



NO IMAGE  
AVAILABLE

## BDF200-NH-20-LTYE-LTWH-B

- slender shock-proof thermoplastic enclosure
- to be installed at an ergonomic favourable position
- to be fitted to commercial-off-the-shelf aluminium profiles
- Thermoplastic enclosure
- slender shock-proof enclosure
- large range of illuminated pushbuttons, Selector switches, LED indicator lights, Key-operated selector switches and Emergency-Stop buttons
- Emergency stop, on/off and reset functions available
- The position of the pushbuttons on the control panel can be freely selected.
- Field labelling with separate plastic cover
- Freely installable button caps for an optimal adaptation to the plants

## Data

### Ordering data

|                               |                           |
|-------------------------------|---------------------------|
| Product type description      | BDF200-NH-20-LTYE-LTWH-B  |
| Article number (order number) | 103009706                 |
| EAN (European Article Number) | 4030661463018             |
| 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                  |
| Note (Ordering data)          | Notice: see ordering code |

### Approvals - Standards

Certificates

cULus

## General data

|                            |                                                                        |
|----------------------------|------------------------------------------------------------------------|
| Standards                  | EN ISO 13850<br>EN IEC 60947-5-1<br>EN IEC 60947-5-5<br>EN IEC 60947-1 |
| Climatic stress            | IEC 60068-2-30                                                         |
| Versions                   | Assembly housing                                                       |
| Housing material           | Plastic, glass-fibre reinforced thermoplastic, self-extinguishing      |
| Positions used, position 1 | Emergency stop pushbutton                                              |
| Positions used, position 2 | Illuminated pushbutton, yellow                                         |
| Positions used, position 3 | Illuminated pushbutton, white                                          |
| Positions used, position 4 | Blanking plug                                                          |
| Gross weight               | 280 g                                                                  |

## General data - Features

|                       |     |
|-----------------------|-----|
| Emergency-Stop button | Yes |
| Safety functions      | Yes |
| Removable Terminals   | Yes |
| Number of cable wires | 16  |

## Safety classification

|              |                |
|--------------|----------------|
| Standards    | EN ISO 13849-1 |
| Mission time | 20 Year(s)     |

## Safety classification - Safety outputs

|                                               |                    |
|-----------------------------------------------|--------------------|
| B <sub>10D</sub> Normally-closed contact (NC) | 100,000 Operations |
|-----------------------------------------------|--------------------|

## Mechanical data

|                                                                          |                                             |
|--------------------------------------------------------------------------|---------------------------------------------|
| Position of the cable gland                                              | bottom                                      |
| Mechanical life, Emergency-Stop button                                   | 100,000 Operations                          |
| Mechanical life, Command devices                                         | 1,000,000 Operations                        |
| Mechanical life, Key operated- selector switch                           | 30,000 Operations                           |
| Actuating stroke                                                         | 3 mm                                        |
| Actuating force, maximum                                                 | 8 N                                         |
| Note (Actuating force)                                                   | each contact                                |
| Contact force, typically                                                 | 1 N                                         |
| Mounting                                                                 | interior mounting holes                     |
| Type of the fixing screws                                                | 2x M5                                       |
| Tightening torque of the fastening screws for the housing cover, minimum | 0.7 Nm                                      |
| Tightening torque of the fastening screws for the housing cover, maximum | 0.8 Nm                                      |
| Tightening torque of the cable gland, maximum                            | 4 Nm                                        |
| Note                                                                     | Maximum tightening cable gland cap nut 3 Nm |

### Mechanical data - Connection technique

|                                                  |                           |
|--------------------------------------------------|---------------------------|
| Cable entry                                      | M20 cable gland           |
| Cable cross-section of the cable glands, minimum | 6 mm                      |
| Cable cross-section of the cable glands, maximum | 13 mm                     |
| Wire cross-section                               | 0.5 mm <sup>2</sup>       |
| Terminal (mechanical)                            | Removable screw terminals |

### Mechanical data - Dimensions

|        |        |
|--------|--------|
| Width  | 40 mm  |
| Height | 69 mm  |
| Depth  | 249 mm |

### Ambient conditions

|                      |      |
|----------------------|------|
| Degree of protection | IP65 |
|----------------------|------|

|                          |                          |
|--------------------------|--------------------------|
| Ambient temperature      | -25 ... +65 °C           |
| Resistance to vibrations | 10 ... 100 Hz, with 20 g |
| Resistance to shock      | 100 g / 6 ms             |

### Ambient conditions - Insulation values

|                                           |         |
|-------------------------------------------|---------|
| Rated insulation voltage $U_i$            | 250 VAC |
| Rated impulse withstand voltage $U_{imp}$ | 2.5 kV  |
| Overvoltage category                      | III     |
| Overvoltage category                      | III     |
| Degree of pollution                       | 3       |

### Electrical data

|                                              |                                        |
|----------------------------------------------|----------------------------------------|
| Thermal test current                         | 2 A<br>2.5 A                           |
| LED current consumption (operating elements) | 16 mA                                  |
| Rated operating voltage                      | 24 VDC                                 |
| Utilisation category AC-15                   | 24 VAC                                 |
| Utilisation category AC-15                   | 2 A                                    |
| Utilisation category DC-13                   | 24 VDC                                 |
| Utilisation category DC-13                   | 1 A                                    |
| External wire and device fuse rating         | 2.5A T                                 |
| Suitable for low-voltages                    | $\geq 5 \text{ V} / \geq 1 \text{ mA}$ |
| Switching principle                          | Slow action<br>cross-point-system      |
| Maximum switching frequency                  | 1,200 /h                               |
| Material of the contacts, electrical         | Ag-Ni 10, gold-plated                  |

### Status indication

|                              |                                |
|------------------------------|--------------------------------|
| Colour of the indicator lamp | without (Blanking plug, black) |
|------------------------------|--------------------------------|

### Other data

## Ordering code

Product type description:

BDF 200-(1)-(2)-(3)-(4)-(5)-(6)

(1)

|             |                                                     |
|-------------|-----------------------------------------------------|
| <b>NH</b>   | Emergency stop pushbutton without protective collar |
| <b>NHK</b>  | Emergency stop with protective collar               |
| <b>LT..</b> | Selection (Color Illuminated pushbutton)            |
| <b>LM..</b> | Indicator light (selection colour)                  |
| <b>DT..</b> | Push button (Selection Color)                       |
| <b>PT..</b> | Mushroom push button                                |

(2)

|           |                                                                                              |
|-----------|----------------------------------------------------------------------------------------------|
| <b>20</b> | with EMERGENCY-STOP: 2 NO position 2-4 > without EMERGENCY STOP: 2 NO position 1-4           |
| <b>11</b> | with EMERGENCY-STOP: 1 NO/1 NC position 2-4 > without EMERGENCY STOP: 1 NO/1 NC position 1-4 |
| <b>10</b> | with EMERGENCY-STOP: 1 NO position 2-4 > without EMERGENCY STOP: 1 NO position 1-4           |

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|               |                                                    |
|---------------|----------------------------------------------------|
| <b>WS 2/3</b> | Selector switch, 2/3 switch position               |
| <b>WT 2/3</b> | Selector switch, 2/3 switch positions              |
| <b>SW 20</b>  | Key switch/button, 2 switch positions              |
| <b>LT..</b>   | Illuminated control push button (selection colour) |
| <b>LM..</b>   | Indicator light (selection colour)                 |
| <b>DT..</b>   | Push button (Selection Color)                      |
| <b>PT..</b>   | Mushroom push button                               |

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|               |                                       |
|---------------|---------------------------------------|
| <b>WS 2/3</b> | Selector switch, 2/3 switch position  |
| <b>WT 2/3</b> | Selector switch, 2/3 switch positions |
| <b>SW 20</b>  | Key switch/button, 2 switch positions |

|      |                                                    |
|------|----------------------------------------------------|
| LT.. | Illuminated control push button (selection colour) |
| LM.. | Indicator light (selection colour)                 |
| DT.. | Push button (Selection Color)                      |
| PT.. | Mushroom push button                               |

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|      |                                                    |
|------|----------------------------------------------------|
| LT.. | Illuminated control push button (selection colour) |
| LM.. | Indicator light (selection colour)                 |
| DT.. | Push button (Selection Color)                      |
| PT.. | Mushroom push button                               |

(6)

|         |                                         |
|---------|-----------------------------------------|
| without | without indicator lamp                  |
| G24     | with indicator lamp, red (only for -10) |

(7)

|         |                                |
|---------|--------------------------------|
| without | Included in standard version   |
| 2875    | Freely installable button caps |

Pictures

Product picture (catalogue individual photo)



NO IMAGE  
AVAILABLE

ID: no-pic01  
| 98.4 kB | .jpg | 352.778 x 352.778 mm - 1000 x 1000 px - 72 dpi  
| 3.3 kB | .png | 74.083 x 74.083 mm - 210 x 210 px - 72 dpi  
| 26.4 kB | .jpg | 123.472 x 123.472 mm - 350 x 350 px - 72 dpi