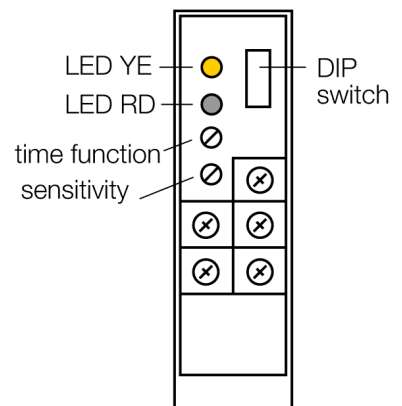
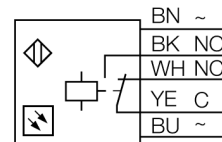


**Photoelectric sensor
diffuse mode sensor
Q85VR3D-B**



- Integrated terminal chamber
- Cable glands, offset installation by 90° in two places
- Protection class IP67
- AID alignment aid
- Operating voltage: 12...240 VDC, 24...240 VAC
- Relay output
- Light and dark operation
- Sensitivity adjusted via potentiometer

Wiring diagram



Type code	Q85VR3D-B
Ident no.	3031657
Operating mode	diffuse mode sensor
Light type	IR
Wavelength	880 nm
Ambient temperature	-25...+55 °C
Operating voltage	12...240VDC
Operating voltage	24...240 VAC
DC rated operational current	≤ 3000 mA
AC rated operational current	≤ 3000 mA
Output function	NO/NC , Relay output
Switching frequency	≤ 25 Hz
Max. AC switching capacity	2 VA
Design	rectangular, Q85
Dimensions	85 x 65 x 25 mm
Housing material	plastic, ABS, yellow
Lens	acrylic, Plastic
Connection	terminal chamber
Protection class	IP67
Switching state	LED yellow
Excess gain indication	LED red flashing

Functional principle

Identical to retro-reflective sensors, emitter and receiver circuitry are incorporated in the same housing of the diffuse mode sensors. However, diffuse mode sensors do not detect the interruption of the light beam but the reflection of the target. A target is detected if it reflects a sufficient amount of light back to the receiver. The switching distance of diffuse mode sensors thus largely depends on the reflectivity of the target. This type of sensor is especially suited for detection of transparent objects (diffuse mode sensor with or without background suppression or convergent mode sensors). Some diffuse mode sensors do not incorporate a lens. These devices are particularly suited for detection of transparent, tilted and even targets (e.g. glass) at short range (typically 130 mm) at which target alignment is very simple.

Photoelectric sensor
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Q85VR3D-B

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