

# Product data sheet

Specifications



Push button, Harmony XB5, plastic, black mushroom 40mm, 22mm, spring return, unmarked, 1NO

XB5AC21

## Main

Range of product	Harmony XB5
Product or component type	Push-button
Device short name	XB5
Bezel material	Plastic Dark grey plastic
Head type	Standard
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	Black mushroom Ø 40 mm
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 0.22...2 x 2.5 mm <sup>2</sup> without cable end conforming to EN/IEC 60947-1 Faston connectors, connection size: 1 x 6.35 mm Faston connectors, connection size: 2 x 2.8 mm

## Complementary

Height	43 mm
Width	40 mm
Depth	82 mm
Net weight	0.062 kg
Resistance to high pressure washer	7000000 Pa at 55 °C, distance : 0.1 m
Contacts usage	Standard contacts
Positive opening	Without
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 NO changing electrical state

<b>Mechanical durability</b>	5000000 cycles
<b>Tightening torque</b>	0.8...1.2 N.m conforming to EN 60947-1
<b>Shape of screw head</b>	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
<b>Contacts material</b>	Silver alloy (Ag/Ni)
<b>Short-circuit protection</b>	10 A cartridge fuse type gG conforming to EN/IEC 60947-5-1
<b>[I<sub>th</sub>] conventional free air thermal current</b>	10 A conforming to EN/IEC 60947-5-1
<b>[U<sub>i</sub>] rated insulation voltage</b>	600 V (pollution degree 3) conforming to EN/IEC 60947-1
<b>[U<sub>imp</sub>] rated impulse withstand voltage</b>	6 kV conforming to EN/IEC 60947-1
<b>[I<sub>e</sub>] rated operational current</b>	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
<b>Electrical durability</b>	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
<b>Electrical reliability</b>	Λ < 10 <sup>exp(-6)</sup> at 5 V and 1 mA in clean environment conforming to EN/IEC 60947-5-4 Λ < 10 <sup>exp(-8)</sup> at 17 V and 5 mA in clean environment conforming to EN/IEC 60947-5-4
<b>Device presentation</b>	Complete product
<b>Customizable</b>	No
	1
<b>GCR BRIDGE</b>	XB5ACCUST01
<b>Compatibility code</b>	XB5
<b>Environment</b>	
<b>Protective treatment</b>	TH
<b>Ambient air temperature for storage</b>	-40...70 °C
<b>Ambient air temperature for operation</b>	-40...70 °C
<b>Overvoltage category</b>	Class II conforming to IEC 60536
<b>IP degree of protection</b>	IP65 conforming to IEC 60529 IP69 IP69K
<b>NEMA degree of protection</b>	NEMA 13 NEMA 4X
<b>IK degree of protection</b>	IK03 conforming to IEC 50102
<b>Standards</b>	JIS C8201-5-1 CSA C22.2 No 14 UL 508 EN/IEC 60947-5-4 EN/IEC 60947-5-1 EN/IEC 60947-1 JIS C8201-1
<b>Product certifications</b>	BV CSA UL listed RINA GL DNV

<b>Vibration resistance</b>	5 gn (f= 2...500 Hz) conforming to IEC 60068-2-6
<b>Shock resistance</b>	10 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	4.500 cm
<b>Package 1 Width</b>	5.500 cm
<b>Package 1 Length</b>	9.000 cm
<b>Package 1 Weight</b>	63.000 g
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	42
<b>Package 2 Height</b>	15.000 cm
<b>Package 2 Width</b>	30.000 cm
<b>Package 2 Length</b>	40.000 cm
<b>Package 2 Weight</b>	2.879 kg

## Offer Sustainability

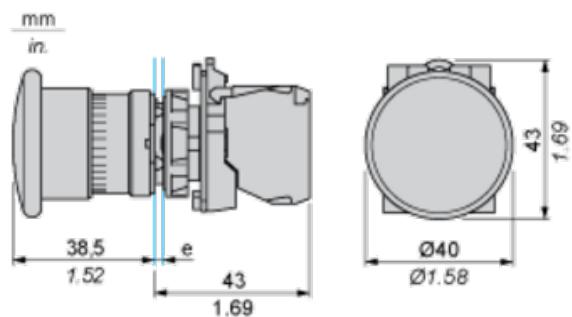
<b>Sustainable offer status</b>	Green Premium product
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>REACH free of SVHC</b>	Yes
<b>EU RoHS Directive</b>	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
<b>Toxic heavy metal free</b>	Yes
<b>Mercury free</b>	Yes
<b>RoHS exemption information</b>	<a href="#">Yes</a>
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a>
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>
<b>WEEE</b>	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
<b>California proposition 65</b>	WARNING: This product can expose you to chemicals including: Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to <a href="#">www.P65Warnings.ca.gov</a>

## Contractual warranty

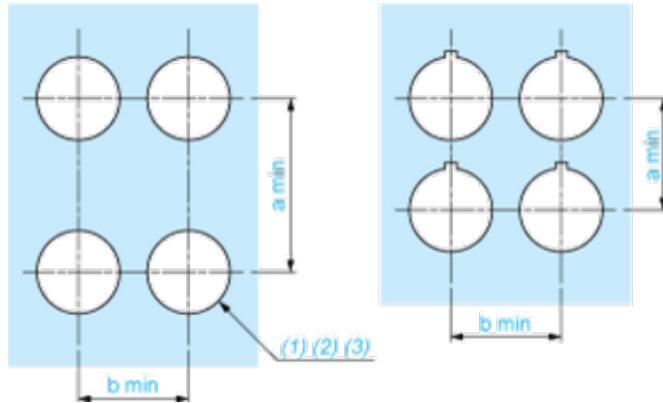
<b>Warranty</b>	18 months
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### Dimensions

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

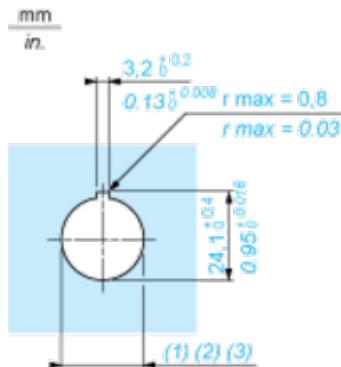
**Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)****Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board**

(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) Ø22.5 mm recommended ( $\text{Ø}22.3 {}^{+0.4} \text{ mm}$ ) / Ø0.89 in. recommended ( $\text{Ø}0.88 \text{ in.} {}^{+0.016}$ )

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

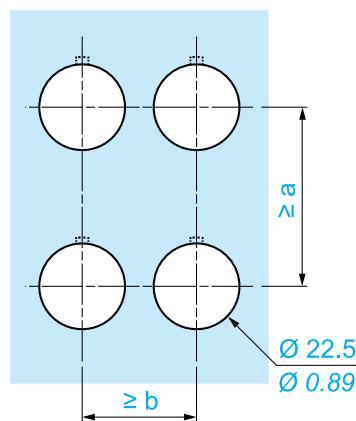
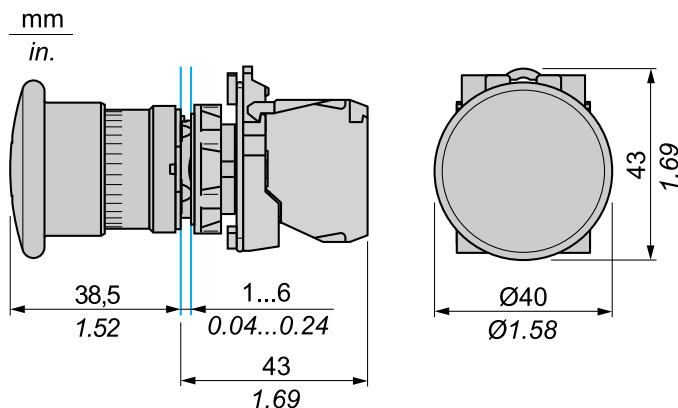
**Detail of Lug Recess**

(1) Diameter on finished panel or support

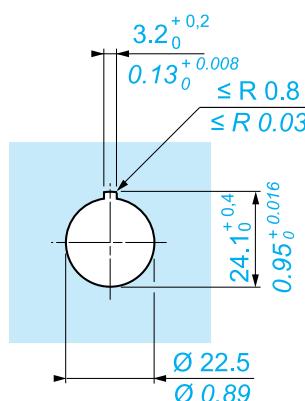
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## Dimensions



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



## Recommended replacement(s)