

# Specifications

## Eaton 134769

Eaton Moeller® series E53 Proximity switch, capacitive, Sn=20mm, 1N/O, 2L, 20-250VAC, M30, insulated material, line 2m

### General specifications

|                             |  |
|-----------------------------|--|
| <b>PRODUCT NAME</b>         | Eaton Moeller® series E53 Proximity switch |
| <b>CATALOG NUMBER</b>       | 134769                                     |
| <b>MODEL CODE</b>           | E53KAL30A2                                 |
| <b>EAN</b>                  | 4015081316212                              |
| <b>PRODUCT LENGTH/DEPTH</b> | 152.4 mm                                   |
| <b>PRODUCT HEIGHT</b>       | 44.45 mm                                   |
| <b>PRODUCT WIDTH</b>        | 152.4 mm                                   |
| <b>PRODUCT WEIGHT</b>       | 0.23 kg                                    |
| <b>CERTIFICATIONS</b>       | CE<br>IEC/EN 60947-5-2                     |

## Product specifications

|   |  |
|---|--|
| <b>TYPE</b>   | Capacitive sensor                                |
| <b>ELECTRIC CONNECTION TYPE</b>                             | Cable  |
| <b>ENCLOSURE MATERIAL FINISHING</b>                         | Other  |
| <b>FITTED WITH:</b>   | Status indication                                |
| <b>ACTUATION TYPE</b>                                       | Other  |
| <b>ENCLOSURE MATERIAL</b>                                   | Plastic  |
| <b>ENCLOSURE TYPE</b>                                       | Cylinder, screw-thread                           |
| <b>CATEGORY (EN 954-1)</b>                                  | B  |
| <b>EXPLOSION SAFETY CATEGORY FOR DUST</b>                   | None   |
| <b>EXPLOSION SAFETY CATEGORY FOR GAS</b>                    | None   |
| <b>VOLTAGE TYPE</b>   | AC   |
| <b>MOUNTING METHOD</b>                                      | Flush mounting                                   |
| <b>MATERIAL</b>   | Insulated material                               |
| <b>CONNECTION TYPE</b>                                      | 2 m connection cable<br>2-wire                   |
| <b>INSTALLATION TYPE</b>                                    | Concise  |
| <b>DEGREE OF PROTECTION</b>                                 | IP65<br>NEMA 4<br>NEMA 12<br>NEMA 13             |
| <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>   | 5 - 300 mA (Ie)                                  |
| <b>RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MIN</b> | 20 V   |
| <b>RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX</b>        | 0 V  |
| <b>RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN</b>        | 0 V  |
| <b>RATED SWITCHING DISTANCE (SN)</b>                        | 20 mm  |
| <b>REPEATABILITY</b>  | 10 %   |
| <b>SENSOR HEIGHT</b>  | 0 mm   |
| <b>SENSOR LENGTH</b>  | 80 mm  |
| <b>SUPPLY VOLTAGE - MAX</b>                                 | 250 V  |

## Resources

|                                   |  |
|-----------------------------------|--|
| <b>CATALOGUES</b>                 | <a href="#">Product Range Catalog Sensors – products, basic information, applications</a>  |
| <b>DECLARATIONS OF CONFORMITY</b> | <a href="#">DA-DC-00004653.pdf</a><br><a href="#">DA-DC-00004648.pdf</a>   |
| <b>DRAWINGS</b>                   | <a href="#">eaton-proximity-switches-e53-proximity-switch-dimensions-006.eps</a><br><a href="#">eaton-proximity-switches-e53-proximity-switch-dimensions-008.eps</a><br><a href="#">eaton-proximity-switches-e53-proximity-switch-dimensions-007.eps</a><br><a href="#">1360DRW-93</a> |
| <b>INSTALLATION INSTRUCTIONS</b>  | <a href="#">IL05307002Z</a>  |

|   |  |
|---|--|
| <b>SUPPLY VOLTAGE - MIN</b>   | 20 V   |
| <b>SWITCHING HYSTERESIS OF SN</b>                                   | 20 %   |
| <b>VOLTAGE DROP (UD)</b>  | 9 V  |
| <b>VOLTAGE RATING - MAX</b>   | 250 V  |
| <b>WIDTH SENSOR</b>   | 0 mm   |
| <b>PRODUCT CATEGORY</b>   | E53 Capacitive Series  |
| <b>OPERATIONAL CURRENT (IB)</b>                                     | < 2.5 mA (in the switched state at 24 V DC)                            |
| <b>RATED SHORT-TIME WITHSTAND CURRENT</b>                           | 5 A (10 ms, 5 Hz)  |
| <b>RESIDUAL CURRENT</b>   | 2.5 mA (through the load in the blocked state at 230 V AC and 24 V DC) |
| <b>RESIDUAL RIPPLE</b>  | 10 % (U <sub>e</sub> )   |
| <b>SHOCK RESISTANCE</b>   | 30 g, Mechanical, Shock duration 11 ms                                 |
| <b>SUPPLY FREQUENCY</b>   | 50 Hz, Input, min. Range<br>60 Hz, Input, max. Range                   |
| <b>SWITCHING FREQUENCY</b>  | 15 Hz  |
| <b>SWITCHING OUTPUT TYPE</b>  | Two-wire   |
| <b>TEMPERATURE DRIFT OF SN</b>                                      | 10 %   |
| <b>SAFETY PERFORMANCE LEVEL (EN ISO 13849-1)</b>                    | None   |
| <b>SIL (IEC 61508)</b>  | None   |
| <b>AMBIENT OPERATING TEMPERATURE - MAX</b>                          | 70 °C  |
| <b>AMBIENT OPERATING TEMPERATURE - MIN</b>                          | -25 °C   |
| <b>DIAMETER SENSOR</b>  | 30 mm  |
| <b>NUMBER OF CONTACT ENERGIZED OUTPUTS WITH SIGNALLING FUNCTION</b> | 0  |
| <b>NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS)</b>                  | 1  |
| <b>NUMBER OF OUTPUTS (PROTECTED CONTACT ENERGIZED)</b>              | 0  |
| <b>NUMBER OF OUTPUTS (PROTECTED SEMICONDUCTOR)</b>                  | 0  |
| <b>NUMBER OF OUTPUTS (SEMICONDUCTOR WITH</b>                        | 1  |

|  |       |
|--|-------|
| SIGNALING FUNCTION)                                  |       |
| OUTPUT CURRENT AT PROTECTED OUTPUT - MAX             | 0 mA  |
| RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MAX | 250 V |
| RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MIN | 20 V  |
| RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MAX | 250 V |

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



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