

Product data sheet

Specifications



Illuminated push button, Harmony XB4, metal, white flush, 22mm, universal LED, plain lens, 1NO + 1NC, 24V AC/DC

XB4BW31B5

Main

Range of product	Harmony XB4
Product or component type	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
Head type	Standard
Shape of signaling unit head	Round
Type of operator	spring return
Operator profile	White flush
Operator additional information	With plain lens
Contacts type and composition	1 NO + 1 NC
Contact operation	Slow-break
Connections - terminals	Screw clamp terminals, $\leq 2 \times 1.5 \text{ mm}^2$ with cable end conforming to EN/IEC 60947-1 Screw clamp terminals, $1 \times 0.22 \dots 2 \times 2.5 \text{ mm}^2$ without cable end conforming to EN/IEC 60947-1
Light source	Universal LED
Bulb base	Integral LED
[Us] rated supply voltage	24 V AC/DC at 50/60 Hz

Complementary

Height	47 mm
Width	30 mm
Depth	57 mm
Terminals description ISO n°1	(13-14)NO (21-22)NC
Net weight	0.097 kg
Resistance to high pressure washer	7000000 Pa at 55 °C, distance : 0.1 m
Contacts usage	Standard contacts
Positive opening	With conforming to EN/IEC 60947-5-1 appendix K

Operating travel	1.5 mm (NC changing electrical state) 2.6 mm (NO changing electrical state) 4.3 mm (total travel)
Operating force	3.5 N NC changing electrical state 3.8 N
Mechanical durability	10000000 cycles
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
Contacts material	Silver alloy (Ag/Ni)
Short-circuit protection	10 A cartridge fuse type gG conforming to EN/IEC 60947-5-1
[I_{th}] conventional free air thermal current	10 A conforming to EN/IEC 60947-5-1
[U_i] rated insulation voltage	600 V (pollution degree 3) conforming to EN/IEC 60947-1
[U_{imp}] rated impulse withstand voltage	6 kV conforming to EN/IEC 60947-1
[I_e] 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 and 1 mA in clean environment conforming to EN/IEC 60947-5-4 $\Lambda < 10\exp(-8)$ at 17 V and 5 mA in clean environment conforming to EN/IEC 60947-5-4
Signalling type	Steady
Current consumption	18 mA
Service life	100000 h at rated voltage and 25 °C
Surge withstand	1 kV conforming to IEC 61000-4-5
Supply voltage limits	19.2...30 V DC 21.6...26.4 V AC
Device presentation	Complete product
Environment	
Protective treatment	TH
Ambient air temperature for storage	-40...70 °C
Ambient air temperature for operation	-40...70 °C
Electrical shock protection class	Class I conforming to IEC 60536
IP degree of protection	IP66 conforming to IEC 60529 IP67 IP69 IP69K
NEMA degree of protection	NEMA 13 NEMA 4X
IK degree of protection	IK06 conforming to IEC 50102
Standards	EN/IEC 60947-5-5 CSA C22.2 No 14

EN/IEC 60947-5-4
EN/IEC 60947-5-1
JIS C8201-5-1
UL 508
EN/IEC 60947-1
JIS C8201-1

Product certifications	DNV CSA UL listed LROS (Lloyds register of shipping) GL BV
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

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	96.25 g
Package 1 Height	3.5 cm
Package 1 width	5.5 cm
Package 1 Length	8.5 cm
Unit Type of Package 2	S03
Number of Units in Package 2	100
Package 2 Weight	10.079 kg
Package 2 Height	30.0 cm
Package 2 width	30.0 cm
Package 2 Length	40.0 cm
Unit Type of Package 3	P06
Number of Units in Package 3	800
Package 3 Weight	88.632 kg
Package 3 Height	75.0 cm
Package 3 width	80.0 cm
Package 3 Length	60.0 cm

Offer Sustainability

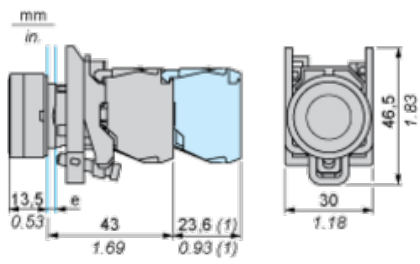
Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration

Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Contractual warranty

Warranty	18 months
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Dimensions



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

(1) Additional row of contacts or double contact

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) \varnothing 22.5 mm / 0.89 in. recommended (\varnothing 22.3 mm $_0^{+0.4}$ / 0.88 in. $_0^{+0.016}$) (5) 45 mm min. / 1.78 in. min. (6) 32 mm min. / 1.26 in. min.</p>	