

Product datasheet

Specifications



illuminated selector switch, Harmony XB5, dark grey plastic, green handle, 22mm, universal LED, 2 positions, 1NO + 1NC, 24V AC/DC

XB5AK123B5

Main

Range of product	Harmony XB5
Product or component type	Illuminated selector switch
Device short name	XB5
Bezel material	Dark grey plastic
Head type	Standard
Mounting diameter	22 mm
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Type of operator	stay put
Operator profile	Green standard handle
Operator position information	2 positions 90°
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, $\geq 1 \times 0.22 \text{ mm}^2$ without cable end conforming to EN/IEC 60947-1
Bulb base	Integral LED
[Us] rated supply voltage	24 V AC/DC at 50/60 Hz

Complementary

Height	42 mm
Width	30 mm
Depth	70 mm
Terminals description ISO n°1	(11-12)NC (13-14)NO
Net weight	0.516 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 torque	0.14 N.m NO changing electrical state
Mechanical durability	1000000 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 60947-1
[U_{imp}] rated impulse withstand voltage	6 kV conforming to EN 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	$\Lambda < 10\text{exp}(-6)$ at 5 V and 1 mA in clean environment conforming to EN/IEC 60947-5-4 $\Lambda < 10\text{exp}(-8)$ at 17 V and 5 mA in clean environment conforming to EN/IEC 60947-5-4
Signalling type	Steady
Light source	Universal LED
Supply voltage limits	19.2...30 V DC 21.6...26.4 V AC
Current consumption	18 mA
Service life	100000 h at rated voltage and 25 °C
Surge withstand	1 kV conforming to IEC 61000-4-5
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 II conforming to IEC 60536
IP degree of protection	IP66 conforming to IEC 60529 IP67 conforming to IEC 60529 IP69 IP69K
NEMA degree of protection	NEMA 13 NEMA 4X
IK degree of protection	IK06 conforming to IEC 50102
Standards	EN/IEC 60947-5-4 UL 508 EN/IEC 60947-1 EN/IEC 60947-5-1 CSA C22.2 No 14 JIS C8201-5-1 JIS C8201-1
Product certifications	UL

CSA
LROS (Lloyds register of shipping)
BV
GL
DNV

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 Height	3.500 cm
Package 1 Width	5.400 cm
Package 1 Length	9.200 cm
Package 1 Weight	59.000 g
Unit Type of Package 2	S03
Number of Units in Package 2	150
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	9.473 kg

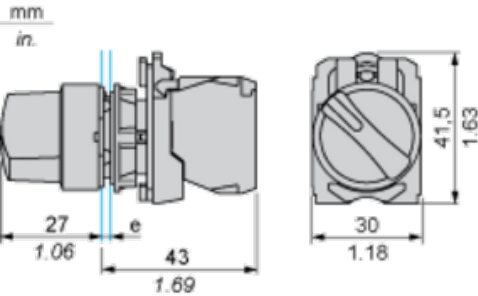
Offer Sustainability

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
China RoHS Regulation	China RoHS declaration
RoHS exemption information	Yes
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

Contractual warranty

Warranty	18 months
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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)

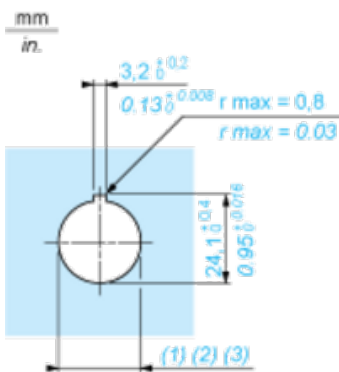
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



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

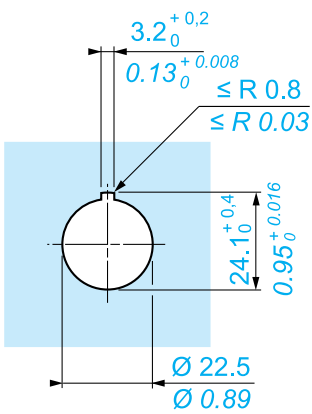
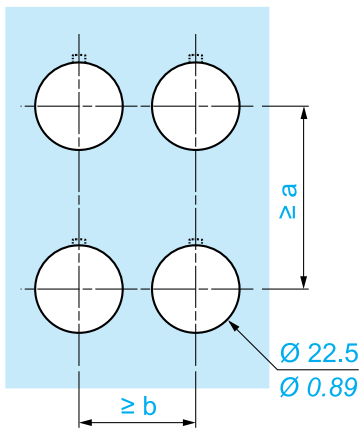
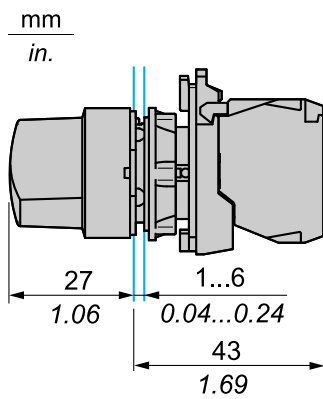
Connections	a in mm	a in in.	b in mm	b in in.
By screw clamp terminals or plug-in connector	40	1.57	30	1.18
By Faston connectors	45	1.77	32	1.26
On printed circuit board	30	1.18	30	1.18

Detail of Lug Recess



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

Dimensions



		a (mm)	a (in.)	b (mm)	b (in.)
		40	1.57	30	1.18
ZBE●●●●●	ZBV●●●●●				
		45	1.77	32	1.26
ZBE●●●●●3	ZBV●●●●●3				
		40	1.57	30	1.18
ZBE●●●●●4	ZBV●●●●●4				
		50	1.97	30	1.18
ZBE●●●●●5	ZBV●●●●●5				
		40	1.57	30	1.18
ZBE●●●●●9	ZBV●●●●●9				
		40	1.57	30	1.18
ZBRT●	ZBRV1				

Recommended replacement(s)