Q85 series – Rectangular sensors

Dimensions [mm]

Q85 series
ac/dc operation

Wave length
IR (infrared) 880 nm
Red 680 nm

Adjustments
sensitivity
light and dark operate

Timing function
0.1…5 s (Q85…-T9-…)

Supply
Supply voltage 24…240 V ac or
(non-polarised) 12…240 V dc
No load current ≤ 2 W

Output
Continuous load current
≤ 3 A (30 V dc or 250 V ac)
Switching frequency ≤ 25 Hz

Material
Housing ABS
Lens acrylic
Protection class (IEC 60529/EN 60529) IP67
Temperature range -25…+55 °C

Indicator LED’s
Red light sensed
Yellow output load status
Red flashing AID (alignment indicating device)

Accessories
Brackets SMB85B 35 619 00 side mounting, included
SMB85R 35 618 00 rear mounting, optional

Wiring
all types except emitter
emitter

Yellow LED
red LED
timing function
sensitivity

DIP switch

Yellow LED DIP switch
red LED
yellow LED
light and dark operate
sensitivity

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## ac/dc operation

Excess gain curve:
Excess gain in relation to the distance

<table>
<thead>
<tr>
<th></th>
<th>Max. range</th>
<th>Light source</th>
<th>Output function</th>
<th>Connection</th>
<th>Type</th>
<th>Ident number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Retro-reflective</strong></td>
<td>4,6 m</td>
<td>red</td>
<td>relay terminals</td>
<td>with polarising filter</td>
<td>Q85VR3LP-B</td>
<td>35 600 00</td>
</tr>
<tr>
<td></td>
<td>4,6 m</td>
<td>red</td>
<td>relay terminals</td>
<td>Q85VR3LP-T9-B</td>
<td>35 601 00</td>
<td></td>
</tr>
</tbody>
</table>

|                        | 0,25 m     | IR           | relay terminals | Q85VR3D-B         | 35 604 00 |
|                        | 0,25 m     | IR           | relay terminals | Q85VR3D-T9-B       | 35 605 00 |
|                        | 1 m        | IR           | relay terminals | Q85VR3DL-B         | 35 602 00 |
|                        | 1 m        | IR           | relay terminals | Q85VR3DL-T9-B       | 35 603 00 |

| **Diffuse**            | 0,1        | IR           | relay terminals | Q853E-B            | 35 606 00 |
|                        | 0,1        | IR           | relay terminals | Q853R-B            | 35 607 00 |
|                        | 0,1        | IR           | relay terminals | Q853R-T9-B         | 35 608 00 |

| **Opposed**            | 23 m       | (emitter)    | relay terminals | Q853E-B            | 35 606 00 |
|                        | 23 m       | (emitter)    | relay terminals | Q853R-B            | 35 607 00 |
|                        | 23 m       | (emitter)    | relay terminals | Q853R-T9-B         | 35 608 00 |

These sensors do not include the self-checking redundant circuitry necessary to allow their use in personnel safety applications. A sensor failure or malfunction can result in either an energised or de-energised output condition. These products should not be used as sensing devices for personnel safety.