

Selection guide **page 2/2**

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Ranges	Universal			
Enclosures	Plastic		Metal, elbowed	Metal
	Complete stations and separate components for customer assembly	Complete stations and separate components for customer assembly	Empty enclosures	Empty enclosures
				
Main feature	Pre-drilled enclosures		Pre-drilled enclosures	Pre-drilled or undrilled enclosures
Associated control and signalling units	Harmony XB5 with plastic bezel		Harmony XB4 with metal bezel Harmony XB5 with plastic bezel	
Number of cut-outs for Ø 22 control and signalling units	1, 2, 3, 4 or 5	1, 2 or 3 (complete stations) 1, 2, 3, 4 or 5 (empty enclosures)	1, 2, 3, 4, 5, 6 or 7	1, 2, 3, 4, 6, 8 or 12
Material	Polycarbonate		Aluminium alloy	Zinc or aluminium alloy
Colour	Yellow lid Light grey base	Dark grey lid Light grey base	Dark grey or yellow lid (enclosure with 1 cut-out) Light grey base	XAP M: Blue lid Blue base XAP J: Yellow lid Blue base
Degree of protection	IP 66		IP 65	
Function	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	
Cable entries	Knock-outs		Via opening in rear of enclosure	Drilled
Type references	XAL K	XAL D	XAM W●	XAP M, XAP J
Page(s)	2/9 and 2/12	2/8, 2/10 to 2/12	2/52	2/53

Universal			Optimum	Application specific		
Metal	Metal front plate, insulated protective rear cover	Plastic				Metal
Empty enclosures	Empty, flush mounting enclosures: front plate + rear cover	Empty insulated enclosures	Complete stations and separate components for customer assembly	Enclosures for severe environments	Lift inspection stations	Key operated control stations



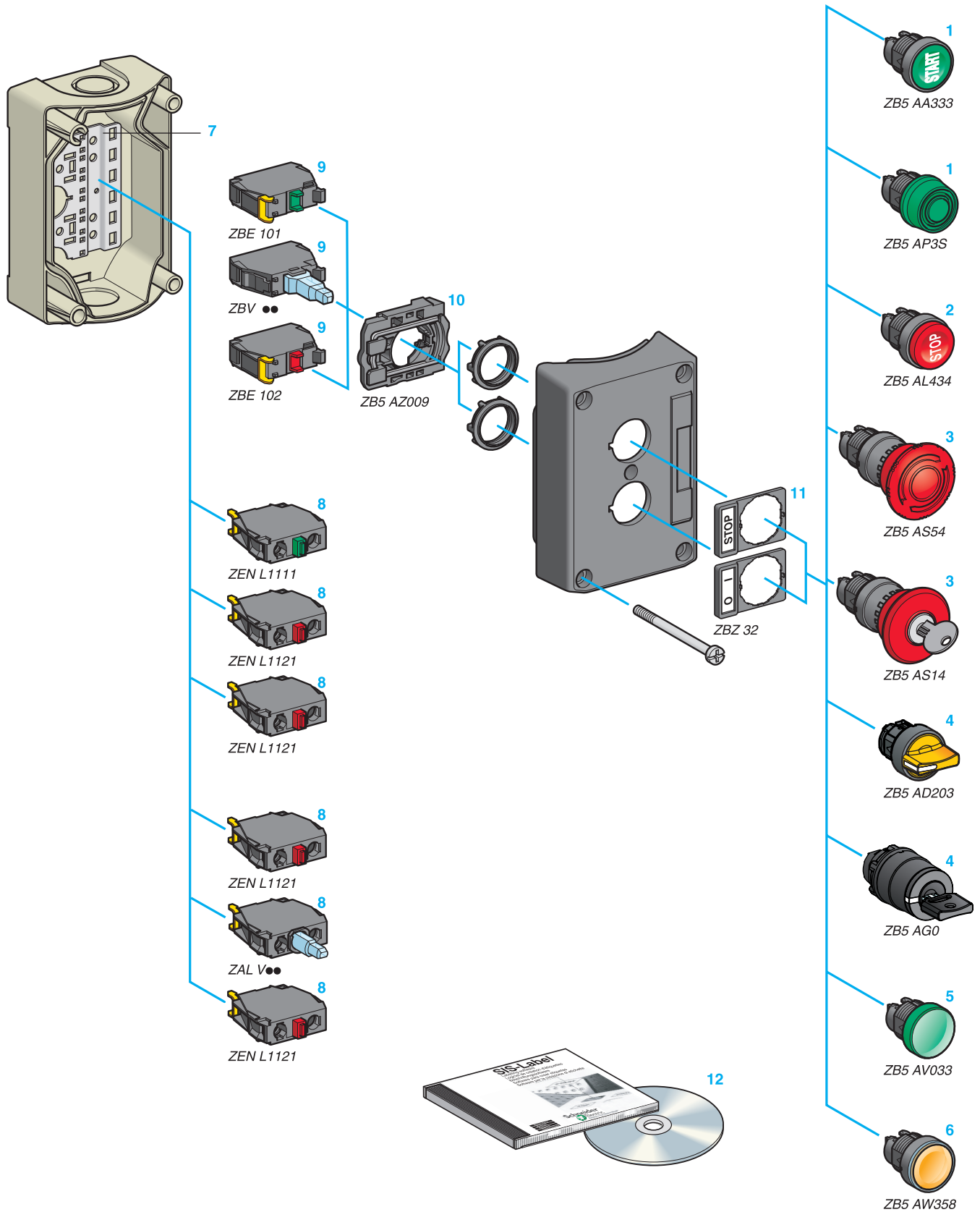
Pre-drilled enclosures	Pre-drilled front plates & rear covers	Pre-drilled or undrilled enclosures	Pre-drilled enclosures	Pre-drilled empty enclosures	Pre-drilled empty enclosures or fitted stations	Fitted stations
Harmony XB4 with metal bezel Harmony XB5 with plastic bezel			Harmony XB7, monolithic, plastic	Harmony XB5 with plastic bezel	Harmony XB5 or XB7 with plastic bezel	With key lock
8, 16, 24, 30 or 40	1, 2, 3, 4 or 5	1, 2, 4, 8 or 16	1, 2 or 3	1, 2, 3, 4 or 5	1, 2, 3, 4, 5 or 6 with or without power socket	–
Aluminium alloy or sheet steel	Front plate: brushed aluminium Rear cover: polystyrene	Glass-reinforced polyester	ABS	Mineral reinforced polyamide	Polycarbonate	Zinc alloy
Blue lid and base	Unpainted aluminium	Coloured grey throughout	Light grey or yellow lid Light grey base	Black lid Black base	Yellow lid Light grey base	Grey
IP 54	IP 65		IP 54	IP 66	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	Tapped for cable gland	Knock-outs	ISO 20	Knock-outs	Tapped for cable gland
XB2 SL	XAP E	XAP A	XAL E	XAL G	XAL F	XAP S
2/53	2/54	2/52	2/39 to 2/41	2/33	Please consult your Regional Sales Office	2/59

Control stations and enclosures

Control stations XAL

For Harmony® XB5 plastic Ø 22 control and signalling units

2



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

Protective treatment	Standard version		"TH"
Ambient air temperature around the device	For storage	°C	- 40...+ 70
	For operation	°C	- 25...+ 70 unless otherwise stated
Electric shock protection			Conforming to IEC 60536: class II
Degree of protection			Conforming to IEC 60529: IP 65
			Conforming to NEMA: NEMA type 4X and 13
High pressure cleaning resistance		Pa	70 x 10 ⁵ (70 bar); distance: 0.1 m Temperature: 55 °C
Mechanical shock protection Conforming to EN 50102			With non illuminated heads: IK 03
			With illuminated heads: IK 05
Conformity to standards			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: 2006 (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) JIS C 4520, UL 508, CSA C22-2 n° 14
Product certifications	UL Listed, CSA		Standard single contacts with screw clamp terminals: A600; R300 Light blocks with screw clamp terminals
Terminal referencing			Conforming to EN 50005 and EN 50013
Material and colours			XAL D: polycarbonate, light grey RAL 7035 and dark grey RAL 7016
			XAL K: polycarbonate, light grey RAL 7035 and yellow RAL 1021
Cable entries			Knock-out entries for n° 13 (CM12, Pg 13.5) cable gland and tapped ISO 20

Contact function characteristics

Mechanical characteristics

Contact operation	N/C or N/O		Slow break
Positive operation	Conforming to EN/IEC 60947-5-1 Appendix K		All functions incorporating a N/C contact are positive opening operation
Operating travel (to change electrical state)	Pushbutton	mm	Changing N/C state: 1.5 Changing N/O state: 2.6 Total travel: 4.3
Operating force	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
Operating torque (to change electrical state)	Selector switches	N.m	N/O contact: 0.14
	Additional contact only	N.m	N/O contact: 0.05
Mechanical durability (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
Vibration resistance	Conforming to IEC 60068-2-6		Frequency: 12...500 Hz: 5 gn
Shock resistance	Conforming to IEC 60068-2-27		All functions except mushroom head pushbutton, spring return: □ half sine wave acceleration 11 ms: 50 gn □ half sine wave acceleration 18 ms: 30 gn Mushroom head pushbutton, spring return: □ half sine wave acceleration 11 ms: 10 gn

Contact function characteristics (continued)

Electrical characteristics					
Cabling capacity	Conforming to EN/IEC 60947-1	mm ²	Screw clamp terminals		
		mm ²	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.)		
Contact material			Silver alloy (Ag/Ni)		
Nominal thermal current	Conforming to EN/IEC 60947-5-1	A	Standard blocks with screw clamp terminals: 10		
Short-circuit protection	Conforming to EN/IEC 60947-5-1	A	Standard blocks with screw clamp terminals: 10 (gG cartridge fuse conforming to IEC 269-1)		
Rated insulation voltage	Conforming to EN/IEC 60947-1	V	Standard blocks with screw clamp terminals: Ui = 600 degree of pollution 3		
Rated impulse withstand voltage	Conforming to EN/IEC 60947-1	kV	Standard blocks with screw clamp terminals: Uimp = 6		
Rated operational characteristics 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		
Electrical durability 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	
Electrical reliability	Failure rate. Conforming to EN/IEC 60947-5-4		At 17 V and 5 mA, $\lambda < 10^{-8}$ At 5 V and 1 mA, $\lambda < 10^{-6}$		

Specific characteristics of light functions with integral LED

Mechanical characteristics			
Vibration resistance	Conforming to IEC 60068-2-6		Frequency: 12...500 Hz: 5 gn
Shock resistance	Conforming to IEC 60068-2-27		Half sine wave acceleration 11 ms: 50 gn Half sine wave acceleration 18 ms: 30 gn
Electrical characteristics			
Cabling capacity	Conforming to EN/IEC 60947-1	mm ² mm ²	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.)
Rated insulation voltage	Conforming to EN/IEC 60947-1	V	Pilot light blocks with integral LED: Ui = 250, degree of pollution 3
Rated impulse withstand voltage	Conforming to EN/IEC 60947-1	kV	Pilot light blocks with integral LED: Uimp = 4
Voltage limits	At nominal voltage	V	24 V: 19.2...30 —; 21.6...26.4 ~ 48...120 V: 40...132 ~ 240 V: 195...264 ~
Current consumption	For all colours	mA	≈ 12 V supply blocks: 18 ≈ 24 V supply blocks: 18 ~ 120 V supply blocks: 14 ~ 240 V supply blocks: 14
Service life	At nominal voltage and at an ambient temperature of 25 °C	H	100,000
Surge withstand	Conforming to IEC 6100-5-1	kV	1
Resistance to fast transients	Conforming to IEC 6100-4-4	kV	2
Resistance to electromagnetic fields	Conforming to IEC 6100-4-3	V/m	10
Resistance to electrostatic discharges	Conforming to IEC 6100-4-2	kV	8/6
Direct parallel connection across inductive load e.g. contactor coil or solenoid	Maximum power of load	VA	For applications involving high powers (≥ 30 VA), a ZBZ V● suppressor must be connected across the light block terminals (see page 2/13)
Electromagnetic emission	Conforming to IEC 55011		Class B

Control stations and enclosures



Control stations XAL

For Harmony® XB5 plastic Ø 22 control and signalling units

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
		 N/O	 N/C			
Marking on pushbutton						
1 spring return pushbutton	Flush, green	1	—	I	XAL D102	0.135
				Marche	XAL D104	0.156
				Start	XAL D103	0.156
			1	1	I	XAL D102E
	Flush, red	—	1	O	XAL D112	0.156
				Arrêt	XAL D117	0.156
				Stop	XAL D114	0.165
			1	1	O	XAL D112E
				Stop	XAL D114E	0.165
	Projecting, red	—	1	O	XAL D115	0.157
				Arrêt	XAL D118	0.157
				Stop	XAL D116	0.157
Marking on legend holder and legend below head						
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

2



XAL D102



XAL D115



XAL D101



XAL D111



XAL D164



XAL K174





XAL K184



XAL K194

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		
Unmarked					
1 mushroom head pushbutton, Ø 40 mm, red Turn to release	Trigger action	—	2	XAL K178F (1)	0.194
		1	1	XAL K178E (1)	0.194
		1	2	XAL K178G (1)	0.194
	Standard	—	1	XAL K174 (2)	0.178
		—	2	XAL K174F (2)	0.188
		1	1	XAL K174E (2)	0.188
		1	2	XAL K174G (2)	0.197
	1 mushroom head pushbutton, Ø 40 mm, red Key release (key n° 455)	Trigger action	—	2	XAL K188F (1)
1			1	XAL K188E (1)	0.188
1			2	XAL K188G (1)	0.188
Standard		—	1	XAL K184 (2)	0.178
		—	2	XAL K184F (2)	0.188
		1	1	XAL K184E (2)	0.188
		1	2	XAL K184G (2)	0.197
1 mushroom head pushbutton, Ø 40 mm, red Push-pull		Standard	—	1	XAL K194 (2)

(1) Mushroom head Emergency stop trigger action and mechanical latching pushbuttons conform to standards EN/IEC 60204-1 and EN/ISO 13850: 2006, to Machinery Directive 98/37/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 Regional Sales Office for full details of these standards and directives.

Control stations XAL

For Harmony® XB5 plastic Ø 22 control and signalling units

Complete stations (screw clamp terminal connections)

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			

Marking on pushbutton (1)

2 spring return pushbuttons	1 flush, green 1 flush, red	1	–	I	XAL D213	0.233
		–	1	O		
				Marche Arrêt		
	1 flush, green 1 projecting, red	1	1	I	XAL D215	0.233
		1	1	O		
				Start Stop		
	1 flush, green 1 projecting, red	1	–	I	XAL D214	0.234
		–	1	O		
				Start Stop		

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		
	1 flush, green 1 flush, green	1	–	Start	XAL D211H29	0.233
		1	–	Stop		
1 selector switch 2-position stay put	Standard handle	1	–	O-I	XAL D134	0.163
		1	–	Arrêt-Marche		
	Key switch (key n° 455) key withdrawal from left-hand position	1	–	O-I	XAL D144	0.187
				Arrêt-Marche		
		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				

With pilot light and marking on pushbutton (1)

2 spring return pushbuttons and 1 pilot light with integral red LED Protected LED	1 flush, green 1 flush, red	1	–	I	≈ 24	XAL D363B	0.261
		–	1	O	≈ 120		
					≈ 230		

With pilot light and marking on legend holder and legend below head

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		

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

2

815203



XAL D224

815202



XAL D211H29

106613



XAL D134

106614



XAL D144

815199



XAL D363B



Control stations XAL

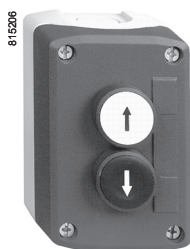
For Harmony® XB5 plastic Ø 22 control and signalling units

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
		 N/O	 N/C			
Marking on pushbutton (1)						
2 spring return pushbuttons	1 flush, white 1 flush, black	1	—	↑	XAL D222	0.233
		1	—	↓		
				→	XAL D223	0.233
				↔		
		1	1	↑	XAL D222E	0.233
		1	1	↓		



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			
Marking on pushbutton (1)						
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	—	↑ O	XAL D324	0.298
	1 flush, red	—	1	↓		
	1 flush, black	1	—	↑ Stop ↓	XAL D326	0.298
				→ O ←	XAL D334	0.298
		1 1 1	1 1 1	↑ O ↓	XAL D324E	0.317
	1 flush, white	1	—	↑ O	XAL D325	0.299
	1 flush, red	—	1	↓		
1 flush, black	1	—				
2 spring return pushbuttons + 1 latching mushroom head pushbutton, Ø 30 mm	1 flush, white	1	—	↑ O	XAL D328	0.317
	1 mushroom head, red (2)	—	1			
	1 flush, black	1	—	↓		



XAL D339



XAL D334



XAL D321

Marking on legend holder and legend below head

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.

Control stations and enclosures

Control stations XAL

For Harmony® XB5 plastic Ø 22 control and signalling units

Stations for customer assembly: empty enclosures

815211



XAL D02

Empty enclosures (lid fixing screws and nut material: stainless steel type A4, AISI 316)

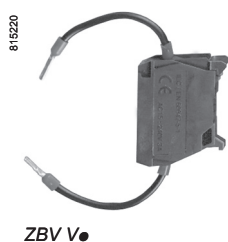
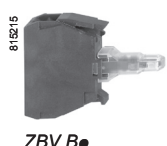
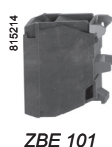
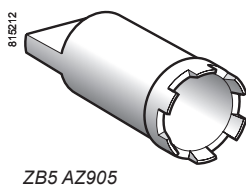
Description	Number of cut-outs	Reference	Weight kg
Light grey "RAL 7035" base Dark grey "RAL 7016" lid	1	XAL D01	0.136
	2	XAL D02	0.193
	3	XAL D03	0.238
	4	XAL D04	0.278
	5	XAL D05	0.322
Light grey "RAL 7035" base Yellow "RAL 1021" lid For Emergency stop function	1	XAL K01	0.136
	2	XAL K02	0.193
	3	XAL K03	0.238
	4	XAL K04	0.278
	5	XAL K05	0.322
CSA + UL certified (1)			
Light grey "RAL 7035" base Dark grey "RAL 7016" lid	1	XAL D01H7	0.136
	2	XAL D02H7	0.205
	3	XAL D03H7	0.238

(1) Volt-free commoning/earth terminal included.

Control stations XAL

For Harmony® XB5 plastic Ø 22 control and signalling units

Stations for customer assembly: electrical blocks



Electrical blocks and accessories for mounting in back of enclosure

Description	Description	Colour	Sold in lots of	Unit reference	Weight kg
Electrical blocks with screw clamp terminal connections					
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
	~ 48...120 V	White	5	ZAL VG1	0.015
		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
Accessories for electrical blocks				
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
Electrical blocks with screw clamp terminal connections (2) (for use with body/fixing collar ZB5 AZ009)					
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 B14	0.016
		Green	5	ZBV B34	0.016
		Red	5	ZBV B44	0.016
		Yellow	5	ZBV B54	0.016
		Blue	5	ZBV B64	0.016
	~ 48...120 V	White	5	ZBV G14	0.016
		Green	5	ZBV G34	0.016
		Red	5	ZBV G44	0.016
		Yellow	5	ZBV G54	0.016
		Blue	5	ZBV G64	0.016
	~ 230...240 V	White	5	ZBV M14	0.016
		Green	5	ZBV M34	0.016
		Red	5	ZBV M44	0.016
		Yellow	5	ZBV M54	0.016
		Blue	5	ZBV M64	0.016

Description	For use with		Level of protection	Unit reference	Weight kg
Accessories for electrical blocks					
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 <small>Sold in lots of 10</small>	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 Regional Sales Office.

Control stations and enclosures

Control stations XAL

For Harmony® XB5 plastic Ø 22 control and signalling units

Stations for customer assembly: heads



ZB5 AA0



ZB5 AA5



ZB5 AP2S



ZB5 AL3



ZB5 CA2



ZB5 CA5

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 2/28.

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

(3) For legend ordering information, see page 2/27.

Control stations XAL

For Harmony® XB5 plastic Ø 22 control and signalling units

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 Text	Colour	Colour of cap	Reference	Weight kg
	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	Red	ZB5 AA432	0.018
				Black	ZB5 AA232	0.018
		ARRET	White	Red	ZB5 AA433	0.018
				Black	ZB5 AA233	0.018
		STOP	White	Red	ZB5 AA434	0.018
				Black	ZB5 AA234	0.018
		OFF	White	Red	ZB5 AA435	0.018
				Black	ZB5 AA235	0.018
		UP	Black	White	ZB5 AA343	0.018
		DOWN	White	Black	ZB5 AA344	0.018
	Projecting (1)	O	White	Red	ZB5 AL432	0.019
				Black	ZB5 AL232	0.019
		ARRET	White	Red	ZB5 AL433	0.019
				Black	ZB5 AL233	0.019
		STOP	White	Red	ZB5 AL434	0.019
				Black	ZB5 AL234	0.019
		OFF	White	Red	ZB5 AL435	0.019
				Black	ZB5 AL235	0.019
			White	Green	ZB5 CA331	0.019
			White	Red	ZB5 CA432	0.019
	Flush (1)	+	White	Black	ZB5 CA2934	0.019
			White	Black	ZB5 CA2912	0.019
		↑	White	Black	ZB5 CA2912	0.019
			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.

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
	Trigger action Push-pull	40	Red	ZB5 AT84 (1)	0.050
	Trigger action Turn to release	30	Red	ZB5 AS834 (1)	0.042
		40	Red	ZB5 AS844 (1)	0.046
	Trigger action Key release (key n° 455) (3)	30	Red	ZB5 AS934 (1) (4)	0.068
		40	Red	ZB5 AS944 (1)	0.071
		60	Red	ZB5 AS964 (1)	0.092
	Trigger action Key release (key n° 4A185)	40	Red	ZB5 AS944D (1)	0.071
	Push-pull	30	Black	ZB5 AT24 (2)	0.044
			Red	ZB5 AT44 (2)	0.044
		40	Black	ZB5 AT2 (2)	0.049
			Red	ZB5 AT4 (2)	0.049
	Turn to release	30	Black	ZB5 AS42 (2)	0.040
			Red	ZB5 AS44 (2)	0.040
		40	Black	ZB5 AS52 (2)	0.044
			Red	ZB5 AS54 (2)	0.044
	Key release (key n° 455) (3)	30	Black	ZB5 AS72 (2)	0.040
			Red	ZB5 AS74 (2)	0.040
		40	Black	ZB5 AS12 (2)	0.044
			Red	ZB5 AS14 (2) (3)	0.044
	Key release (key n° 4A185)	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: 2006, to Machinery Directive 98/37/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 Regional Sales Office for full details of these standards and directives.

(3) For specific keys with other numbers, please consult your Regional Sales Office.

(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

Control stations XAL

For Harmony® XB5 plastic Ø 22 control and signalling units

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

Control stations XAL

For Harmony® XB5 plastic Ø 22 control and signalling units

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
	Standard handle, red	2 - stay put	ZB5 AD204	0.017
		2 - spring return from right to left	ZB5 AD404	0.020
		3 - stay put	ZB5 AD304	0.017
		3 - spring return to centre	ZB5 AD504	0.017
		3 - spring return from left to centre	ZB5 AD704	0.017
		3 - spring return from right to centre	ZB5 AD804	0.017
	Standard handle, yellow	2 - stay put	ZB5 AD205	0.017
		2 - spring return from right to left	ZB5 AD405	0.020
		3 - stay put	ZB5 AD305	0.017
		3 - spring return to centre	ZB5 AD505	0.017
		3 - spring return from left to centre	ZB5 AD705	0.017
		3 - spring return from right to centre	ZB5 AD805	0.017
	Standard handle, blue	2 - stay put	ZB5 AD206	0.017
		2 - spring return from right to left	ZB5 AD406	0.020
		3 - stay put	ZB5 AD306	0.017
		3 - spring return to centre	ZB5 AD506	0.017
		3 - spring return from left to centre	ZB5 AD706	0.017
		3 - spring return from right to centre	ZB5 AD806	0.017
	Long handle, black	2 - stay put	ZB5 AJ2	0.017
		2 - spring return from right to left	ZB5 AJ4	0.020
		3 - stay put	ZB5 AJ3	0.017
		3 - spring return to centre	ZB5 AJ5	0.017
		3 - spring return from left to centre	ZB5 AJ7	0.017
		3 - spring return from right to centre	ZB5 AJ8	0.017

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

Control stations XAL

For Harmony® XB5 plastic Ø 22 control and signalling units

Stations for customer assembly: heads



ZB5 AD39

Knurled knob,
blackKey switch with
key n° 455 (4)

ZB5 AG3

Key switch with
key n° 455 (4)Key switch with
key n° 455 (4)

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

(2) The symbol "Δ" 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 Regional Sales Office.

Heads for selector switches (1) (continued)					
Shape of head	Type of operator	Number and type of positions (2)		Reference	Weight kg
	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
	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
				ZB5 AG08 (3)	0.057






















Control stations and enclosures

Control stations XAL


For Harmony® XB5 plastic Ø 22 control and signalling units

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
 ZB5 AG●●	 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
				ZB5 AG0D	0.057
		3 - stay put		ZB5 AG3D	0.057
				ZB5 AG5D	0.057
				ZB5 AG9D	0.057
				ZB5 AG09D	0.057
				ZB5 AG03D	0.057
				ZB5 AG04D	0.057
				ZB5 AG06D	0.057
				ZB5 AG1D	0.057
				ZB5 AG07D	0.057
		3 - spring return from left to centre		ZB5 AG8D	0.057
				ZB5 AG08D	0.057
				ZB5 AG05D	0.057
		3 - spring return from right to centre		ZB5 AG7D	0.057
					

Heads for toggle switches

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

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

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









Control stations XAL

For Harmony® XB5 plastic Ø 22 control and signalling units

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
With plain lens				
	With integral LED 	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 	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
		With plain lens, for insertion of legend (2)		
	With integral LED 	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
With grooved lens (3)				
	With integral LED 	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
Only for use with bodies comprising a light source with integral LED 				
	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 2/27.

(2) For legend ordering information: see page 2/27.

(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 Regional Sales Office.

Control stations XAL



For Harmony® XB5 plastic Ø 22 control and signalling units

Stations for customer assembly: heads

Heads for illuminated selector switches with standard handle

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

Heads for Ø 40 illuminated, latching, mushroom head pushbuttons (1)

Shape of head	Type of push	Colour of push	Reference	Weight kg
Only for use with bodies comprising a light source with integral LED				
		White	ZB5 AW713	0.022
		Green	ZB5 AW733	0.022
		Red	ZB5 AW743	0.022
		Yellow	ZB5 AW753	0.022
		Blue	ZB5 AW763	0.022

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

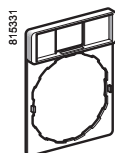
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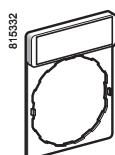
Control stations XAL

For Harmony® XB5 plastic Ø 22 control and signalling units

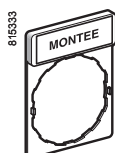
Stations for customer assembly: accessories



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 Colour	Marking	Sold in lots of	Unit reference	Weight kg
Without legend	—	—	10	ZBZ 32	0.001
With blank legend (for engraving)	Black or red background	—	10	ZBY 2101	0.002
	White or yellow background	—	10	ZBY 4101	0.002
With 8 x 27 mm legend (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
		ARRET (red background)	1	ZBY 2104	0.002
		ARRET (black background)	1	ZBY 0104	0.002
		ARRET GENERAL	1	ZBY 2129	0.002
With 8 x 27 mm legend (with French language marking)	Black or red background ⁽²⁾	ARRET REARMEMENT	1	ZBY 2133	0.002
		ARRET MARCHÉ	1	ZBY 2166	0.002
		ARRIÈRE	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-ARRIÈRE	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
		DEFAULT (black background)	1	ZBY 2134	0.002
		DEFAULT (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
		MARCHÉ	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
	Yellow background	ARRET D'URGENCE	1	ZBY 2130	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
Without legend	Circular heads	—	10	ZBZ 34	0.003
	Square heads	—	10	ZBC Z34	0.002
With blank legend	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 pages 2/25 to 2/29.

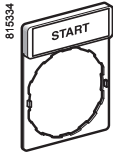
(2) "Start" functions: white characters on black background. "Stop" functions: white characters on red background (unless otherwise stated above).

Control stations and enclosures

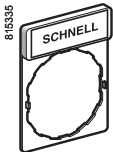
Control stations XAL

For Harmony® XB5 plastic Ø 22 control and signalling units

Stations for customer assembly: accessories



ZBY 2303



ZBY 2228

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

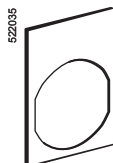
Description	Legend	Reference	Weight kg
	Colour	Marking	
With legend (English language marking)	Black or red background (1)	AUTO-HAND	ZBY 2364 0.002
		AUTO-O-HAND	ZBY 2385 0.002
		CLOSE	ZBY 2314 0.002
		DOWN	ZBY 2308 0.002
		FAST	ZBY 2328 0.002
		FORWARD	ZBY 2305 0.002
		HAND	ZBY 2316 0.002
		HAND-OFF-AUTO	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
	Yellow background	EMERGENCY STOP	ZBY 2330 0.002
With legend (German language 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-RUCKSTELLUND	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
		NOT-HALT	ZBY 2229 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
	Yellow background	NOT-AUS	ZBY 22420001 0.002

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

Control stations XAL

For Harmony® XB5 plastic Ø 22 control and signalling units

Stations for customer assembly: accessories



ZAL Y4

Legends (30 x 42 mm) for engraving

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

Legends for engraving

Description mm	For use with	Colour	Sold in lots of	Unit reference	Weight kg
8 x 27	30 x 40 mm legend holder	Black or red background	10	ZBY 0101	0.001
		White or yellow background	10	ZBY 0102	0.001

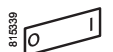
Sheets of peel-off legends (with backing board and protective transparent cover)

Description	For use with	Sold in lots of	Unit reference	Weight kg
Sheet of 76 8 x 27 mm legends	30 x 40 mm legend holders ZBZ 32 and ZBZ 34	10	ZBY 4100	0.043

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

Colour	Marking	Reference	Weight kg
Black or red background (1)	International	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	ARRET (red background)	ZBY 02104 0.001
		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
Yellow background	French	ARRET D'URGENCE	ZBY 02130 0.001

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



ZBY 02178



ZBY 02104

Control stations and enclosures

Control stations XAL

For Harmony® XB5 plastic Ø 22 control and signalling units

Stations for customer assembly: accessories

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

Colour	Marking	Reference	Weight kg
Black or red background (1)	French (continued)	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
	English	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
	German	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
		NOT-HALT	ZBY 02229 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
Yellow background	English	EMERGENCY STOP	ZBY 02330 0.001
	German	NOT-AUS	ZBY 022420001 0.001

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

815341

START

ZBY 02303

815342

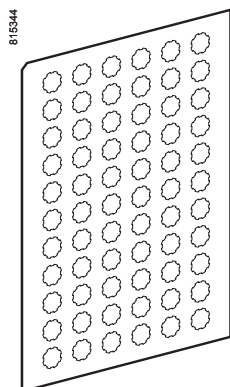
SCHNELL

ZBY 02228

Control stations XAL

For Harmony® XB5 plastic Ø 22 control and signalling units

Stations for customer assembly: accessories



ZBY 1...

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	ZBY 1146	0.017
		I	ZBY 1147	0.017
		II	ZBY 1148	0.017
		III	ZBY 1149	0.017
		AUTO	ZBY 1115	0.017
		STOP	ZBY 1304	0.017
		↑	ZBY 1912	0.017
	French	ARRET	ZBY 1104	0.017
		ARRIERE	ZBY 1106	0.017
		AVANT	ZBY 1105	0.017
		AUTO	ZBY 1115	0.017
		DESCENTE	ZBY 1108	0.017
		MAIN	ZBY 1116	0.017
		MARCHE	ZBY 1103	0.017
		MONTEE	ZBY 1107	0.017
	English	HAND	ZBY 1316	0.017
		OFF	ZBY 1312	0.017
		ON	ZBY 1311	0.017
		START	ZBY 1303	0.017
	German	AB	ZBY 1208	0.017
		AUF	ZBY 1207	0.017
		AUS	ZBY 1204	0.017
		EIN	ZBY 1203	0.017
		ZU	ZBY 1214	0.017

Strip of 66 square peel-off transparent self-adhesive legends	Without	10	ZBC Y1101	0.017
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Circular legends for Emergency stop mushroom head pushbuttons

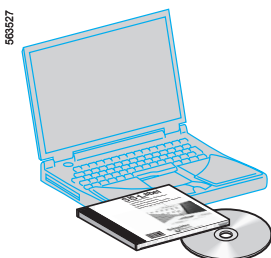
Diameter mm	Colour	Marking on yellow background	Reference	Weight kg
60	Yellow	Without	ZBY 9101	0.004
		ARRET D'URGENCE	ZBY 9130	0.004
		EMERGENCY STOP	ZBY 9330	0.004
		NOT-AUS	ZBY 9230	0.004
90	Yellow	Without	ZBY 8101	0.008
		ARRET D'URGENCE	ZBY 8130	0.008
		EMERGENCY STOP	ZBY 8330	0.008
		NOT-AUS	ZBY 8230	0.008

"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	XBY 2U	0.100



ZBY 9330



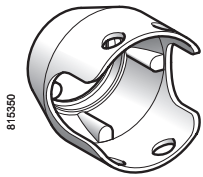
XBY 2U

Control stations and enclosures

Control stations XAL

For Harmony® XB5 plastic Ø 22 control and signalling units

Stations for customer assembly: accessories



ZBZ 160●

Metal guards (3)

Description	For use with	Colour	Reference	Weight kg
Padlockable	Only for use with Ø 40 mushroom head trigger action Emergency stop pushbuttons: XB5 AT8●, XB5 AS8● XB5 AS9●, ZB5 AT8● ZB5 AS8●, ZB5 AS9●	Chromium plated	ZBZ 1600	0.046
		Black	ZBZ 1602	0.046
		Red	ZBZ 1604	0.046
		Yellow	ZBZ 1605	0.046
		Blue	ZBZ 1606	0.046

Pushbutton caps - unmarked

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

Pushbutton caps - marked (2) (sold in lots of 10)

For use with	Type of push	Marking		Colour of cap	Unit reference	Weight kg
		Text	Colour			
Circular pushbutton heads ZB5 AA supplied without cap	Flush	I	White	Green	ZBA 331	0.001
			Black	White	ZBA 131	0.001
		II	White	Green	ZBA 336	0.001
			Black	White	ZBA 136	0.001
		III	White	Green	ZBA 337	0.001
			Black	White	ZBA 137	0.001
		IV	White	Green	ZBA 338	0.001
			Black	White	ZBA 138	0.001
		START	White	Green	ZBA 333	0.001
			Black	White	ZBA 133	0.001
		ON	White	Green	ZBA 341	0.001
			Black	White	ZBA 141	0.001
		MARCHE	White	Green	ZBA 342	0.001
			Black	White	ZBA 142	0.001
		ⓘ	White	Black	ZBA 245	0.001
			Black	White	ZBA 145	0.001
		UP	Black	White	ZBA 343	0.001
			White	Black	ZBA 344	0.001
		DOWN	White	Black	ZBA 335	0.001
			Black	White	ZBA 334	0.001
		O	White	Red	ZBA 432	0.001
			Black	Black	ZBA 232	0.001
		ARRET	White	Red	ZBA 433	0.001
			Black	Black	ZBA 233	0.001
		STOP	White	Red	ZBA 434	0.001
			Black	Black	ZBA 234	0.001
		OFF	White	Red	ZBA 435	0.001
			Black	Black	ZBA 235	0.001
		⚠	White	Green	ZBA 346	0.001
			Black	Black	ZBA 236	0.001
		R	White	Blue	ZBA 639	0.001
		+	White	Black	ZBA 2934	0.001
		-	White	Black	ZBA 2935	0.001

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

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

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

Control stations XAL

For Harmony® XB5 plastic Ø 22 control and signalling units

Stations for customer assembly: accessories



ZB2 BP01●



ZBV 01●3



ZBG 455

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
	Blue	10	ZBC W9163	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

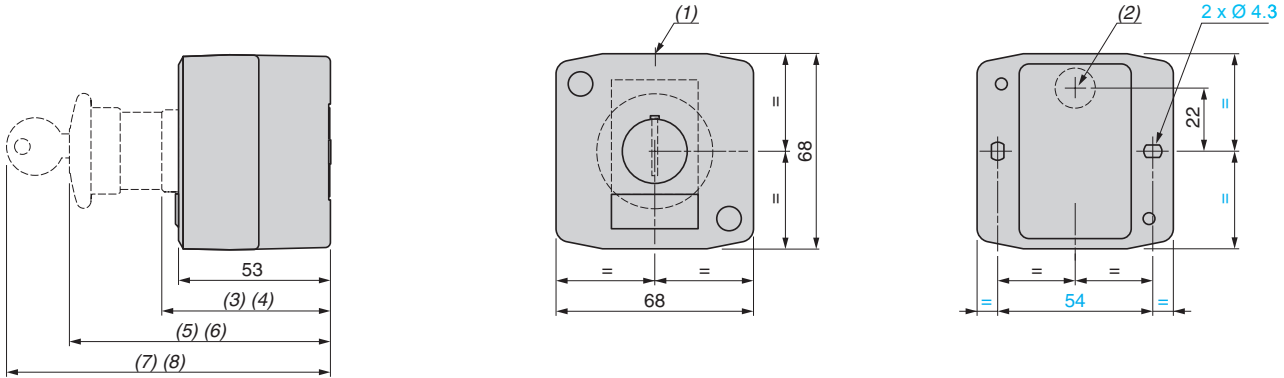
Replacement keys for Emergency stop key release heads and key switches

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

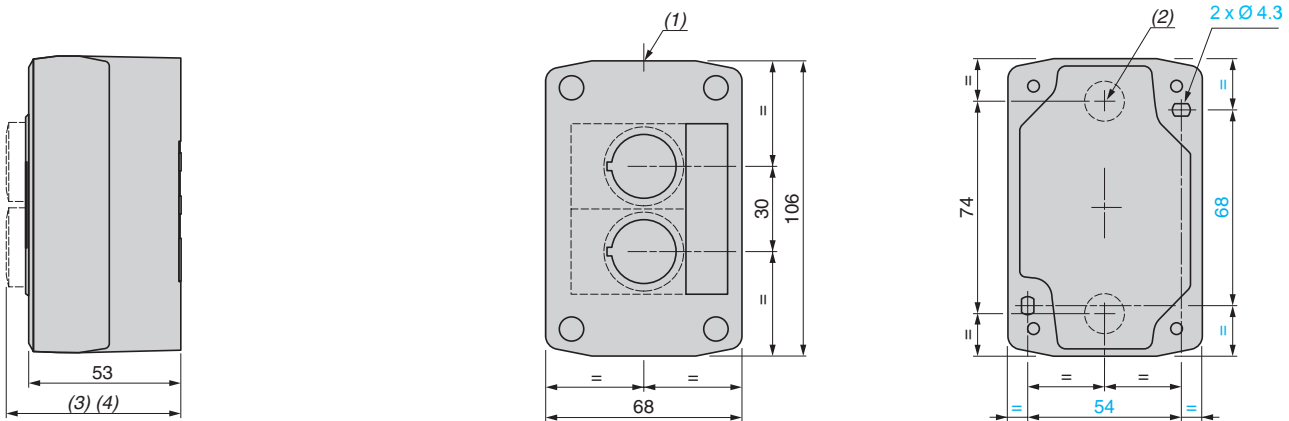
(1) Set of 5 different coloured lenses: white, green, red, yellow and blue.

Dimensions

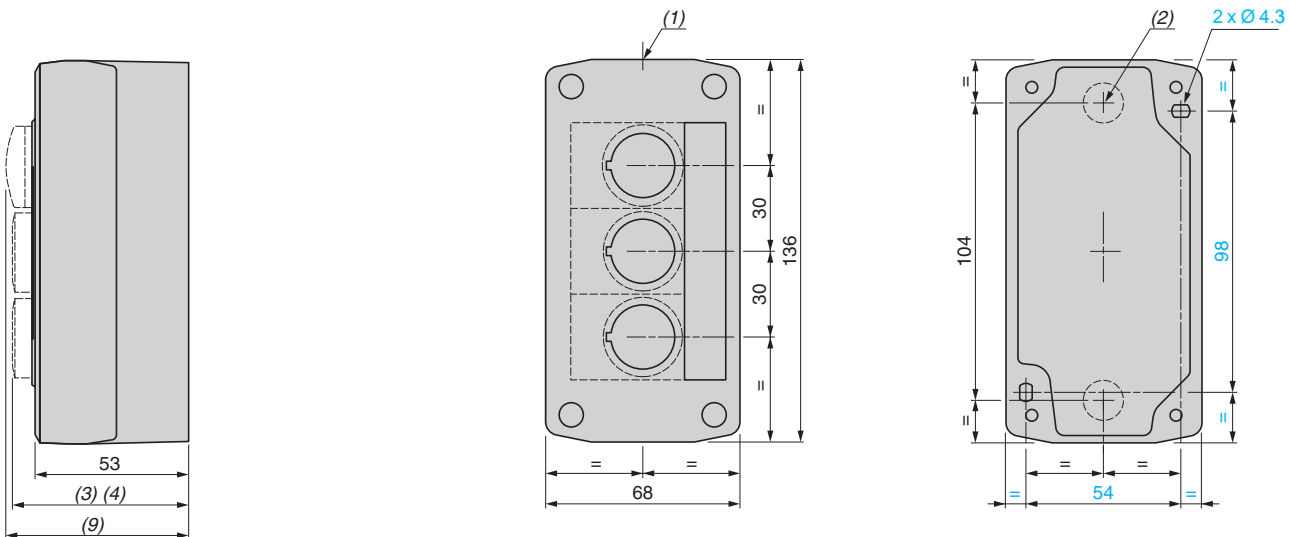
Single-way control stations XAL



2-way control stations XAL



3-way control stations XAL



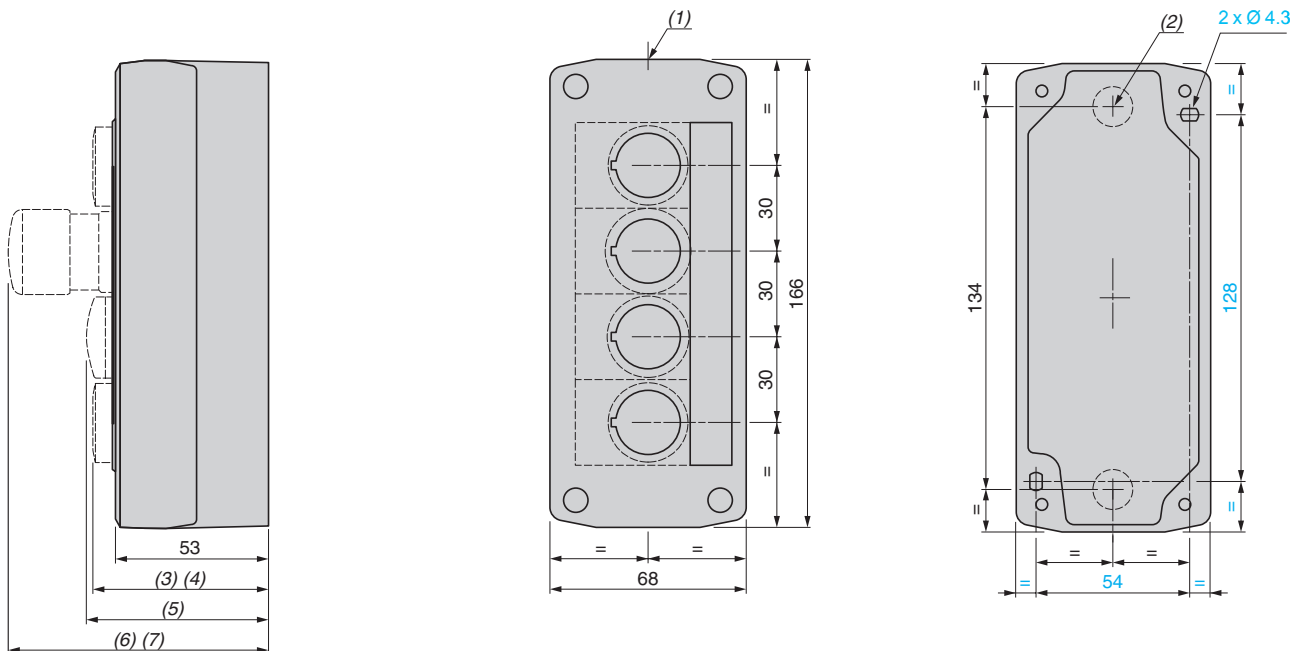
- (1) 2 knock-outs for Pg 13.5 cable gland, maximum capacity 12 mm.
 (2) Knock-out for cable entry, maximum capacity 14 mm.

Examples

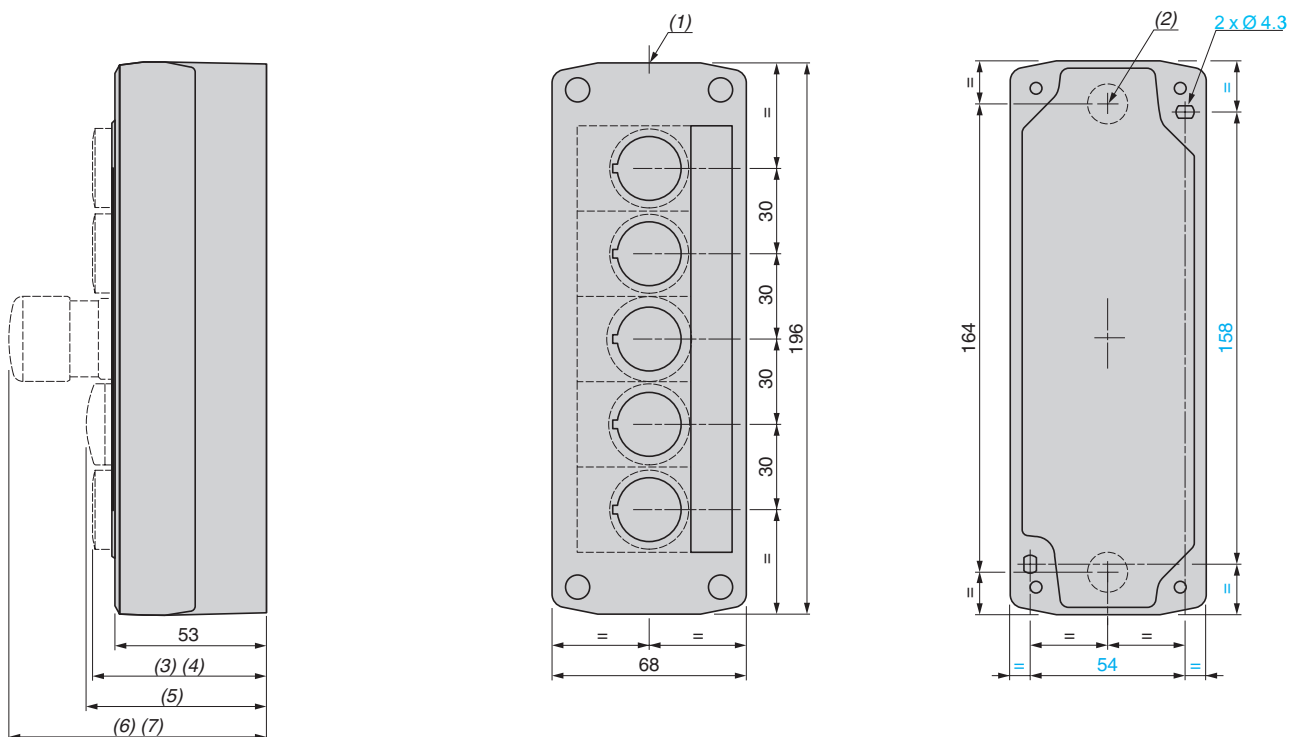
- (3) 62 mm for flush pushbuttons.
 (4) 66 mm for projecting pushbuttons.
 (5) 91 mm for latching mushroom head Emergency stop pushbuttons.
 (6) 82.5 mm for key switches.
 (7) 115 mm for latching mushroom head Emergency stop pushbuttons with key release.
 (8) 105.5 mm for key switches with key inserted.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

Presentation

■ Plastic control station enclosures 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 station enclosures 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 station enclosures 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

Protective treatment	Standard version		"TC" and "TH"		
Ambient air temperature (around the device)	For storage	°C	- 40...+ 70		
	For operation	°C	- 25...+ 70		
Electric shock protection	Conforming to EN/IEC 61140		Class II		
Degree of protection	Conforming to IEC 60529		IP 66, IP 69K		
High pressure cleaning resistance		Bar	100 at 0.2 m and 80 °C		
Mechanical shock protection (empty enclosures)	Conforming to EN 50102		IK 05		
Conformity to standards			EN/IEC 60947-1, EN/IEC 60947-5-1		
Material			Lid and base: mineral reinforced polyamide		
Colour			Lid and base: black "RAL 9005"		
Cable entries			Two ISO 20 open entries (1)		
Resistance to chemical products			Results	Test conditions	
				Concentration (%)	Temperature (°C)
+ : good resistance O: limited resistance - : no resistance	Acetic acid		O	10	—
	Acetone		+	—	—
	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.

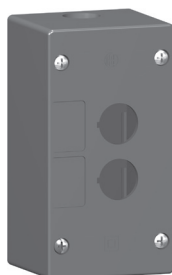
Control stations and enclosures

Plastic control station enclosures XAL G
for severe environments

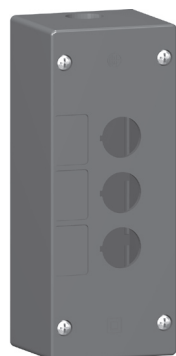
With cut-outs for Ø 22 control and signalling units XB5



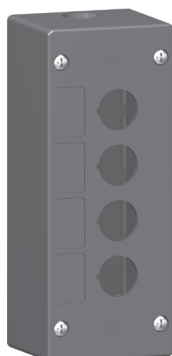
XAL G01



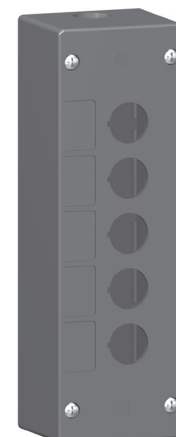
XAL G02



XAL G03



XAL G04



XAL G05

References

Control station enclosures XAL G for severe environments

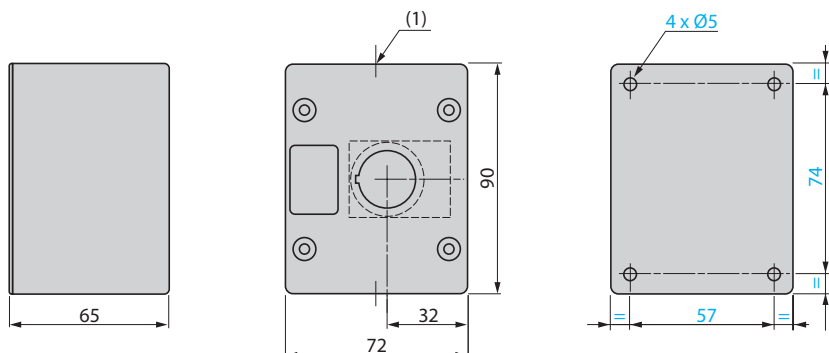
Description	Number of Ø 22 cut-outs	Reference	Weight kg
Black "RAL 9005" lid and base	1	XAL G01	0.226
	2	XAL G02	0.280
	3	XAL G03	0.333
	4	XAL G04	0.331
	5	XAL G05	0.382

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

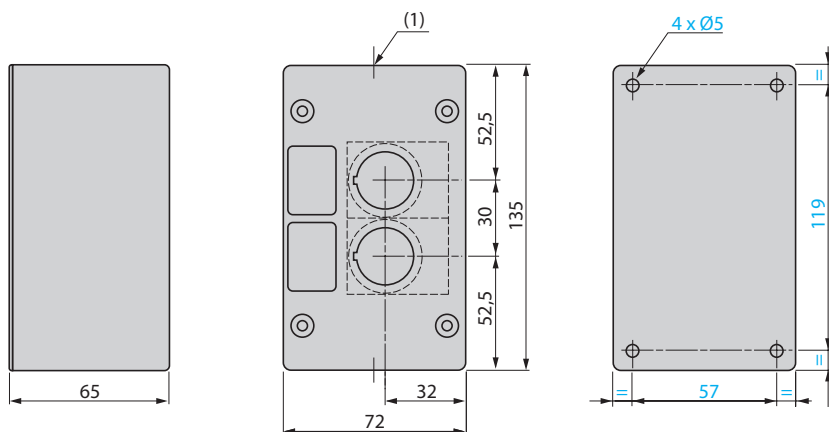
Dimensions

XAL G01



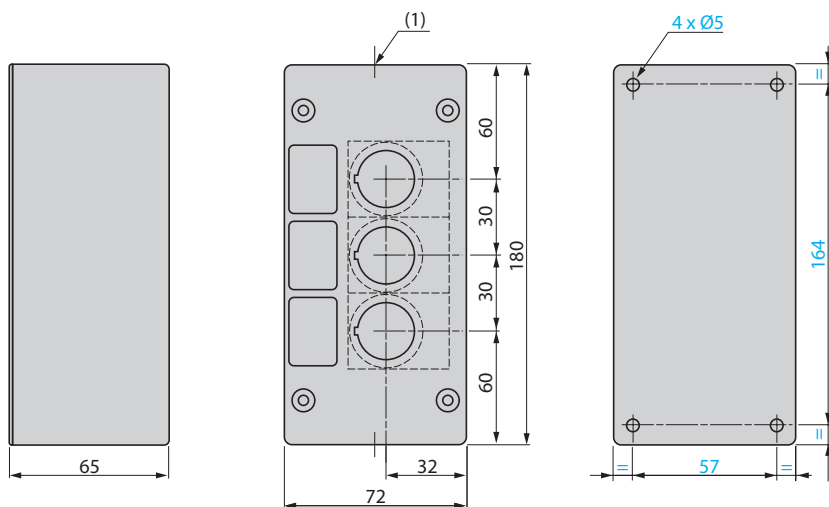
(1) 2 ISO 20 cable entries.

XAL G02



(1) 2 ISO 20 cable entries.

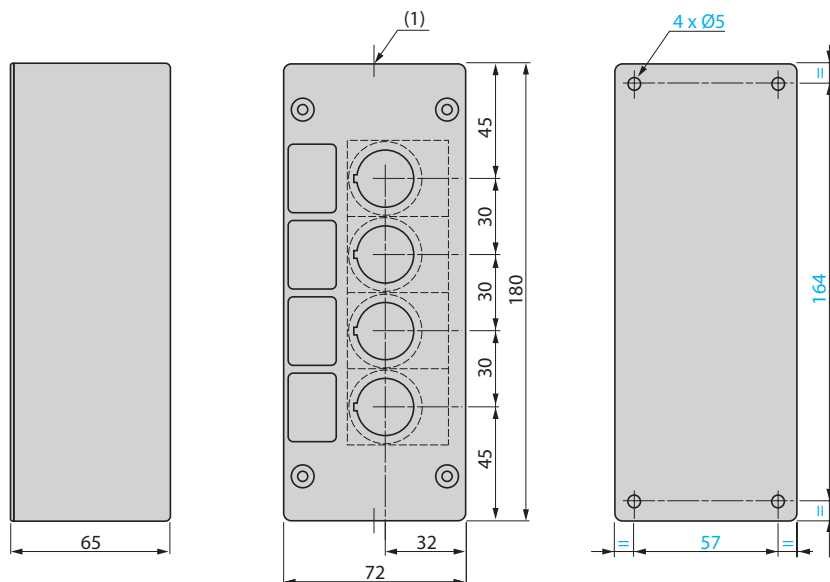
XAL G03



(1) 2 ISO 20 cable entries.

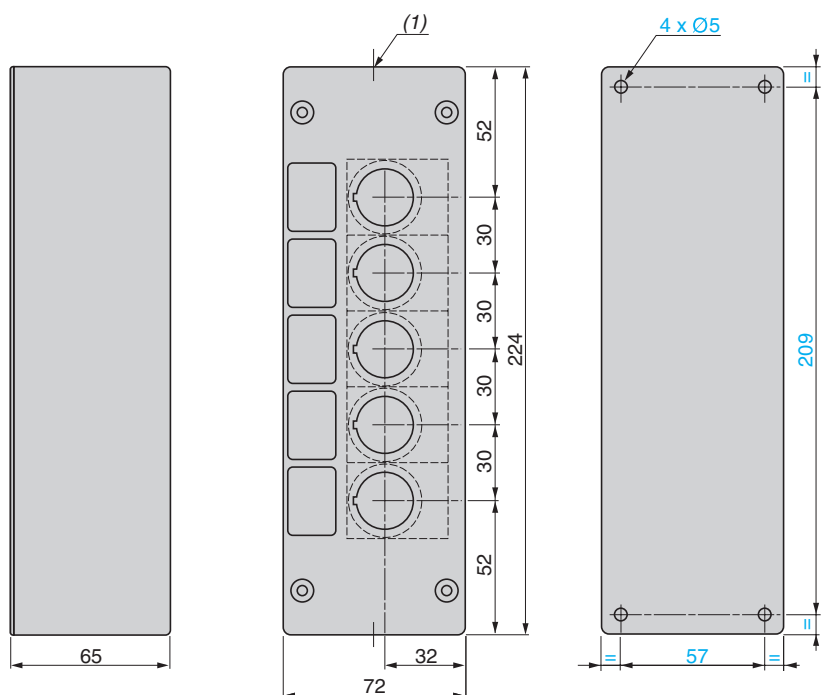
Dimensions

XAL G04



(1) 2 ISO 20 cable entries.

XAL G05



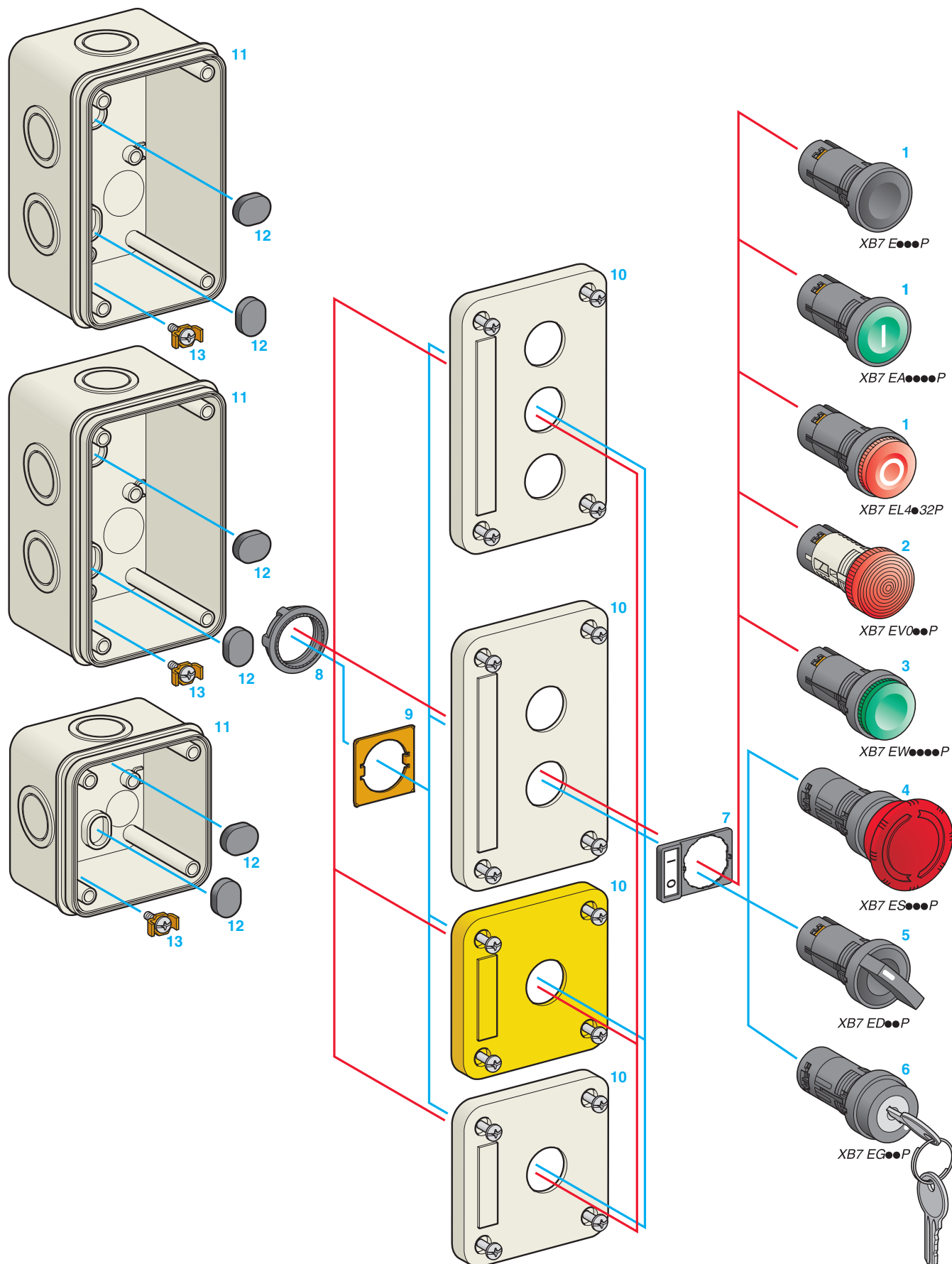
(1) 2 ISO 20 cable entries.

Control stations and enclosures

Plastic control stations XAL E Optimum

For Harmony® Ø 22 control and signalling units XB7

2



Presentation

Control stations XAL E Optimum 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 Optimum 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.

Environment			
Protective treatment	Standard version		"TC"
Ambient air temperature (around the device)	For storage	°C	- 40...+ 70
	For operation	°C	- 25...+ 55
Electric shock protection	Conforming to IEC 60536		Class II
Degree of protection	Conforming to IEC 60529		IP 54
Mechanical shock protection	Conforming to EN 50102		IK 05
Conformity to standards			EN/IEC 60947-1, EN/IEC 60947-5-1, EN/IEC 62208, EN/IEC 60947-5-5
Product certifications			CE
Material			ABS
Colours			Light grey "RAL 7035" or yellow "RAL 1021" lid, light grey "RAL 7035" base
Cable entries			ISO 20 knock-out entries
Contact function characteristics			
Type of contact	N/C or N/O or C/O		Slow break
Positive operation	Conforming to EN/IEC 60947-5-1 Appendix K		All functions incorporating a N/C contact are positive opening operation
Short-circuit protection	Conforming to EN/IEC 60947-5-1	A	4 (using gG cartridge fuse conforming to IEC 269-1)
Rated insulation voltage	Conforming to EN/IEC 60947-1	V	Ui = 250 (degree of pollution 3)
Rated impulse withstand voltage	Conforming to EN/IEC 60947-1	kV	Uimp = 4
Rated operational characteristics (conforming to EN/IEC 60947-5-1)	a.c. supply: utilisation category AC14, D300		Ue = 240 V and Ie = 0.3 A or Ue = 120 V and Ie = 0.6 A
	utilisation category DC13, R300		Ue = 250 V and Ie = 0.1 A or Ue = 125 V and Ie = 0.22 A
Electrical reliability	Failure rate in accordance with 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)
Voltage limits	At nominal voltage	V	24 V ~: 19.2...30 ~; 21.6...26.4 ~ 120 V ~: 100...132 ~ 230-240 V ~: 195...264 ~
Consumption	For all colours	mA	24 V ~: 27 mA max. 120 V ~: 21 mA max. 230 V ~: 20 mA max.
Service life	At nominal voltage and at an ambient temperature of 25 °C	H	80 000
Electromagnetic emission	Conforming to EN 55011		Class B



XAL E1011



XAL E1031



XAL E1W1●



XAL E1333



XAL E1441



XAL EK170●

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			
1 spring return pushbutton	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
	Projecting, red	–	1	–	O (white)	XAL E1152	0.100
		–	–	1	O (white)	XAL E1155	0.100

Equipment	Colour of lens	Type of contact			Supply voltage	Reference	Weight kg
		N/O	N/C	C/O			
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

Equipment	Number and type of positions	Type of contact			Marking Text (colour)	Reference	Weight kg
		N/O	N/C	C/O			
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
	2 position, stay put (1)	1	–	–	O I (white)	XAL E1441	0.115

Emergency switching off (yellow control station lid) (2)

Equipment	Type of push	Type of contact			Reference	Weight kg
		N/O	N/C	C/O		
1 Emergency switching off pushbutton	Latching, red	–	1	–	XAL EK1701	0.110
		1	1	–	XAL EK1702	0.110

(1) The symbol "⌘" 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 Regional Sales Office 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.

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 flush, red	1 –	– 1	– –	– –	XAL E2011	0.145
	1 flush, green 1 flush, red	2 –	– –	– 1	– –	XAL E2015	0.145
	1 flush, green 1 flush, red	1 –	– 1	– –	START (white) STOP (white)	XAL E2151	0.145
	1 flush, green 1 projecting, red	1 –	– 1	– –	I (white) O (white)	XAL E2141	0.145
	1 flush, white 1 flush, black	1 1	– –	– –	→ (black) ⇄ (white)	XAL E2231	0.145
	1 flush, white 1 flush, black	– –	– –	1 1	→ (black) ⇄ (white)	XAL E2235	0.145
	1 flush, white 1 flush, black	1 1	– –	– –	↑ (black) ↓ (white)	XAL E2221	0.145
	1 flush, white 1 flush, black	– –	– –	1 1	↑ (black) ↓ (white)	XAL E2225	0.145
1 spring return pushbutton + 1 pilot light with integral LED (≈ 24 V), green	1 flush, green –	1 –	– –	– –	I (white) –	XAL E21V1B	0.145
	1 flush, green –	1 –	– –	– –	I (white) –	XAL E21V1M	0.145

Integral
LEDIntegral
LED



XAL E33V●●



XAL E325●



XAL E3441

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)		
	1 flush, white	–	–	1	↑ (black)	XAL E3255	0.170
	1 projecting, red	–	–	1	O (white)		
	1 flush, black	–	–	1	↓ (white)		
	1 flush, green	2	–	–	I (white)	XAL E3405	0.170
	1 projecting, red	–	–	1	O (white)		
	1 flush, green	2	–	–	II (white)		
	1 flush, green	1	–	–	I (white)	XAL E3401	0.170
	1 projecting, red	–	1	–	O (white)		
	1 flush, green	1	–	–	II (white)		
	1 flush, white	1	–	–	→ (black)	XAL E3351	0.170
	1 projecting, red	–	1	–	O (white)		
	1 flush, black	1	–	–	↔ (white)		
	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.

Control stations and enclosures

Plastic control stations XAL E Optimum
For Harmony® Ø 22 control and signalling units XB7
Empty enclosures



XAL E1



XAL E2



XAL E3



XAL EK1

Empty enclosures

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.



XB7 EA1P



XB7 EL4P



XB7 EA3133P
















XB7 EA1341P



XB7 EA2343P

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				
Spring return pushbuttons without marking										
	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
		–	2	–	–	–	Red	10	XB7 EA44P (1) ▲	0.020
		–	–	1	–	–	Red	10	XB7 EA45P (1)	0.020
		1	–	–	–	–	Yellow	10	XB7 EA51P (1)	0.020
		–	–	1	–	–	Yellow	10	XB7 EA55P (1) ▲	0.020
			Projecting	–	1	–	–	–	Red	10
–	2			–	–	–	Red	10	XB7 EL44P (1) ▲	0.020
–	–			1	–	–	Red	10	XB7 EL45P (1) ▲	0.020
Spring return pushbuttons with marking										
	Flush	1	–	–	I	White	Green	10	XB7 EA3131P (1)	0.020
		2	–	–	–	–	Green	10	XB7 EA3331P (1)	0.020
		1	–	–	START	White	Green	10	XB7 EA3133P (1)	0.020
		2	–	–	–	–	Green	10	XB7 EA3333P (1)	0.020
		1	–	–	MARCHE	White	Green	10	XB7 EA3142P (1)	0.020
		2	–	–	–	–	Green	10	XB7 EA3342P (1)	0.020
		–	1	–	O	White	Red	10	XB7 EA4232P (1)	0.020
		–	–	1	–	–	Red	10	XB7 EA4532P (1)	0.020
		–	1	–	STOP	White	Red	10	XB7 EA4234P (1)	0.020
		–	–	1	–	–	Red	10	XB7 EA4534P (1)	0.020
		–	1	–	ARRET	White	Red	10	XB7 EA4233P (1) ▲	0.020
		–	–	1	–	–	Red	10	XB7 EA4533P (1) ▲	0.020
		1	–	–	↑	Black	White	10	XB7 EA11341P (1)	0.020
		–	–	1	–	–	White	10	XB7 EA15341P (1)	0.020
		1	–	–	↓	White	Black	10	XB7 EA21343P (1)	0.020
		–	–	1	–	–	Black	10	XB7 EA25343P (1)	0.020
	Projecting	–	1	–	O	White	Red	10	XB7 EA4232P (1)	0.020
		–	–	1	–	–	Red	10	XB7 EA4532P (1)	0.020
		–	1	–	STOP	White	Red	10	XB7 EA4234P (1)	0.020
		–	–	1	–	–	Red	10	XB7 EA4534P (1)	0.020
		–	1	–	ARRET	White	Red	10	XB7 EA4233P (1)	0.020
		–	–	1	–	–	Red	10	XB7 EA4533P (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.

▲ Available: 1st quarter 2008



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				
Push and push-to release pushbuttons without marking										
	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
Push and push-to release pushbuttons with marking										
	–	1	–	–		White	Black	10	XB7 EH2137P ▲	0.020
						White	Black	10	XB7 EH2567P ▲	0.020

Selector/key switches

Shape of head	Type of operator	Type of contact			Number and type of positions (2)		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 ED21P



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 "Q" 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: 2006, 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

Pilot lights with integral LED ("true" colours)							
Shape of head	Supply voltage V	Colour of lens	Sold in lots of	Unit reference	Weight kg		
 Integral LED	~ 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		




XB7 EW3...P

Illuminated pushbuttons with integral LED (“true” colours)								
Shape of head	Type of push	Supply voltage	Type of contact		Colour of lens	Sold in lots of	Unit reference	Weight
		V	N/O	N/C				kg
Spring return illuminated pushbuttons								
 Integral LED	Projecting	~ 24	1	–	Green	10	XB7 EW33B1P	0.022
					Red	10	XB7 EW34B1P	0.022
					Yellow	10	XB7 EW35B1P	0.022
		~ 230 50-60 Hz	1	–	Red	10	XB7 EW34B2P	0.022
					Green	10	XB7 EW33M1P	0.022
					Red	10	XB7 EW34M1P	0.022
	Projecting	~ 24	1	–	Yellow	10	XB7 EW35M1P	0.022
					Red	10	XB7 EW34M2P	0.022
					Green	10	XB7 EW33M2P	0.022
		~ 230 50-60 Hz	1	–	Red	10	XB7 EW34B1P	0.022
					Yellow	10	XB7 EW35B1P	0.022
					Green	10	XB7 EW33B1P	0.022



XB7 EH0...P


Push and push-to-release illuminated buttons								
	Projecting	~ 24	1	—	Green	10	XB7 EH03B1P	0.022
					Red	10	XB7 EH04B1P	0.022
					Yellow	10	XB7 EH05B1P	0.022
		~ 230 50-60 Hz	1	—	Red	10	XB7 EH04B2P	0.022
					Green	10	XB7 EH03M1P	0.022
					Red	10	XB7 EH04M1P	0.022
	Projecting	~ 24	1	—	Yellow	10	XB7 EH05M1P	0.022
					Red	10	XB7 EH04M2P	0.022
					Green	10	XB7 EH03M2P	0.022
		~ 230 50-60 Hz	1	—	Red	10	XB7 EH04B1P	0.022
					Yellow	10	XB7 EH05B1P	0.022
					Green	10	XB7 EH03B1P	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 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
				Clear	10	XB7 EV67P (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
				Clear	10	XB7 EV77P (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
				Clear	10	XB7 EV770P (1)	0.020
				Orange	10	XB7 EV780P (1) ▲	0.020

Illuminated pushbuttons with BA 9s base fitting, projecting push

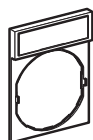
Shape of head	Supply	Type of contact		Supply voltage V	Colour of lens	Sold in lots of	Unit reference	Weight kg
		N/O	N/C					
	Direct with BA 9s base fitting neon bulb included	1	—	~ 230	Green	10	XB7 EW3341P	0.022
					Red	10	XB7 EW3441P	0.022
					Yellow	10	XB7 EW3541P	0.022
	Direct for incandescent 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
	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.

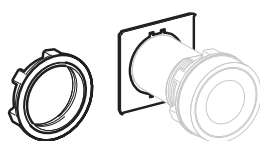
Text	Unit reference	Weight kg	Text	Unit reference	Weight kg
Auto	ZBY 2115	0.001	Reset	ZBY 2323	0.001
Down	ZBY 2308	0.001	Reverse	ZBY 2306	0.001
Forward	ZBY 2305	0.001	Right	ZBY 2309	0.001
Hand	ZBY 2316	0.001	Start	ZBY 2303	0.001
Inch	ZBY 2321	0.001	Stop	ZBY 2304	0.001
Left	ZBY 2310	0.001	Up	ZBY 2307	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

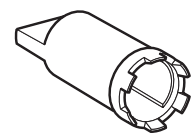


ZBY 9330



ZB5 AZ901

ZB5 AZ902



ZB5 AZ905



DL1 CE000



DL1 CS000

Accessories

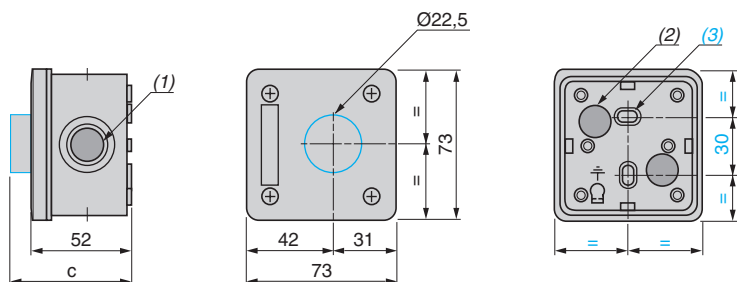
Description	Colour	Sold in lots of	Unit reference	Weight kg
Anti-rotation plate	–	10	ZB5 AZ902	0.008
Fixing nut	–	10	ZB5 AZ901	0.002
Fixing nut tightening tool	–	1	ZB5 AZ905	0.016
Grooved lenses for BA 9s pilot lights	White	10	ZB7 EV01	0.002
	Green	10	ZB7 EV03	0.002
	Red	10	ZB7 EV04	0.002
	Yellow	10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

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

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

Control stations with 1 x Ø 22 control and signalling unit



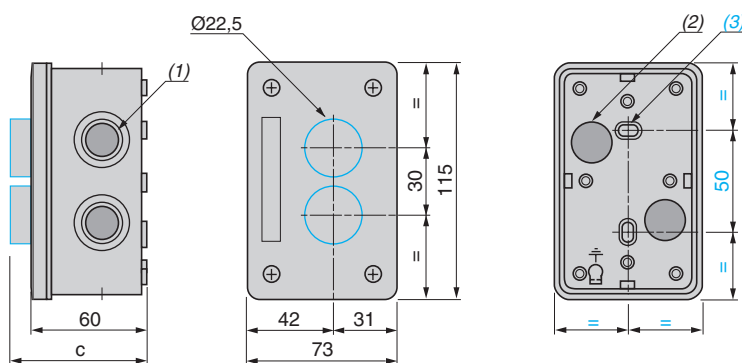
Control station XAL E fitted with:	c
Flush pushbutton	61
Projecting pushbutton	63
Illuminated pushbutton	66.5
Pilot light	63
Emergency stop without key	81.5
Selector switch with standard handle	76.5
Key switch	92

(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



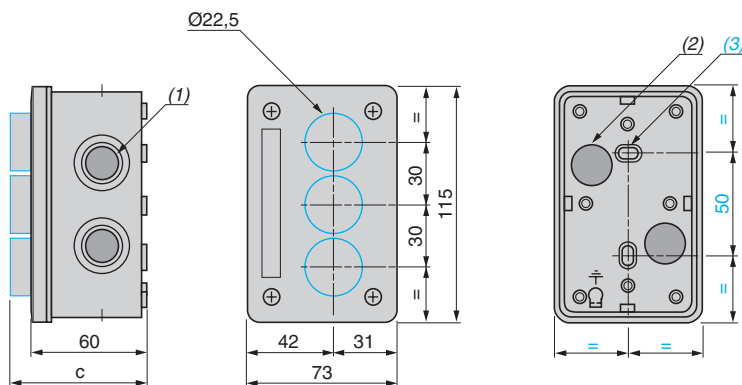
Control station XAL E fitted with:	c
Flush pushbutton	69
Projecting pushbutton	71
Illuminated pushbutton	74.5
Pilot light	71
Emergency stop without key	89.5
Selector switch with standard handle	84.5
Key switch	100

(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.

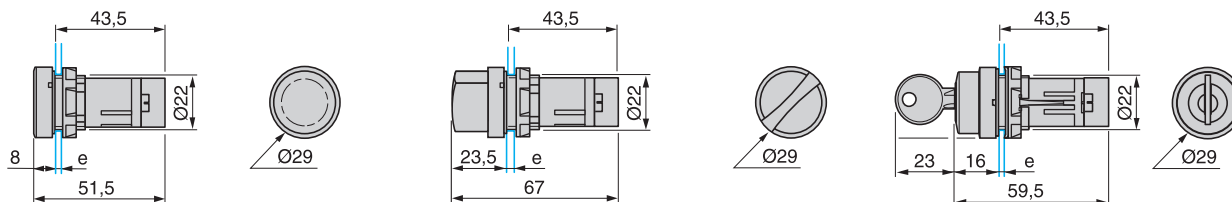
(3) 2 knock-out elongated fixing holes Ø 3 x 5.

Harmony® Ø 22 control and signalling units XB7

XB7 EA●●P, XB7 EH●●P

XB7 ED●●P

XB7 EG●●P

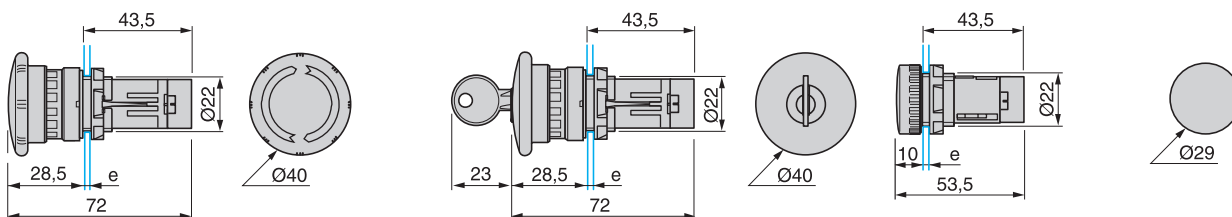


e: support panel thickness = 1 to 6 mm.

XB7 ES5●●P

XB7 ES1●●P

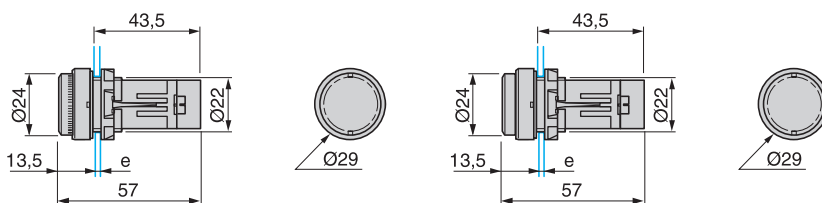
XB7 EV●●P



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

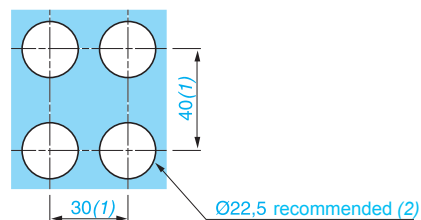
"U" type tag connection



(1) Minimum value.

Mounting

Diameter of finished fixing holes



(1) Minimum value.

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

Characteristics

Insulated enclosures XAP A

Material and colour			Glass-reinforced polyester, coloured grey throughout
Product certifications	Special version		CSA ENCLOSURE 4 and 5
Protective treatment	Standard version		"TC" and "TH"
Ambient air temperature	For operation	°C	- 25...+ 70
	For storage	°C	- 40...+ 70
Degree of protection	Conforming to IEC 529		IP 65
	Conforming to NF C 20-010		IP 657
Electric shock protection	Conforming to IEC 536 and NF C 20-030		Class II
Flame resistance			CSTB: M3, NF C 20-455: 850 °C, IEC 92: 960 °C, UL 94: VO
Resistance to chemical agents			Highly resistant to acids, bases, sea water, mineral salts, all solvents, petrol, diesel, oils and greases
Cable entries			Undrilled

Elbowed metal enclosures XAM W

Material and colour			Aluminium alloy XAM WD : dark grey RAL 7016 lid, light grey RAL 7035 base XAM WK01 : yellow RAL 1012 lid, light grey RAL 7035 base
Conformity to standards			EN/IEC 60947-1, EN/IEC 60947-5-1, EN/IEC 60947-5-4
Protective treatment	Standard version		"TC" and "TH"
Ambient air temperature	For operation	°C	- 25...+ 70
	For storage	°C	- 40...+ 70
Degree of protection	Conforming to IEC 529		IP 65
Electric shock protection	Conforming to IEC 536		Class I
Flame resistance			CSTB: M3, NF C 20-455: 850 °C, IEC 92: 960 °C, UL 94: VO
Resistance to chemical agents			Good resistance to organic acids, diluted mineral acids, salts, alcohol, acetone, chloride and fluoride solvents, oils and petrol
Cable entries			Via opening in rear of enclosure

Die-cast metal enclosures XAP M

Material and colour			XAP M1, M2, M3 and M4 : zinc alloy. Blue paint finish XAP M5 : aluminium alloy. Blue paint finish
Product certifications	Special version		CSA ENCLOSURE 4 and 5, UL ENCLOSURE 1, 3, 4 and 12K
Protective treatment	Standard version		"TC"
	Special version		"TH"
Ambient air temperature	For operation	°C	- 25...+ 70
	For storage	°C	- 40...+ 70
Degree of protection	Conforming to IEC 529		IP 65
	Conforming to NF C 20-010		IP 657
Electric shock protection	Conforming to IEC 536 and NF C 20-030		Class I
Resistance to chemical agents			Special treatments on request
Cable entries			Tapped entries for cable gland (see dimensions, page 2/55)

Characteristics			
Metal enclosures XB2 S			
Material and colour			Aluminium alloy or sheet steel. Blue paint finish
Protective treatment	Standard version		“TC”
	Special version		“TH”
Ambient air temperature	For operation	°C	- 25...+ 70
	For storage	°C	- 40...+ 70
Degree of protection	Conforming to IEC 529		IP 54
	Conforming to NF C 20-010		IP 547
Electric shock protection	Conforming to IEC 536 and NF C 20-030		Class I
Resistance to chemical agents			Special treatments on request
Cable entries	XB2 S in aluminium alloy		Tapped entries for cable gland (see dimensions, page 2/55)
	XB2 S in sheet steel		Undrilled
Flush mounting enclosures XAP E			
Material and colour			Anodised aluminium front plate. Insulated protective rear cover
Protective treatment	Standard version		“TC” and “TH”
Ambient air temperature	For operation	°C	- 25...+ 70
	For storage	°C	- 40...+ 70
Degree of protection	Conforming to IEC 529		IP 65
	Conforming to NF C 20-010		IP 657
Electric shock protection	Conforming to IEC 536 and NF C 20-030		Class I
Resistance to chemical agents			Good resistance to organic acids, diluted mineral acids, salts, alcohol, acetone, chloride and fluoride solvents, oils and petrol
Cable entries			Through rear cover: knock-out cable entries

Control stations and enclosures

Control station enclosures: insulated, metal and flush mounting

With cut-outs for Ø 22 control and signalling units

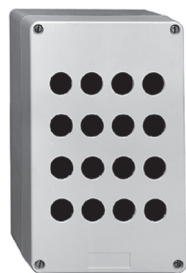
2



XAP A1104



XAP A2108



XAP A3116



XAM WD03



XAM WK01

References

Insulated enclosures, glass-reinforced polyester (usable depth 83 mm)

Description	Front face dimensions mm	Number of cut-outs	Number of rows		Reference	Weight kg
			Vertical	Horizontal		
Without hinges	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	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

Elbowed metal enclosures for mounting on vertical support

Description	Colour	Number of cut-outs	Reference	Weight kg
Elbowed enclosures metal	Dark grey lid (RAL 7016) Light grey base (RAL 7035)	1	XAM WD01	0.465
		2	XAM WD02	0.545
		3	XAM WD03	0.725
		4	XAM WD04	0.725
		5	XAM WD05	0.790
		6	XAM WD06	0.990
		7	XAM WD07	0.990
	Yellow lid (RAL 1012) Light grey base (RAL 7035)	1	XAM WK01	0.465

Other versions

Insulated and metal control station enclosures with cut-outs for Ø 30 control and signalling units.
Protective guards and fixing lugs for die-cast metal enclosures.
Insulated and metal control station enclosures pre-fitted with Ø 22 units.
Adjustable floor mounting pedestal (790 mm to 1143 mm) for sheet steel enclosures.
Please consult your Regional Sales Office.

Control stations and enclosures

Control station enclosures: insulated, metal and flush mounting

With cut-outs for Ø 22 control and signalling units



References

Description	Front face dimensions mm	Number of cut-outs	Number of rows		Reference	Weight kg	
			Vertical	Horizontal			
Die-cast metal enclosures (blue lid and base)							
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
Aluminium Usable depth 78 mm	150 x 150	6	3	2	XB2 SL32009	0.970	
		8	4	2	XB2 SL42009	0.960	
Die-cast metal enclosures (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	
Sheet steel enclosures							
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	

Other versions

Insulated and metal control station enclosures with cut-outs for Ø 30 control and signalling units.
 Protective guards and fixing lugs for die-cast metal enclosures.
 Insulated and metal control station enclosures pre-fitted with Ø 30 units.
 Adjustable floor mounting pedestal (790 mm to 1143 mm) for sheet steel enclosures.
 Please consult your Regional Sales Office.

Control stations and enclosures

Control station enclosures: insulated, metal and flush mounting

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

2



XAP A1100

XAP A2100

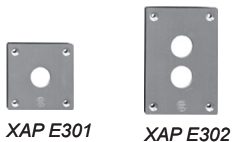


XAP A3100



XAP M11

XAP M31



XAP E301

XAP E302



XAP E303

XAP E305



ZB2 SZ2

ZB2 SZ3
ZB2 SZ4

References

Insulated enclosures, undrilled

Description		Front face dimensions (mm)	Reference	Weight kg
Usable depth 83 mm	Without hinges	85 x 146	XAP A1100	0.470
		85 x 226	XAP A2100	0.600
		151 x 241	XAP A3100	0.860
	With hinges	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

Die-cast metal enclosures, undrilled

Description	Material	Front face dimensions (mm)	Reference	Weight kg
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
	Zinc alloy Usable depth 74.5 mm	80 x 80	XAP J14	0.610
		80 x 175	XAP J34	1.160

Flush mounting enclosures for Ø 22 control and signalling units

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	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

Separate components

Description		Colour	Unit reference	Weight kg
Blanking plugs with seal and fixing nut for cut-outs Ø 22.3 ^{+0.4} mm	Insulated	Black	ZB2 SZ3	0.005
		Grey	ZB2 SZ4	0.005
	Metal	Blue	ZB2 SZ2	0.020
Seal (IP 65 degree of protection) (sold in lots of 7)	For mounting Ø 22 control and signalling units in XAM W● enclosures		ZB2 BZ004	0.001

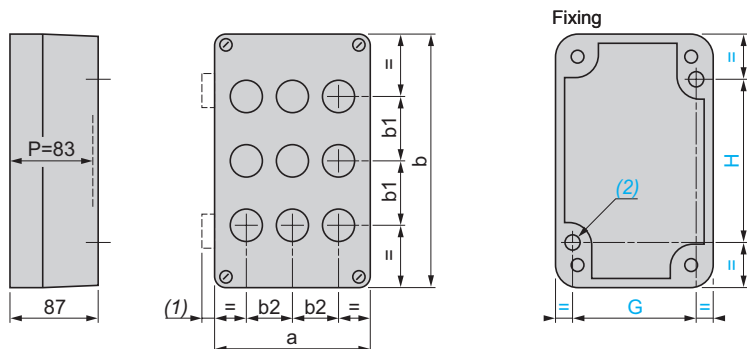
Other versions

Protective guards and fixing lugs for metal enclosures.
Flush mounting enclosures, undrilled or with Ø 30 cut-outs.
Flush mounting enclosures pre-fitted with Ø 22 units.
Please consult your Regional Sales Office.

Dimensions

Insulated enclosures 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.

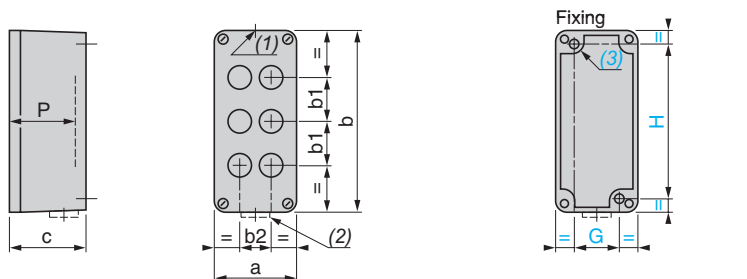
(1) 11 mm for XAP A4●●● enclosures with hinges.

(2) 2 x Ø 5.6 holes, depth 12.

P = Usable depth

Die-cast metal enclosures with cut-outs

XAP J, XAP M



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

(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:

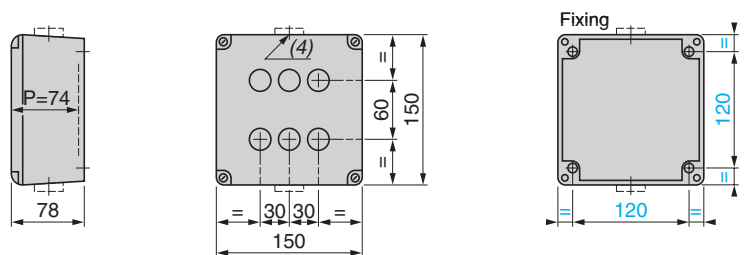
- XAP M3●●●: maximum capacity 18 mm,
- XAP M4●●● and XAP M5●●●: undrilled.

(3) 2 x Ø 5.6 holes, depth 20.

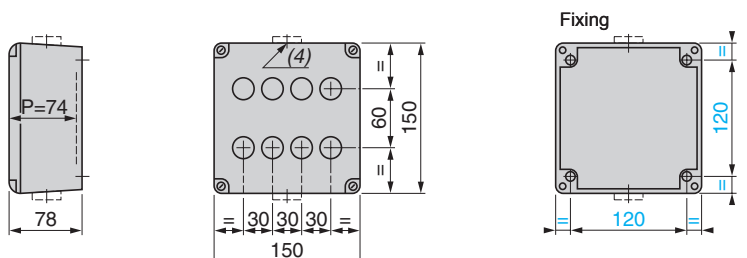
(4) 2 holes, with blanking plugs (protrusion 7.5 mm), for cable glands with 12 mm maximum clamping capacity.

P = Usable depth

XB2 SL32009



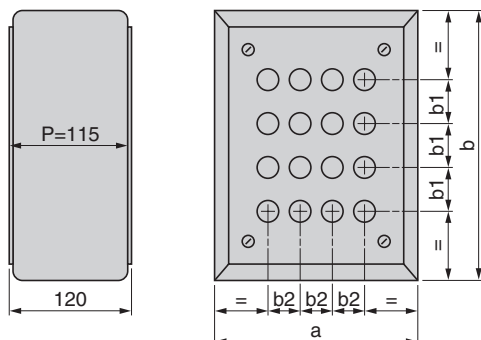
XB2 SL42009



Control station enclosures: insulated, metal and flush mounting

Dimensions

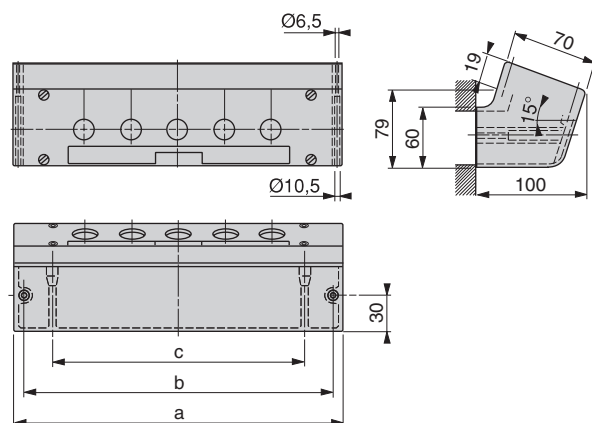
XB2 SL



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

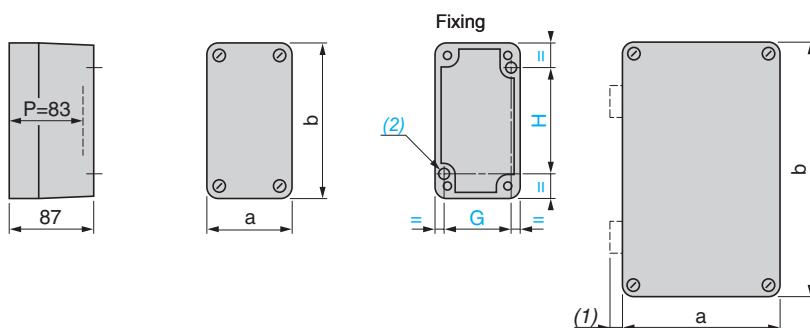
XAM W.●



	a	b	c
XAM WD01	90	74	50
XAM WD02	135	119	95
XAM WD03	180	164	140
XAM WD04	180	164	140
XAM WD05	225	209	185
XAM WD06	290	274	230
XAM WD07	290	274	230
XAM WK01	90	74	50

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.

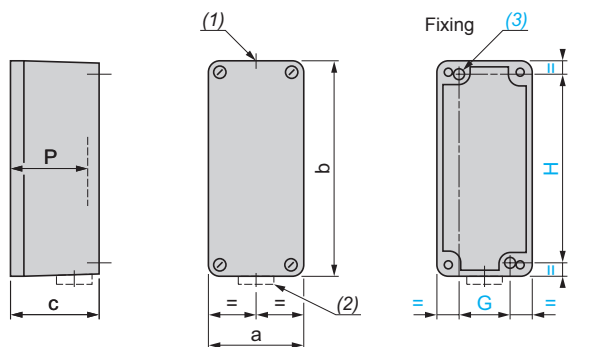
(1) 11 mm for XAPA4●●● enclosures with hinges.
(2) 2 x Ø 5.6 holes, depth 12.

P = Usable depth

Dimensions

Die-cast metal enclosures, undrilled

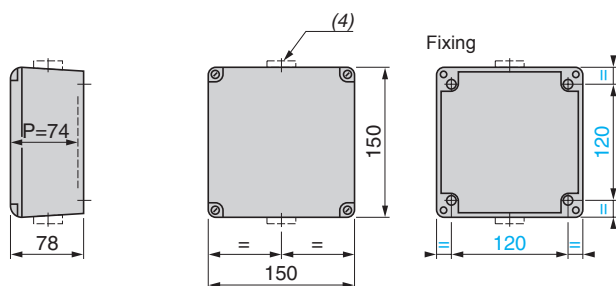
XAP J●●, XAP M●●



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

- (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.
 (4) 2 holes, with blanking plug (protrusion 7.5 mm), for cable glands with 12 mm maximum clamping capacity.
 P = Usable depth

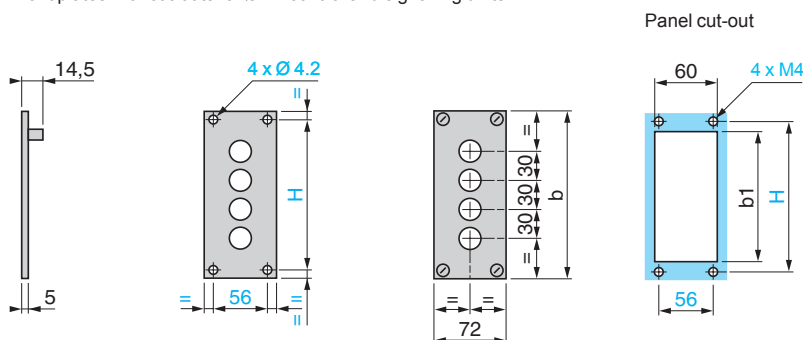
XB2 SA220095



Flush mounting enclosures

XAP E30●

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

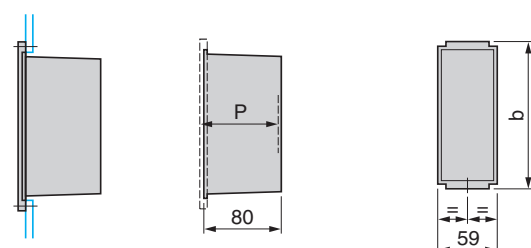


For Ø 22 control and signalling units

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

Conformity to standards			IEC 947-5-1, EN 60947-5-1
Protective treatment	Standard version		"TC"
	Special version		"TH"
Ambient air temperature	For operation	°C	- 25...+ 70
	For storage	°C	- 40...+ 70
Electric shock protection	Conforming to IEC 536		Class I
Degree of protection	Conforming to IEC 529		IP 54
	Conforming to EN 50102		IK 08
Cable entries			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)

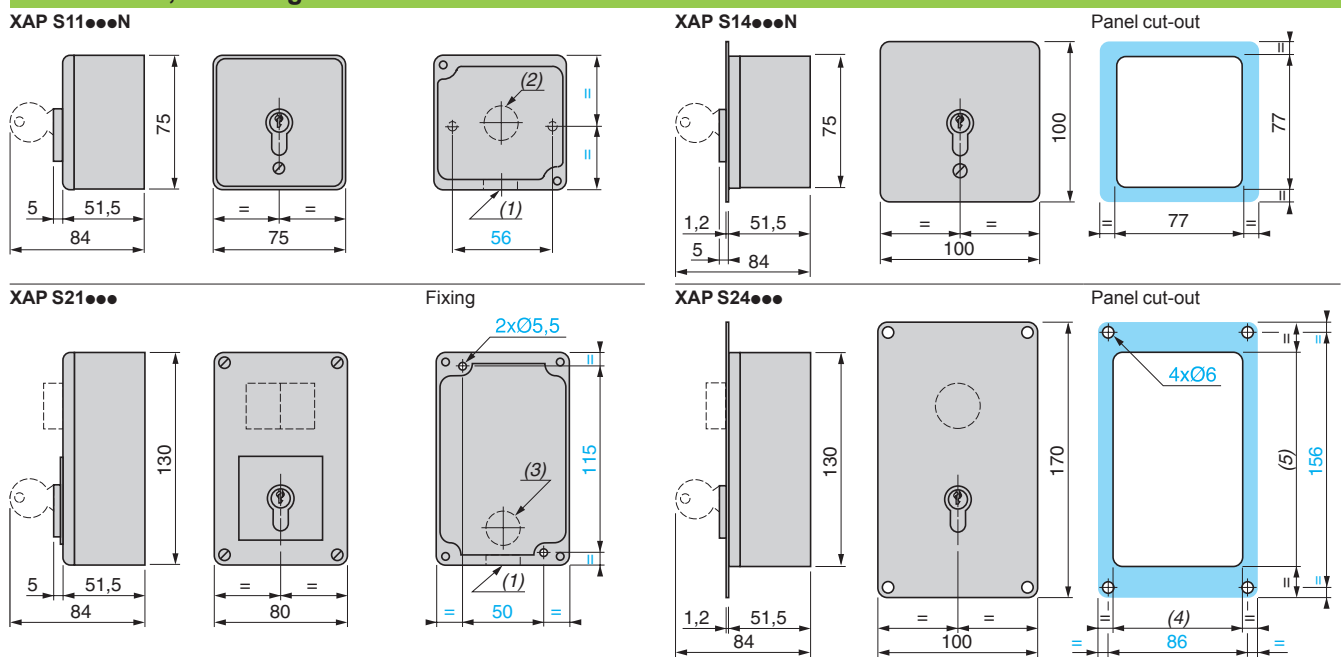
Contact block characteristics

Nominal thermal current	Conforming to IEC 947-5-1	A	10	
Rated insulation voltage			Ui = 600 V, degree of pollution 3 conforming to IEC 947-1	
Rated impulse withstand voltage			Uimp = 6 kV conforming to IEC 947-1	
Contact	Type		1 N/O slow break contact	
	Material		Silver alloy (Ag/Ni)	
Resistance across terminals		mΩ	≤ 25	
Terminal referencing			Conforming to EN 50013 and EN 50050	
Short-circuit protection	Conforming to IEC 947-5-1		10 A cartridge fuse type gG	
Rated operational power	Conforming to IEC 947-5-1. Utilisation categories AC-15 and DC-13. Operating rate: 3600 operating cycles/hour. Load factor: 0.5			
	AC-15: A600			
	Ue (V)	600	240	120
	Ie (A)	1.2	3	6
	DC-13: Q600			
	Ue (V)	600	250	125
	Ie (A)	0.1	0.27	0.55
	d.c. supply ---			
	Power broken in W for 1 million operating cycles			
	Voltage (V)	24	48	120
	mm (W)	65	48	40
Connection			Screw clamp terminals, cross head screws slotted for 4 and 5.5 mm screwdrivers Maximum clamping capacity: 1 x 2.5 mm² or 2 x 1.5 mm² 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	I	Surface Flush	XAP S11111N (1) 0.830 XAP S14111N (1) 0.890
		2 position, spring return from right to left	Left-hand position		→	Surface Flush	XAP S11221N (1) 0.830 XAP S14221N (1) 0.890
		2 position, stay put + 2 spring return buttons	Left-hand position	↑ O	↓ I	Surface Flush	XAP S21111 1.080 XAP S24111 1.190
		3 position, stay put	Centre position	↑ O	↓	Surface Flush	XAP S11331N (1) 0.850 XAP S14331N (1) 0.910
	XAP S21111	3 position, spring return from left and right to centre	Centre position	↑ O	↓	Surface Flush	XAP S11431N (1) 0.850 XAP S14431N (1) 0.910
		3 position, stay put + 1 spring return button	Centre position	← O	→	Surface Flush	XAP S21331 1.070 XAP S24331 1.180
	XAP S21331	3 position, spring return from left and right to centre + 1 spring return button	Centre position	← O	→	Surface Flush	XAP S21431 1.070 XAP S24431 1.180
		100 x 100 front plates (for XAP S11●●●N control stations)					
		Description	Marking			Reference	Weight kg
		2 position, stay put	O		I	XAP SZ11	0.045
		2 position			→	XAP SZ12	0.045
		3 position	↑ O		↓	XAP SZ13	0.045
		Separate components and spare parts					
		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
		Accessories (for control stations XAP S11●●●N and XAP S14●●●N)					
		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 Regional Sales Office.

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.