

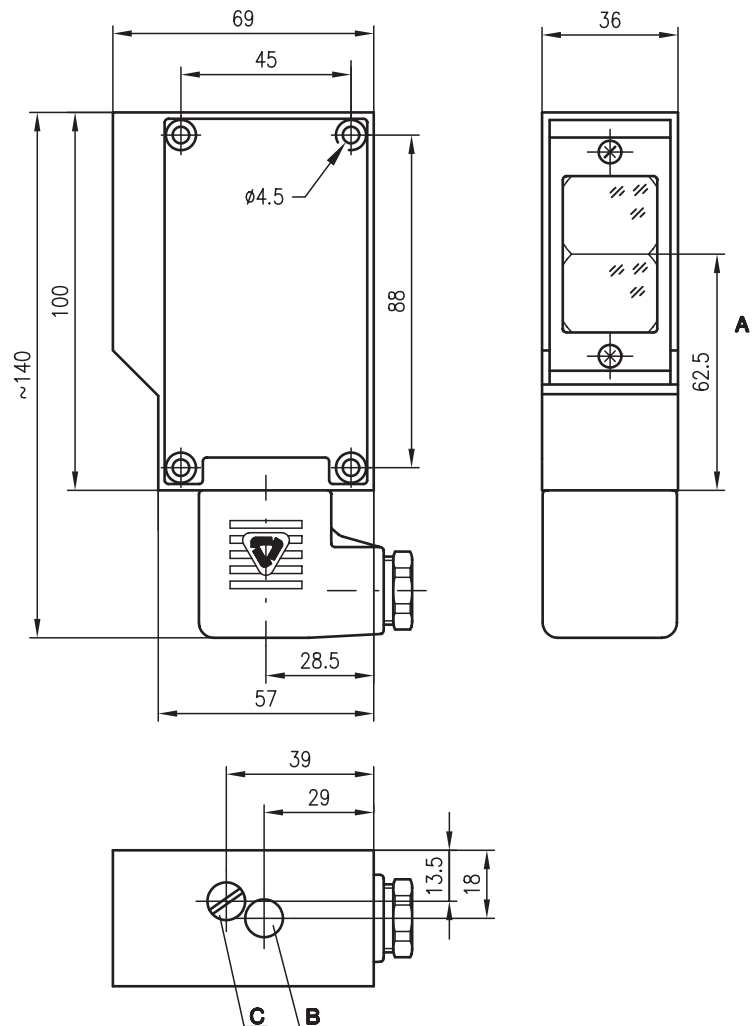


RK 85

Retro-reflective photoelectric sensors



Dimensioned drawing



6m



22-250 V
AC / DC

230 V
AC

- All-mains design
22 ... 250VAC/DC with relay output
- Special voltages for universal application
- General light/dark switching and delay before start-up for optimal adaptation to applications
- Connection via standard plug with screw connector up to 1.5mm²

- A Optical axis
- B Indicator diode
- C Light/dark switching

Electrical connection

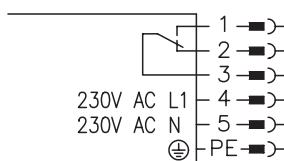


Accessories:

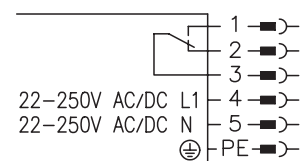
(available separately)

- Mounting systems (BT 85)
- Reflectors
- Reflective tapes

RK 85/7



RK 85/7-10 UC



We reserve the right to make changes • 85_b02e.fm



Specifications

Optical data

Operating range ¹⁾ see tables
 Light source LED (modulated light)
 Wavelength 880nm

Timing

Switching frequency 20Hz
 Response time 25ms
 Delay before start-up ≤ 200ms

Electrical data

Operating voltage U_B 22 ... 250VAC (50/60Hz)
 22 ... 250VDC ± 10%
 230VAC ± 10% 50/60Hz
 Power consumption ≤ 1.5VA
 Switching output relay, 1 change-over contact
 Function characteristics light or dark switching (reversible)
 Switching voltage, relay 250 VAC/DC
 Switching current, relay 250 VAC 3A/30VDC 3A
 Switching power, relay 250 VAC – 50W
 250 VAC 60VA ind. load

Indicators ²⁾

LED green ready
 LED yellow light path free
 LED red flashing light path free, no performance reserve

Mechanical data

Housing diecast aluminium
 Optics cover glass
 Weight 340g
 Connection type standard plug with screw connector up to 1.5mm²

Environmental data

Ambient temp. (operation/storage) ³⁾ -20°C ... +55°C/-30°C ... +55°C
 Protective circuit ⁴⁾ 1, 2, 3, 4
 VDE safety class I, all-insulated
 Protection class IP 65
 LED class 1 (acc. to EN 60825-1)
 Standards applied IEC 60947-5-2

Options

De-humidifying system to prevent condensation on the optics (due to temperature changes)

- 1) Operating range: recommended range with performance reserve
- 2) RK 85/7-10UC LED red: receive indicator
LED red flashing: switching state (LEDs illuminate at interruption)
- 3) -30°C with operating voltage continuously applied
- 4) 1=transient protection, 2=polarity reversal protection, 3=short circuit protection for all outputs,
4=interference blanking

Tables

RK 85/7
 RK 85/7 UC

Reflectors	Operating range
100x100	0.3 ... 6.0m
50x100	0.3 ... 5.5m
50x50	0.3 ... 4.5m
TK 82	0.5 ... 6.0m
Tape 2 100x100	0.4 ... 3.5m

TK ... = adhesive
 TKS ... = screw type
 Tape 2 = adhesive

Diagrams

Remarks

Order guide

Selection table		Order code →					
Equipment ↓		RK 85/7 Part No. 500 00497	RK 85/7-10 UC Part No. 500 21126				
Housing	metal	●	●				
Operating range	6m	●	●				
Connection	standard plug	●	●				
Features							
Voltage supply	230VAC	●					
	22 ... 250VAC/DC		●				
	special voltage	●					
Switching output	Relay	●	●				
Dehumidification		●	●				