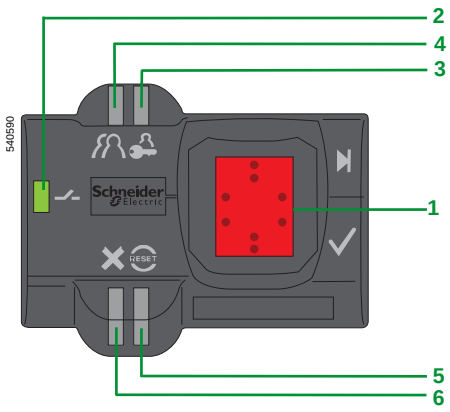
Control and signalling units Ø 22

Harmony® XB5, plastic

Specific functions

Biometric switches



Presentation

The fingerprint reader biometric switch is designed for use in industry to protect access to systems or machines. No type of interface is required for programming and operating the switch: it is an independent unit.

2 types of product are available:
- bistable biometric switches type XB5 S1B, with 2 fixed states,
- monostable biometric switches type XB5 S2B, with pulse control.

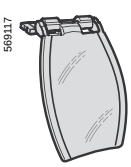
The biometric switch is aimed at 2 types of user:
- the administrator, who manages the registration and deletion of fingerprints,
- the operator who, once registered, uses the product as a control unit.

The product is of monolithic design (a single plastic housing) and is fixed by means of a nut (hand-tightened without need for tools) in a standard, 22 mm diameter hole.
It operates on a 24 V d.c. supply.
Connection to the power supply and to the control output (relay or plc) is by means of a 2 metre cable or by M12 connector.
It can be installed on a flat, horizontal or vertical surface.
A protective cover is available as an accessory to protect the active face of the sensing screen. This cover is fixed by means of a self-adhesive hinge.

Description

The product consists of a dark grey housing, with the following on its front face:
■ a sensing screen **1** that allows the registration of fingerprints and subsequent recognition of fingerprints registered,
■ a green LED output state indicator **2**, that illuminates when the output is activated (N/O solid state contact),
■ an orange LED **3**, indicating an administrator's “Registration” mode,
■ an orange LED **4**, indicating an operator's “Registration” mode,
■ a red «RESET» LED **5**, which indicates, in "Delete" mode, that the administrator is deleting all or part of the memory,
■ a red LED **6** which flashes in the presence of an "unrecognised" fingerprint or in the case of incorrect operation.

XB5 S●B●●●●



ZB5 SZ70

References

Complete units

Description	Output	Connection	Reference	Weight kg
Bistable biometric switch, 24 V d.c.	PNP	By 2 m cable	XB5 S1B2L2 (n)	0.170
		By M12 connector	XB5 S1B2M12 (n)	0.183
	NPN	By 2 m cable	XB5 S1B3L2 (n) ▲	0.170
		By M12 connector	XB5 S1B3M12 (n) ▲	0.183
Monostable biometric switch, 24 V d.c.	PNP	By 2 m cable	XB5 S2B2L2 (n)	0.170
		By M12 connector	XB5 S2B2M12 (n)	0.183
	NPN	By 2 m cable	XB5 S2B3L2 (n) ▲	0.170
		By M12 connector	XB5 S2B3M12 (n) ▲	0.183

Accessories

Description	Function	Sold in lots of	Reference	Weight kg
Protective cover, translucent and self-adhesive	Protection of the sensing screen	5	**ZB5 SZ70**	0.020
Fixing nut Ø 22 mm	Replacement part	5	**ZB5 SZ71**	0.030
Legend plate, 28 x 7 mm, self-adhesive, blank, with black background, for engraving		10	**ZBY 0101T**	0.005

(n) New

▲ Available: 3rd quarter 2009.

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Biometric switches

Characteristics

Biometric switch type			XB5 S1B●●●● and XB5 S2B●●●●
Conforming to standards			cCSAus, CE
Product certifications			CSA C22-2 n° 14, UL 508, IEC/EN 61000-6-2 and IEC/EN 61000-6-4
Degree of protection	Conforming to EN/IEC 60529		IP 65 NEMA 12
Ambient air temperature around the device	Storage	°C	- 25…+ 70
	Operation	°C	- 5…+ 50
Vibration resistance	Conforming to IEC 60068-2-6		1 gn - 9 to 500 Hz Amplitude 3 mm - 5 to 9 Hz
Electric shock resistance	Conforming to IEC 60068-2-27		50 gn, duration 11 ms
Connection method	Cable		Length: 2 m, 3-wire, pre-wired
	Connector		M12
Materials	Housing		Polyamide PA66
	Cable		PvR 3 x 0.34 mm^2
Memory capacity			200 records (100 users, operators or administrators, each registering 2 fingerprints)
Output state indicator			Green LED
Short-circuit protection			By gG fuse - 250 mA
Rated supply voltage		V	⎓ 24 with protection against reverse polarity
Voltage limits (including ripple)		V	⎓ 20…30
Switching capacity		mA	⩽ 200 with protection against overloads and short-circuits
Residual voltage, closed state		V	⩽ 1
No-load current consumption		mA	⩽ 50
Delays	First-up	s	< 2
	Response time	s	< 1
	Recovery time	s	< 1

Connections

Connector

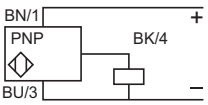
M12

1 (+)
3 (-)
4 Output

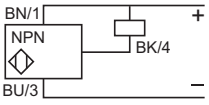
Cable

BU: Blue
BN: Brown
BK: Black

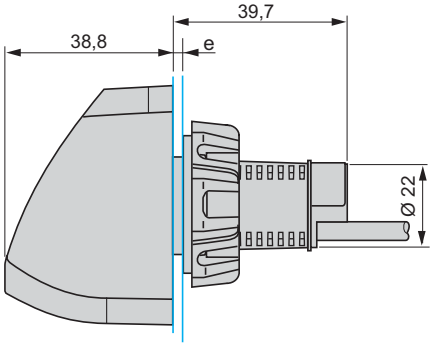
PNP

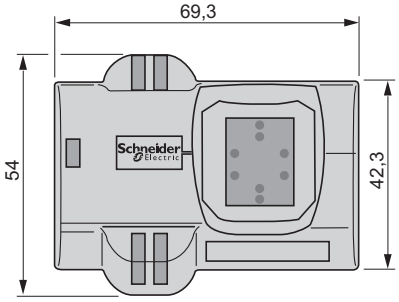


NPN



Dimensions





e = 1 to 6 mm