

# Product datasheet

## Characteristics

# XB4BP683G5EX

blue illuminated pushbutton - Ø 22 - 48..120 V -  
ATEX



### Main

Range of product	Harmony XB4
Product or component type	Complete illuminated push-button
Device short name	XB4
Bezel material	Chromium plated metal
Fixing collar material	Zamak
Mounting diameter	22 mm
Sale per indivisible quantity	1
Dust zone	Zone 21 - 22
Operator profile	Blue flush
Operator additional information	Booted (clear silicon)
Contacts type and composition	1 NO

### Complementary

Resistance to high pressure washer	7000000 Pa at 55 °C, distance : 0.1 m
Device mounting	Fixing hole - diameter: 22.5 mm 22.3 +0.4/0 conforming to EN/IEC 60947-1
Fixing center	>= 30 x 40 mm (support panel)
Fixing mode	Single screw: 0.8...1.2 N.m
Embedding depth	43 mm
Marking	Ex tb IIIC
Shape of signaling unit head	Round
Contact operation	Slow-break
Positive opening	Without
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	5000000 cycles
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 0.22...2 x 2.5 mm <sup>2</sup> without cable end conforming to EN/IEC 60947-1
Tightening torque	0.8...1.2 N.m conforming to EN 60947-1
Shape of screw head	Cross compatible with Philips no 1 screwdriver Cross compatible with pozidriv No 1 screwdriver Slotted compatible with flat Ø 4 mm screwdriver Slotted compatible with flat Ø 5.5 mm screwdriver

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Contacts material	Silver alloy (Ag/Ni)
Short-circuit protection	10 A cartridge fuse type gG conforming to EN/IEC 60947-5-1
[I <sub>th</sub> ] conventional free air thermal current	10 A conforming to EN/IEC 60947-5-1
[U <sub>i</sub> ] rated insulation voltage	600 V (pollution degree 3) conforming to EN/IEC 60947-1
[U <sub>imp</sub> ] rated impulse withstand voltage	EN/IEC 60947-1 6 kV
[I <sub>e</sub> ] 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	1000000 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, 0.5 A at 24 V, operating rate <3600 cyc/h, load factor: 0.5 conforming to EN/IEC 60947-5-1: appendix C
Electrical reliability	$\Lambda < 10^{\exp(-6)}$ at 5 V, 1 mA in clean environment conforming to EN/IEC 60947-5-4 $\Lambda < 10^{\exp(-8)}$ at 17 V, 5 mA in clean environment conforming to EN/IEC 60947-5-4
Signalling type	Steady
Light source	Integral LED
[U <sub>s</sub> ] rated supply voltage	48...120 V AC 50/60 Hz
Supply voltage limits	40...132 V AC
Service life	100000 h at rated voltage and 25 °C
Surge withstand	1 kV conforming to IEC 61000-4-5

## Environment

Protective treatment	TH
Ambient air temperature for storage	-40...70 °C
Ambient air temperature for operation	-40...70 °C
Overvoltage category	I conforming to IEC 60536
IP degree of protection	IP65 conforming to IEC 60529
NEMA degree of protection	NEMA 13 NEMA 4X
IK degree of protection	IK05 conforming to IEC 50102
Standards	EN 60079-0:2009 EN 60079-31:2009 EN 61000-6-2 IEC 60079-0:2007 IEC 60079-31:2008
Directives	94/9/EC - ATEX directive
Product certifications	INERIS 04ATEX9004U
Vibration resistance	5 gn (f= 2...500 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
Resistance to fast transients	2 kV conforming to IEC 61000-4-4
Resistance to electromagnetic fields	10 V/m conforming to IEC 61000-4-3
Resistance to electrostatic discharge	6 kV on contact (on metal parts) conforming to IEC 61000-4-2 8 kV in free air (in insulating parts) conforming to IEC 61000-4-2
Electromagnetic emission	Class B conforming to IEC 55011

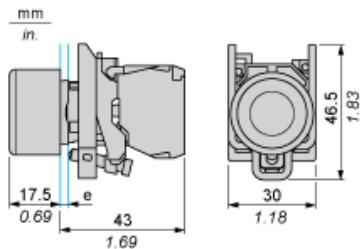
## Contractual warranty

Warranty	18 months
----------	-----------

---

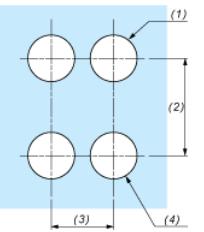
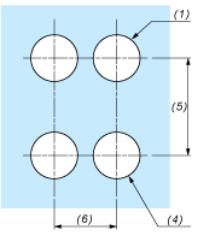
Illuminated Pushbutton

---



e : support 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	Connection by Faston Connectors
 <p>(1) Diameter on finished panel or support (2) 40 mm min. / 1.57 in. min. (3) 30 mm min. / 1.18 in. min. (4) Ø 22.5 mm / 0.89 in. recommended (Ø 22.3 mm <math>^{+0.4}</math> / 0.88 in. <math>^{+0.016}</math>) (5) 45 mm min. / 1.78 in. min. (6) 32 mm min. / 1.26 in. min.</p>	 <p>(1) Diameter on finished panel or support (2) 40 mm min. / 1.57 in. min. (3) 30 mm min. / 1.18 in. min. (4) Ø 22.5 mm / 0.89 in. recommended (Ø 22.3 mm <math>^{+0.4}</math> / 0.88 in. <math>^{+0.016}</math>) (5) 45 mm min. / 1.78 in. min. (6) 32 mm min. / 1.26 in. min.</p>