



Main

Range of product	Harmony XB5
Product or component type	Complete illuminated pushbutton
Device short name	XB5
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 flush unmarked
Operator additional information	With plain lens
Contacts type and composition	1 NO + 1 NC
Contacts 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	Protected LED
Bulb base	Integral LED
[Us] rated supply voltage	24 V AC/DC, 50/60 Hz

Complementary

CAD overall width	30 mm
CAD overall height	42 mm
CAD overall depth	57 mm
Terminals description ISO n°1	(13-14)NO (21-22)NC
Product weight	0.056 kg
Resistance to high pressure washer	7000000 Pa at 55 °C, distance: 0.1 m
Contacts usage	Standard contacts
Positive opening	With positive opening conforming to EN/IEC 60947-5-1 appendix K
Operating travel	4.3 mm (total travel) 1.5 mm (NC changing electrical state) 2.6 mm (NO changing electrical state)
Operating force	3.8 N 3.5 N (NC changing electrical state)
Mechanical durability	5000000 cycles
Tightening torque	0.8...1.2 N.m conforming to EN 60947-1
Shape of screw head	Cross head compatible with pozidriv No 1 screwdriver Slotted head compatible with flat Ø 5.5 mm screwdriver Slotted head compatible with flat Ø 4 mm screwdriver Cross head compatible with Philips no 1 screwdriver
Contacts material	Silver alloy (Ag/Ni)
Short circuit protection	10 A cartridge fuse type gG conforming to EN/IEC 60947-5-1
[Ith] 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
[Ie] rated operational current	0.27 A at 250 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 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 3 A at 240 V, AC-15, A600 conforming to EN/IEC 60947-5-1 0.55 A at 125 V, DC-13, Q600 conforming to EN/IEC 60947-5-1
Electrical durability	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 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, 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, 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
Electrical reliability IEC 60947-5-4	$\Lambda < 10\exp(-8)$ at 17 V, 5 mA in clean environment conforming to EN/IEC 60947-5-4 $\Lambda < 10\exp(-6)$ at 5 V, 1 mA in clean environment conforming to EN/IEC 60947-5-4
Signalling type	Steady
Supply voltage limits	21.6...26.4 V AC 19.2...30 V DC
Current consumption	18 mA
Service life	100000 h at rated voltage and 25 °C
Surge withstand	1 kV conforming to IEC 61000-4-5

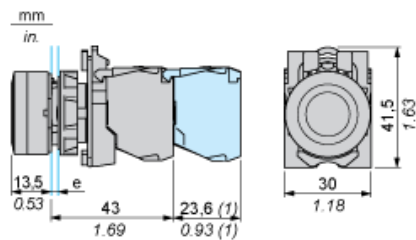
Environment

Protective treatment	TH
Ambient air temperature for storage	-40...70 °C
Ambient air temperature for operation	-25...70 °C
Class of protection against electric shock	Class II conforming to IEC 60536
IP degree of protection	IP66 conforming to IEC 60529
NEMA degree of protection	NEMA 13 NEMA 4X
IK degree of protection	IK05 conforming to IEC 50102
Standards	CSA C22-2 No 14 UL 508 EN/IEC 60947-5-5 EN/IEC 60947-5-4 EN/IEC 60947-5-1 EN/IEC 60947-1 JIS C 4520
Product certifications	LROS (Lloyds register of shipping) CSA DNV (Det Norske Veritas) BV RINA UL listed GL
Vibration resistance	5 gn (f = 2...500 Hz) conforming to IEC 60068-2-6
Shock resistance	30 gn for 18 ms half sine wave acceleration conforming to IEC 60068-2-27 50 gn for 11 ms 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

Dimensions of Illuminated Pushbuttons

Integral LED

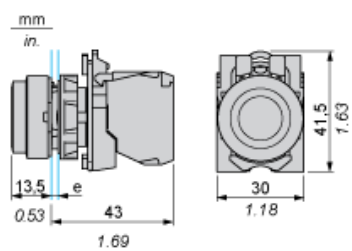
XB5 AW•B5, XB5 AW•G5, XB5 AW•M5



- e: clamping thickness: 1 to 6 mm / 0.04 to 0.24 in.
- (1) Additional row of contacts or double contact.

Direct Supply

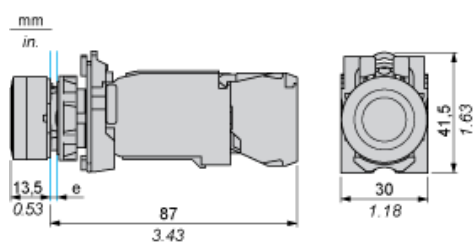
XB5 AW3•65



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

Via Integral Transformer

XB5 AW3••5



- 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)

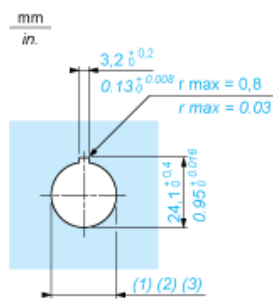
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (1) Diameter on finished panel or support
- (2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5 AZ902 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 ZB5 AZ902 is recommended.
- (3) $\varnothing 22.5$ mm recommended ($\varnothing 22.3 \text{ }_0^{+0.4}$) / $\varnothing 0.89$ in. recommended ($\varnothing 0.88 \text{ in. }_0^{+0.016}$)