



**Model Number**

**NJ30+U2+W**

**Features**

- Limit switch style housing
- 2-wire AC

**Accessories**

**MHW 01**  
Modular mounting bracket

**Technical Data**

**General specifications**

|                            |       |               |       |
|----------------------------|-------|---------------|-------|
| Switching element function |       | AC            | NO/NC |
| Rated operating distance   | $s_n$ | 30 mm         |       |
| Installation               |       | non-flush     |       |
| Output polarity            |       | AC            |       |
| Assured operating distance | $s_a$ | 0 ... 24.3 mm |       |
| Reduction factor $r_{Al}$  |       | 0.45          |       |
| Reduction factor $r_{Cu}$  |       | 0.4           |       |
| Reduction factor $r_{304}$ |       | 0.8           |       |

**Nominal ratings**

|                                   |       |                             |
|-----------------------------------|-------|-----------------------------|
| Operating voltage                 | $U_B$ | 20 ... 253 V <sup>1)</sup>  |
| Switching frequency               | $f$   | 0 ... 20 Hz                 |
| Hysteresis                        | $H$   | 1 ... 10 typ. 5 %           |
| Voltage drop                      | $U_d$ | ≤ 5 V                       |
| Momentary current (20 ms, 0.1 Hz) |       | 0 ... 3000 mA               |
| Operating current                 | $I_L$ | 8 ... 500 mA                |
| Off-state current                 | $I_r$ | 0.5 ... 1.95 mA typ. 1.2 mA |
| Operating voltage indicator       |       | LED, green                  |
| Switching state indicator         |       | LED, yellow                 |

**Functional safety related parameters**

|                          |       |
|--------------------------|-------|
| MTTF <sub>d</sub>        | 653 a |
| Mission Time ( $T_M$ )   | 20 a  |
| Diagnostic Coverage (DC) | 0 %   |

**Ambient conditions**

|                     |                                |
|---------------------|--------------------------------|
| Ambient temperature | -25 ... 70 °C (-13 ... 158 °F) |
| Storage temperature | -25 ... 85 °C (-13 ... 185 °F) |

**Mechanical specifications**

|                      |                                                                                                                                                                                                                                                                |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connection type      | screw terminals                                                                                                                                                                                                                                                |
| Core cross-section   | ≤ 2.5 mm <sup>2</sup>                                                                                                                                                                                                                                          |
| Housing material     | PBT housing/PBT base                                                                                                                                                                                                                                           |
| Sensing face         | PBT                                                                                                                                                                                                                                                            |
| Degree of protection | IP68                                                                                                                                                                                                                                                           |
| Note                 | <sup>1)</sup> In the temperature range below 0 °C, permissible operating voltage $U_b$ 80...253 V<br>Safety fuse ≤ 2 A (quick-blow) according to IEC 60127-2 Sheet 1<br>Recommendation: after a short circuit, check that the device is functioning correctly. |

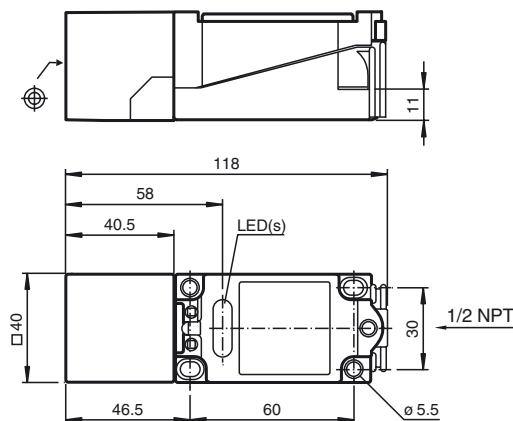
**Compliance with standards and directives**

|                     |                                         |
|---------------------|-----------------------------------------|
| Standard conformity |                                         |
| Standards           | EN 60947-5-2:2007<br>IEC 60947-5-2:2007 |

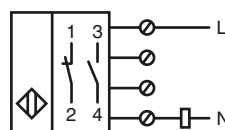
**Approvals and certificates**

|              |                                |
|--------------|--------------------------------|
| UL approval  | cULus Listed, General Purpose  |
| CSA approval | cCSAus Listed, General Purpose |

**Dimensions**



**Electrical Connection**



Release date: 2014-10-21 08:39 Date of issue: 2014-10-21 017829\_eng.xml