



## EX-T1R 235-20Z-3D

- Ex certified
- Metal enclosure
- Wide range of alternative actuators
- Good resistance to oil and petroleum spirit
- 30 mm x 63,5 mm x 30 mm
- Actuator heads can be repositioned by 4 x 90°
- Mounting details to EN 50047
- Ex-certified screwed cable gland
- 1 Cable entry M 20 x 1.5

## Data

### Ordering data

|                               |                |
|-------------------------------|----------------|
| Note (Delivery capacity)      | Not available! |
| EAN (European Article Number) | 4030661365152  |

### Explosion protection

|                                   |                                                        |
|-----------------------------------|--------------------------------------------------------|
| Explosion protection: regulations | EN 60079-15<br>EN 60079-31<br>IEC 60079-0              |
| Explosion protection zones        | 22<br>2                                                |
| Explosion protection category     | 3D<br>3G                                               |
| Explosion protection designation  | II 3G Ex nC IIC T5 Gc X<br>II 3D Ex tc IIIC T90°C Dc X |

### General data

|                                      |                             |
|--------------------------------------|-----------------------------|
| Standards                            | BG-GS-ET-15<br>EN 60947-5-1 |
| Housing construction form            | Norm construction design    |
| Enclosure material                   | Zink                        |
| Enclosure coating material           | painted                     |
| Material of the contacts, electrical | Silver                      |
| Gross weight                         | 210 g                       |

### General data - Features

|                              |     |
|------------------------------|-----|
| Safety functions             | Yes |
| Number of auxiliary contacts | 2   |

### Safety appraisal

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

### Mechanical data

|                               |                                                         |
|-------------------------------|---------------------------------------------------------|
| Actuating element             | Offset roller lever                                     |
| Mechanical life, minimum      | 20,000,000 Operations                                   |
| Actuating force, minimum      | 9 N                                                     |
| Positive break force, minimum | 19 N                                                    |
| Actuating speed, minimum      | 160 mm/min                                              |
| Actuating speed, maximum      | 1 m/s                                                   |
| Note (Actuating speed)        | Actuating speed with actuating angle 30° to switch axis |
| Note Bounce duration          | Bounce duration in accordance with actuating speed      |
| Note (Switchover time)        | Switchover time in accordance with actuating speed      |

### Mechanical data - Connection technique

|                    |                  |
|--------------------|------------------|
| Terminal Connector | Screw connection |
|--------------------|------------------|

|                                                  |                                                                               |
|--------------------------------------------------|-------------------------------------------------------------------------------|
| Cable cross-section of the cable glands, minimum | 6 mm                                                                          |
| Cable cross-section of the cable glands, maximum | 12 mm                                                                         |
| Cable section, minimum                           | 0.75 mm <sup>2</sup>                                                          |
| Cable section, maximum                           | 2.5 mm <sup>2</sup>                                                           |
| Note (Cable section)                             | All indications about the cable section are including the conductor ferrules. |
| Wire cross-section                               | 13 AWG                                                                        |

### Mechanical data - Dimensions

|                  |         |
|------------------|---------|
| Length of sensor | 30 mm   |
| Width of sensor  | 30 mm   |
| Height of sensor | 91.5 mm |

### Ambient conditions

|                              |        |
|------------------------------|--------|
| Degree of protection         | IP67   |
| Ambient temperature, minimum | -20 °C |
| Ambient temperature, maximum | +60 °C |

### Ambient conditions - Insulation value

|                                           |       |
|-------------------------------------------|-------|
| Rated insulation voltage $U_i$            | 500 V |
| Rated impulse withstand voltage $U_{imp}$ | 6 kV  |

### Electrical data

|                            |         |
|----------------------------|---------|
| Thermal test current       | 10 A    |
| Utilisation category AC-15 | 230 VAC |
| Utilisation category AC-15 | 4 A     |
| Utilisation category DC-13 | 24 VDC  |

|                            |                            |
|----------------------------|----------------------------|
| Utilisation category DC-13 | 1 A                        |
| Switching element          | Normally open contact (NO) |
| Switching principle        | Creep circuit element      |
| Switching frequency        | 5,000 /h                   |

## Notes

Note (General) Switch with 2 NO contacts are not for security tasks

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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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