



## BDF200-FB-NHK-WS20-LTBU-LTBU-G24

- integrated FB interface for connection to the Safety-Field-Box SFB
- Pos 1: E-STOP with protective collar
- Pos 2: Selector switch, 2 positions
- Pos 3: BLUE illuminated pushbutton
- Pos 4: BLUE 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-WS20-LTBU-LTBU-G24
Article number (order number)	103025654
EAN (European Article Number)	4030661513881
eCl@ss number, version 12.0	27-37-12-16
eCl@ss number, version 11.0	27-37-12-16
eCl@ss number, version 9.0	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 ISO 13849-1 EN ISO 13850 EN IEC 60947-5-1 EN IEC 60947-5-5 EN IEC 61508
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	Selector switch, 1 latching position and 1 zero position, standard knob
Positions used, position 3	Illuminated pushbutton, blue
Positions used, position 4	Illuminated pushbutton, blue

## 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
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Performance Level, up to	e
Category to EN ISO 13849	4
PFH value	$2.89 \times 10^{-10}$ /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
Overtoltage 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	$-3\text{ V} \dots 5\text{ V}$ (Low) $15\text{ V} \dots 30\text{ V}$ (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

## Pictures

### Product picture (catalogue individual photo)



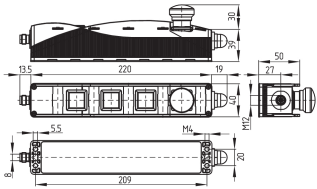
ID: kbdf2f03

| 1.5 MB | .jpg | 352.778 x 802.217 mm - 1000 x 2274 px - 72 dpi

| 26.1 kB | .png | 22.013 x 50.038 mm - 260 x 591 px - 300 dpi

| 125.1 kB | .png | 74.083 x 168.275 mm - 210 x 477 px - 72 dpi

## Dimensional drawing basic component



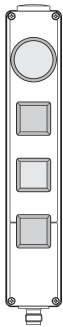
ID: 1bdf2g03

| 358.0 kB | .cdr |

| 14.8 kB | .png | 74.083 x 51.506 mm - 210 x 146 px - 72 dpi

| 164.7 kB | .jpg | 352.778 x 245.181 mm - 1000 x 695 px - 72 dpi

## Clipart

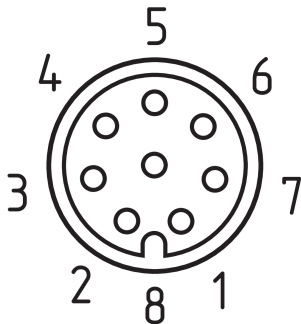


ID: kbdf-c03

| 64.1 kB | .cdr |

| 7.7 kB | .png | 74.083 x 404.989 mm - 210 x 1148 px - 72 dpi

## Contact arrangement



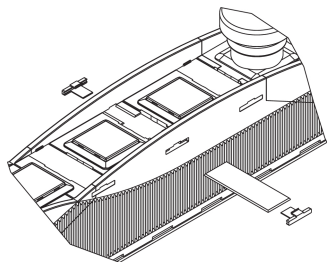
ID: km23-k8a

| 18.0 kB | .cdr |

| 5.5 kB | .png | 73.731 x 79.728 mm - 209 x 226 px - 72 dpi

| 155.6 kB | .jpg | 352.778 x 380.647 mm - 1000 x 1079 px - 72 dpi

## Operating principle



ID: kbdf-a08

| 284.5 kB | .jpg | 352.778 x 281.517 mm - 1000 x 798 px - 72 dpi

| 5.0 kB | .png | 74.083 x 59.267 mm - 210 x 168 px - 72 dpi

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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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