

1) Optical axis receiver, 2) Optical axis emitter, 3) Stability, 4) Output function, 5) Removable cover



IND. CONT. EQ  
 1TD4  
 for use in the secondary of  
 a class 2 source of supply



**Basic features**

<b>Approval/Conformity</b>	CE cULus EAC WEEE
<b>Basic standard</b>	IEC 60947-5-2
<b>Principle of operation</b>	Photoelectric sensor
<b>Series</b>	64K
<b>Style</b>	Square Connection 45°

**Display/Operation**

<b>Adjuster</b>	Potentiometer 240° (2x) Slide switch (4x)
<b>Display</b>	Output function- LED yellow Stability - LED green
<b>Setting</b>	Time function Light-on/dark-on Rated switching distance (Sn)

**Electrical connection**

<b>Cable diameter D</b>	8...10 mm
<b>Connection</b>	Screw terminals
<b>Polarity reversal protected</b>	yes
<b>Protection against device mix-ups</b>	yes

**Electrical data**

<b>No-load current I<sub>o</sub> max. at U<sub>e</sub></b>	25 mA
<b>Operating voltage U<sub>b</sub></b>	24...60 VDC/24...240 VAC
<b>Protection class</b>	II
<b>Rated insulation voltage U<sub>i</sub></b>	250 V AC
<b>Rated operating current I<sub>e</sub></b>	3000 mA
<b>Rated operating voltage U<sub>e</sub> AC</b>	230 V
<b>Rated operating voltage U<sub>e</sub> DC</b>	24 V
<b>Ripple max. (% of U<sub>e</sub>)</b>	10 %
<b>Switching frequency</b>	20 Hz
<b>Turn-off delay t<sub>off</sub> max.</b>	25 ms
<b>Turn-on delay t<sub>on</sub> max.</b>	25 ms
<b>Utilization category</b>	AC-140

Photoelectric Sensors  
**BOS 64K-AA-PR10-TG**  
**Order Code: BOS01K3**



**Environmental conditions**

<b>Ambient temperature</b>	-25...55 °C
<b>EN 60068-2-27, Shock</b>	Half-sinus, 30 gn, 11 ms, 3x6
<b>EN 60068-2-6, Vibration</b>	10...55 Hz, amplitude 0.5 mm, 3x30 min
<b>Protection degree</b>	IP67

**Functional safety**

<b>MTTF (40 °C)</b>	287 a
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**Material**

<b>Housing material</b>	PBT, GF30
<b>Material sensing surface</b>	PC

**Mechanical data**

<b>Dimension</b>	25 x 69.7 x 100.4 mm
<b>Mounting</b>	Screw M4
<b>Tightening torque max.</b>	1.2 Nm

**Optical features**

<b>Ambient light max.</b>	5000 Lux
<b>Beam characteristic</b>	Divergent
<b>Blind zone</b>	100 mm
<b>LED group per IEC 62471</b>	Exempt Group
<b>Light type</b>	LED, red light
<b>Polarizing filter</b>	yes
<b>Principle of optical operation</b>	Retroreflective sensor
<b>Switching function, optical</b>	Light-on dark-on
<b>Wave length</b>	660 nm

**Output/Interface**

<b>Duration of time function</b>	T = 0.6...16 s
<b>Switching output</b>	Relay NO/NC change-over contact
<b>Time function</b>	switch-off delay On/off delay Turn-on delay Single pulse

**Range/Distance**

<b>Range</b>	0...10 m
<b>Rated operating distance Sn</b>	10 m Adjustable

**Remarks**

For additional information, refer to user's guide.

Actuation object (target): gray card, 200 x 200, 90 % remission, lateral approach, approach direction vertical to lens axis plane.

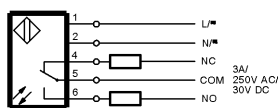
Polarizing filters prevent spurious switching due to reflecting and shiny parts.

Order accessories separately.

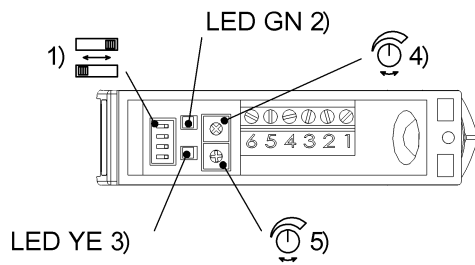
For more information about MTTF and B10d see MTTF / B10d Certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

**Wiring Diagrams**



## Help Views



- 1) Light-on/dark-on, time funct
- 2) Stability
- 3) Output function
- 4) Sensitivity
- 5) Delay time

## Opto Symbols

