCIA	ZBY 9430	0.004
		ARRESTO DE EMERGENZA	ZBY 9630	0.004
		90	EN/IEC 60204-1 and EN/ISO 13850	–
ARRET D'URGENCE	ZBY 8130			0.008
EMERGENCY STOP	ZBY 8330			0.008
NOT-HALT	ZBY 8230			0.008
PARADA DE EMERGENCIA	ZBY 8430			0.008
ARRESTO DE EMERGENZA	ZBY 8630			0.008

## Used for "Emergency switching off" function

60	EN/IEC 60204-1	–	ZBY 9101	0.004
		COUPURE D'URGENCE	ZBY 9160	0.004
		EMERGENCY SWITCHING OFF	ZBY 9360	0.004
		NOT-AUS	ZBY 9260	0.004
		DESCONEXION DE EMERGENCIA	ZBY 9460	0.004
		INTERRUZIONE DI EMERGENZA	ZBY 9660	0.004
90	EN/IEC 60204-1	–	ZBY 8101	0.008
		COUPURE D'URGENCE	ZBY 8160	0.008
		EMERGENCY SWITCHING OFF	ZBY 8360	0.008
		NOT-AUS	ZBY 8260	0.008
		DESCONEXION DE EMERGENCIA	ZBY 8460	0.008
		INTERRUZIONE DI EMERGENZA	ZBY 8660	0.008

(1) For complying with ISO 13850 standard, paragraph 4.4.6., Emergency Stop function logo  has been added.

# Control stations and enclosures

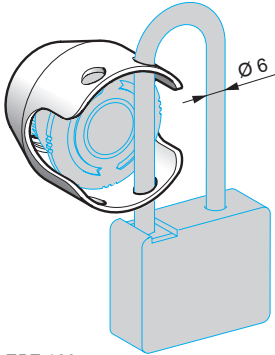
Plastic control stations XAL D and XAL K

For Harmony® Ø 22 control and signalling units XB5

Stations for customer assembly: accessories

2

815197



ZBZ 160●

815347



ZBA ●

815348



ZBL ●

815349



ZBA 333

## Metal guards (1)

Description	For use with	Colour	Reference	Weight kg
<b>Metal guards</b> Padlockable	Emergency stop function only with the following Ø 40 trigger action pushbuttons: XB5 AT8●, XB5 AS8●, XB5 AS9●, ZB5 AT8●, ZB5 AS8●, ZB5 AS9●.	Chromium plated	<b>ZBZ 1600</b>	0.046
		Black	<b>ZBZ 1602</b>	0.046
		Red	<b>ZBZ 1604</b>	0.046
		Blue	<b>ZBZ 1605</b>	0.046

## Pushbutton caps - unmarked

For use with	Cap Type	Colour	Sold in lots of	Unit reference	Weight kg	
<b>Circular pushbutton heads</b> ZB5 AA supplied without cap	Flush	White	10	<b>ZBA 1</b>	0.001	
		Black	10	<b>ZBA 2</b>	0.001	
		Green	10	<b>ZBA 3</b>	0.001	
		Red	10	<b>ZBA 4</b>	0.001	
		Yellow	10	<b>ZBA 5</b>	0.001	
		Blue	10	<b>ZBA 6</b>	0.001	
		6 colours (2)	1	<b>ZBA 9</b>	0.006	
		Projecting	White	10	<b>ZBL 1</b>	0.001
			Black	10	<b>ZBL 2</b>	0.001
	Green		10	<b>ZBL 3</b>	0.001	
	Red		10	<b>ZBL 4</b>	0.001	
	Yellow		10	<b>ZBL 5</b>	0.001	
	Blue		10	<b>ZBL 6</b>	0.001	
	6 colours (2)		1	<b>ZBL 9</b>	0.006	

## Pushbutton caps - marked (3) (sold in lots of 10)

For use with	Type of push	Marking		Colour of cap	Unit reference	Weight kg
		Text	Colour			
<b>Circular pushbutton heads</b> ZB5 AA supplied without cap	Flush	I	White	Green	<b>ZBA 331</b>	0.001
			Black	White	<b>ZBA 131</b>	0.001
		II	White	Green	<b>ZBA 336</b>	0.001
			Black	White	<b>ZBA 136</b>	0.001
		III	White	Green	<b>ZBA 337</b>	0.001
			Black	White	<b>ZBA 137</b>	0.001
		IV	White	Green	<b>ZBA 338</b>	0.001
			Black	White	<b>ZBA 138</b>	0.001
		START	White	Green	<b>ZBA 333</b>	0.001
			Black	White	<b>ZBA 133</b>	0.001
		ON	White	Green	<b>ZBA 341</b>	0.001
			Black	White	<b>ZBA 141</b>	0.001
		MARCHE	White	Green	<b>ZBA 342</b>	0.001
			Black	White	<b>ZBA 142</b>	0.001
		⊕	White	Black	<b>ZBA 245</b>	0.001
			Black	White	<b>ZBA 145</b>	0.001
		UP	Black	White	<b>ZBA 343</b>	0.001
		DOWN	White	Black	<b>ZBA 344</b>	0.001
		↑	White	Black	<b>ZBA 335</b>	0.001
			Black	White	<b>ZBA 334</b>	0.001
		O	White	Red	<b>ZBA 432</b>	0.001
				Black	<b>ZBA 232</b>	0.001
		ARRET	White	Red	<b>ZBA 433</b>	0.001
				Black	<b>ZBA 233</b>	0.001
		STOP	White	Red	<b>ZBA 434</b>	0.001
				Black	<b>ZBA 234</b>	0.001
		OFF	White	Red	<b>ZBA 435</b>	0.001
				Black	<b>ZBA 235</b>	0.001
		⚠	White	Green	<b>ZBA 346</b>	0.001
		R	White	Blue	<b>ZBA 639</b>	0.001
		+	White	Black	<b>ZBA 2934</b>	0.001
		-	White	Black	<b>ZBA 2935</b>	0.001

(1) These guards can be used in conjunction with a legend holder, but only those for mounting directly beneath the head. See page 2/13.

(2) Set of 6 different coloured caps: white, black, green, red, yellow, blue.

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

# Control stations and enclosures

Plastic control stations XAL D and XAL K

For Harmony® Ø 22 control and signalling units XB5

Stations for customer assembly: accessories



ZB2 BP01●



ZBV 01●3

## Coloured boots

For use with	Colour	Sold in lots of	Unit reference	Weight kg
Coloured boots (can be replaced without dismantling the head)	Black	10	ZB2 BP012	0.003
	Green	10	ZB2 BP013	0.003
	Red	10	ZB2 BP014	0.003
	Yellow	10	ZB2 BP015	0.003
	Blue	10	ZB2 BP016	0.003

## Lens caps

### Circular lens caps for light sources with integral LED

Pilot lights	White	10	ZBV 0113	0.002
	Green	10	ZBV 0133	0.002
	Red	10	ZBV 0143	0.002
	Yellow	10	ZBV 0153	0.002
	Blue	10	ZBV 0163	0.002
	5 different coloured grooved lenses (1)	1	ZBV 0103S	0.010
Illuminated pushbuttons, with flush push	White	10	ZBW 9113	0.002
	Green	10	ZBW 9133	0.002
	Red	10	ZBW 9143	0.002
	Yellow	10	ZBW 9153	0.002
	Blue	10	ZBW 9163	0.002
Illuminated pushbuttons, with projecting push	White	10	ZBW 9313	0.002
	Green	10	ZBW 9333	0.002
	Red	10	ZBW 9343	0.002
	Yellow	10	ZBW 9353	0.002
	Blue	10	ZBW 9363	0.002

### Square lens caps for light sources with integral LED

Pilot lights	White	10	ZBC V0113	0.002
	Green	10	ZBC V0133	0.002
	Red	10	ZBC V0143	0.002
	Yellow	10	ZBC V0153	0.002
	Blue	10	ZBC V0163	0.002
Illuminated pushbuttons, with flush push	White	10	ZBC W9113	0.002
	Green	10	ZBC W9133	0.002
	Red	10	ZBC W9143	0.002
	Yellow	10	ZBC W9153	0.002
Illuminated pushbuttons, with projecting push	White	10	ZBC W9313	0.002
	Green	10	ZBC W9333	0.002
	Red	10	ZBC W9343	0.002
	Yellow	10	ZBC W9353	0.002
	Blue	10	ZBC W9363	0.002

## Replacement keys for Emergency stop key release heads and key switches

Description	Key number	Reference	Weight kg
Set of 2 keys	455	ZBG 455	0.013
	421E	ZBG 421E	0.014
	458A	ZBG 458A	0.014
	520E	ZBG 520E	0.014
	3131A	ZBG 3131A	0.014
	4A185	ZBD A185	0.014
	LU1	ZBD LU1	0.014
	LU2	ZBD LU2	0.014
	LU3	ZBD LU3	0.014
	LU4	ZBD LU4	0.014
	LU5	ZBD LU5	0.014
	LU6	ZBD LU6	0.014
	LU7	ZBD LU7	0.014
	LU8	ZBD LU8	0.014
	LU9	ZBD LU9	0.014
	LU10	ZBD LU10	0.014
LU11	ZBD LU11	0.014	
LU12	ZBD LU12	0.014	
LU13	ZBD LU13	0.014	
LU14	ZBD LU14	0.014	
8D1	ZBD 8D1	0.014	

(1) Set of 5 different coloured lenses: white, green, red, yellow and blue.



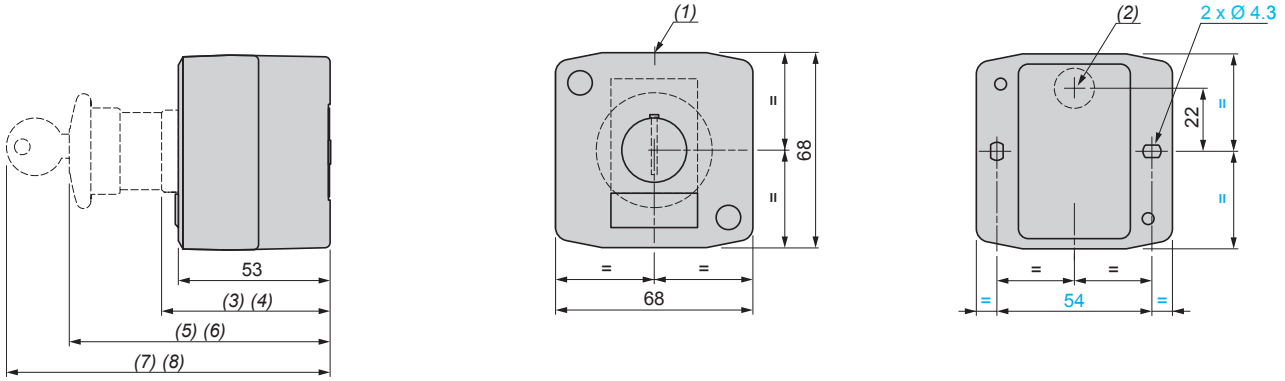
ZBG 455



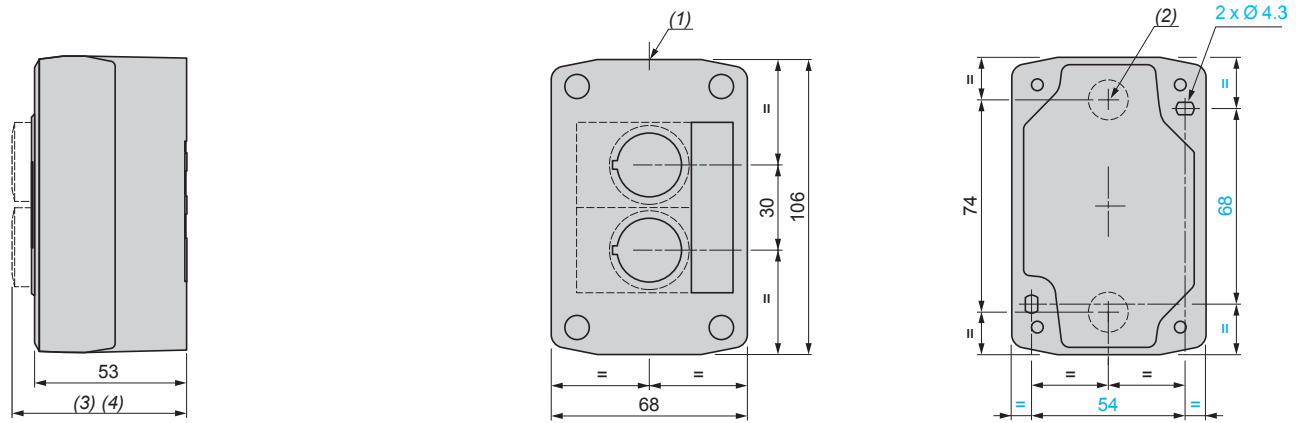
ZBD LU1

## Dimensions

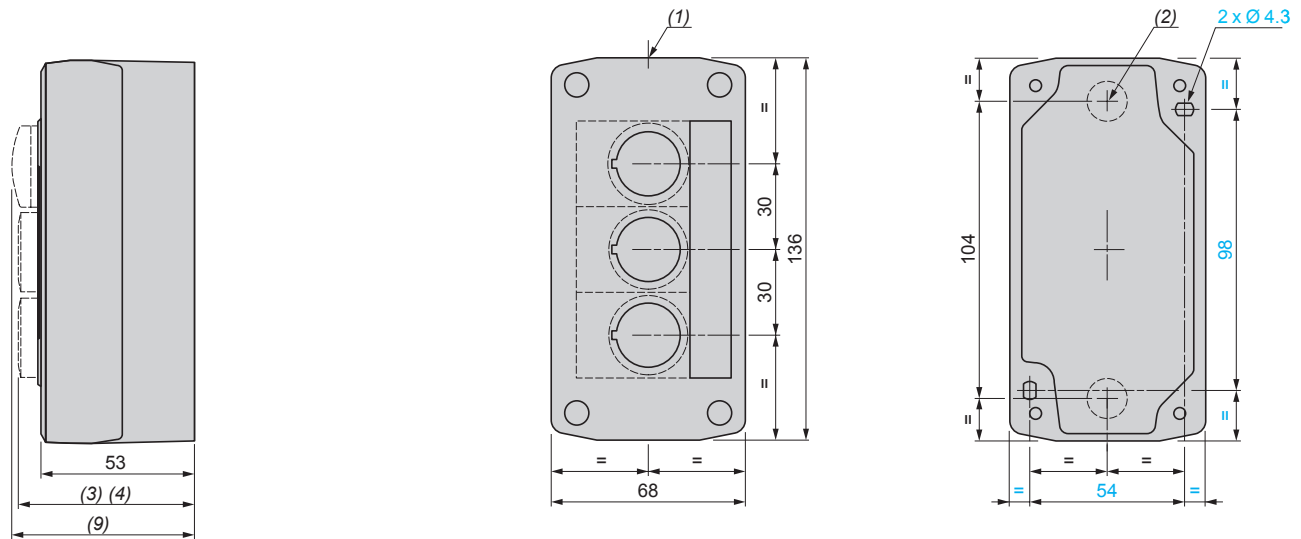
### Single-way control stations XAL



### 2-way control stations XAL



### 3-way control stations XAL



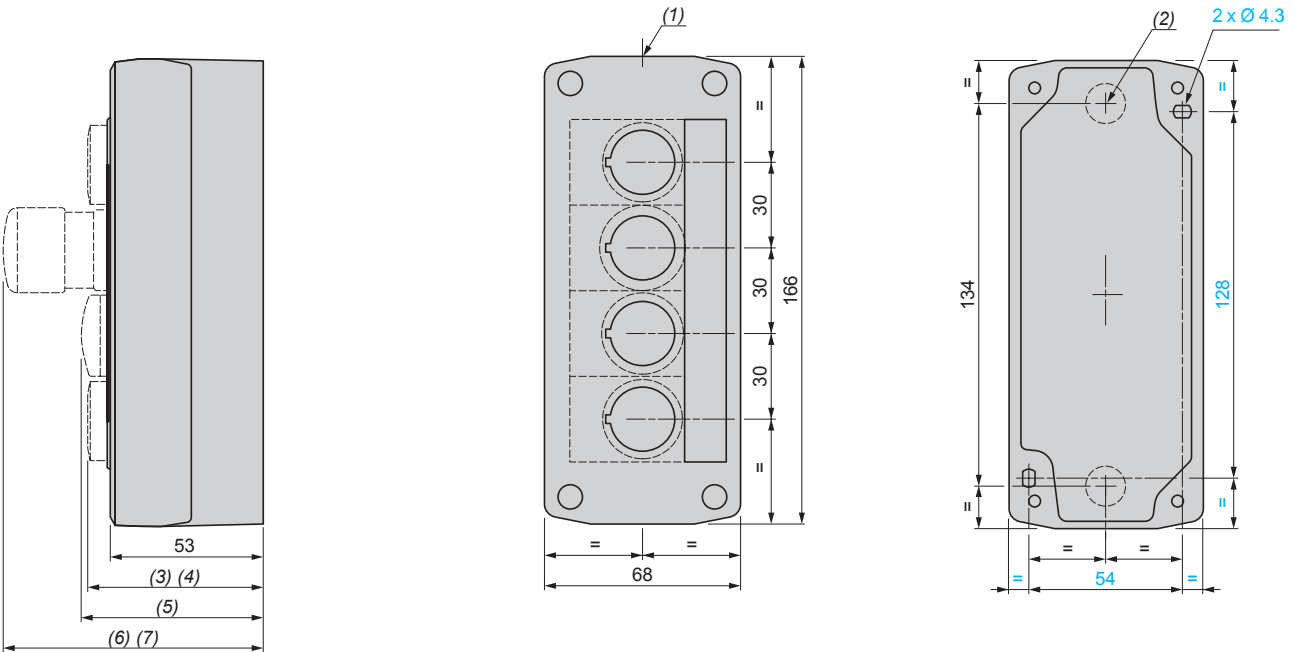
- (1) 2 knock-outs for Pg 13.5 cable gland, maximum capacity 12 mm.
- (2) Knock-out for cable entry, maximum capacity 14 mm.

#### Examples

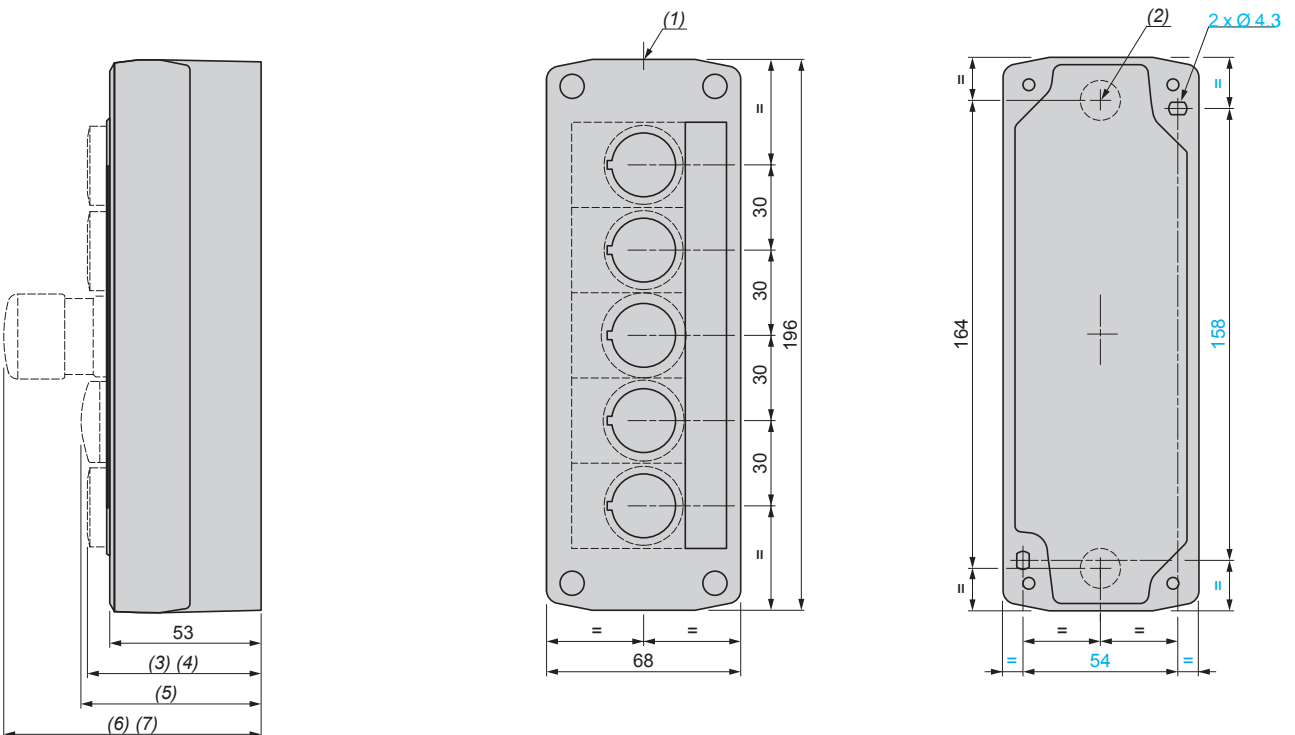
- (3) 62 mm for flush pushbuttons.
- (4) 66 mm for projecting pushbuttons.
- (5) 91 mm for latching mushroom head Emergency stop pushbuttons.
- (6) 82.5 mm for key switches.
- (7) 115 mm for latching mushroom head Emergency stop pushbuttons with key release.
- (8) 105.5 mm for key switches with key inserted.
- (9) 64 mm for pilot lights.

**Dimensions (continued)**

**4-way control stations XAL**



**5-way control stations XAL**



- (1) 2 knock-outs for Pg 13.5 cable gland, maximum capacity 12 mm.
- (2) Knock-out for cable entry, maximum capacity 14 mm.

- Examples**
- (3) 62 mm for flush pushbuttons.
  - (4) 66 mm for projecting pushbuttons.
  - (5) 64 mm for pilot lights.
  - (6) 91.5 mm for mushroom head pushbuttons.
  - (7) 80 mm for selector switches.



# Control stations and enclosures

## Plastic control stations XAL G for severe environments

With cut-outs for Ø 22 control and signalling units XB5

### Presentation

■ Plastic control stations XAL G are designed for use in severe environments (dirty, dusty or humid atmospheres). They ensure an increased degree of protection (IP 66, IP 69K) against the penetration of solid bodies and liquids and a high level of protection against heat and chemical products (acids, solvents, oils, alkaline substances).

■ The empty control stations XAL G are available with one, two, three, four or five Ø 22 mm cut-outs for the fitting of any of the catalogue listed Harmony control and signalling units type XB5.

■ Control stations XAL G comprise a lid and a base, with four captive stainless steel screws securing the lid.

□ The XB5 control and signalling units are mounted on the lid and secured by the head of the unit.

□ The electrical blocks of the XB5 units are mounted directly beneath the heads using a body/fixing collar (station method).

□ An anti-rotation plate is not required when mounting selector/key switches or Emergency stop mushroom heads: a notch incorporated in each cut-out fulfils this function.

□ The use of booted heads is recommended when using the station in severe environments.

■ The smooth and uniform surface of the lids simplifies cleaning of the installed control station.

■ Self-adhesive legends, with or without marking, specifically for use with these control stations are available as an accessory. They are resistant to high pressure cleaning and to heat.

### Environment

<b>Protective treatment</b>	Standard version		"TC" and "TH"	
<b>Ambient air temperature</b> (around the device)	For storage	°C	- 40... + 70	
	For operation	°C	- 25... + 70	
<b>Electric shock protection</b>	Conforming to IEC 61140		Class II	
<b>Degree of protection</b>	Conforming to IEC 60529		IP 66, IP 69K	
<b>High pressure cleaning resistance</b>		Bar	100 at 0.2 m and 80 °C	
<b>Mechanical shock protection</b> (empty control stations)	Conforming to EN 50102		IK 05	
<b>Conformity to standards</b>			EN/IEC 60947-1, EN/IEC 60947-5-1	
<b>Material</b>			Lid and base: mineral reinforced polyamide	
<b>Colour</b>			Lid and base: black "RAL 9005"	
<b>Cable entries</b>			Two ISO 20 open entries (1)	
<b>Resistance to chemical products</b>		Results	Test conditions	
			Concentration (%)	Temperature (°C)
+ : good resistance	Acetic acid	O	10	–
O: limited resistance	Acetone	+	–	–
- : no resistance	Ammonia	+	–	–
	Benzene	+	–	–
	Boric acid	O	–	–
	Butter	+	–	–
	Citric acid	+	10	–
	Cutting compounds	+	–	–
	Ethane	+	–	–
	Ethanol	+	–	–
	Ethylene	+	–	–
	Fatty acids	+	–	–
	Fatty alcohols	+	–	–
	Formic acid	-	10	50
	Hydrogen peroxide	-	30	–
	Lactic acid	+	–	10
	Lactic acid	-	–	90
	Milk	+	–	–
	Motor oils and greases	+	–	–
	Nitric acid	-	2	–
	Oils (vegetable, mineral)	+	–	–
	Petroleum	+	–	–
	Uric acid	+	20	–
	Detergent	+	max.	60

(1) One ISO 20 cable entry blanking plug included with control station enclosures XAL G.



# Control stations and enclosures

Plastic control stations XAL G for severe environments

With cut-outs for Ø 22 control and signalling units XB5



XAL G01



XAL G02



XAL G03



XAL G04



XAL G05

## References

### Control stations XAL G for severe environments

Description	Number of Ø 22 cut-outs	Reference	Weight kg
Black "RAL 9005" lid and base	1	XAL G01	0.226
	2	XAL G02	0.280
	3	XAL G03	0.333
	4	XAL G04	0.331
	5	XAL G05	0.382

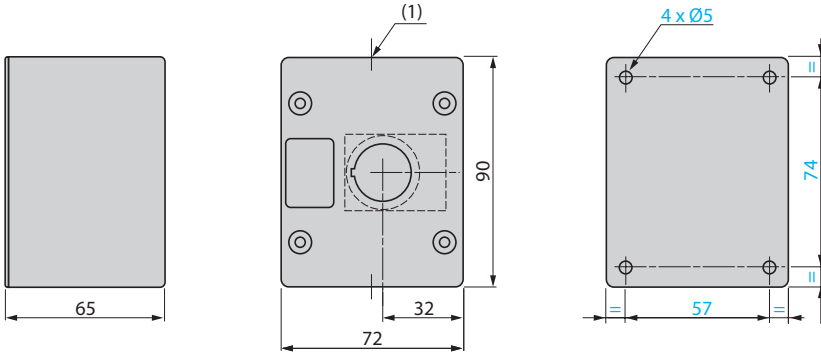
### Self-adhesive legends (19 x 27 mm) for control stations XAL G

Description	Marking	Sold in lots of	Unit reference	Weight kg
Blank legend (colour: grey)	–	10	ZBY D06102	0.001
Legends with marking (black marking on grey background)	O	1	ZBY D06146	0.001
	I	1	ZBY D06147	0.001
	O I	1	ZBY D06178	0.001
	EIN	1	ZBY D06203	0.001
	AUS	1	ZBY D06204	0.001
	AUF	1	ZBY D06207	0.001
	AB	1	ZBY D06208	0.001
	AUS EIN	1	ZBY D06266	0.001
	START	1	ZBY D06303	0.001
	STOP	1	ZBY D06304	0.001
	ON	1	ZBY D06311	0.001
	POWER ON	1	ZBY D06326	0.001
	HAND AUTO	1	ZBY D06364	0.001
OFF ON	1	ZBY D06367	0.001	

**Other versions** New control stations with 40 mm between 2 holes. Available 3<sup>rd</sup> quarter of 2011

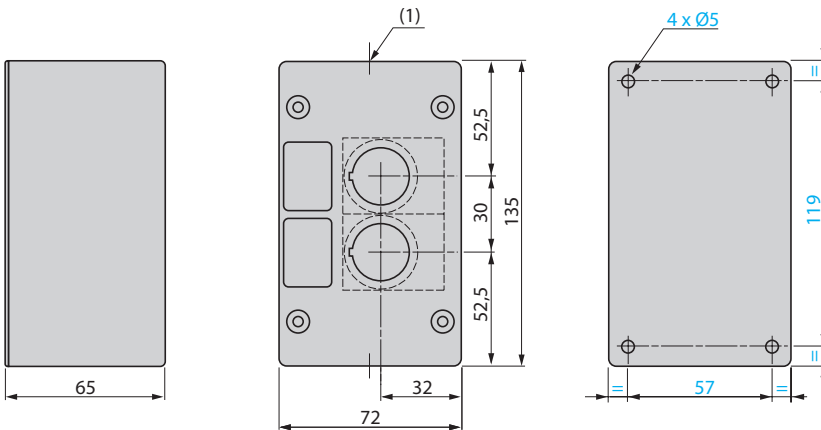
**Dimensions**

**XAL G01**



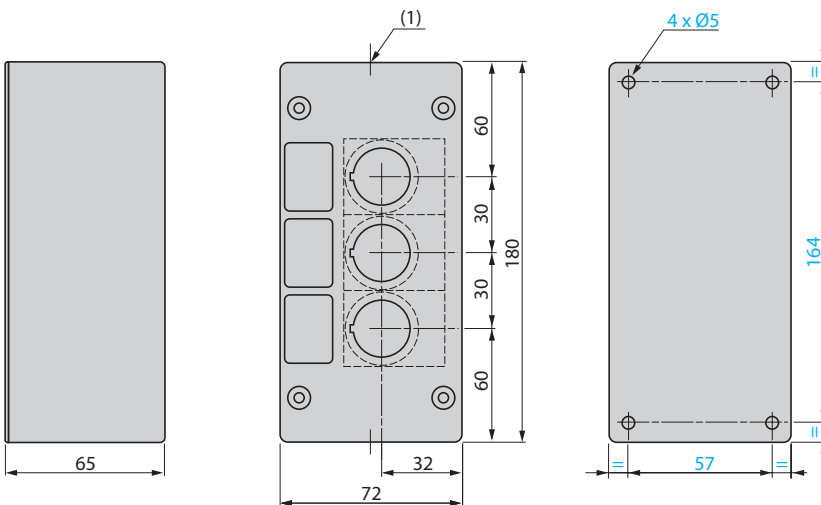
(1) 2 ISO 20 cable entries.

**XAL G02**



(1) 2 ISO 20 cable entries.

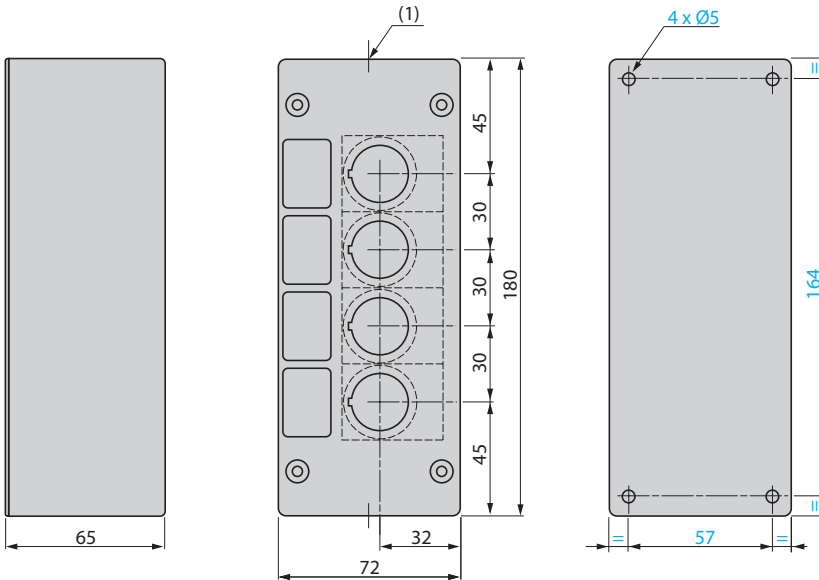
**XAL G03**



(1) 2 ISO 20 cable entries.

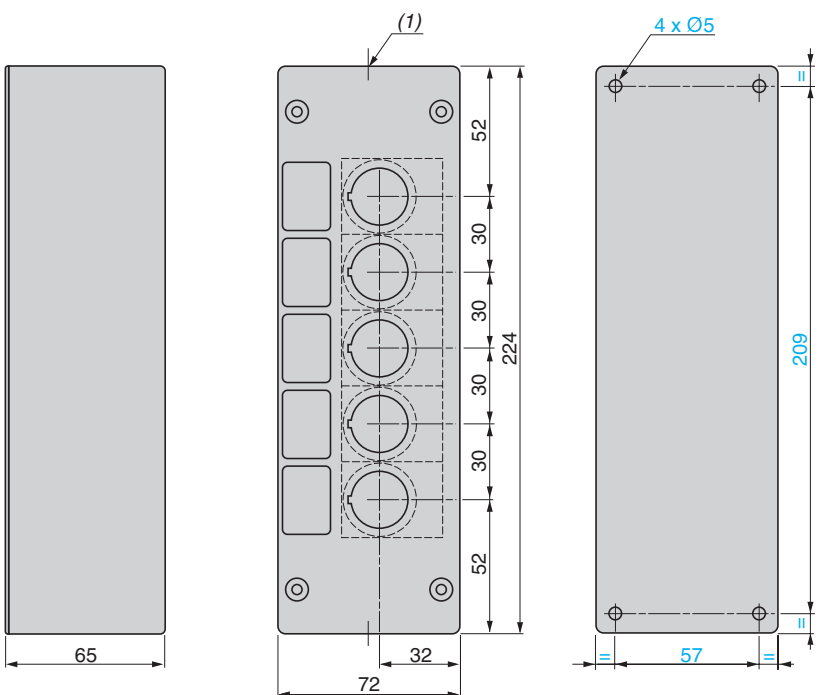
## Dimensions

### XAL G04



(1) 2 ISO 20 cable entries.

### XAL G05



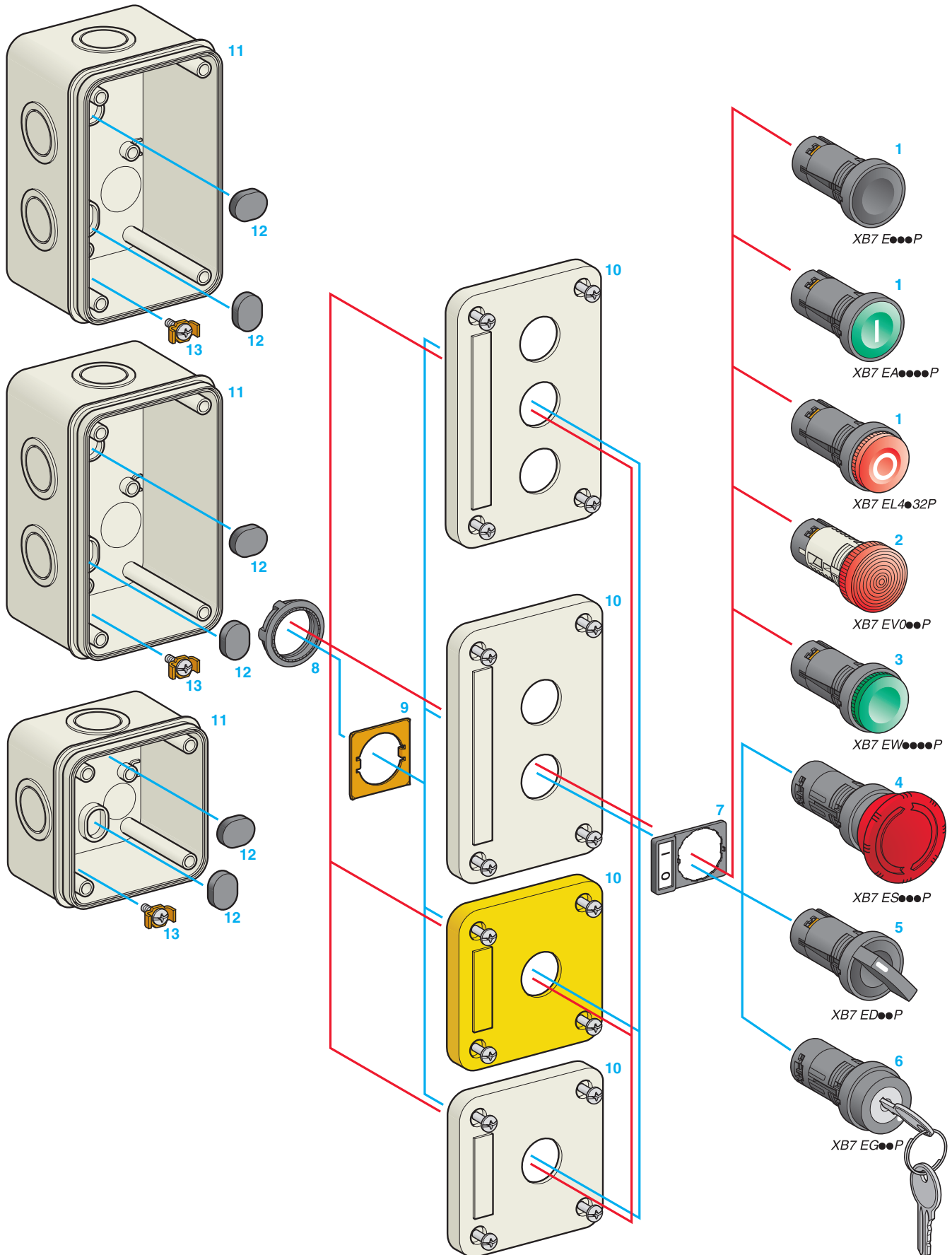
(1) 2 ISO 20 cable entries.

# Control stations and enclosures

Plastic control stations XAL E

For Harmony® Ø 22 control and signalling units XB7

2



## Presentation

Control stations XAL E are designed for various applications and predetermined requirements.

- In buildings, they control garage doors, rolling shutters or smoke extraction vents.
- In the tertiary sector, they are fitted to simple machines and small lifting systems.
- In the industrial sector, they are fitted to small machines with 2 or 3 actuators or mass production machines (packaging, materials handling, machine tools, etc.).

Control stations XAL E are available as complete products or as empty enclosures.

### Complete stations

- The complete XAL E control stations are supplied fitted with one, two or three Ø 22 mm control and signalling units from the Harmony® XB7 range (1).
- The fitted control stations are ready to use. Electrical connections to the mounted units are made by the user.

Complete XAL E control stations meet simple control and/or signalling requirements by factory pre-fitting of:

- 1 pushbuttons, with or without marking,
- 2 pilot lights with integral LED,
- 3 illuminated pushbuttons with integral LED,
- 4 Emergency stop mushroom head pushbuttons,
- 5 selector switches with standard handle,
- 6 key switches,
- 7 legend holder with legend,
- 8 fixing nut,
- 9 anti-rotation plates for selector switches, key switches, Emergency stops and buttons with rotatable marking.

The mounted units are interchangeable: the equipment fitted as standard can be modified in order to meet customised applications.

### Empty enclosures

- The XAL E enclosures supplied empty comprise:
  - a lid 10 with 4 captive fixing screws and a base 11,
  - two fixing screw caps (must be fitted to ensure double isolation and sealing) 12.
- The empty enclosures are available with one, two or three cut-outs of equal diameter.
- Depending on the needs of the customer, all the catalogue listed Harmony® Ø 22 control and signalling units XB7 (1...6) can be fitted on these empty enclosures for customisation of the product (1).
- The units are fitted on the lid of the stations. Selector switches, key switches, Emergency stops and buttons with rotatable markings are held in position by an anti-rotation plate 9 (2).
- Legends and legend holder type ZBY 7 listed in the catalogue complete this customised equipment.

### Mounting and fixing

- Control stations XAL E easily mount on a support using two fixing screws. Two fixing screw caps 12 and a rubber seal (3) ensure the sealing and electrical insulation of the installation (IP 54 degree of protection).
- Control stations XAL E incorporate 4 or 6 ISO 20 knock-outs (depending on the model) to enable cable entry irrespective of the fixing position of the station: horizontal or vertical.
- A commoning/earth terminal 13 can be mounted in the base of the station if required. To be used in relation to the type of installation (4).

(1) Except pilot lights type XB7 EV8●P supplied via integral transformer.

(2) Included with Harmony® Ø 22 control and signalling units XB7.

(3) Included with complete stations and empty enclosures.

(4) To be ordered separately.

2

### Environment

<b>Protective treatment</b>	Standard version		"TC"
<b>Ambient air temperature</b> (around the device)	For storage	°C	- 40...+ 70
	For operation	°C	- 25...+ 55
<b>Electric shock protection</b>	Conforming to IEC 61140		Class II
<b>Degree of protection</b>	Conforming to IEC 60529		IP 54
<b>Mechanical shock protection</b>	Conforming to EN 50102		IK 05
<b>Conformity to standards</b>			EN/IEC 60947-1, EN/IEC 60947-5-1, EN/IEC 62208, EN/IEC 60947-5-5
<b>Product certifications</b>			CE
<b>Material</b>			ABS
<b>Colours</b>			Light grey "RAL 7035" or yellow "RAL 1021" lid, light grey "RAL 7035" base
<b>Cable entries</b>			ISO 20 knock-out entries

### Contact function characteristics

<b>Type of contact</b>	N/C or N/O or C/O		Slow break
<b>Positive operation</b>	Conforming to EN/IEC 60947-5-1 Appendix K		All functions incorporating a N/C contact are positive opening operation
<b>Short-circuit protection</b>	Conforming to EN/IEC 60947-5-1	<b>A</b>	4 (using gG cartridge fuse conforming to IEC 269-1)
<b>Rated insulation voltage</b>	Conforming to EN/IEC 60947-1	<b>V</b>	Ui = 250 (degree of pollution 3)
<b>Rated impulse withstand voltage</b>	Conforming to EN/IEC 60947-1	<b>kV</b>	Uimp = 4
<b>Rated operational characteristics</b> (conforming to EN/IEC 60947-5-1)	a.c. supply: utilisation category AC14, D300 utilisation category DC13, R300		Ue = 240 V and Ie = 0.3 A or Ue = 120 V and Ie = 0.6 A Ue = 250 V and Ie = 0.1 A or Ue = 125 V and Ie = 0.22 A
<b>Electrical reliability</b>	Failure rate in accordance with EN/IEC 60947-5-4		At 17 V and 5 mA: $\lambda \leq 10^{-6}$

### Ordinary light function characteristics

Light source			LED	Incandescent bulb (all models)
<b>Voltage limits</b>	At nominal voltage	<b>V</b>	24 V ~: 19.2...30 ~; 21.6...26.4 ~ 120 V ~: 100...132 ~ 230-240 V ~: 195...264 ~	120 V ~: 100...132 ~ 230 V ~: 195...264 ~
<b>Consumption</b>	For all colours	<b>mA</b>	24 V ~: 27 mA max. 120 V ~: 21 mA max. 230 V ~: 20 mA max.	Depending on bulb
<b>Service life</b>	At nominal voltage and at an ambient temperature of 25 °C	<b>H</b>	80 000	2 000
<b>Electromagnetic emission</b>	Conforming to EN 55011		Class B	







# Control stations and enclosures

Plastic control stations XAL E

For Harmony® Ø 22 control and signalling units XB7

Complete stations

2

Complete stations									
With 1 x Ø 22 control and signalling unit (grey control station lid)									
Equipment	Type of push	Type of contact			Marking Text (colour)	Reference	Weight kg		
		N/O	N/C	C/O					
 XAL E1011	Flush, green	1	–	–	–	XAL E1011	0.100		
		2	–	–	–	XAL E1013	0.100		
		1	–	–	I (white)	XAL E1021	0.100		
		1	–	–	START (white)	XAL E1031	0.100		
	Flush, red	–	1	–	–	XAL E1112	0.100		
		–	–	1	–	XAL E1115	0.100		
		–	1	–	STOP (white)	XAL E1142	0.100		
		–	1	–	O (white)	XAL E1152	0.100		
Projecting, red	–	–	1	O (white)	XAL E1155	0.100			
	–	–	1	O (white)	XAL E1155	0.100			
 XAL E1031	1 projecting illuminated spring return pushbutton with integral LED	Green	1	–	–	≈ 24 V	XAL E1W1B	0.100	
			1	–	–	~ 230/240 V	XAL E1W1M	0.100	
		Red	–	1	–	≈ 24 V	XAL E1W2B	0.100	
			–	1	–	~ 230/240 V	XAL E1W2M	0.100	
	Integral LED	Green	1	–	–	≈ 24 V	XAL E1W1B	0.100	
			1	–	–	~ 230/240 V	XAL E1W1M	0.100	
		Red	–	1	–	≈ 24 V	XAL E1W2B	0.100	
			–	1	–	~ 230/240 V	XAL E1W2M	0.100	
 XAL E1W1	1 selector switch with standard handle	2 position, stay put	1	–	–	O I (white)	XAL E1341	0.105	
		2 position, stay put	1	1	–	O I (white)	XAL E1345	0.105	
		3 position, stay put	2	–	–	I O II (white)	XAL E1333	0.105	
	1 key switch (key n° 455)	2 position, stay put (1)	1	–	–	O I (white)	XAL E1441	0.115	
		2 position, stay put (2)	1	–	–	O I (white)	XAL E1441	0.115	
		2 position, stay put (3)	1	–	–	O I (white)	XAL E1441	0.115	
 XAL E1333	1 selector switch with standard handle	2 position, stay put	1	–	–	O I (white)	XAL E1341	0.105	
		2 position, stay put	1	1	–	O I (white)	XAL E1345	0.105	
		3 position, stay put	2	–	–	I O II (white)	XAL E1333	0.105	
	1 key switch (key n° 455)	2 position, stay put (1)	1	–	–	O I (white)	XAL E1441	0.115	
2 position, stay put (2)		1	–	–	O I (white)	XAL E1441	0.115		
2 position, stay put (3)		1	–	–	O I (white)	XAL E1441	0.115		
 XAL E1441	1 key switch (key n° 455)	2 position, stay put (1)	1	–	–	O I (white)	XAL E1441	0.115	
		2 position, stay put (2)	1	–	–	O I (white)	XAL E1441	0.115	
		2 position, stay put (3)	1	–	–	O I (white)	XAL E1441	0.115	
		2 position, stay put (4)	1	–	–	O I (white)	XAL E1441	0.115	
 XAL EK170	1 Emergency switching off pushbutton	Latching, red	–	1	–	–	XAL EK1701	0.110	
			1	1	–	–	XAL EK1702	0.110	
		Emergency switching off (yellow control station lid) (2)	Latching, red	–	1	–	–	XAL EK1701	0.110
				1	1	–	–	XAL EK1702	0.110

(1) The symbol "Ω" indicates key withdrawal position.

(2) Mushroom head switching off mechanical latching pushbuttons conform to standards IEC 60364-5-53 and EN/IEC 60947-5-5. Please consult your customer care centre for full details of these standards and directives.

For conformity to standard EN/ISO 13850, use control stations XAL K178 or XAL K188, see "Control stations XAL" offer.

# Control stations and enclosures

## Plastic control stations XAL E

For Harmony® Ø 22 control and signalling units XB7

Complete stations

2



XAL E201●



XAL E222●



XAL E21V1●

Complete stations (continued)							
With 2 x Ø 22 control and signalling units (grey control station lid)							
Equipment	Type of push	Type of contact			Marking Text (colour)	Reference	Weight kg
		N/O	N/C	C/O			
2 spring return pushbuttons	1 flush, green	1	–	–	–	XAL E2011	0.145
	1 flush, red	–	1	–	–		
	1 flush, green	2	–	–	–	XAL E2015	0.145
	1 flush, red	–	–	1	–		
	1 flush, green	1	–	–	START (white)	XAL E2151	0.145
	1 flush, red	–	1	–	STOP (white)		
	1 flush, green	1	–	–	I (white)	XAL E2141	0.145
	1 projecting, red	–	1	–	O (white)		
1 flush, white	1	–	–	→ (black)	XAL E2231	0.145	
1 flush, black	1	–	–	⇌ (white)			
1 flush, white	–	–	1	→ (black)	XAL E2235	0.145	
1 flush, black	–	–	1	⇌ (white)			
1 flush, white	1	–	–	↑ (black)	XAL E2221	0.145	
1 flush, black	1	–	–	↓ (white)			
1 flush, white	–	–	1	↑ (black)	XAL E2225	0.145	
1 flush, black	–	–	1	↓ (white)			
1 spring return pushbutton + 1 pilot light with integral LED (≈ 24 V), green	1 flush, green	1	–	–	I (white)	XAL E21V1B	0.145
	–	–	–	–	–		
1 spring return pushbutton + 1 pilot light with integral LED (≈ 230/240 V), green	1 flush, green	1	–	–	I (white)	XAL E21V1M	0.145
	–	–	–	–	–		

**Integral  
LED**

**Integral  
LED**



## Complete stations (continued)

With 3 x Ø 22 control and signalling units (grey control station lid)

Equipment	Type of push or colour of lens	Type of contact			Marking Text (colour)	Reference	Weight kg
		N/O	N/C	C/O			
2 spring return pushbuttons + 1 pilot light with integral LED (≈ 24 V), red	1 flush, green	1	–	–	I (white)	XAL E33V2B	0.170
	1 flush, red	–	1	–	O (white)		
2 spring return pushbuttons + 1 pilot light with integral LED (≈ 230/240 V), red	1 flush, green	1	–	–	I (white)	XAL E33V2M	0.170
	1 flush, red	–	1	–	O (white)		
2 spring return pushbuttons + 1 pilot light with integral LED (≈ 24 V), green	1 flush, green	1	–	–	I (white)	XAL E33V1B	0.170
	1 flush, red	–	1	–	O (white)		
2 spring return pushbuttons + 1 pilot light with integral LED (≈ 230/240 V), green	1 flush, green	1	–	–	I (white)	XAL E33V1M	0.170
	1 flush, red	–	1	–	O (white)		
3 spring return pushbuttons	1 flush, white	1	–	–	↑ (black)	XAL E3251	0.170
	1 projecting, red	–	1	–	O (white)		
	1 flush, black	1	–	–	↓ (white)		
3 spring return pushbuttons	1 flush, white	–	–	1	↑ (black)	XAL E3255	0.170
	1 projecting, red	–	–	1	O (white)		
	1 flush, black	–	–	1	↓ (white)		
3 spring return pushbuttons	1 flush, green	2	–	–	I (white)	XAL E3405	0.170
	1 projecting, red	–	–	1	O (white)		
	1 flush, green	2	–	–	II (white)		
3 spring return pushbuttons	1 flush, green	1	–	–	I (white)	XAL E3401	0.170
	1 projecting, red	–	1	–	O (white)		
	1 flush, green	1	–	–	II (white)		
3 spring return pushbuttons	1 flush, white	1	–	–	→ (black)	XAL E3351	0.170
	1 projecting, red	–	1	–	O (white)		
	1 flush, black	1	–	–	⇐ (white)		
3 spring return pushbuttons	1 flush, white	–	–	1	→ (black)	XAL E3355	0.170
	1 projecting, red	–	–	1	O (white)		
	1 flush, black	–	–	1	⇐ (white)		
1 key switch (key n° 455)	1 black operator (2 position, stay put)	1	–	–	O I (white)	XAL E3441	0.180
+ 2 spring return pushbuttons	1 flush, white 1 flush, black	1 1	– –	– –	↑ (black) ↓ (white)		

(1) The symbol "⌘" indicates key withdrawal position.



XAL E33V●●



XAL E325●



XAL E3441

## Control stations and enclosures

Plastic control stations XAL E

For Harmony® Ø 22 control and signalling units XB7

Empty control stations



XAL E1



XAL E2



XAL E3



XAL EK1

## Empty control stations

For Ø 22 control and signalling units

Description	Number of cut-outs	Sold in lots of	Unit reference	Weight kg
Light grey "RAL 7035" lid and base	1	5	XAL E1	0.080






	2	5	XAL E2	0.100
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	3	5	XAL E3	0.100
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For Emergency stop mushroom head pushbutton only (1)

Yellow "RAL 1021" lid, light grey "RAL 7035" base	1	5	XAL EK1	0.080
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(1) For conformity to standard EN/ISO 13850, use control stations XAL K178 or XAL K188, see "Control stations XAL" offer.

Pushbuttons											
Shape of head	Type of push	Type of contact			Marking		Colour of push	Sold in lots of	Unit reference	Weight kg	
		N/O	N/C	C/O	Text	Colour					
<b>Spring return pushbuttons without marking</b>											
 XB7 EA1P	Flush	1	-	-	-	-	White	10	XB7 EA11P (1)	0.020	
		-	-	1	-	-	White	10	XB7 EA15P (1)	0.020	
		1	-	-	-	-	Black	10	XB7 EA21P (1)	0.020	
		2	-	-	-	-	Black	10	XB7 EA23P (1)	0.020	
		-	-	1	-	-	Black	10	XB7 EA25P (1)	0.020	
		1	-	-	-	-	Green	10	XB7 EA31P (1)	0.020	
		2	-	-	-	-	Green	10	XB7 EA33P (1)	0.020	
		-	-	1	-	-	Green	10	XB7 EA35P (1)	0.020	
		-	1	-	-	-	Red	10	XB7 EA42P (1)	0.020	
		-	-	1	-	-	Red	10	XB7 EA45P (1)	0.020	
 XB7 EL4P	Projecting	1	-	-	-	-	Yellow	10	XB7 EA51P (1)	0.020	
		-	1	-	-	-	Red	10	XB7 EL42P (1)	0.020	
		-	-	1	-	-	Red	10	XB7 EL42P (1)	0.020	
<b>Spring return pushbuttons with marking</b>											
 XB7 EA3133P	Flush	1	-	-	I	White	Green	10	XB7 EA3131P (1)	0.020	
		2	-	-	-	-	White	Green	10	XB7 EA3331P (1)	0.020
		1	-	-	START	White	Green	10	XB7 EA3133P (1)	0.020	
		2	-	-	-	-	White	Green	10	XB7 EA3333P (1)	0.020
		1	-	-	MARCHE	White	Green	10	XB7 EA3142P (1)	0.020	
		2	-	-	-	-	White	Green	10	XB7 EA3342P (1)	0.020
		-	1	-	O	White	Red	10	XB7 EA4232P (1)	0.020	
		-	-	1	-	-	White	Red	10	XB7 EA4532P (1)	0.020
		-	1	-	STOP	White	Red	10	XB7 EA4234P (1)	0.020	
		-	-	1	-	-	White	Red	10	XB7 EA4534P (1)	0.020
 XB7 EA1341P	Flush	1	-	-	↑	Black	White	10	XB7 EA11341P (1)	0.020	
		-	-	1	-	-	Black	White	10	XB7 EA15341P (1)	0.020
		1	-	-	↓	White	Black	10	XB7 EA21343P (1)	0.020	
		-	-	1	-	-	White	Black	10	XB7 EA25343P (1)	0.020
 XB7 EA2343P	Projecting	-	1	-	O	White	Red	10	XB7 EL4232P (1)	0.020	
		-	-	1	-	-	White	Red	10	XB7 EL4532P (1)	0.020
		-	1	-	STOP	White	Red	10	XB7 EL4234P (1)	0.020	
		-	-	1	-	-	White	Red	10	XB7 EL4534P (1)	0.020
		-	1	-	ARRET	White	Red	10	XB7 EL4233P (1)	0.020	
		-	-	1	-	-	White	Red	10	XB7 EL4533P (1)	0.020

(1) For Faston connection version (1 x 6.35 mm and 2 x 2.8 mm), add the number "3" to the end of the reference.

Example: XB7 EA21P becomes XB7 EA21P3.

2



XB7 EA1P

Pushbuttons (continued)										
Shape of head	Type of push	Type of contact			Marking		Colour of push	Sold in lots of	Unit reference	Weight kg
		N/O	N/C	C/O	Text	Colour				
<b>Push and push-to release pushbuttons without marking</b>										
	Flush	1	-	-	-	-	Black	10	XB7 EH21P	0.020
					-	-	Green	10	XB7 EH31P	0.020
		-	-	1	-	-	Black	10	XB7 EH25P	0.020
					-	-	Green	10	XB7 EH35P	0.020



XB7 ED21P

Selector/key switches									
Shape of head	Type of operator	Type of contact			Number and type of positions (2)	Symbol	Sold in lots of	Unit reference	Weight kg
		N/O	N/C	C/O					
	Standard handle, black	1	-	-	2, stay put		10	XB7 ED21P (1)	0.025
		1	1	-	2, stay put		10	XB7 ED25P	0.025
		2	-	-	3, stay put		10	XB7 ED33P	0.025
	Key (key n° 455)	1	-	-	2, key withdrawal in LH position		10	XB7 EG21P	0.049
		2	-	-	3, key withdrawal in centre position		10	XB7 EG33P	0.049



XB7 EG33P



XB7 ES542P

Ø 40 mm Emergency switching off mushroom head pushbuttons (3)								
Shape of head	Type of push	Type of contact			Colour of push	Sold in lots of	Unit reference	Weight kg
		N/O	N/C	C/O				
	Turn to release	-	1	-	Red	10	XB7 ES542P	0.032
		1	1	-	Red	10	XB7 ES545P	0.035
	Key release (n° 455)	-	1	-	Red	10	XB7 ES142P	0.055
		1	1	-	Red	10	XB7 ES145P	0.058

(1) For Faston connection version (1 x 6.35 mm and 2 x 2.8 mm), add the number "3" to the end of the reference.

Example : XB7 ED21P becomes XB7 ED21P3.

(2) The symbol "Ω" indicates key withdrawal position.

(3) Mushroom head switching off mechanical latching pushbuttons are conform to standards IEC 60364-5-53 and EN/IEC 60947-5-5.

For mushroom head Emergency stop trigger action and mechanical latching pushbuttons conforming to standards EN/IEC 60204-1 and EN/ISO 13850, to Machinery Directive 98/37/EC and to standard EN/IEC 60947-5-5, use an XB5 A●8●●● or XB5 AS9●●● from the Harmony range.



XB7 EV0...P

Integral  
LED

Pilot lights with integral LED ("true" colours)								
Shape of head	Supply voltage V	Colour of lens	Sold in lots of	Unit reference	Weight kg			
						N/O	N/C	
	~ 24 50-60 Hz	White	10	XB7 EV01BP (1)	0.020			
		Green	10	XB7 EV03BP (1)	0.020			
		Red	10	XB7 EV04BP (1)	0.020			
		Yellow	10	XB7 EV05BP (1)	0.020			
		Blue	10	XB7 EV06BP (1)	0.020			
		Orange	10	XB7 EV08BP (1)	0.020			
		~ 120 50-60 Hz	White	10	XB7 EV01GP (1)	0.020		
			Green	10	XB7 EV03GP (1)	0.020		
			Red	10	XB7 EV04GP (1)	0.020		
	Yellow		10	XB7 EV05GP (1)	0.020			
	Blue		10	XB7 EV06GP (1)	0.020			
	Orange		10	XB7 EV08GP (1)	0.020			
	~ 230-240 50-60 Hz	White	10	XB7 EV01MP (1)	0.020			
		Green	10	XB7 EV03MP (1)	0.020			
		Red	10	XB7 EV04MP (1)	0.020			
Yellow		10	XB7 EV05MP (1)	0.020				
Blue		10	XB7 EV06MP (1)	0.020				
Orange		10	XB7 EV08MP (1)	0.020				

## Illuminated pushbuttons with integral LED ("true" colours)

Shape of head	Type of push	Supply voltage V	Type of contact		Colour of lens	Sold in lots of	Unit reference	Weight kg				
			N/O	N/C								
	Projecting	~ 24	1	-	Green	10	XB7 EW33B1P	0.022				
					Red	10	XB7 EW34B1P	0.022				
					Yellow	10	XB7 EW35B1P	0.022				
			-	1	Red	10	XB7 EW34B2P	0.022				
					1	-	Green	10	XB7 EW33M1P	0.022		
							Red	10	XB7 EW34M1P	0.022		
	Yellow	10	XB7 EW35M1P	0.022								
	-	1	-	1	Red	10	XB7 EW34M2P	0.022				
					Projecting	~ 24	1	-	Green	10	XB7 EH03B1P	0.022
									Red	10	XB7 EH04B1P	0.022
		Yellow	10	XB7 EH05B1P					0.022			
		-	1	Red			10	XB7 EH04B2P	0.022			
1				-			Green	10	XB7 EH03M1P	0.022		
	Red						10	XB7 EH04M1P	0.022			
	Yellow	10	XB7 EH05M1P		0.022							
-	1	1	1	Red	10	XB7 EH04M2P	0.022					

(1) For Faston connection version (1 x 6.35 mm and 2 x 2.8 mm), add the number "3" to the end of the reference.  
Example: XB7 EV01BP becomes XB7 EV01BP3.



XB7 EW3...P

Integral  
LED

XB7 EH0...P

Integral  
LED



XB7 EV61P

### Pilot lights with BA 9s base fitting

Shape of head	Supply	Description	Supply voltage V	Colour of lens	Sold in lots of	Unit reference	Weight
							kg
○	Direct (2)	For incandescent bulb (not included) (2) BA 9s base fitting	≤ 250	White	10	XB7 EV61P (1)	0.018
				Green	10	XB7 EV63P (1)	0.018
				Red	10	XB7 EV64P (1)	0.018
				Yellow	10	XB7 EV65P (1)	0.018
				Blue	10	XB7 EV66P (1)	0.018
				Orange	10	XB7 EV68P (1)	0.018
	Direct, through resistor	With incandescent bulb 130 V - 2.6 W included BA 9s base fitting	~ 230 50/60 Hz	White	10	XB7 EV71P (1)	0.020
				Green	10	XB7 EV73P (1)	0.020
				Red	10	XB7 EV74P (1)	0.020
				Yellow	10	XB7 EV75P (1)	0.020
				Blue	10	XB7 EV76P (1)	0.020
				Orange	10	XB7 EV78P (1)	0.020
	For 130 V - 2.6 W bulb (not included) (2) BA 9s base fitting		~ 230 50/60 Hz	White	10	XB7 EV710P (1)	0.020
				Green	10	XB7 EV730P (1)	0.020
				Red	10	XB7 EV740P (1)	0.020
Yellow				10	XB7 EV750P (1)	0.020	
			Blue	10	XB7 EV760P (1)	0.020	

### Illuminated pushbuttons with BA 9s base fitting, projecting push

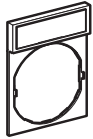
Shape of head	Supply	Type of contact		Supply voltage V	Colour of lens	Sold in lots of	Unit reference	Weight
		N/O	N/C					kg
<b>Spring return illuminated pushbuttons</b>								
○	Direct with BA 9s base fitting neon bulb included	1	-	~ 230	Green	10	XB7 EW3341P	0.022
					Red	10	XB7 EW3441P	0.022
					Yellow	10	XB7 EW3541P	0.022
	Direct for incandescent BA 9s bulb (not included) (3)	1	-	≤ 250	Green	10	XB7 EW3361P	0.020
					Red	10	XB7 EW3461P	0.020
					Yellow	10	XB7 EW3561P	0.020
<b>Push and push-to-release illuminated buttons</b>								
○	Direct with BA 9s base fitting neon bulb included	1	-	~ 230	Green	10	XB7 EH0341P	0.022
					Red	10	XB7 EH0441P	0.022
					Yellow	10	XB7 EH0541P	0.022
	Direct for incandescent BA 9s bulb (not included) (3)	1	-	≤ 250	Green	10	XB7 EH0361P	0.020
					Red	10	XB7 EH0461P	0.020
					Yellow	10	XB7 EH0561P	0.020

(1) For Faston connection version (1 x 6.35 mm and 2 x 2.8 mm), add the number "3" to the end of the reference.

Example: **XB7 EV61P** becomes **XB7 EV61P3**.

(2) Bulb characteristics for direct supply pilot lights: 250 V max., 2.6 W max.

(3) Bulb characteristics for direct supply illuminated pushbuttons: 250 V max., 1.2 W max.



ZBY 2101

**Legend holder, 30 x 40 mm with legend (black or red background)****With blank legend**

Text	Sold in lots of	Unit reference	Weight kg
Without	10	ZBY 2101	0.001

**With marked legend (sold singly)**

- Start functions: white characters on black background.
- Stop functions: white characters on red background.

Text	Unit reference	Weight kg	Text	Unit reference	Weight kg
Auto	ZBY 2115	0.001	Reset	ZBY 2323	0.001
Down	ZBY 2308	0.001	Reverse	ZBY 2306	0.001
Forward	ZBY 2305	0.001	Right	ZBY 2309	0.001
Hand	ZBY 2316	0.001	Start	ZBY 2303	0.001
Inch	ZBY 2321	0.001	Stop	ZBY 2304	0.001
Left	ZBY 2310	0.001	Up	ZBY 2307	0.001
Off	ZBY 2312	0.001	O	ZBY 2146	0.001
On	ZBY 2311	0.001	I	ZBY 2147	0.001
Power on	ZBY 2326	0.001	O-I	ZBY 2178	0.001

**Circular legends for Emergency stop mushroom head pushbuttons**

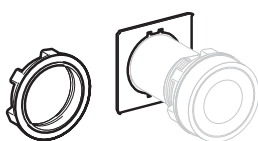
Diameter mm	Colour	Marking on yellow background	Unit reference	Weight kg
60	Yellow	–	ZBY 9101	0.004
		EMERGENCY STOP	ZBY 9330	0.004
		ARRET D'URGENCE	ZBY 9130	0.004
		NOT-AUS	ZBY 9230	0.004
		PARADA DE EMERGENCIA	ZBY 9430	0.004
		ARRESTO EMERGENZA	ZBY 9630	0.004



ZBY 9330

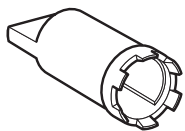
**Accessories**

Description	Colour	Sold in lots of	Unit reference	Weight kg
Anti-rotation plate	–	10	ZB5 AZ902	0.008
Fixing nut	–	10	ZB5 AZ901	0.002
Fixing nut tightening tool	–	1	ZB5 AZ905	0.016
Grooved lenses for BA 9s pilot lights	White	10	ZB7 EV01	0.002
	Green	10	ZB7 EV03	0.002
	Red	10	ZB7 EV04	0.002
	Yellow	10	ZB7 EV05	0.002
	Blue	10	ZB7 EV06	0.002
	Clear	10	ZB7 EV07	0.002
	Orange	10	ZB7 EV08	0.002



ZB5 AZ901

ZB5 AZ902



ZB5 AZ905

**Bulbs**

Description	Voltage V	Power W	Colour	Sold in lots of	Unit reference	Weight kg
Incandescent bulbs, long life BA 9s base fitting Ø 11 mm max. length 28 mm max.	6	1.2	–	10	DL1 CB006	0.002
	24	2.0	–	10	DL1 CE024	0.002
	130	2.6	–	10	DL1 CE130	0.002
Neon bulbs BA 9s base fitting Ø 11 mm max. length 28 mm max.	220...240	–	Green	10	DL1 CS3220	0.002
			Blue	10	DL1 CS6220	0.002
			Orange (1)	10	DL1 CS7220	0.002



DL1 CE●●●

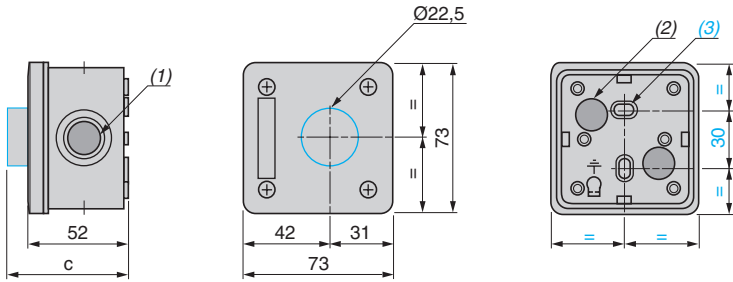


DL1 CS●●●●

(1) For use with red, yellow or clear pilot light.

2

### Control stations with 1 x Ø 22 control and signalling unit



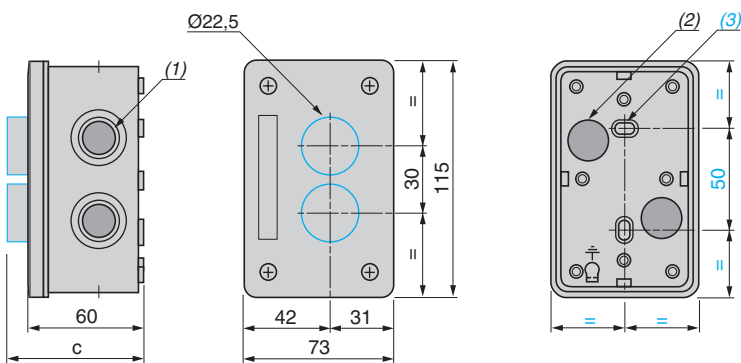
Control station XAL E fitted with:	c
Flush pushbutton	61
Projecting pushbutton	63
Illuminated pushbutton	66.5
Pilot light	63
Emergency stop without key	81.5
Selector switch with standard handle	76.5
Key switch	92

(1) 4 ISO 20 knock-outs.

(2) 2 knock-outs for cable entry, maximum capacity 16 mm.

(3) 2 knock-out elongated fixing holes Ø 3 x 5.

### Control stations with 2 x Ø 22 control and signalling units



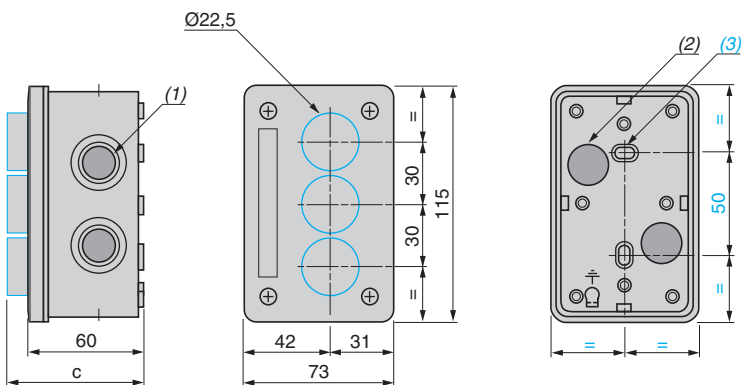
Control station XAL E fitted with:	c
Flush pushbutton	69
Projecting pushbutton	71
Illuminated pushbutton	74.5
Pilot light	71
Emergency stop without key	89.5
Selector switch with standard handle	84.5
Key switch	100

(1) 6 ISO 20 knock-outs.

(2) 2 knock-outs for cable entry, maximum capacity 20 mm.

(3) 2 knock-out elongated fixing holes Ø 3 x 5.

### Control stations with 3 x Ø 22 control and signalling units



Control station XAL E fitted with:	c
Flush pushbutton	69
Projecting pushbutton	71
Illuminated pushbutton	74.5
Pilot light	71
Emergency stop without key	89.5
Selector switch with standard handle	84.5
Key switch	100

(1) 6 ISO 20 knock-outs.

(2) 2 knock-outs for cable entry, maximum capacity 20 mm.

(3) 2 knock-out elongated fixing holes Ø 3 x 5.

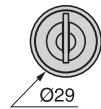
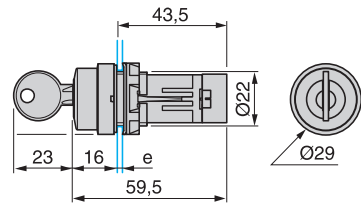
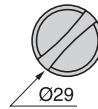
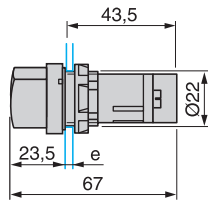
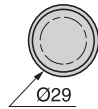
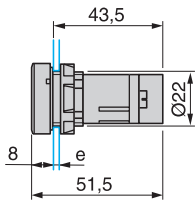


### Harmony® Ø 22 control and signalling units XB7

**XB7 EA●●P, XB7 EH●●P**

**XB7 ED●●P**

**XB7 EG●●P**

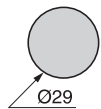
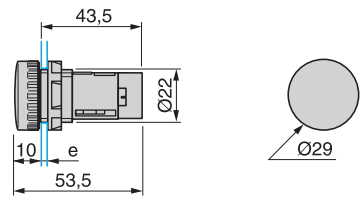
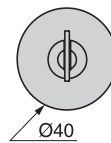
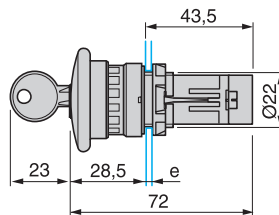
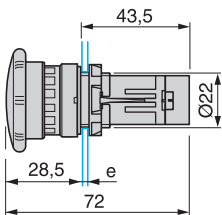


e: support panel thickness = 1 to 6 mm.

**XB7 ES5●●P**

**XB7 ES1●●P**

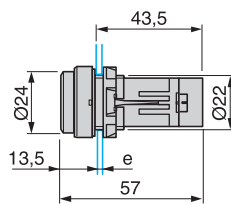
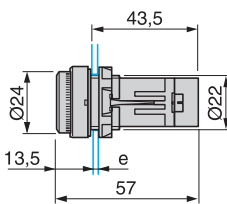
**XB7 EV●●P**



e: support panel thickness = 1 to 6 mm.

**XB7 EW3●●●P, XB7 EH0●●●P**

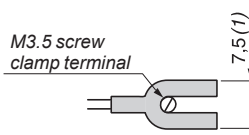
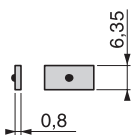
**XB7 EL4●32P**



e: support panel thickness = 1 to 6 mm.

**Faston clip connection**

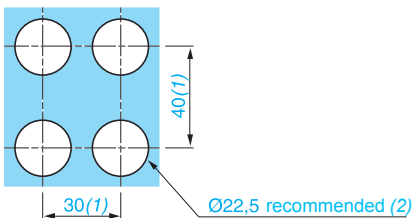
**"U" type tag connection**



(1) Minimum value.

### Mounting

**Diameter of finished fixing holes**



(1) Minimum value.

(2) Standard value: Ø 22.3 (0; + 0.4).

### Insulated enclosures XAP A, glass-reinforced polyester

<b>Material and colour</b>			Glass-reinforced polyester, coloured grey throughout
<b>Product certifications</b>	Special version		CSA ENCLOSURE 4 and 5
<b>Protective treatment</b>	Standard version		"TC" and "TH"
<b>Ambient air temperature</b>	For operation	°C	- 25...+ 70
	For storage	°C	- 40...+ 70
<b>Degree of protection</b>	Conforming to IEC 60529		IP 65
<b>Electric shock protection</b>	Conforming to IEC 61140		Class II
<b>Flame resistance</b>			CSTB: M3, NF C 20-455: 850 °C, IEC 92: 960 °C, UL 94: VO
<b>Resistance to chemical agents</b>			Highly resistant to acids, bases, sea water, mineral salts, all solvents, petrol, diesel, oils and greases
<b>Cable entries</b>			Undrilled

### Die-cast metal enclosures XAP M and XAP J

<b>Material and colour</b>			<b>XAP M1, M2, M3 and M4:</b> zinc alloy. Blue paint finish <b>XAP M5:</b> aluminium alloy. Blue paint finish <b>XAP J:</b> zinc alloy. Yellow lid and blue base
<b>Product certifications</b>	Special version		CSA ENCLOSURE 4 and 5, UL ENCLOSURE 1, 3, 4 and 12K
<b>Protective treatment</b>	Standard version		"TC"
	Special version		"TH"
<b>Ambient air temperature</b>	For operation	°C	- 25...+ 70
	For storage	°C	- 40...+ 70
<b>Degree of protection</b>	Conforming to IEC 60529		IP 65
<b>Electric shock protection</b>	Conforming to IEC 61140		Class I
<b>Resistance to chemical agents</b>			Special treatments on request
<b>Cable entries</b>			Tapped entries for cable gland (see dimensions, page 2/55)

Metal enclosures XB2 SL			
<b>Material and colour</b>			Aluminium alloy or sheet steel. Blue paint finish
<b>Protective treatment</b>	Standard version		"TC"
	Special version		"TH"
<b>Ambient air temperature</b>	For operation	°C	- 25...+ 70
	For storage	°C	- 40...+ 70
<b>Degree of protection</b>	Conforming to IEC 60529		IP 54
<b>Electric shock protection</b>	Conforming to IEC 61140		Class I
<b>Resistance to chemical agents</b>			Special treatments on request
<b>Cable entries</b>	<b>XB2 S</b> in aluminium alloy		Tapped entries for cable gland (see dimensions, page 2/55)
	<b>XB2 S</b> in sheet steel		Undrilled
Flush mounting enclosures XAP E			
<b>Material and colour</b>			Anodised aluminium front plate. Insulated protective rear cover
<b>Protective treatment</b>	Standard version		"TC" and "TH"
<b>Ambient air temperature</b>	For operation	°C	- 25...+ 70
	For storage	°C	- 40...+ 70
<b>Degree of protection</b>	Conforming to IEC 60529		IP 65
<b>Electric shock protection</b>	Conforming to IEC 61140		Class I
<b>Resistance to chemical agents</b>			Good resistance to organic acids, diluted mineral acids, salts, alcohol, acetone, chloride and fluoride solvents, oils and petrol
<b>Cable entries</b>			Through rear cover: knock-out cable entries

# Control stations and enclosures

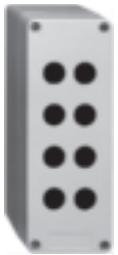
## Polyester enclosures XAP A

Undrilled or with cut-outs for Ø 22 control and signalling units

2



XAP A1104



XAP A2108



XAP A3116



XAP A1100



XAP A2100



XAP A3100

### Insulated enclosures XAP A, glass-reinforced polyester

Description	Front face dimensions mm	Number of cut-outs	Number of rows		Reference	Weight kg
			Vertical	Horizontal		
Without hinges Usable depth 83 mm	85 x 146	1	1	1	XAP A1110	0.470
		2	1	2	XAP A1120	0.450
		4	2	2	XAP A1104	0.460
	85 x 226	8	2	4	XAP A2108	0.580
	151 x 241	16	4	4	XAP A3116	0.820
With hinges Usable depth 83 mm	151 x 241	16	4	4	XAP A4116	0.850
Earthing plates sheet steel with earth screw	For XAP A1110				XAP Z110	0.080
	For XAP A1120				XAP Z120	0.070
	For XAP A1104				XAP Z104	0.070
	For XAP A2108				XAP Z208	0.110
	For XAP A3116 and A4116				XAP Z316	0.160

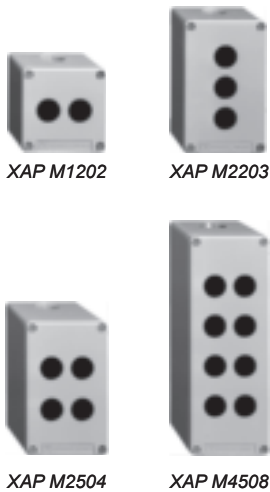
### Insulated enclosures XAP A, glass-reinforced polyester, undrilled

Description	Front face dimensions mm	Reference	Weight kg	
Without hinges Usable depth 83 mm	85 x 146	XAP A1100	0.470	
	85 x 226	XAP A2100	0.600	
	151 x 241	XAP A3100	0.860	
With hinges Usable depth 83 mm	151 x 241	XAP A4100	0.890	
Earthing plates with earth screw	For XAP A1100		XAP Z100	0.080
	For XAP A2100		XAP Z200	0.130
	For XAP A3100 and A4100		XAP Z300	0.200
Other versions	Enclosures with cut-outs for Ø 30 control and signalling units. Enclosures pre-fitted with Ø 22 units. Please consult your customer care centre.			

## Control stations and enclosures

## Metal control stations XAP M and XAP J

Undrilled or with cut-outs for Ø 22 control and signalling units



## Die-cast metal enclosures XAP M (blue lid and base)

Description	Front face dimensions mm	Number of cut-outs	Number of rows		Reference	Weight kg	
			Vertical	Horizontal			
Zinc alloy Usable depth 49 mm	80 x 80	1	1	1	XAP M1201	0.455	
		2	2	1	XAP M1202	0.450	
	80 x 130	2	1	2	XAP M2202	0.610	
		3	1	3	XAP M2203	0.605	
		4	2	2	XAP M2204	0.600	
	80 x 175	3	1	3	XAP M3203	0.870	
		4	1	4	XAP M3204	0.880	
		6	2	3	XAP M3206	0.870	
	Zinc alloy Usable depth 74.5 mm	80 x 80	1	1	1	XAP M1501	0.605
			2	2	1	XAP M1502	0.600
		80 x 130	2	1	2	XAP M2502	0.810
			3	1	3	XAP M2503	0.815
4			2	2	XAP M2504	0.810	
80 x 175		3	1	3	XAP M3503	1.145	
		4	1	4	XAP M3504	1.140	
		6	2	3	XAP M3506	1.130	
80 x 220		6	1	6	XAP M4506	1.380	
		8	2	4	XAP M4508	1.370	
Aluminium Usable depth 74.5 mm		85 x 310	8	1	8	XAP M5508	0.810
			12	2	6	XAP M5512	0.790

## Die-cast metal enclosures XAP J (yellow lid, blue base)

Zinc alloy Usable depth 49 mm	80 x 80	1	1	1	XAP J1201	0.455
Zinc alloy Usable depth 74.5 mm	80 x 80	1	1	1	XAP J1501	0.605

## Die-cast metal enclosures XAP M and XAP J, undrilled

Description	Material	Front face dimensions mm	Reference	Weight
Blue lid and base	Zinc alloy Usable depth 49 mm	80 x 80	XAP M11	0.460
		80 x 130	XAP M21	0.620
		80 x 175	XAP M31	0.900
	Zinc alloy Usable depth 74.5 mm	80 x 80	XAP M14	0.610
		80 x 130	XAP M24	0.830
		80 x 175	XAP M34	1.160
		80 x 220	XAP M44	1.410
	Aluminium Usable depth 74.5 mm	85 x 310	XAP M54	0.850
Yellow lid, blue base	Zinc alloy Usable depth 49 mm	80 x 80	XAP J11	0.460
		80 x 80	XAP J14	0.610
		80 x 80	XAP J34	1.160

## Other versions

Enclosures with cut-outs for Ø 30 control and signalling units.  
 Enclosures pre-fitted with Ø 22 units.  
 Die-cast metal enclosures XAPM with ISO cable entries (H29 version).  
 Die-cast metal enclosures XAPM with UL/CSA certification (H7 version).  
 Please consult your customer care centre.



# Control stations and enclosures

Metal control stations XB2 SL

Flush mounting control stations XAP E

With cut-outs for Ø 22 control and signalling units

2



XB2 SL64007



XB2 SL42009



XAP E301



XAP E302



XAP E303



XAP E305



ZB5 SZ3

## Sheet steel enclosures XB2 SL

Description	Front face dimensions mm	Number of cut-outs	Number of rows		Reference	Weight kg
			Vertical	Horizontal		
Sheet steel Usable depth 115 mm	200 x 200	8	4	2	XB2 SL42007	3.100
	200 x 260	16	4	4	XB2 SL44007	3.900
	260 x 260	24	6	4	XB2 SL64007	4.700
	260 x 320	30	6	5	XB2 SL65007	5.500
	320 x 320	40	8	5	XB2 SL85007	6.200

## Die-cast metal enclosures XB2 SL (blue lid and base)

Description	Front face dimensions mm	Number of cut-outs	Number of rows		Reference	Weight kg
			Vertical	Horizontal		
Aluminium Usable depth 78 mm	150 x 150	6	3	2	XB2 SL32009	0.970
		8	4	2	XB2 SL42009	0.960

## Flush mounting enclosures XAP E

Description	Material	Number of cut-outs	Front face dimensions mm	Reference	Weight kg
Front plates with fixing screws	Aluminium, anodised	1	72 x 72	XAP E301	0.050
		2	72 x 105	XAP E302	0.075
		3	72 x 138	XAP E303	0.095
		4	72 x 171	XAP E304	0.115
		5	72 x 204	XAP E305	0.135

Protective rear covers	Material	For front plate	Reference	Weight kg
Insulated	Insulated	For front plate XAP E301	XAP E901	0.040
		For front plate XAP E302	XAP E902	0.050
		For front plate XAP E303	XAP E903	0.060
		For front plate XAP E304	XAP E904	0.070
		For front plate XAP E305	XAP E905	0.080

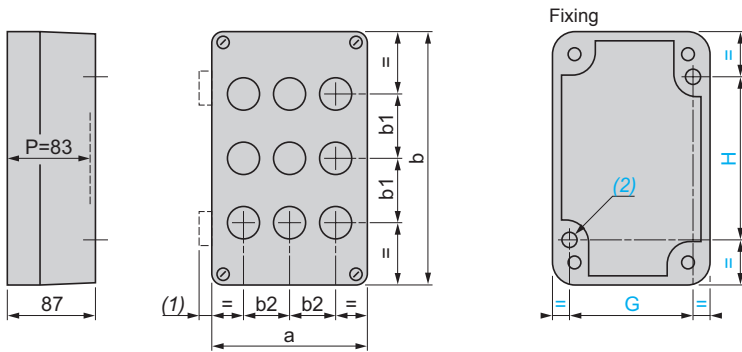
## Accessories

Description	For use with	Colour	Sold in lots of	Unit reference	Weight kg
Metal circular blanking plug	Ø 22 control and signalling units XB4, metal	Chromium plated	10	ZB4 SZ3	0.023
		Black	10	ZB4 SZ37	0.023
Plastic square blanking plug (with fixing nut)	Ø 22 control and signalling units XB5, plastic	Black	10	ZB5 SZ5	0.009
Plastic circular blanking plug (with fixing nut)	Ø 22 control and signalling units XB5, plastic	Black	10	ZB5 SZ3	0.009

**Other versions** Enclosures with cut-outs for Ø 30 control and signalling units.  
Enclosures pre-fitted with Ø 22 units.  
Please consult your customer care centre.

### Insulated enclosures XAP A with cut-outs

XAP A



XAP	a	b	b1	b2	G	H
A1110	85	146	-	-	70	105
A1120	85	146	40	-	70	105
A1104	85	146	40	30	70	105
A2108	85	226	40	30	70	180
A3116, A4116	151	241	40	30	135	200

Drill cable entries to suit.

(1) 11 mm for XAP A4●●● enclosures with hinges.

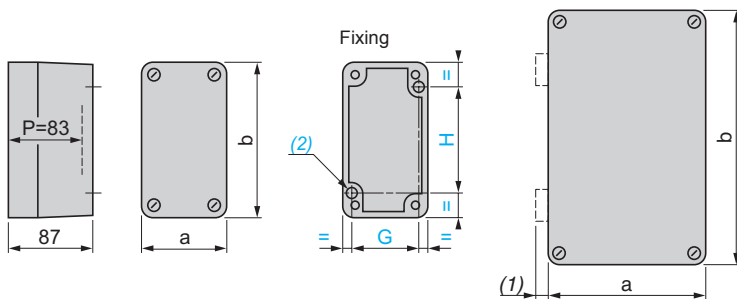
(2) 2 x Ø 5.6 holes, depth 12.

P = Usable depth

### Insulated enclosures XAP A, undrilled

XAP A1100, XAP A2100

XAP A3100, XAP A4100



XAP	a	b	G	H
A1110	85	146	70	105
A2100	85	226	70	180
A3100	151	241	135	200
A4100	151	241	135	200

Drill cable entries to suit.

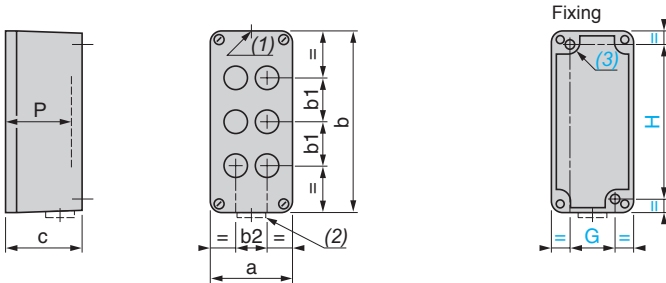
(1) 11 mm for XAP A4●●● enclosures with hinges.

(2) 2 x Ø 5.6 holes, depth 12.

P = Usable depth

#### Die-cast metal enclosures XAP M and XAP J, with cut-outs

XAP J, XAP M

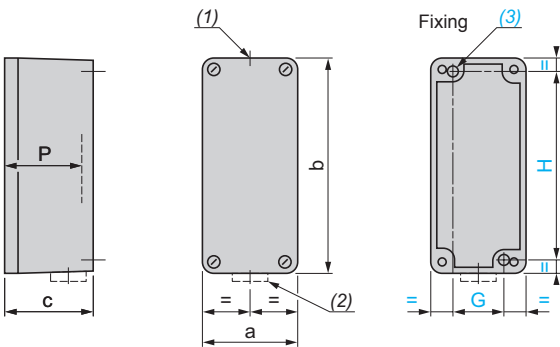


- (1) 1 hole, without blanking plug, for cable gland with 14 mm maximum clamping capacity, except:
    - XAP M3●●● and XAP M4●●●: maximum capacity 18 mm,
    - XAP M5●●●: maximum capacity 24 mm.
  - (2) 1 hole, with blanking plug (protrusion 6 mm), for cable gland with 14 mm maximum clamping capacity, except:
    - XAP M3●●●: maximum capacity 18 mm,
    - XAP M4●●● and XAP M5●●●: undrilled.
  - (3) 2 x Ø 5.6 holes, depth 20.
- P = Usable depth

XAP	a	b	b1	b2	c	G	H	P
J1201	80	80	-	-	51.5	50	65	49
J1501	80	80	-	-	77	50	65	74.5
M1201, M1202	80	80	-	-	51.5	50	65	49
M1501	80	80	-	-	77	50	65	74.5
M1502	80	80	-	30	77	50	65	74.5
M2202	80	130	40	-	51.5	50	115	49
M2203	80	130	30	-	51.5	50	115	49
M2204	80	130	40	30	51.5	50	115	49
M2502	80	130	40	-	77	50	115	74.5
M2503	80	130	30	-	77	50	115	74.5
M2504	80	130	40	30	77	50	115	74.5
M3203	80	175	40	-	51.5	50	160	49
M3204	80	175	30	-	51.5	50	160	49
M3206	80	175	40	30	51.5	50	160	49
M3503	80	175	40	-	77	50	160	74.5
M3504	80	175	30	-	77	50	160	74.5
M3506	80	175	40	30	77	50	160	74.5
M4506	80	220	30	-	77	50	205	74.5
M4508	80	220	40	30	77	50	205	74.5
M5508	85	310	30	-	77	55	295	74.5
M5512	85	310	40	30	77	55	295	74.5

#### Die-cast metal enclosures XAP M and XAP J, undrilled

XAP J●●, XAP M●●

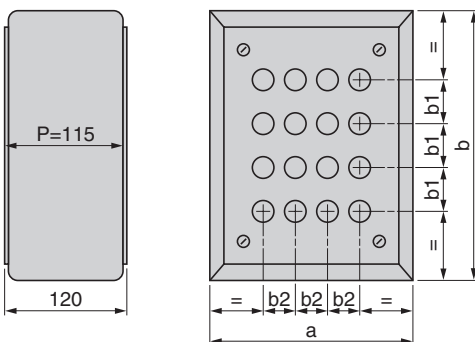


- (1) 1 hole, without blanking plug, for cable gland with 14 mm maximum clamping capacity, except:
    - XAP J34, M31, M34 and M44: maximum capacity 18 mm,
    - XAP M54: maximum capacity 24 mm.
  - (2) 1 hole, with blanking plug (protrusion 6 mm), for cable gland with 14 mm maximum clamping capacity, except:
    - XAP J34, M31 and M34: maximum capacity 18 mm,
    - XAP M44, M54: undrilled.
  - (3) 2 x Ø 5.6 holes, depth 20.
- P = Usable depth

XAP	a	b	c	G	H	P
J11	80	80	51.5	50	65	49
J14	80	80	77	50	65	74.5
J34	80	175	77	50	160	74.5
M11	80	80	51.5	50	65	49
M14	80	80	77	50	65	74.5
M21	80	130	51.5	50	115	49
M24	80	130	77	50	115	74.5
M31	80	175	51.5	50	160	49
M34	80	175	77	50	160	74.5
M44	80	220	77	50	205	74.5
M54	85	310	77	55	295	74.5

#### Sheet steel enclosures XB2 SL

XB2 SL



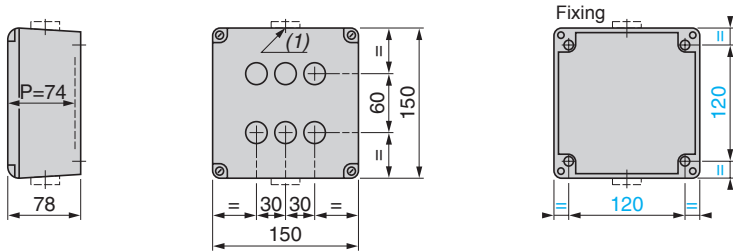
XB2	a	b	b1	b2
SL42007	200	200	40	30
SL44007	200	260	40	30
SL64007	260	260	40	30
SL65007	260	320	40	30
SL85007	320	320	40	30

Enclosures supplied without fixing points or cable entries. In both cases drill to suit.  
The depth of the enclosures enables all types of Ø 22 units to be mounted.  
P = Usable depth



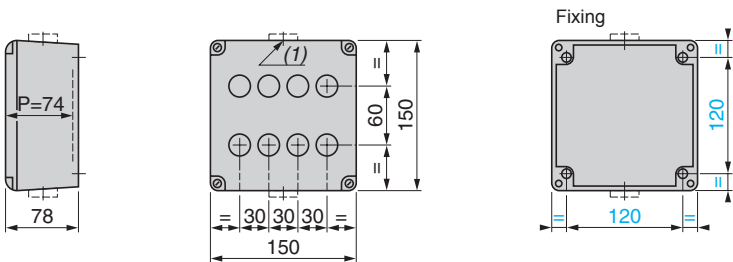
### Die-cast metal enclosures XB2 SL, with cut-outs

#### XB2 SL32009



(1) 2 holes, with blanking plugs (protrusion 7.5 mm), for cable glands with 12 mm maximum clamping capacity. P = Usable depth

#### XB2 SL42009

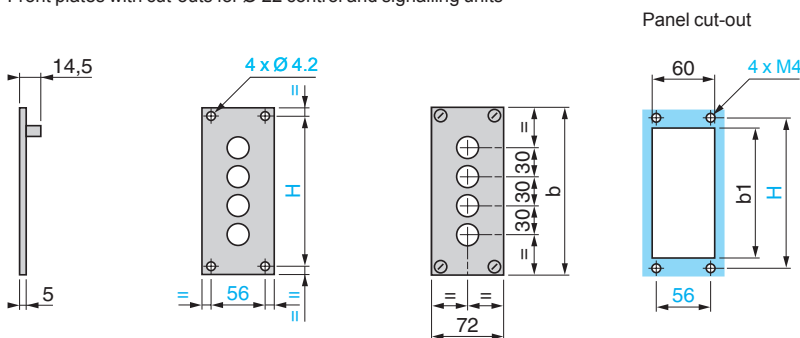


(1) 2 holes, with blanking plugs (protrusion 7.5 mm), for cable glands with 12 mm maximum clamping capacity. P = Usable depth

### Flush mounting enclosures XAP E

#### XAP E30●

Front plates with cut-outs for Ø 22 control and signalling units

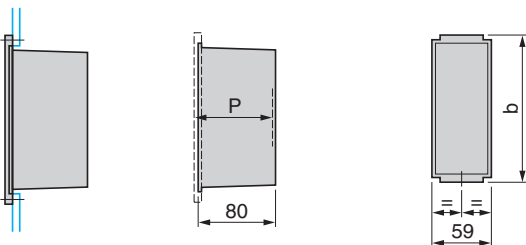


#### For Ø 22 control and signalling units

##### Front plate

XAP	b	b1	H
E301	72	44	56
E302	105	77	89
E303	138	110	122
E304	171	143	155
E305	204	176	188

Mounting of front plate and protective rear cover on support panel



##### Protective rear cover for front plate XAP E30●

XAP	b	P
E901	52	82.5
E902	85	82.5
E903	118	82.5
E904	151	82.5
E905	184	82.5

P = Usable depth

### Operating principle

These control stations are fitted with a key operated lock and are designed to provide a starting or authorisation sequence by using the key. To prevent unauthorised operation (shorting of the contact block) or tampering, the stations are fitted with a special lock featuring a pre-determined key position (other than its withdrawal position) that only allows removal of the front cover by the key holder. The control stations are supplied with 2 keys.

### Environment

<b>Conformity to standards</b>			EN/IEC 60947-5-1
<b>Protective treatment</b>	Standard version		"TC"
	Special version		"TH"
<b>Ambient air temperature</b>	For operation	°C	- 25... + 70
	For storage	°C	- 40... + 70
<b>Electric shock protection</b>	Conforming to IEC 61140		Class I
<b>Degree of protection</b>	Conforming to IEC 60529		IP 54
	Conforming to EN 50102		IK 08
<b>Cable entries</b>			1 tapped entry for cable gland and 1 entry through the rear (Ø 17 mm knock-out), with rubber cable grommet (see dimensions on next page)

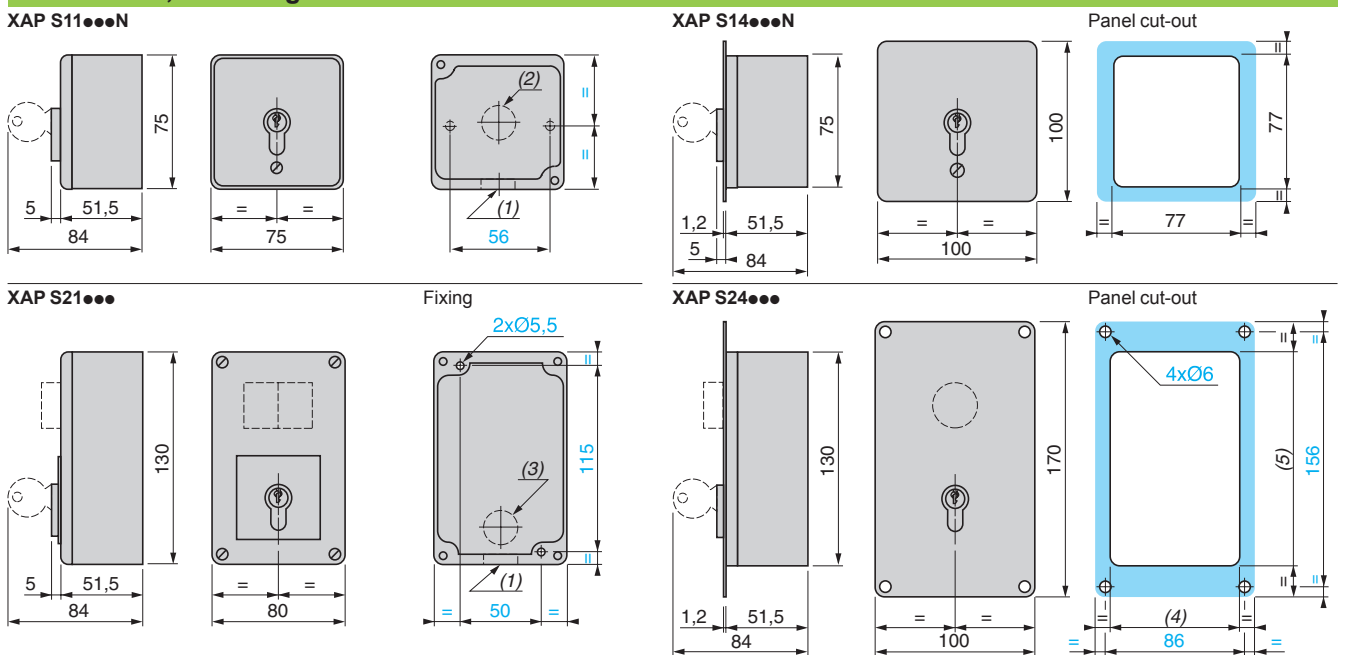
### Contact block characteristics

<b>Nominal thermal current</b>	Conforming to EN/IEC 60947-5-1	<b>A</b>	10
<b>Rated insulation voltage</b>			U <sub>i</sub> = 600 V, degree of pollution 3 conforming to EN/IEC 60947-1
<b>Rated impulse withstand voltage</b>			U <sub>imp</sub> = 6 kV conforming to EN/IEC 60947-1
<b>Contact</b>	Type		1 N/O slow break contact
	Material		Silver alloy (Ag/Ni)
<b>Resistance across terminals</b>		<b>mΩ</b>	≤ 25
<b>Terminal referencing</b>			Conforming to EN 50013 and EN 50050
<b>Short-circuit protection</b>	Conforming to EN/IEC 60947-5-1		10 A cartridge fuse type gG
<b>Rated operational power</b>		Conforming to EN/IEC 60947-5-1. Utilisation categories AC-15 and DC-13. Operating rate: 3600 operating cycles/hour. Load factor: 0.5	
<b>AC-15: A600</b>			
<b>U<sub>e</sub> (V)</b>	600	240	120
<b>I<sub>e</sub> (A)</b>	1.2	3	6
<b>DC-13: Q600</b>			
<b>U<sub>e</sub> (V)</b>	600	250	125
<b>I<sub>e</sub> (A)</b>	0.1	0.27	0.55
<b>d.c. supply ---</b>			
Power broken in W for 1 million operating cycles			
<b>Voltage (V)</b>	24	48	120
<b>mm (W)</b>	65	48	40
<b>Connection</b>			Screw clamp terminals, cross head screws slotted for 4 and 5.5 mm screwdrivers Maximum clamping capacity: 1 x 2.5 mm <sup>2</sup> or 2 x 1.5 mm <sup>2</sup> with or without cable end Tightening torque: 0.8 Nm

References		Control stations with 1 N/O contact per function					
		Description	Key withdrawal	Marking	Mounting	Reference	Weight kg
	XAP S11111N	2 position, stay put	Left-hand position	O	Surface	XAP S11111N (1)	0.830
					Flush	XAP S14111N (1)	0.890
	XAP S11221N	2 position, spring return from right to left	Left-hand position		Surface	XAP S11221N (1)	0.830
					Flush	XAP S14221N (1)	0.890
	XAP S21111	2 position, stay put + 2 spring return buttons	Left-hand position	O	Surface	XAP S21111	1.080
					Flush	XAP S24111	1.190
	XAP S11331N	3 position, stay put	Centre position	↑ O ↓	Surface	XAP S11331N (1)	0.850
					Flush	XAP S14331N (1)	0.910
	XAP S11431N	3 position, spring return from left and right to centre	Centre position	↑ O ↓	Surface	XAP S11431N (1)	0.850
					Flush	XAP S14431N (1)	0.910
	XAP S21331	3 position, stay put + 1 spring return button	Centre position	← Stop O →	Surface	XAP S21331	1.070
					Flush	XAP S24331	1.180
	XAP S21431	3 position, spring return from left and right to centre + 1 spring return button	Centre position	← Stop O →	Surface	XAP S21431	1.070
					Flush	XAP S24431	1.180
<b>100 x 100 front plates (for XAP S11●●●N control stations)</b>							
		Description	Marking			Reference	Weight kg
		2 position, stay put	O			XAP SZ11	0.045
		2 position			→	XAP SZ12	0.045
		3 position	↑	O	↓	XAP SZ13	0.045
<b>Separate components and spare parts</b>							
		Description	Type of contact	For use with control stations	Sold in lots of	Unit reference	Weight kg
		Standard contact blocks	N/O	XAP S1●●●●N	5	ZEN L1111	0.015
				XAP S2●●●●	5	ZB2 BE101	0.015
<b>Accessories (for control stations XAP S11●●●N and XAP S14●●●N)</b>							
		Description	Key number	Reference		Weight (kg)	
				Key only	2 keys + barrel (2)	Key only	2 keys + barrel
		Keys	Number to be stated	XAP SZ50	XAP SZ15	0.011	0.140
			BC1011	XAP SZ01	XAP SZ16	0.011	0.140
			BC1025	XAP SZ02	XAP SZ17	0.011	0.140
			BC1029	XAP SZ03	XAP SZ18	0.011	0.140
			BC1031	XAP SZ04	XAP SZ19	0.011	0.140
			BC1069	XAP SZ05	XAP SZ20	0.011	0.140

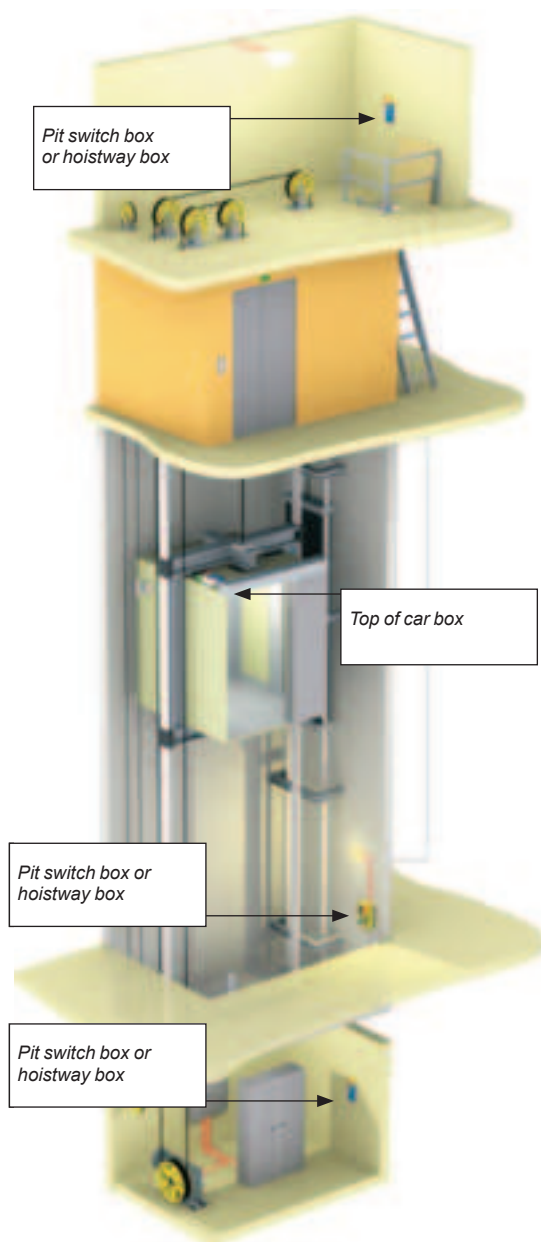
(1) For a control station with a specific key number, add the letter Z to the end of the reference and state the key number when ordering. Example: XAP S11111N becomes XAP S11111NZ.  
 (2) For keys and barrels with other numbers, please consult your customer care centre.

### Dimensions, mounting



(1) 1 tapped entry for 12 mm maximum capacity cable gland.  
 (2) Knock-out: cable entry through rear, Ø 17 mm.  
 (3) Optional: cable entry through rear.

(4) 81 mm min.  
 (5) 131 mm min.



### Presentation

XAL F lift inspection stations are designed for lift maintenance applications.

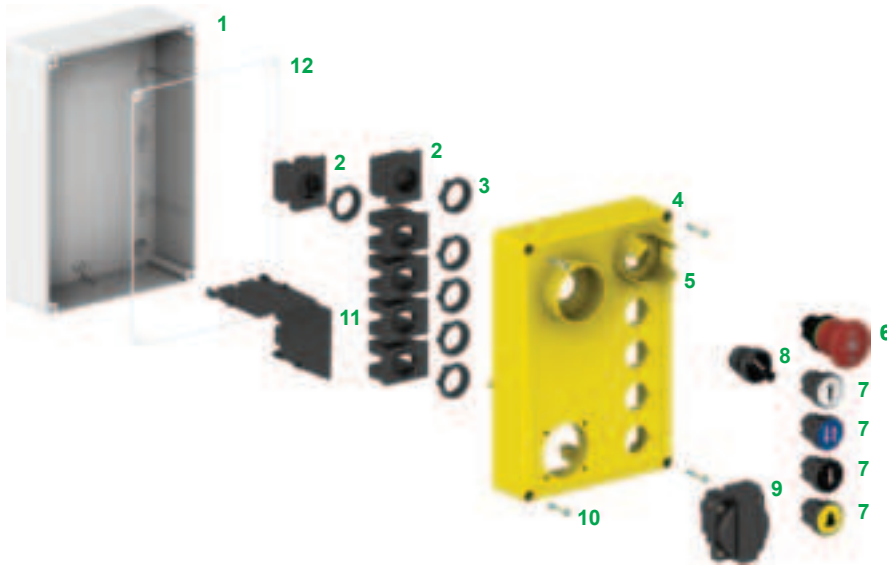
Three types of stations are available:

- Top of car boxes
  - Pit switch boxes
  - Hoistway boxes.
- These boxes make it possible to control movement of the lift.
  - Used in conjunction with the other operating components, they facilitate inspection and repair work.
  - They are installed outside the lift car.
  - Safety: inspection stations prevent any risk of uncontrolled movement of the lift while such work is being carried out.
- Supplied complete, these lift inspection stations are equipped with Ø 22 control and signalling units from the Harmony® XB5 and XB7 ranges; they are catalogue listed and are certified CE.
  - Stations can also be configured by the user: empty enclosures which can be equipped to meet custom requirements are available from the catalogue.

### Functions

Function	Equipment
Control and signalling	<ul style="list-style-type: none"> <li>■ Flush pushbuttons, unmarked or with marking (1).</li> <li>■ Selector switches with standard handle or key switches.</li> <li>■ Pilot lights with integral LED and "true colours".</li> <li>■ Illuminated pushbuttons.</li> </ul>
Emergency Stop (EN/ISO 13850)	<ul style="list-style-type: none"> <li>■ Mushroom head, latching, Emergency Stop pushbutton with pilot light and mechanical state indicator;</li> <li>□ White LED, on front panel.</li> <li>□ 360° mechanical indication by green ring and by two windows with green/red indication, on front panel.</li> </ul>
Power socket	<ul style="list-style-type: none"> <li>■ Extensive range of power sockets to meet the specific needs of each country. Degree of protection IP 44.</li> </ul>

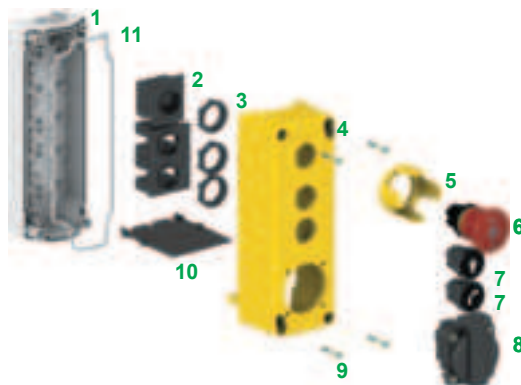
(1) Double injection-moulded marking.



### Description

#### Top of car boxes

- 1 Enclosure base, grey.
- 2 Contact block.
- 3 Nuts.
- 4 Enclosure lid, yellow.
- 5 Guard.
- 6 Red, mushroom head, latching Emergency Stop pushbutton with pilot light (white) and mechanical state indicator (green/red).
- 7 Flush pushbuttons, with marking: ⬆, ⬇, ⬇, ⬆.
- 8 Selector switch with standard handle.
- 9 230 V power socket.
- 10 Stainless steel screws.
- 11 Partition plates.
- 12 Gasket



#### Pit switch boxes

- 1 Enclosure base, grey.
- 2 Contact block.
- 3 Nuts.
- 4 Enclosure lid, yellow.
- 5 Guard.
- 6 Red, mushroom head, latching Emergency Stop pushbutton with pilot light (white) and mechanical state indicator (green/red).
- 7 Flush pushbuttons, with marking ⬆, ⬇.
- 8 230 V power socket.
- 9 Stainless steel screws.
- 10 Partition plate
- 11 Gasket



#### Hoistway boxes

- 1 Enclosure base, grey.
- 2 Contact block.
- 3 Nut.
- 4 Enclosure lid, yellow.
- 5 Guard.
- 6 Mushroom head for latching Emergency Stop pushbutton with pilot light (white) and mechanical state indicator (green/red).
- 7 Stainless steel screws.

Empty enclosures or complete units			
Environment characteristics			
Protective treatment	Standard version		"TH" treatment
Ambient air temperature around the device	Storage	°C	- 40... + 70
	Operation	°C	0... + 50 (empty enclosures or complete units) - 25... + 70 (control and signalling units type XB5 or XB7)
Electric shock protection			Conforming to IEC 61140 class II
Degree of protection	Conforming to IEC 60529		IP 54 IP 44 with power socket
Mechanical shock protection	Conforming to IEC 50102		Non illuminated heads: IK 03 Illuminated heads: IK 05
Conforming to standards			EN 81-1, EN/IEC 60947-1, EN/IEC 60947-5-1, EN/IEC 60947-5-4, EN/IEC 60947-5-5 EN/ISO 13850 (if equipped with "Trigger action" Emergency Stop buttons with pilot light and mechanical state indicator)
Product certifications			CE
Terminal referencing			Conforming to EN 50005 and EN 50013
Material and colours			Polycarbonate, light grey RAL 7035 (base) and yellow (lid)
Cable entries			Hoistway box and pit switch box: Knock-outs for n° 13 (CM12, Pg13.5) cable glands and tapped ISO 20 Top of car box: cut-outs required
Electrical characteristics			
Rated insulation voltage	Conforming to EN 81-1	V	250 for power sockets
			500 for ZBE10● contact

**Contact function characteristics of XB5 pushbuttons, switches and pilot lights**

**Mechanical characteristics**

<b>Contact operation</b>	N/C or N/O		Slow break
<b>Positive operation</b>	Conforming to EN/IEC 60947-5-1 appendix K		All functions incorporating an N/C contact have positive opening operation
<b>Operating travel</b> (to change the electrical state)	Pushbutton	<b>mm</b>	Changing N/C state: 1.5 Changing N/O state: 2.6 Total travel: 4.3
<b>Operating force</b>	Pushbutton	<b>N</b>	Changing N/C state: 3.5 Changing N/O state: 3.8
	Additional contact only (to change the state)	<b>N</b>	Single N/C contact: 2 Single N/O contact: 2.3
	Emergency stop with N/C + N/O	<b>N</b>	Trigger action push-pull: 50
<b>Operating torque</b> (to change the electrical state)	Selector switches	<b>N.m</b>	N/O contact: 0.14
	Additional contact only	<b>N.m</b>	N/O contact: 0.05
<b>Mechanical durability</b> (in millions of operating cycles)	Spring return pushbutton		5
	Non illuminated selector switch		1
	Illuminated selector switch		0.5
	Latching mushroom head pushbutton for Emergency Stop with mechanical state indicator		0.3 with 2 contacts
<b>Vibration resistance</b>	Conforming to IEC 60068-2-6		Frequency: 2...500 Hz: 5 gn
<b>Shock resistance</b>	Conforming to IEC 60068-2-27		All functions except spring return mushroom head pushbuttons: <input type="checkbox"/> half sine wave acceleration 11 ms: 50 gn <input type="checkbox"/> half sine wave acceleration 18 ms: 30 gn Spring return mushroom head pushbutton: <input type="checkbox"/> half sine wave acceleration 11 ms: 15 gn

**Electrical characteristics**

<b>Cabling capacity</b>	Conforming to EN/IEC 60947-1	<b>mm<sup>2</sup></b>	Screw clamp terminals Min: 1 x 0.22 without cable end Max: 2 x 1.5 with cable end Cross head screws (Pozidriv or Philips type 1), slotted for flat 4 and 5.5 mm screwdriver Tightening torque: 0.8 N.m (max 1.2 N.m)
<b>Contact material</b>			Silver alloy (Ag / Ni)
<b>Rated thermal current</b>	Conforming to EN/IEC 60947-5-1	<b>A</b>	Standard block with screw clamp terminals: 10
<b>Short-circuit protection</b>	Conforming to EN/IEC 60947-5-1	<b>A</b>	Standard block with screw clamp terminals: 10 (gG cartridge fuse conforming to IEC 60269-1)
<b>Rated insulation voltage</b>	Conforming to EN/IEC 60947-1	<b>V</b>	Standard block with screw clamp terminals: Ui = 600 degree of pollution 3
<b>Rated impulse withstand voltage</b>	Conforming to EN/IEC 60947-1	<b>kV</b>	Standard block with screw clamp terminals: Uimp = 6
<b>Rated operational characteristics</b> Conforming to EN/IEC 60947-5-1	a.c. supply: utilisation category AC-15		A 600: Ue = 600 V and Ie = 1.2 A or Ue = 240 V and Ie = 3 A or Ue = 120 V and Ie = 6 A B300 with ZBE 7●●● contact blocks for printed circuit board connection
	d.c. supply: utilisation category DC-13		Q 600: Ue = 600 V and Ie = 0.1 A or Ue = 250 V and Ie = 0.1 A or Ue = 125 V and Ie = 0.22 A R300 with ZBE 7●●● contact blocks for printed circuit board connection
<b>Electrical durability</b> Conforming to EN/IEC 60947-5-1 appendix C Frequency: 3600 operating cycles/hour Load factor: 0.5	a.c. supply for 1 million operating cycles: utilisation category AC-15	<b>V</b> <b>A</b>	24 4
	d.c. supply for 1 million operating cycles: utilisation category DC-13	<b>V</b> <b>A</b>	120 3
<b>Electrical reliability</b>	Failure rate Conforming to EN/IEC 60947-5-4		230 2
			24 0.5
			110 0.2
			At 17 V and 5 mA, λ < 10 <sup>-8</sup> At 5 V and 1 mA, λ < 10 <sup>-6</sup>



#### Ordinary light function characteristics, with integral LED

##### Ø 22 mm control and signalling units with plastic bezel, type XB5

<b>Voltage limits</b>	For rated voltage	<b>V</b>	12 V: 10 to 15 $\overline{\text{---}}$ ; 10.2 to 13.8 $\sim$ 24 V: 19.2 to 15 $\overline{\text{---}}$ ; 21.6 to 13.8 $\sim$ 24 to 120 V: 20 to 132 $\overline{\text{---}}$ 48 to 120 V: 40 to 132 $\sim$ 240 V: 195 to 264 $\sim$
<b>Current consumption</b>	Applicable to all colours	<b>mA</b>	Blocks with $\overline{\text{---}}$ 12 V supply: 18 Blocks with $\overline{\text{---}}$ 24 V supply: 18 Blocks with $\sim$ 120 V supply: 14 Blocks with $\sim$ 240 V supply: 14
<b>Service life</b>	At rated voltage and at an ambient temperature of 25 °C	<b>H</b>	100 000
<b>Surge withstand</b>	Conforming to IEC 61000-4-5	<b>kV</b>	1
<b>Resistance to fast transients</b>	Conforming to IEC 61000-4-4	<b>kV</b>	2
<b>Resistance to electromagnetic fields</b>	Conforming to IEC 61000-4-3	<b>V/m</b>	10
<b>Resistance to electrostatic discharges</b>	Conforming to IEC 61000-4-2	<b>kV</b>	8: in free air, on insulating parts 6: on contact, on metal parts
<b>Direct parallel connection across inductive load</b> E.g.: contactor coil or solenoid	Maximum power of load	<b>VA</b>	For high power applications ( $\geq 30$ VA), a <b>ZBZ V•</b> LED suppressor must be connected across the light block terminals (see page 36168/4)
<b>Electromagnetic emission</b>	Conforming to IEC 55011		Class B

##### Monolithic plastic pilot lights type XB7 with integral LED

<b>Voltage limits</b>	For rated voltage	<b>V</b>	24 V $\overline{\text{---}}$ : 19.2...30 $\overline{\text{---}}$ ; 21.6...26.4 $\sim$ 120 V $\sim$ : 100...132 $\sim$ 230-240 V $\sim$ : 195...264 $\sim$
<b>Current consumption</b>	Applicable to all colours	<b>mA</b>	18 (all types, all voltages)
<b>Service life</b>	At rated voltage and at an ambient temperature of 25 °C	<b>H</b>	80 000
<b>Electromagnetic emissions</b>	Conforming to IEC 55011		Class B

#### Connections

##### Ø 22 mm control and signalling units with plastic bezel, type XB5

<b>Cabling capacity</b>	Conforming to EN/IEC 60947-1	<b>mm<sup>2</sup></b>	Screw clamp terminals <input type="checkbox"/> min.: 1 x 0.22 without cable end <input type="checkbox"/> max.: 2 x 1.5 with cable end or 2 x 2.5 without cable end  Cross head screws (Pozidriv or Phillips type 1), slotted for flat 4 and 5.5 mm screwdriver  Tightening torque: 0.8 N.m (max 1.2 N.m)
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##### Monolithic plastic pilot lights type XB7 with integral LED

<b>Cabling capacity</b>	Conforming to EN/IEC 60947-1	<b>mm<sup>2</sup></b>	Screw clamp terminals <input type="checkbox"/> min.: 1 x 0.34 without cable end <input type="checkbox"/> max.: 2 x 1.5 with cable end  Cross head screws (Pozidriv or Phillips type 1), slotted for flat 4 and 5.5 mm screwdriver  Tightening torque: 0.8 N.m (max 1.2 N.m)
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### Hoistway boxes (grey base and yellow lid)

#### Complete boxes

Description	Type of push	Type of contact		Shape of head	Reference	Weight kg	
		N/O	N/C				
 XAL FKT644●1	1 red, mushroom head Emergency Stop pushbutton, with guard	Latching, with mechanical state indicator (green/red)	1	1		XAL FKT64451	0.175
			–	1		XAL FKT64421	0.165
			–	2		XAL FKT64441	0.175
 XAL FKT644●	1 red, mushroom head Emergency Stop pushbutton	Latching, with mechanical state indicator (green/red)	1	1		XAL FKT6445●11 (1)	0.185
			–	1		XAL FKT6445	0.165
			–	1		XAL FKT6442	0.155
 XAL FKA252●	1 spring return pushbutton	Latching, with pilot light (white) and mechanical state indicator (green/red)	1	1		XAL FKT6444	0.165
			–	2		XAL FKT6444	0.165
			1	1		XAL FKT6445●11 (1)	0.175
 XAL FKA551●	Flush black	Flush black	1	–		XAL FKA2521	0.130
			1	1		XAL FKA2525	0.140
			2	–		XAL FKA2523	0.140
 XAL FKA253●	Flush yellow	Flush yellow	1	–		XAL FKA5511	0.130
			1	1		XAL FKA5515	0.140
			2	–		XAL FKA5513	0.140
 XAL FK01	Flush black	Flush black	1	–		XAL FKA2531	0.130
			1	1		XAL FKA2535	0.140
			2	–		XAL FKA2533	0.140

#### Empty enclosure for configuration by the user

Number of Ø 22 mm cut-outs	Reference	Weight kg
1	XAL FK01	0.110

(1) Replace the ● in the reference with **B** for ~ 24 V, with **G** for ~ 110 ... 120 V or with **M** for ~ 230 ... 240 V.

Other versions

Please consult your customer care centre

# Control stations and enclosures

Lift inspection stations












Harmony® XAL F

Complete stations, empty enclosures

2

## Pit switch boxes (grey base and yellow lid)

### Complete boxes

Description	Type of push	Type of contact		Shape of head	Reference	Weight kg
		N/O	N/C			
 105782 XAL FK2001E 1 red, mushroom head Emergency Stop pushbutton, with guard 1 spring return pushbutton 1 power socket (IEC blue) (1)	Latching, with mechanical state indicator (green/red)	1	1		XAL FK2001E	0.500
	1 flush black	1	–			
 105783 XAL FK3001E 1 red, mushroom head Emergency Stop pushbutton, with guard 2 spring return pushbuttons 1 power socket (IEC blue) (1)	Latching, with mechanical state indicator (green/red)	1	1		XAL FK3001E	0.550
	1 flush black	1	–			
	1 flush black	1	–			
 105784 XAL FK3011E 1 red, mushroom head Emergency Stop pushbutton, with guard 2 spring return pushbuttons 1 power socket (IEC blue) (1)	Latching, with pilot light (white ~/--- 24 V) and with mechanical state indicator (green/red)	1	1		XAL FK3011E	0.550
	1 flush black	1	–			
	1 flush yellow	1	–			

### Empty enclosures for configuration by the user

Number of Ø 22 mm cut-outs	Number of Ø 45 mm cut-outs for power socket	Reference	Weight kg
3	–	XAL FK03	0.290
4	–	XAL FK04	0.290
2	1	XAL FK021	0.290
3	1	XAL FK031	0.290
























(1) IEC Blue power socket type XAL FZE3; for other types of power socket, see page 2/70.

Other versions Please consult your customer care centre

## Top of car boxes (grey base and yellow lid)

## Complete boxes

Description	Type of operator	Type of contact		Shape of head	Reference	Weight kg
		N/O	N/C			
 XAL FP6003E	1 red, mushroom head Emergency Stop pushbutton, with guard	Latching, with mechanical state indicator (green/red)	1	1		XAL FP6003E 0.810
	4 spring return pushbuttons	1 flush white	2	–		
		1 flush blue	1	–		
		1 flush black	2	–		
	1 flush yellow	1	–			
1 selector switch, with guard	Standard black handle, 2-position stay put	3	3			
1 power socket (IEC blue) (1)						
 XAL FP7005E	1 red, mushroom head Emergency Stop pushbutton, with guard	Latching, with pilot light (white ~/∞ 24 V) and mechanical state indicator (green/red)	1	1		XAL FP7005E 0.850
	4 spring return pushbuttons	1 flush white	2	–		
		1 flush blue	1	–		
		1 flush black	2	–		
	1 flush yellow	1	–			
2 selector switches, with guard	Standard black handle, 2-position stay put Standard black handle, 3-position spring return to centre	2 1	2 1			
1 power socket (IEC blue) (1)						
 XAL FK4001	1 red, mushroom head Emergency Stop pushbutton, with guard	Latching, with mechanical state indicator (green/red)	1	1		XAL FK4001 0.550
	2 spring return pushbuttons	1 flush white 1 flush black	2 2	– –	 	
1 selector switch, with guard	Standard black handle, 2-position stay put	2	2			

## Empty enclosures for configuration by the user

Number of Ø 22 mm cut-outs	Number of Ø 45 mm cut-outs for power socket	Reference	Weight kg
6	1	XAL FP0612	0.500
	0	XAL FP0602	0.500
7	1	XAL FP0714	0.500
	0	XAL FP0704	0.500

(1) IEC Blue power socket type XAL FZE3; for other types of power socket, see page 2/70.









## Other versions








Please consult your customer care centre

Heads to combine with bodies:  
see page 2/71

### Ø 22 mm control and signalling units with plastic bezel

#### Pushbuttons, switches and pilot lights for user assembly: heads

Description	Type of push	Marking		Colour of push	Reference	Weight kg
		Symbol	Colour			
Heads for spring return pushbuttons	Flush		White	Yellow	ZB5 AA551	0.018
			Black	White	ZB5 AA334	0.018
			White	Blue	ZB5 AA650	0.018
			White	Black	ZB5 AA335	0.018
			White	Black	ZB5 AA252	0.018
			White	Black	ZB5 AA253	0.018
			Flush, illuminated (1)	–	Orange	ZB5 AA58
Illuminated mushroom head for Emergency stop trigger action and mechanical latching pushbuttons (2) (4)	Push-pull Ø 40 mm With pilot light (3) and mechanical state indicator		–	Red	ZB5 AT8643M	0.034

Description	Type of operator	Shape of head	Number and type of positions	Reference	Weight kg
Heads for selector switches	Standard handle, black		2 - stay put 	ZB5 AD2	0.025
			3 - spring return to centre 	ZB5 AD5	0.025
			Key switch with key n° 455 (5) 	2 - stay put (6) 	ZB5 AG2
Heads for illuminated selector switches with standard handle (3)	Standard handle, green		2 - stay put 	ZB5 AK1233	0.021

Protected  
LED

(1) For insertion of legend.

(2) Conforming to standards EN/IEC 60204-1 and ISO 13850, to Machinery Directive 98/37/EC and to standard EN/IEC 60947-5-5.

(3) For use with bodies comprising a light source with integral LED. Light blocks and body fixing collar, see page 2/71. Maximum number of contacts fitted to the associated body: 2.

(5) Other key numbers available:

- key n° 421E: add suffix **12** to the reference,

- key n° 458A: add suffix **10** to the reference,

- key n° 520E: add suffix **14** to the reference,

- key n° 3131A: add suffix **20** to the reference.

Example: for a switch head with key n° 421E, 2-position stay put with key withdrawal from the left-hand position, the reference becomes: **ZB5 AG212**. For specific keys with other numbers, please consult your customer care centre.

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

#### Other versions

Specific markings on boxes  
Other power sockets  
Special cut-outs in enclosures  
Customised products

Please consult your customer care centre



ZB5 AA58



ZB5 AT8643M



ZB5 AD




ZB5 AG2



ZB5 AK1233

## Ø 22 mm control and signalling units with plastic bezel (continued)

## Monolithic pilot lights

Description	Shape of head	Supply voltage V	Colour of lens	Sold in lots of	Unit reference	Weight kg	
Pilot lights with integral LED ("true" colours)		≈ 24 V	White	10	<b>XB7 EV01BP</b>	0.020	
			Green	10	<b>XB7 EV03BP</b>	0.020	
			Red	10	<b>XB7 EV04BP</b>	0.020	
			Yellow	10	<b>XB7 EV05BP</b>	0.020	
			Blue	10	<b>XB7 EV06BP</b>	0.020	
			Clear	10	<b>XB7 EV07BP</b>	0.020	
			Orange	10	<b>XB7 EV08BP</b>	0.020	
			~ 120 V 50-60 Hz	White	10	<b>XB7 EV01GP</b>	0.020
				Green	10	<b>XB7 EV03GP</b>	0.020
				Red	10	<b>XB7 EV04GP</b>	0.020
				Yellow	10	<b>XB7 EV05GP</b>	0.020
				Blue	10	<b>XB7 EV06GP</b>	0.020
		Clear		10	<b>XB7 EV07GP</b>	0.020	
		~ 230 V 50-60 Hz	White	10	<b>XB7 EV01MP</b>	0.020	
			Green	10	<b>XB7 EV03MP</b>	0.020	
			Red	10	<b>XB7 EV04MP</b>	0.020	
			Yellow	10	<b>XB7 EV05MP</b>	0.020	
			Blue	10	<b>XB7 EV06MP</b>	0.020	
			Clear	10	<b>XB7 EV07MP</b>	0.020	
		Orange	10	<b>XB7 EV08MP</b>	0.020		

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XB7 EV0...P

## Pilot lights with integral LED

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

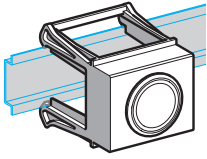
## Complete units

Description	Shape of head	Supply voltage V	Colour	Reference	Weight kg	
Pilot lights with plain lens		≈ 24 (50/60 Hz)	White	<b>XB5 AVB1</b> (ZB5 AVB1 + ZB5 AV013)	0.038	
			Green	<b>XB5 AVB3</b> (ZB5 AVB3 + ZB5 AV033)	0.038	
			Red	<b>XB5 AVB4</b> (ZB5 AVB4 + ZB5 AV043)	0.038	
			Orange	<b>XB5 AVB5</b> (ZB5 AVB5 + ZB5 AV053)	0.038	
			Blue	<b>XB5 AVB6</b> (ZB5 AVB6 + ZB5 AV063)	0.038	
			~ 110...120 (50/60 Hz)	White	<b>XB5 AVG1</b> (ZB5 AVG1 + ZB5 AV013)	0.038
				Green	<b>XB5 AVG3</b> (ZB5 AVG3 + ZB5 AV033)	0.038
				Red	<b>XB5 AVG4</b> (ZB5 AVG4 + ZB5 AV043)	0.038
				Orange	<b>XB5 AVG5</b> (ZB5 AVG5 + ZB5 AV053)	0.038
				Blue	<b>XB5 AVG6</b> (ZB5 AVG6 + ZB5 AV063)	0.038
				~ 230...240 (50/60 Hz)	White	<b>XB5 AVM1</b> (ZB5 AVM1 + ZB5 AV013)
			Green		<b>XB5 AVM3</b> (ZB5 AVM3 + ZB5 AV033)	0.038
		Red	<b>XB5 AVM4</b> (ZB5 AVM4 + ZB5 AV043)		0.038	
		Orange	<b>XB5 AVM5</b> (ZB5 AVM5 + ZB5 AV053)		0.038	
		Blue	<b>XB5 AVM6</b> (ZB5 AVM6 + ZB5 AV063)		0.038	

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XB5 AVB1



15151



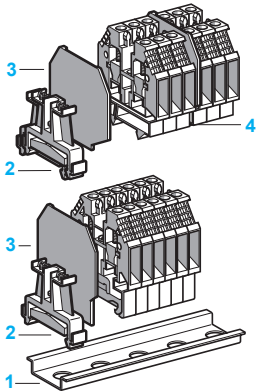
ZB5 SZ3



AB1 VV215



AB1 TP215



### Power sockets

Description	For use in	Colour	Sold in lots of	Unit reference	Weight kg
230 Volt power socket, with protective shutter (protection: IP 44)	Germany	Black	1	XAL FZE2	0.050
		Blue	1	XAL FZE3	0.050
	France	Grey	1	XAL FZF8	0.050
	Italy	Blue	1	XAL FZT3	0.050
	United Kingdom	Black	1	XAL FZB2	0.050
	Switzerland	Blue	1	XAL FZS3	0.050

### Accessories

Description	Application	Sold in lots of	Unit reference	Weight kg
Partition plates	For 230 Volt power socket	1	XAL FZ1	0.010
Nut	Fixing the head of Ø 22 mm control and signalling units	10	ZB5 AZ901	0.002
Plastic blanking plug, round, black (supplied with nut ZB5 AZ901)	Ø 22 mm cut-outs for circular heads	10	ZB5 SZ3	0.009
Bracket for XB5 A pushbuttons or XB7 E pilot lights	35 mm  mounting rail (for use in modular enclosure).	1	15151	0.040

### Terminal blocks

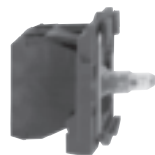
Description	Type	Sold in lots of	Unit reference	Weight g
Terminal block for clip-on mounting on 15 mm  rail	Screw clamp terminals for cables Colour: grey - Width: 5 mm Cabling c.s.a. (mm <sup>2</sup> ): - flexible cable without cable end: 0.5...2.5 - flexible cable with cable end: 0.5...1.5 - solid cable: 0.5...4	10	AB1 VV215	4.2
Protective earth	Colour: green/yellow - Width: 6 mm Cabling c.s.a. (mm <sup>2</sup> ): - flexible cable without cable end: 0.5...4 - flexible cable with cable end: 0.5...2.5 - solid cable: 0.5...6	100	AB1 TP215	11.7
1 15 x 5 rail for terminal blocks	Length: 1m	10	AB1 PC15	140
2 Plastic end stop	Width: 7.5	100	AB1 AB715	2.2
3 End plate	Colour: grey Thickness: 1.5 mm	50	AB1 AC2	1.3
4 Partition plate	Colour: grey Thickness: 1.5 mm	50	AB1 AS2	1.7



ZB5 AZ101



ZB5 AZ102



ZB5 AW0B51



ZBE 101



ZBE 102



ZBV B



ZB5 AZ009

## Bodies for Ø 22 mm control and signalling units with screw clamp terminal connections (1)

Description	For use with	Type of contact		Reference	Weight kg
		N/O	N/C		
Fixing collar + single contact block with screw clamp terminal connections	Heads for ZB5 pushbuttons	1	–	ZB5 AZ101	0.021
		–	1	ZB5 AZ102	0.021
		2	–	ZB5 AZ103	0.030
		–	2	ZB5 AZ104	0.030
		1	1	ZB5 AZ105	0.030

Description	For use with	Supply voltage	Colour of light source	Type of contact		Reference	Weight kg
				N/O	N/C		
Fixing collar + single contact block with screw clamp terminal connections + light block with integral LED <b>Protected LED</b>	ZB5 AA58	≈ 24 V	Orange	1	–	ZB5 AW0B51	0.032

## Contact blocks with screw clamp terminal connections

Description	For use with	Sold in lots of	Type of contact		Unit reference	Weight kg
			N/O	N/C		
Standard single contact blocks (2) (3)	Heads for ZB5 pushbuttons	5	1	–	ZBE 101	0.011
		5	–	1	ZBE 102	0.011

## Light blocks with screw clamp terminal connections

Description	For use with	Supply voltage	Colour of light source	Sold in lots of	Unit reference	Weight kg
		~ 48...120 V	Orange	5	ZBV G5	0.017
		~ 230...240 V	Orange	5	ZBV M5	0.017
	ZB5 AK1233	≈ 24 V	Green	5	ZBV B3	0.017
		~ 48...120 V	Green	5	ZBV G3	0.017
		~ 230...240 V	Green	5	ZBV M3	0.017
	ZB5 AT8643M	≈ 24 V	White	5	ZBV B1	0.017
		~ 48...120 V	White	5	ZBV G1	0.017
		~ 230...240 V	White	5	ZBV M1	0.017

## Accessories

Description	For use with	Sold in lots of	Unit reference	Weight kg

(1) Can be fitted with additional contact blocks.

(2) The contact blocks enable variable composition of body/contact assemblies. Maximum number of rows possible: 3. Either 3 rows of 3 single contacts or 1 row of 3 double contacts + 1 row of 3 single contacts (double contacts occupy 2 rows).

(3) For use with body/fixing collar ZB5 AZ009.



2



ZBE 701



ZBE 702

Contact blocks for printed circuit board connection (1)						
Description	Type of contact		For use with	Sold in lots of	Unit reference	Weight kg
	N/O	N/C				
Standard contact blocks	1	–	Heads for ZB5 pushbuttons	10	ZBE 701	0.002
	–	1	Heads for ZB5 pushbuttons	10	ZBE 702	0.002
Specific contact blocks for low power switching with gold flashed contacts	1	–	Heads for ZB5 pushbuttons	10	ZBE 7016	0.003
	–	1	Heads for ZB5 pushbuttons	10	ZBE 7026	0.003

Light blocks for printed circuit board connection (1)						
Description	Supply voltage	For use with	Colour of LED	Sold in lots of	Unit reference	Weight kg
	V					
Integral LED (to combine with heads for integral LED)	≈ 24	ZB5 AA58	Orange	5	ZBV B57	0.004
		ZB5 AK1233	Green	5	ZBV B37	0.004
		ZB5 AT8643M	White	5	ZBV B17	0.004

Adapter (socket) for printed circuit board					
For use with	Thickness of printed circuit board mm	Sold in lots of	Unit reference	Weight kg	
Electrical block (contact or light)	1.6 ± 0.2	10	ZBZ 010	0.008	
	2.2 ± 0.2	10	ZBZ 011	0.008	
	3.2 ± 0.2	10	ZBZ 012	0.008	

Accessories specifically for printed circuit board mounting (1)					
Description	For use with	Sold in lots of	Unit reference	Weight kg	
Fixing collar/pillar	Printed circuit board support	10	ZB5 AZ079	0.003	
Fixing screw for printed circuit board	Fixing collar/pillar ZB5 AZ079	10	ZBZ 006	0.011	



ZBV B57



ZBZ 010



ZB5 AZ079

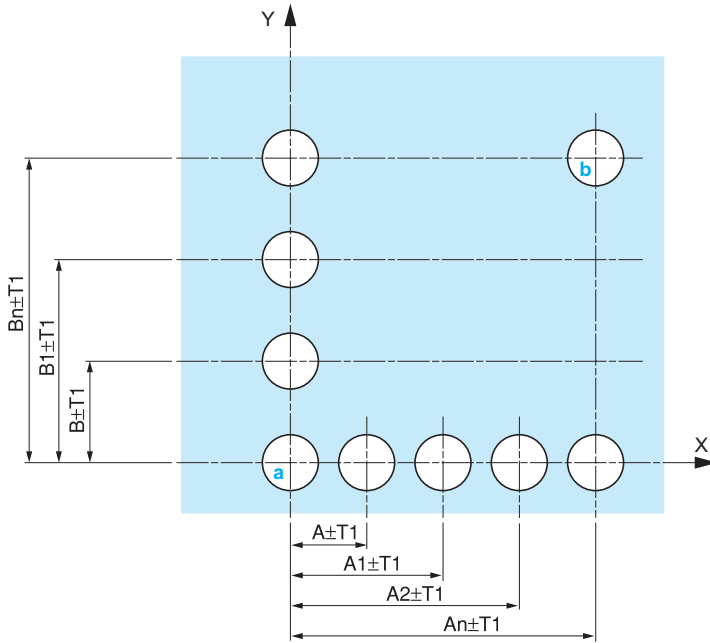
(1) For details of panel and printed circuit board cut-outs: see page 2/73.  
Must be used in conjunction with adapter (socket) ZBZ 010.



**Pushbuttons, switches and pilot lights for printed circuit board connection**

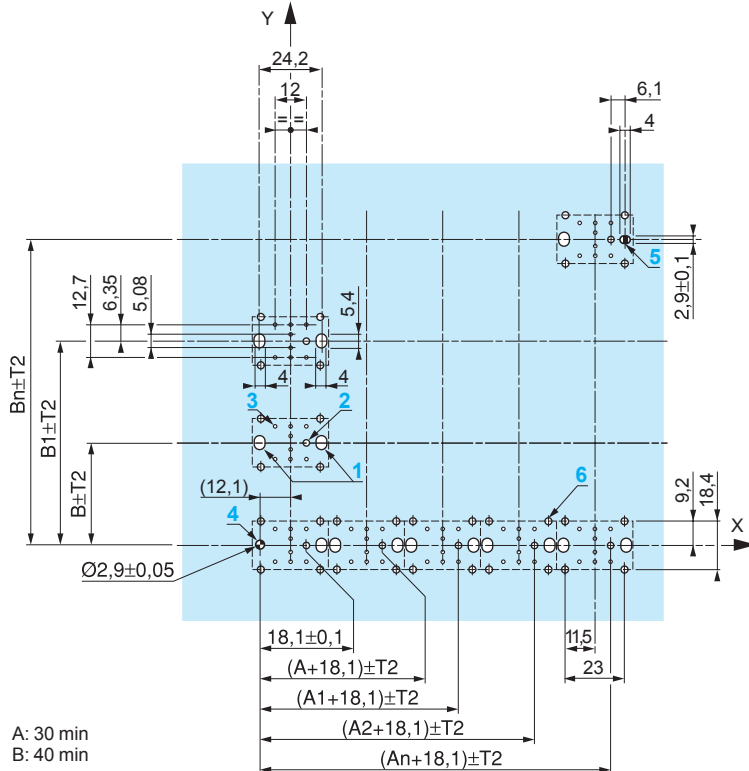
**Panel cut-outs (viewed from installer's side)**

Dimensions in mm



**Printed circuit board cut-outs (viewed from electrical block side)**

Dimensions in mm



A: 30 min  
B: 40 min

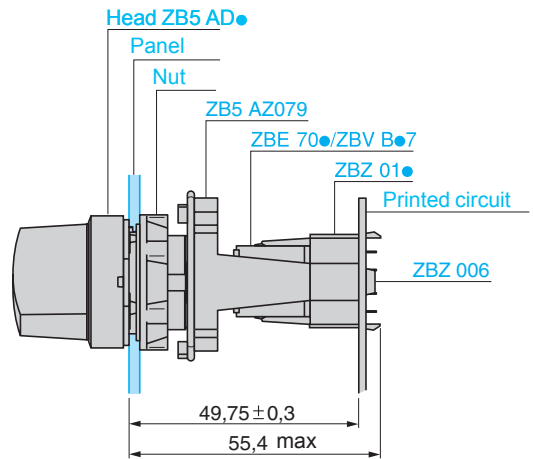
**General tolerances of the panel and printed circuit board**

The cumulative tolerance must not exceed 0.3 mm:  $T1 + T2 = 0.3 \text{ mm max.}$

■ Installation precautions:

- Minimum thickness of circuit board: 1.6 mm.
- Cut-out diameter:  $22.4 \text{ mm} \pm 0.1 \text{ mm}$ .
- Orientation of body/fixing collar ZB5 BZ079:  $\pm 2^\circ 30'$  (excluding cut-outs marked **a** and **b**).
- Tightening torque of screws ZBZ 006: 0.6 N.m max.
- Allow for one ZB5 BZ079 fixing collar/pillar and its fixing screws:
  - every 90 mm horizontally (X), and 120 mm vertically (Y),
  - with each selector switch head (ZB5 AD●, ZB5 AJ●, ZB5 AG●).

The fixing centres marked **a** and **b** are diagonally opposed and must align with those marked **4** and **5** on the printed circuit board.



■ Mounting of adapter (socket) ZBZ 01● :

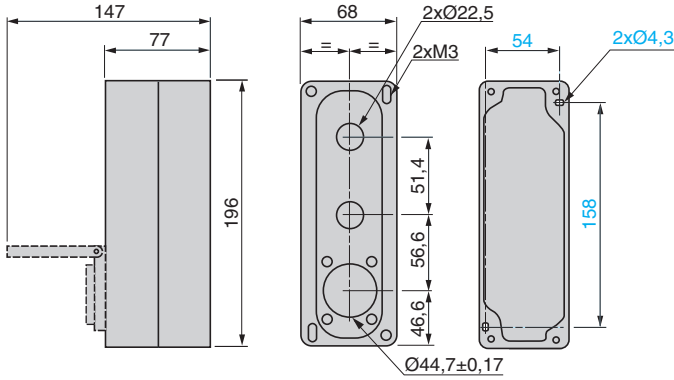
- 1 2 elongated holes for ZBZ 006 screw access.
- 2 1 hole  $\text{Ø} 2.4 \text{ mm} \pm 0.05$  for centring adapter ZBZ 01●.
- 3 8 x  $\text{Ø} 1.2 \text{ mm}$  holes.
- 4 1 hole  $\text{Ø} 2.9 \text{ mm} \pm 0.05$ , for aligning the printed circuit board (with cut-out marked **a**).
- 5 1 elongated hole for aligning the printed circuit board (with cut-out marked **b**).
- 6 4 holes  $\text{Ø} 2.4 \text{ mm} \pm 0.05$  for clipping in adapter ZBZ 01●.

Dimensions  $A_n + 18.1$  relate to the  $\text{Ø} 2.4 \text{ mm} \pm 0.05$  holes for centring adapter ZBZ 01●.

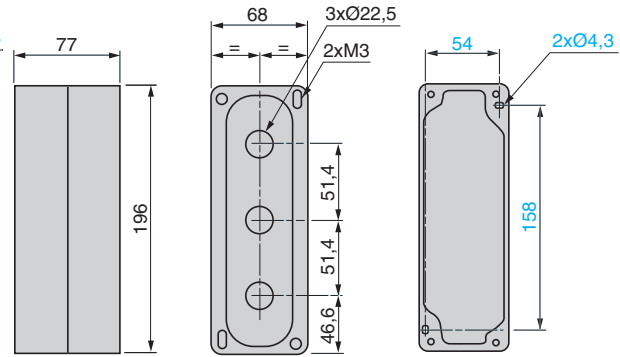
2

### Pit switch boxes

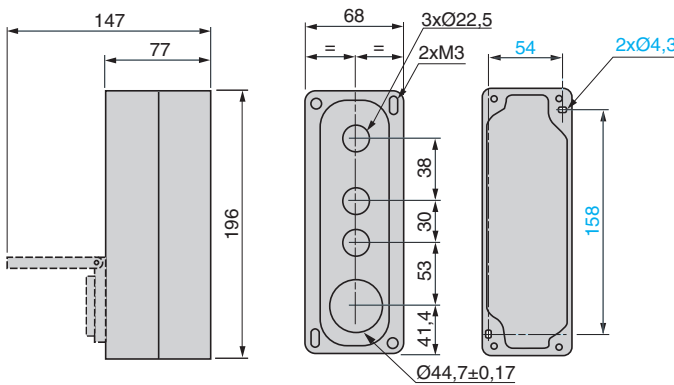
2 x Ø 22 mm cut-outs + 1 x Ø 45 mm cut-out for power socket



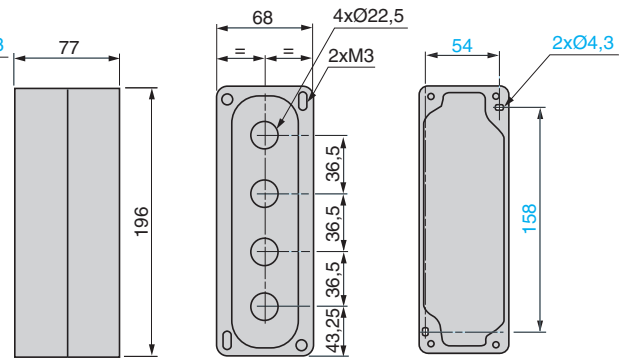
3 x Ø 22 mm cut-outs



3 x Ø 22 mm cut-outs + 1 x Ø 45 mm cut-out for power socket

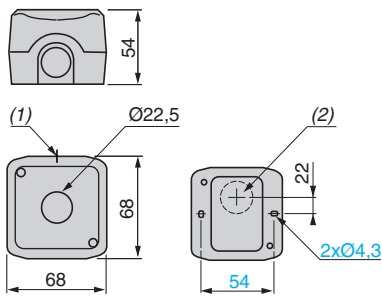


4 x Ø 22 mm cut-outs



### Hoistway boxes

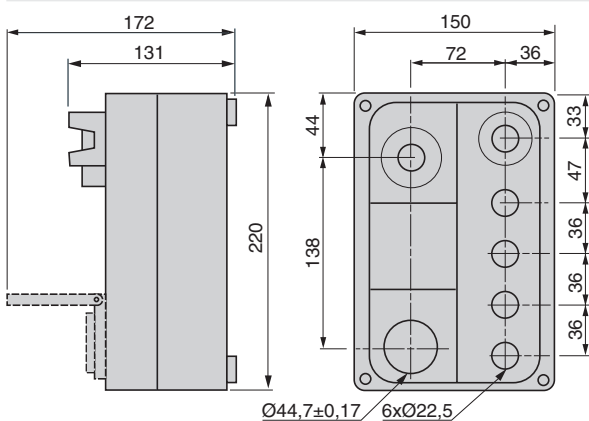
1 x Ø 22 mm cut-out



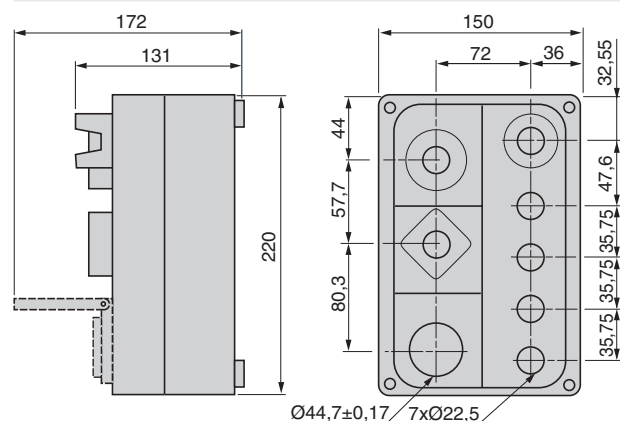
(1) 2 knock-outs for Pg 13.5 cable gland, maximum capacity 12 mm.  
(2) Knock-out for cable entry, maximum capacity 14 mm.

### Top of car boxes

6 x Ø 22 mm cut-outs + 1 x Ø 45 mm cut-out for power socket

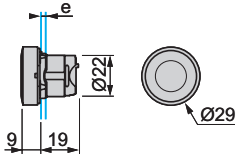


7 x Ø 22 mm cut-outs + 1 x Ø 45 mm cut-out for power socket

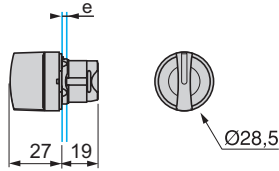


### Control and signalling units

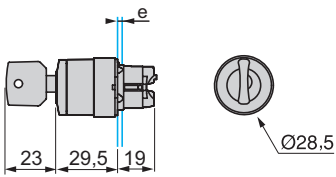
ZB5 AA●●●



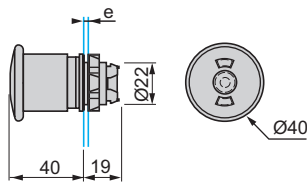
ZB5 AK1●●3



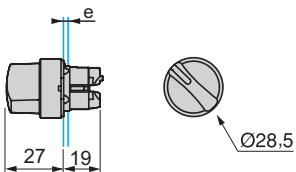
ZB5 AG●



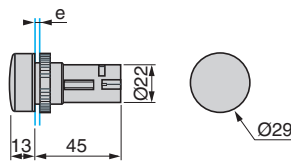
ZB5 AT8643M



ZB5 AD●



XB7 EV0●●P



e: panel thickness = 1...6 mm