

## Datasheet - BDF200-FB-NH-LT-LT-LT-2875

Control panels / BDF200-SD/FB



(Minor differences between the printed image and the original product may exist!)

- Integrated FB interface for command and signaling devices
- Device version for connection to a Safety-Field-Box SFB
- E-STOP with electronic OSSDs
- Thermoplastic enclosure
- slender shock-proof enclosure
- to be fitted to commercial-off-the-shelf aluminum profiles
- Connector M12, 8-pole

### Ordering details

Product type description	BDF200-FB-NH-LT-LT-LT-2875
Article number	103015447
notice	
eCl@ss	

### Approval


Approval



### Classification

Standards	EN ISO 13849-1, IEC 61508
PL	up e
Control category	up 4
PFH value	$2.89 \times 10^{-10}$ /h
- notice	up to max. 5.000 switching cycles/year
SIL	up 3
Mission time	20 Years

### Global Properties

Product name	BDF200-FB
Standards	IEC 60947-5-1, IEC 60947-5-5, ISO 13850, ISO 13849-1, IEC 61508
Compliance with the Directives (Y/N) 	Yes
Suitable for safety functions (Y/N)	Yes
Climatic stress	to EN 60068-2-30
Material of the housings	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
Weight	340 g
Positions used	
- Position 1	NH, Emergency stop
- Position 2	LT-2875, Illuminated pushbutton
- Position 3	LT-2875, Illuminated pushbutton
- Position 4	LT-2875, Illuminated pushbutton
Response time	< 50 ms
Duration of risk	≤ 100 ms

## Mechanical data

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termination	connector plug M12, 8-pole, A-coded
Mechanical life	
- Emergency-Stop button	100.000 operations
- Command devices	1.000.000 operations
resistance to shock	30 g / 11 ms
Resistance to vibration	10 ... 150 HZ, Amplitude 0,35 mm / 5 g

## Ambient conditions

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Ambient temperature	
- Min. environmental temperature	-25 °C
- Max. environmental temperature	+65 °C
Storage and transport temperature	
- Min. Storage and transport temperature	-25 °C
- Max. Storage and transport temperature	+85 °C
Protection class	IP64
Protection rating	III
Air clearances and creepage distances To IEC/EN 60664-1	
- Rated impulse withstand voltage	0,8 kV
- Rated insulation voltage	32 VDC
- Overvoltage category	III
- Degree of pollution	3

## Electrical data

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Rated operating voltage	24 VDC -15 % / +10 % (PELV to IEC 60204-1)
Operating current	0,6 A
No-load current	35 mA
Required rated short-circuit current	100 A

## Electrical data - Safety inputs

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Safety inputs	X1 and X2
Rated operating voltage	24 VDC -15 % / +10 %
Switching thresholds	-3 V ... 5 V (low) 15 V ... 30 V (High)

Operating current 5 mA / 24 V

## Electrical data - Safety outputs

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Safety outputs	Y1 and Y2
Design of control output	short-circuit proof, p-type
Rated operating voltage	24 VDC -15 % / +10 %
Residual current	≤ 0,5 mA
Operating current	0,25 A
Minimum operating current	
Utilisation category	DC-12: U <sub>e</sub> /I <sub>e</sub> : 24 VDC / 0,25 A, DC-13: U <sub>e</sub> /I <sub>e</sub> : 24 VDC / 0,25 A
Voltage drop	< 1 V

## Electrical data - Diagnostic output

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Serial diagnostics (Y/N)	Yes
Design of control output	short-circuit proof, p-type
Rated operating voltage	24 VDC -15 % / +10 %
Operating current	0,15 A
Wiring capacitance	max. 50 nF

## LED switching conditions display

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LED switching conditions display (Y/N)	No
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## ATEX

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Explosion protection categories for gases	None
Explosion protected category for dusts	None

## Dimensions

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Dimensions	
- Width	40 mm
- Height	69 mm
- Depth	233.5 ... 252.5 mm (without and with Indicator lamp)

## Documents

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**Operating instructions and Declaration of conformity** (nl) 880 kB, 05.12.2018

Code: mrl\_bdf200sd\_nl

**Operating instructions and Declaration of conformity** (pt) 891 kB, 30.11.2018

Code: mrl\_bdf200sd\_pt

**Operating instructions and Declaration of conformity** (es) 891 kB, 30.11.2018

Code: mrl\_bdf200sd\_es

**Operating instructions and Declaration of conformity** (pl) 922 kB, 14.09.2018

Code: mrl\_bdf200sd\_pl

**Operating instructions and Declaration of conformity** (de) 850 kB, 05.11.2018

Code: mrl\_bdf200sd\_de

**Operating instructions and Declaration of conformity (it)** 907 kB, 13.09.2018

Code: mrl\_bdf200sd\_it

**Operating instructions and Declaration of conformity (fr)** 891 kB, 29.11.2018

Code: mrl\_bdf200sd\_fr

**Operating instructions and Declaration of conformity (en)** 876 kB, 05.11.2018

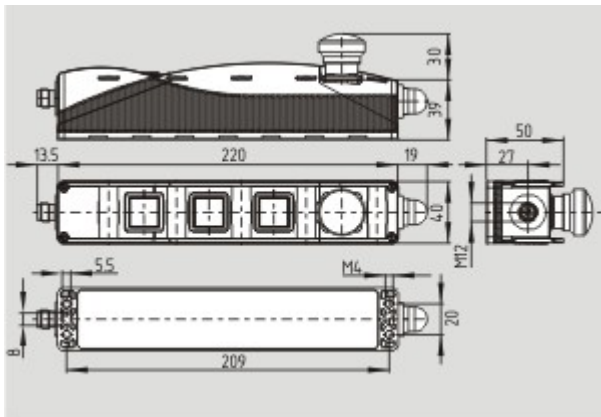
Code: mrl\_bdf200sd\_en

**TÜV certification (de)** 596 kB, 23.10.2017

Code: z\_bdfp02

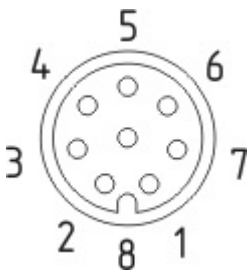
## Images

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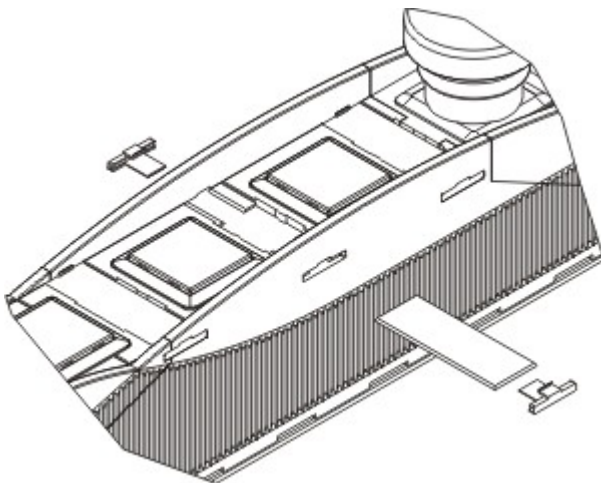
Dimensional drawing (basic component)

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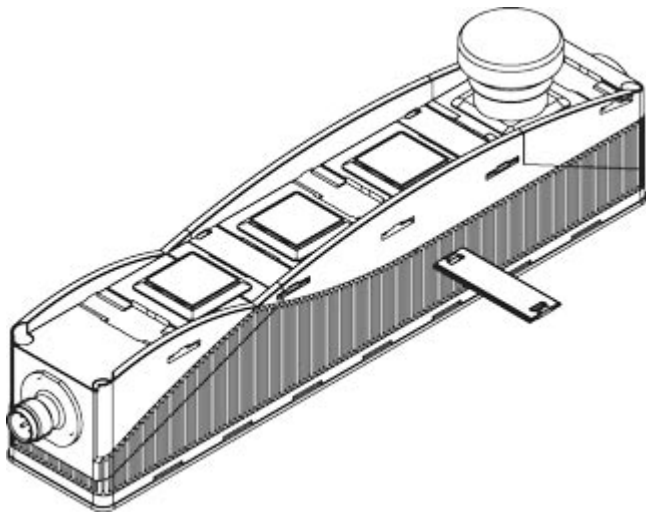
Contact arrangement

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Application

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Application

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Clipart

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The data and values have been checked thoroughly. Technical modifications and errors excepted.

Generiert am 13.02.2019 - 12:58:22h Kasbase 3.3.0.F.64l