

Product data sheet

Specifications



Illuminated push button, Harmony XB5, antimicrobial, plastic, green, 30mm, universal LED, 1NO + 1NC, 24V AC DC

XB5FW33B5

Main

Range of product	Harmony XB5
Product or component type	Illuminated push-button
Device short name	XB5F
Bezel material	Dark grey plastic
Fixing collar material	Plastic
Head type	Built-in-flush
Mounting diameter	30.5 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
Contact operation	Slow-break
Connections - terminals	Screw clamp terminals, <= 2 x 1.5 mm ² with cable end conforming to EN/IEC 60947-1 Screw clamp terminals, 1 x 0.22...2 x 2.5 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 50/60 Hz
Cap/Operator or lens colour	Green

Complementary

Height	42 mm
Width	36.6 mm
Depth	55 mm
Terminals description ISO n°1	(21-22)NC (13-14)NO
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_{ii}] 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	Λ < 10 ^{exp(-6)} at 5 V, 1 mA in clean environment conforming to EN/IEC 60947-5-4 Λ < 10 ^{exp(-8)} at 17 V, 5 mA in clean environment conforming to EN/IEC 60947-5-4
Signalling type	Steady
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
Overvoltage category	Class II 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	IK03 conforming to IEC 50102
Standards	EN/IEC 60947-1 UL 508 JIS C8201-5-1

EN/IEC 60947-5-4
 EN/IEC 60947-5-1
 CSA C22.2 No 14
 JIS C8201-1
 ISO 22196:2011
 ISO 21702

Product certifications	UL listed CSA
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

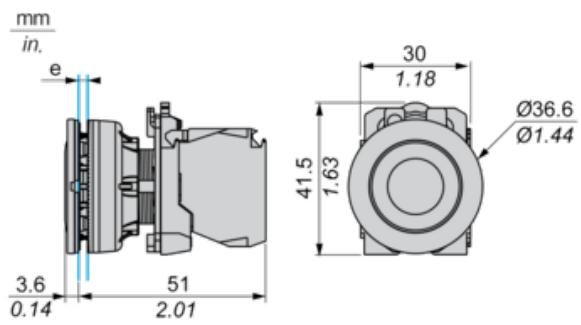
Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	8.6 cm
Package 1 Width	4.3 cm
Package 1 Length	5.3 cm
Package 1 Weight	62.0 g
Unit Type of Package 2	S02
Number of Units in Package 2	40
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	2.785 kg

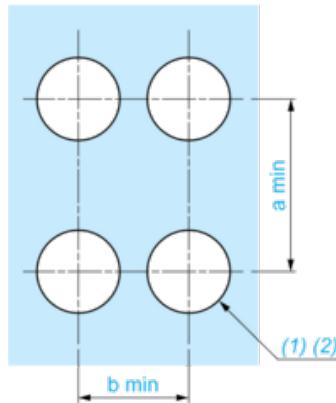
Offer Sustainability

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
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

Dimensions



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

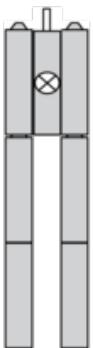
Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)**Connection by Screw Clamp Terminals or Plug-in Connectors**

(1) Diameter on finished panel or support

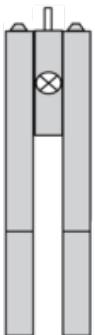
(2) Ø30.75 mm recommended ($\text{Ø}30.5^{+0.5}_0$) / Ø1.21 in. recommended ($\text{Ø}1.20 \text{ in.}^{+0.0196}_0$)

Connections	a in mm	a in in.	b in mm	b in in.
By screw clamp terminals or plug-in connector	40	1.57	40	1.57
By Faston connectors	45	1.77	40	1.57

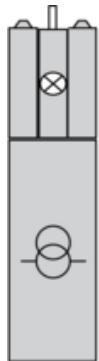
Electrical Composition Corresponding to Codes M1 and M7



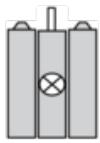
Electrical Composition Corresponding to Codes M2 and M8



Electrical Composition Corresponding to Codes M6 and P2



Electrical Composition Corresponding to Codes M5, M10, MF1, MR1 and MF2



Legend

Single contact



Double contact



Light block



Possible location



Dimensions

	mm in.			
	3.6 0.14	51 2.01	1...6 0.04...0.24	
	30 1.18	41.5 1.63	Ø36.6 Ø1.44	
	Ø 22.5 Ø 0.89	$\geq b$	$\approx a$	
	Ø 22.5 Ø 0.89	$3.20^{+0.2}$ $0.13_0^{+0.008}$	$\leq R 0.8$ $\leq R 0.03$	
	a (mm) a (in.)	b (mm) b (in.)		
ZBE●●●●●	40 1.57	30 1.18	ZBV●●●●●	
ZBE●●●●●3	45 1.77	32 1.26	ZBV●●●●3	
ZBE●●●●●4	40 1.57	30 1.18	ZBV●●●●4	
ZBE●●●●●5	50 1.97	30 1.18	ZBV●●●●5	
ZBE●●●●●9	40 1.57	30 1.18	ZBV●●●●9	
ZBRT●	40 1.57	30 1.18	ZBRV1	

Recommended replacement(s)