Product data sheet Characteristics

ZB4BS844

Emergency stop head, switching off, metal, red mushroom Ø40, Ø22, trigger latching turn to release





Main

Main		
Range of product	Harmony XB4	
Product or component type	Head for emergency switching off push-button	
Device short name	ZB4	
Bezel material	Chromium plated metal	
Mounting diameter	22 mm	
Sale per indivisible quantity	1	
Shape of signaling unit head	Round	
Type of operator	trigger action and mechanical latching	
Reset	Turn to release	
Operator profile	Red mushroom Ø 40 mm, unmarked	
Head type	Standard	
Complementary		
CAD overall width	40 mm	
CAD overall height	40 mm	
CAD overall depth	57 mm	
Net weight	0.073 kg	
Mechanical durability	300000 cycles	
Electrical composition code	C7 for <4 contacts using single blocks in front mounting C8 for <4 contacts using single and double blocks in front mounting C11 for <3 contacts using single blocks in front mounting C15 for <1 contacts using single blocks in front mounting C10 for <4 contacts using single and double blocks in front mounting	
Device presentation	Basic element	

Complementary

Device presentation	Basic element	
	C10 for <4 contacts using single and double blocks in front mounting	
	C15 for <1 contacts using single blocks in front mounting	
	C11 for <3 contacts using single blocks in front mounting	
	C8 for <4 contacts using single and double blocks in front mounting	
Electrical composition code	C7 for <4 contacts using single blocks in front mounting	
Mechanical durability	300000 cycles	
Net weight	0.073 kg	
CAD overall depth	57 mm	
CAD overall height	40 mm	
CAD overall width	40 mm	

Environment		
Protective treatment	TH	
Ambient air temperature for storage	-4070 °C	
Ambient air temperature for operation	-4070 °C	
Electrical shock protection class	Class I conforming to IEC 61140	
IP degree of protection	IP66 conforming to IEC 60529 IP69 IP69K	
NEMA degree of protection	NEMA 13 NEMA 4X NEMA 4 NEMA 12	
IK degree of protection	IK06 conforming to IEC 50102	
Standards	UL 508 EN/IEC 60947-5-5 CSA C22.2 No 14 EN/IEC 60947-5-4 JIS C8201-5-1 EN/IEC 60947-1 EN/IEC 60947-5-1 EN/IEC 60204-1 IEC 60364-5-53 GB 14048.5 EN/ISO 13850 JIS C8201-1	
Product certifications	RINA DNV BV CSA LROS (Lloyds register of shipping) UL listed GL	
Vibration resistance	5 gn (f= 2500 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	

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	76 g
Package 1 Height	5.4 cm
Package 1 width	4.4 cm
Package 1 Length	8.8 cm
Unit Type of Package 2	S03
Number of Units in Package 2	100
Package 2 Weight	8.097 kg
Package 2 Height	30 cm
Package 2 width	30 cm
Package 2 Length	40 cm
Unit Type of Package 3	P06
Number of Units in Package 3	800
Package 3 Weight	75.004 kg
Package 3 Height	77 cm
Package 3 width	60 cm
Package 3 Length	80 cm

Offer Sustainability

Sustainable offer status	Green Premium product
Sustainable oner status	Green Freihlum 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	
Toxic heavy metal free	Yes	
Mercury free	Yes	
RoHS exemption information	Yes	
China RoHS Regulation	China RoHS declaration	
Environmental Disclosure	Product Environmental Profile	
Circularity Profile	End of Life Information	
California proposition 65 WARNING: This product can expose you to chemicals including: Di-isodecyl p which is known to the State of California to cause birth defects or other reprod information go to www.P65Warnings.ca.gov		

Contractual warranty

Warranty

18 months

Product data sheet Dimensions Drawings

Dimensions



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
 Diameter on finished panel or support 40 mm min. / 1.57 in. min. 30 mm min. / 1.18 in. min. Ø 22.5 mm / 0.89 in. recommended (Ø 22.3 mm 0^{+0.4} / 0.88 in. 0^{+0.016}) 45 mm min. / 1.78 in. min. 32 mm min. / 1.26 in. min. 	

ZB4BS844

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection





A: 30 mm min. / 1.18 in. min. B:

40 mm min. / 1.57 in. min.

Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

Dimensions in mm



B: 40 mm min.



General Tolerances of the Panel and Printed Circuit Board

The cumulative tolerance must not exceed 0.3 mm / 0.012 in: T1 + T2 = 0.3 mm max.

Installation Precautions

- Minimum thickness of circuit board: 1.6 mm / 0.06 in.
- Cut-out diameter: 22.4 mm ± 0.1 / 0.88 in. ± 0.004
- Orientation of body/fixing collar ZB4 BZ009: ± 2 30' (excluding cut-outs marked a and b).
- Tightening torque of screws ZBZ 006: 0.6 N.m (5.3 lbf.in) max.
- Allow for one ZB4 BZ079 fixing collar/pillar and its fixing screws:
 - every 90 mm / 3.54 in. horizontally (X), and 120 mm / 4.72 in. vertically (Y).
 - with each selector switch head (ZB4 BD•, ZB4 BJ•, ZB4 BG•).

The fixing centers marked a and b are diagonally opposed and must align with those marked 4 and 5.



(2) Printed circuit board

Mounting of Adapter (Socket) ZBZ 01•

- 1 2 elongated holes for ZBZ 006 screw access
- 2 1 hole Ø 2.4 mm \pm 0.05 / 0.09 in. \pm 0.002 for centring adapter ZBZ 01•
- 3 8 × Ø 1.2 mm / 0.05 in. holes
- 4 1 hole Ø 2.9 mm ± 0.05 / 0.11 in. ± 0.002, for aligning the printed circuit board (with cut-out marked a)
- 5 1 elongated hole for aligning the printed circuit board (with cut-out marked b)
- 6 4 holes Ø 2.4 mm / 0.09 in. for clipping in adapter ZBZ 01•

Dimensions An + 18.1 relate to the Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 holes for centring adapter ZBZ 01•.

Electrical Composition Corresponding to Code C7



Electrical Compositions Corresponding to Code C8



Technical Description

Electrical Compositions Corresponding to Code C10



Electrical Composition Corresponding to Codes C9, C11, SF1 and SR1



Product data sheet Technical Description

Electrical Composition Corresponding to Code C15





1 N/O + N/C or 1 N/O + N/O or 1 N/C + N/C



Product data sheet **Technical Description**

Legend Single contact Double contact Light block 8 Possible location 4