# Product data sheet Characteristics

# **XB5AP31**

green projecting complete pushbutton Ø22 spring return 1NO unmarked



#### Main

Main	
Range of product	Harmony XB5
Product or component type	Complete push-button
Device short name	XB5
Product compatibility	Not compatible with legend holder
Bezel material	Plastic
Fixing collar material	Plastic
Mounting diameter	22 mm
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Type of operator	Spring return
Operator profile	Green projecting unmarked
Operator additional information	Clear boot
Contacts type and composition	1 NO
Contact operation	Slow-break
Connections - terminals	Screw clamp terminals : <= 2 x 1.5 mm <sup>2</sup> with cable end conforming to EN/IEC 60947-1 Screw clamp terminals : 1 x 0.222 x 2.5 mm <sup>2</sup> without cable end conforming to EN/IEC 60947-1

### Complementary

Contacts type and composition	1 NO	
Contact operation	Slow-break	
Connections - terminals	Screw clamp terminals : <= 2 x 1.5 mm <sup>2</sup> with cable end conforming to EN/IEC 60947-1 Screw clamp terminals : 1 x 0.222 x 2.5 mm <sup>2</sup> without cable end conforming to EN/IEC 60947-1	
Complementary		
Height	42 mm	
Width	30 mm	
Depth	61 mm	
Terminals description ISO n°1	(13-14)NO	
Product weight	0.039 kg	
Resistance to high pressure washer	7000000 Pa at 55 °C,distance: 0.1 m	
Contacts usage	Standard contacts	
Positive opening	Without positive opening	
Operating travel	2.6 mm (NO changing electrical state) 4.3 mm (total travel)	



Operating force	3.8 N (NO changing electrical state)				
Mechanical durability	1000000 cycles				
Tightening torque	0.81.2 N.m conforming to EN 60947-1				
Shape of screw head	Cross head compatible with Philips no 1 screwdriver Cross head compatible with pozidriv No 1 screwdriver Slotted head compatible with flat Ø 4 mm screwdriver Slotted head compatible with flat Ø 5.5 mm screwdriver				
Contacts material	Silver alloy (Ag/Ni)				
Short-circuit protection	10 A cartridge fuse type gG conforming to EN/IEC 60947-5-1				
[lth] conventional free air thermal current	10 A conforming to EN/IEC 60947-5-1				
[Ui] rated insulation voltage	600 V (degree of pollution: 3) conforming to EN/IEC 60947-1				
[Uimp] rated impulse withstand voltage	6 kV conforming to EN/IEC 60947-1				
[le] rated operational current	3 A at 240 V, AC-15, A600 conforming to EN/IEC 60947-5-1 6 A at 120 V, AC-15, A600 conforming to EN/IEC 60947-5-1 0.1 A at 600 V, DC-13, Q600 conforming to EN/IEC 60947-5-1 0.27 A at 250 V, DC-13, Q600 conforming to EN/IEC 60947-5-1 0.55 A at 125 V, DC-13, Q600 conforming to EN/IEC 60947-5-1 1.2 A at 600 V, AC-15, A600 conforming to EN/IEC 60947-5-1				
Electrical durability	100000 cycles, AC-15, 2 A at 230 V, operating rate: 3600 cyc/h, load factor: 0.5 conforming to EN/ IEC 60947-5-1 appendix C 1000000 cycles, AC-15, 3 A at 120 V, operating rate: 3600 cyc/h, load factor: 0.5 conforming to EN/ IEC 60947-5-1 appendix C 1000000 cycles, AC-15, 4 A at 24 V, operating rate: 3600 cyc/h, load factor: 0.5 conforming to EN/ IEC 60947-5-1 appendix C 1000000 cycles, DC-13, 0.2 A at 110 V, operating rate: 3600 cyc/h, load factor: 0.5 conforming to EN/IEC 60947-5-1 appendix C 1000000 cycles, DC-13, 0.2 A at 110 V, operating rate: 3600 cyc/h, load factor: 0.5 conforming to EN/IEC 60947-5-1 appendix C 1000000 cycles, DC-13, 0.5 A at 24 V, operating rate: 3600 cyc/h, load factor: 0.5 conforming to EN/ IEC 60947-5-1 appendix C				
Electrical reliability	$\Lambda$ < 10exp(-6) at 5 V, 1 mA in clean environment conforming to EN/IEC 60947-5-4 $\Lambda$ < 10exp(-8) at 17 V, 5 mA in clean environment conforming to EN/IEC 60947-5-4				

#### Environment

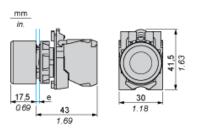
Protective treatment	TH				
Ambient air temperature for storage	-4070 °C				
Ambient air temperature for operation	-4070 °C				
Overvoltage category	Class II conforming to IEC 60536				
IP degree of protection	IP67 IP66 conforming to IEC 60529				
NEMA degree of protection	NEMA 13 NEMA 4X				
IK degree of protection	IK03 conforming to IEC 50102				
Standards	JIS C 4520 UL 508 CSA C22.2 No 14 EN/IEC 60947-5-1 EN/IEC 60947-5-4 EN/IEC 60947-1				
Product certifications	GL CSA RINA UL listed LROS (Lloyds register of shipping) DNV BV				
Vibration resistance	5 gn (f = 2500 Hz) conforming to IEC 60068-2-6				
Shock resistance	30 gn (duration = 18 ms) for half sine wave acceleration conforming to IEC 60068-2-27 50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27				

## Contractual warranty

Warranty period

Product data sheet Dimensions Drawings

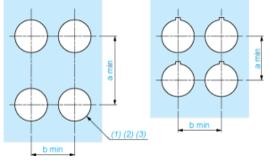
#### Dimensions



e: clamping thickness: 1 to 6 mm / 0.04 to 0.24 in.

#### Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

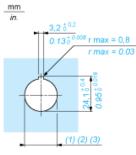
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (1) Diameter on finished panel or support
- (2) (3) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.  $\emptyset$ 22.5 mm recommended ( $\emptyset$ 22.3  $_0^{+0.4}$ ) /  $\emptyset$ 0.89 in. recommended ( $\emptyset$ 0.88 in.  $_0^{+0.016}$ )

Connections	a in mm	a in in.	b in mm	b in in.
By screw clamp terminals or plug-in connector	40	1.57	30	1.18
By Faston connectors	45	1.77	32	1.26
On printed circuit board	30	1.18	30	1.18

#### **Detail of Lug Recess**



- (1) (2) (3) Diameter on finished panel or support
- For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.  $\emptyset$ 22.5 mm recommended ( $\emptyset$ 22.3  $_0^{+0.4}$ ) /  $\emptyset$ 0.89 in. recommended ( $\emptyset$ 0.88 in.  $_0^{+0.016}$ )