



## Eaton 13100RQD07

Eaton Moeller® series E58 Diffuse reflective sensor, Sn=610mm, 4L, 10-30VDC, NPN, PNP, M18, M12, insulated material

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| <b>PRODUCT NAME</b>             | Eaton Moeller® series E58<br>Diffuse reflective sensor                                                                                                                                                                   |
| <b>CATALOG NUMBER</b>           | 13100RQD07                                                                                                                                                                                                               |
| <b>UPC</b>                      | 782113843568                                                                                                                                                                                                             |
| <b>PRODUCT<br/>LENGTH/DEPTH</b> | 152.4 mm                                                                                                                                                                                                                 |
| <b>PRODUCT HEIGHT</b>           | 44.45 mm                                                                                                                                                                                                                 |
| <b>PRODUCT WIDTH</b>            | 152.4 mm                                                                                                                                                                                                                 |
| <b>PRODUCT WEIGHT</b>           | 0.1 kg                                                                                                                                                                                                                   |
| <b>COMPLIANCES</b>              | CE Marked                                                                                                                                                                                                                |
| <b>CERTIFICATIONS</b>           | cUL Recognized<br>UL Recognized<br>CE<br>UL File No.: E117028<br>CSA<br>IEC/EN 60947-5-2<br>CSA File No.: 50513<br>CSA Class No.: 3211-07<br>UL<br>UL Category Control No.:<br>NRKH, NRKH7<br>UL 508<br>CSA-C22.2 No. 14 |



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| TYPE                               | Optical sensors                                                                          |
| CONTACT RATING                     | 100 mA PNP, 250 mA NPN at 10-30 Vdc                                                      |
| FEATURES                           | Right-angled beam                                                                        |
| CABLE TYPE                         | Polyvinyl Chloride (PVC)                                                                 |
| ELECTRIC CONNECTION TYPE           | Connector M12                                                                            |
| ENCLOSURE MATERIAL                 | Lens: polycarbonate<br>Body: structural polyurethane foam<br>Cable jacket: PVC Plastic   |
| ENCLOSURE TYPE                     | Cylinder, screw-thread                                                                   |
| OPERATING MODE                     | Diffuse reflective<br>Switching principle: Adjustable bright/dark switching              |
| CONNECTION                         | 4-pin M12 connector                                                                      |
| CONTACT CONFIGURATION              | NPN and PNP open collector                                                               |
| EXPLOSION SAFETY CATEGORY FOR DUST | None                                                                                     |
| SENSOR TYPE                        | Diffuse reflective                                                                       |
| SWITCH TYPE                        | Photoelectric                                                                            |
| EXPLOSION SAFETY CATEGORY FOR GAS  | None                                                                                     |
| FUNCTIONS                          | Reflected-light beam<br>Short-circuit protection<br>Protection against polarity reversal |
| VOLTAGE TYPE                       | DC                                                                                       |
| WIRE SIZE                          | 22                                                                                       |
| CONNECTION TYPE                    | 4-wire<br>Plug-in connection M12 x 1                                                     |
| INPUT VOLTAGE                      | 10-30 Vdc                                                                                |
| CABLE SHEATH MATERIAL              | Polyvinyl chloride (PVC)                                                                 |
| LIGHT TYPE                         | Infrared light                                                                           |
| DEGREE OF PROTECTION               | IP67<br>NEMA 6                                                                           |
| INTERFACE TYPE                     | Other                                                                                    |
| LED INDICATOR                      | Output status: red<br>Status indication of Switching state: Red LED                      |
| SWITCH FUNCTION TYPE               | Other                                                                                    |
| LOAD CURRENT                       | Max. 250 mA (Ie, NPN, 120                                                                |

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| □□□□□    | <a href="#">IL05305002Z</a>                                 |
| □□□□□□□□ | <a href="#">Eaton Specification Sheet - 13100RQD07</a>      |
| □□       | <a href="#">eaton-proximity-switches-dimensions-004.eps</a> |

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|                                                                     | > 50°C)<br>Max. 100 mA (Ie, PNP)       |
| <b>LASER PROTECTION CLASS</b>                                       | None                                   |
| <b>OPERATION AGENT-SAFETY CLASS</b>                                 | Safety class 2                         |
| <b>SHOCK RESISTANCE</b>                                             | 100 g, Mechanical, Shock duration 3 ms |
| <b>OPTICAL SURFACE MATERIAL</b>                                     | Plastic                                |
| <b>OUTPUT CURRENT (MA) - MAX</b>                                    | 250 mA                                 |
| <b>RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX</b>                | 30 V                                   |
| <b>RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN</b>                | 0 V                                    |
| <b>RATED SWITCHING DISTANCE (SN)</b>                                | 610 mm                                 |
| <b>SENSOR LENGTH</b>                                                | 65 mm                                  |
| <b>SWITCHING DISTANCE - MAX</b>                                     | 610 mm                                 |
| <b>VOLTAGE RATING - MAX</b>                                         | 30 V                                   |
| <b>SAFETY TYPE (IEC 61496-1)</b>                                    | 1                                      |
| <b>SWITCHING FREQUENCY</b>                                          | 500 Hz                                 |
| <b>SENSING MODE</b>                                                 | Light-/dark switching                  |
| <b>SWITCHING OUTPUT TYPE</b>                                        | NPN                                    |
| <b>SENSOR MATERIAL</b>                                              | Insulated material                     |
| <b>PRODUCT CATEGORY</b>                                             | Comet Series                           |
| <b>PROTECTION</b>                                                   | Auto reset short circuit               |
| <b>RESPONSE TIME</b>                                                | 1 ms                                   |
| <b>CORD LENGTH</b>                                                  | 8 in                                   |
| <b>MAXIMUM DC CURRENT</b>                                           | 100 mA PNP, 250 mA NPN                 |
| <b>AMBIENT OPERATING TEMPERATURE - MAX</b>                          | 70 °C                                  |
| <b>AMBIENT OPERATING TEMPERATURE - MIN</b>                          | -40 °C                                 |
| <b>DIAMETER SENSOR</b>                                              | 18 mm                                  |
| <b>NUMBER OF CONTACT ENERGIZED OUTPUTS WITH SIGNALLING FUNCTION</b> | 0                                      |
| <b>NUMBER OF OUTPUTS (PROTECTED CONTACT ENERGIZED)</b>              | 0                                      |

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| NUMBER OF OUTPUTS<br>(PROTECTED SEMICONDUCTOR)               | 0                                                                               |
| NUMBER OF OUTPUTS<br>(SEMICONDUCTOR WITH SIGNALING FUNCTION) | 2                                                                               |
| OPERATING TEMPERATURE - MAX                                  | 158 °F                                                                          |
| OPERATING TEMPERATURE - MIN                                  | -40 °F                                                                          |
| OPERATIONAL CURRENT (IB) IN THE SWITCHED STATE AT 24 V DC    | 30 A                                                                            |
| ENVIRONMENTAL RATING                                         | NEMA 1, NEMA 3, NEMA 4, NEMA 4X, NEMA 6, NEMA 6P, NEMA 12, NEMA 13, IP68, IP69K |
| ADJUSTMENT TYPE                                              | Manual adjustment                                                               |

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