

# Specifications

## Eaton 135871

Eaton Moeller® series E57 Proximity switch, E57 Global Series, 1 N/O, 2-wire, 10 - 30 V DC, M12 x 1 mm, Sn= 8 mm, Non-flush, NPN/PNP, Metal, 2 m connection cable

### General specifications

|                             |  |
|-----------------------------|--|
| <b>PRODUCT NAME</b>         | Eaton Moeller® series E57 Proximity switch   |
| <b>CATALOG NUMBER</b>       | 135871   |
| <b>MODEL CODE</b>           | E57-12GE08-D   |
| <b>EAN</b>                  | 4015081326648  |
| <b>PRODUCT LENGTH/DEPTH</b> | 165.1 mm   |
| <b>PRODUCT HEIGHT</b>       | 12.7 mm  |
| <b>PRODUCT WIDTH</b>        | 139.7 mm   |
| <b>PRODUCT WEIGHT</b>       | 0.16 kg  |
| <b>CERTIFICATIONS</b>       | CSA-C22.2 No. 14<br>UL 508<br>IEC/EN 60947-5-2<br>CE<br>CSA File No.: 224447<br>UL File No.: CSA report applies to both US and Canada<br>CSA Class No.: 4652-04 / 4652-84<br>CSA |

## Product specifications

|  |                        |
|--|------------------------|
| TYPE   | Inductive sensor       |
| ELECTRIC CONNECTION TYPE                                     | Cable                  |
| ENCLOSURE MATERIAL FINISHING                                 | Other                  |
| ACTUATION TYPE   | Metallic Target        |
| ENCLOSURE MATERIAL   | Metal                  |
| ENCLOSURE TYPE   | Cylinder, screw-thread |
| CATEGORY (EN 954-1)  | B                      |
| EXPLOSION SAFETY CATEGORY FOR DUST                           | None                   |
| EXPLOSION SAFETY CATEGORY FOR GAS                            | None                   |
| SAFETY PERFORMANCE LEVEL (EN ISO 13849-1)                    | None                   |
| SIL (IEC 61508)  | None                   |
| AMBIENT OPERATING TEMPERATURE - MAX                          | 60 °C                  |
| AMBIENT OPERATING TEMPERATURE - MIN                          | 0 °C                   |
| DIAMETER SENSOR  | 12 mm                  |
| NUMBER OF CONTACT ENERGIZED OUTPUTS WITH SIGNALLING FUNCTION | 0                      |
| NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS)                  | 1                      |
| NUMBER OF OUTPUTS (PROTECTED CONTACT ENERGIZED)              | 0                      |
| NUMBER OF OUTPUTS (PROTECTED SEMICONDUCTOR)                  | 0                      |
| NUMBER OF OUTPUTS (SEMICONDUCTOR WITH SIGNALING FUNCTION)    | 1                      |
| OPERATIONAL CURRENT (IB) IN THE SWITCHED STATE AT 24 V DC    | 10 A                   |
| OUTPUT CURRENT AT PROTECTED OUTPUT - MAX                     | 0 mA                   |
| RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MAX         | 0 V                    |

## Resources

|                            |  |
|----------------------------|--|
| BROCHURES                  | <a href="#">eaton-sensors-brochure-br053001en-en-us.pdf</a>  |
| CATALOGUES                 | <a href="#">Product Range Catalog Sensors – products, basic information, applications</a>  |
| DECLARATIONS OF CONFORMITY | <a href="#">DA-DC-00004651.pdf</a><br><a href="#">DA-DC-00004656.pdf</a>   |
| DRAWINGS                   | <a href="#">eaton-proximity-switches-proximity-switch-dimensions-026.eps</a><br><a href="#">eaton-proximity-switches-e57-proximity-switch-3d-drawing-002.eps</a> |
| ECAD MODEL                 | <a href="#">DA-CE-ETN.E57-12GE08-D</a>   |
| INSTALLATION INSTRUCTIONS  | <a href="#">IL05301002Z</a>  |
| MULTIMEDIA                 | <a href="#">We make what matters</a>   |

|   |  |
|---|--|
| <b>VOLTAGE TYPE</b>   | DC   |
| <b>MOUNTING METHOD</b>  | Non-flush mounting   |
| <b>MATERIAL</b>   | Metal  |
| <b>CONNECTION TYPE</b>  | 2 m connection cable<br>2-wire   |
| <b>INSTALLATION TYPE</b>  | Not flat   |
| <b>DEGREE OF PROTECTION</b>   | IP67<br>IP69<br>NEMA Other   |
| <b>INTERFACE TYPE</b>   | None   |
| <b>LED INDICATOR</b>  | Status indication of<br>Switching state: Red LED                             |
| <b>SWITCH FUNCTION TYPE</b>   | Normally open contact  |
| <b>LOAD CURRENT</b>   | 3 - 100 mA (I <sub>e</sub> )   |
| <b>RESIDUAL CURRENT</b>   | 0.8 mA (through the load<br>in the blocked state at 230<br>V AC and 24 V DC) |
| <b>RESIDUAL RIPPLE</b>  | 10 % (U <sub>e</sub> )   |
| <b>SHOCK RESISTANCE</b>   | 30 g, Mechanical, Shock<br>duration 11 ms                                    |
| <b>SWITCHING FREQUENCY</b>  | 2000 Hz  |
| <b>VOLTAGE RATING - MAX</b>   | 30 V   |
| <b>WIDTH SENSOR</b>   | 0 mm   |
| <b>PRODUCT CATEGORY</b>   | E57 Global Series  |
| <b>SWITCHING OUTPUT<br/>TYPE</b>                                    | PNP/NPN  |
| <b>TEMPERATURE DRIFT OF<br/>SN</b>                                  | 10 %   |
| <b>RATED CONTROL SUPPLY<br/>VOLTAGE (US) AT AC, 50<br/>HZ - MIN</b> | 0 V  |
| <b>RATED CONTROL SUPPLY<br/>VOLTAGE (US) AT AC, 60<br/>HZ - MAX</b> | 0 V  |
| <b>RATED CONTROL SUPPLY<br/>VOLTAGE (US) AT AC, 60<br/>HZ - MIN</b> | 0 V  |
| <b>RATED CONTROL SUPPLY<br/>VOLTAGE (US) AT DC -<br/>MAX</b>        | 30 V   |
| <b>RATED CONTROL SUPPLY<br/>VOLTAGE (US) AT DC -<br/>MIN</b>        | 10 V   |
| <b>RATED SWITCHING<br/>DISTANCE (SN) - MAX</b>                      | 8 mm   |
| <b>REPEATABILITY</b>  | 2 %  |

|                               |       |
|-------------------------------|-------|
| SENSOR HEIGHT                 | 0 mm  |
| SENSOR LENGTH                 | 50 mm |
| SUPPLY VOLTAGE - MAX          | 30 V  |
| SUPPLY VOLTAGE - MIN          | 10 V  |
| SWITCHING HYSTERESIS<br>OF SN | 15 %  |
| VOLTAGE DROP (UD)             | 6 V   |

|                 |
|-----------------|
| PROJECT NAME:   |
| PROJECT NUMBER: |
| PREPARED BY:    |
| DATE:           |



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