



BDF200-FB-NHK-SWS20-WS30-LTWH-G24

- integrated FB interface for connection to the Safety-Field-Box SFB
- Pos 1: E-STOP with protective collar
- Pos 2: Key selector switch, 2 positions
- Pos 3: Selector switch, 3 positions
- Pos 4: WHITE illuminated pushbutton
- Indicator lamp G24 on top
- slender shock-proof thermoplastic enclosure
- to be installed at an ergonomic favourable position
- to be fitted to commercial-off-the-shelf aluminium profiles
- E-STOP with electronic OSSDs

Data

Ordering data

Product type description	BDF200-FB-NHK-SWS20-WS30-LTWH-G24
Article number (order number)	103015449
EAN (European Article Number)	4030661509662
eCl@ss number, version 9.0	27-37-12-16
eCl@ss number, version 11.0	27-37-12-16
eCl@ss number, version 12.0	27-37-12-16
ETIM number, version 7.0	EC000225
ETIM number, version 6.0	EC000225

Approvals - Standards

Certificates	TÜV cULus EAC
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General data

Standards	EN IEC 60947-5-1 EN ISO 13849-1 EN IEC 61508 EN IEC 60947-5-5 EN ISO 13850
Climatic stress	IEC 60947-5-5
Terminal (mechanical)	Connector plug M12, 8-pole, A-coded
Enclosure material	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
Gross weight	280 g
Reaction time, maximum	50 ms
Duration of risk, maximum	100 ms
Positions used, position 1	Emergency stop, with protective collar
Positions used, position 2	Key-operated switch, 1 latching position and 1 zero position
Positions used, position 3	Selector switch, 2 latching positions left and right of the zero position, standard knob
Positions used, position 4	Illuminated pushbutton, white

General data - Features

Serial diagnostics	No
Field box interface	YN_FIELDBOX_INTERFACE1
Indicator lamp	Yes
Safety functions	Yes

Safety classification

Standards	EN ISO 13849-1 EN IEC 61508
Performance Level, up to	e
Category to EN ISO 13849	4
PFH value	2.89×10^{-10} /h
Note (PFH-value)	up to max. 5,000 switching cycles/year

Safety Integrity Level (SIL), suitable for applications in	3
Mission time	20 Year(s)

Mechanical data

Mechanical life, Emergency-Stop button	100,000 Operations
Mechanical life, Command devices	1,000,000 Operations

Mechanical data - Dimensions

Width	40 mm
Height	69 mm
Length x Width x Height	Depth: 233.5 - 252.5 mm (without and with indicator lamp)

Ambient conditions

Degree of protection	IP64
Ambient temperature, minimum	-25 °C
Ambient temperature, maximum	+65 °C
Storage and transport temperature, minimum	-25 °C
Storage and transport temperature, maximum	+85 °C
Resistance to vibration to EN 60068-2-6	10 ... 150 Hz, amplitude 0.35 mm / 5 g
Resistance to shock	30 g / 11 ms
Protection class	III

Ambient conditions - Insulation values

Rated insulation voltage U_i	32 VDC
Rated impulse withstand voltage U_{imp}	0.8 kV
Overvoltage category	III
Degree of pollution to VDE 0100	3

Electrical data

Current consumption at 24V	5 mA
No-load supply current I_0 , maximum	35 mA
Rated operating voltage	24 VDC –15 % / +10 % (PELV to IEC 60204-1)
Operating current	150 mA 600 mA
Required rated short-circuit current to EN 60947-5-1	100 A
Utilisation category DC-12	24 VDC
Utilisation category DC-12	0.25 A
Utilisation category DC-13	24 VDC
Utilisation category DC-13	0.25 A
Inputs, Switching thresholds	–3 V ... 5 V (Low) 15 V ... 30 V (High)

Electrical data - Safety digital outputs

Rated operating current (safety outputs)	250 mA
Design of control elements	short-circuit proof, p-type
Voltage drop U_d , maximum	1 V
Leakage current I_r , maximum	0.5 mA

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The details and data referred to have been carefully checked. Images may diverge from original. Further technical data can be found in the manual. Technical amendments and errors possible.

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