



## Eaton 009046

Eaton Moeller® series T0 On-Off switch, T0, 20 A, flush mounting, 1 contact unit(s), 2 pole, Emergency switching off function, with red thumb grip and yellow front plate

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| <b>PRODUCT NAME</b>         | Eaton Moeller® series T0 On-off switch                                                                                                                                                                                                                    |
| <b>CATALOG NUMBER</b>       | 009046                                                                                                                                                                                                                                                    |
| <b>PRODUCT LENGTH/DEPTH</b> | 65 mm                                                                                                                                                                                                                                                     |
| <b>PRODUCT HEIGHT</b>       | 65 mm                                                                                                                                                                                                                                                     |
| <b>PRODUCT WIDTH</b>        | 75 mm                                                                                                                                                                                                                                                     |
| <b>PRODUCT WEIGHT</b>       | 0.085 kg                                                                                                                                                                                                                                                  |
| <b>CERTIFICATIONS</b>       | IEC/EN 60947-3<br>VDE 0660<br>CE<br>CSA<br>CSA File No.: 012528<br>IEC/EN 60947<br>UL File No.: E36332<br>UL 60947-4-1<br>IEC/EN 60204<br>UL Category Control No.: NLRV<br>CSA-C22.2 No. 94<br>CSA Class No.: 3211-05<br>CSA-C22.2 No. 60947-4-1-14<br>UL |
| <b>CATALOG NOTES</b>        | Rated Short-time Withstand Current (Icw) for a time of 1 second                                                                                                                                                                                           |

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| PRODUCT CATEGORY                                                                 | On-Off switch                                                                                                                    |
| FEATURES                                                                         | Version as emergency stop installation                                                                                           |
| ACTUATOR COLOR                                                                   | Red                                                                                                                              |
| ACTUATOR FUNCTION                                                                | Maintained                                                                                                                       |
| 10.10 TEMPERATURE RISE                                                           | The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices. |
| 10.11 SHORT-CIRCUIT RATING                                                       | Is the panel builder's responsibility. The specifications for the switchgear must be observed.                                   |
| 10.12 ELECTROMAGNETIC COMPATIBILITY                                              | Is the panel builder's responsibility. The specifications for the switchgear must be observed.                                   |
| 10.13 MECHANICAL FUNCTION                                                        | The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.                         |
| 10.2.2 CORROSION RESISTANCE                                                      | Meets the product standard's requirements.                                                                                       |
| 10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES                         | Meets the product standard's requirements.                                                                                       |
| 10.2.3.2 VERIFICATION OF RESISTANCE OF INSULATING MATERIALS TO NORMAL HEAT       | Meets the product standard's requirements.                                                                                       |
| 10.2.3.3 RESIST. OF INSUL. MAT. TO ABNORMAL HEAT/FIRE BY INTERNAL ELECT. EFFECTS | Meets the product standard's requirements.                                                                                       |
| 10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION                                 | UV resistance only in connection with protective shield.                                                                         |
| 10.2.5 LIFTING                                                                   | Does not apply, since the entire switchgear needs to be evaluated.                                                               |
| 10.2.6 MECHANICAL IMPACT                                                         | Does not apply, since the entire switchgear needs to be evaluated.                                                               |
| 10.2.7 INSCRIPTIONS                                                              | Meets the product standard's requirements.                                                                                       |

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| DECLARATIONS OF CONFORMITY | <a href="#">eaton-main-switch-declaration-of-conformity-uk251328en.pdf</a>                                                                                            |
| □□□□□                      | <a href="#">IL03801020Z</a>                                                                                                                                           |
| □□□                        | <a href="#">eaton-rotary-switches-on-off-switch-t0-on-off-switch-wiring-diagram-002.eps</a>                                                                           |
| □□                         | <a href="#">eaton-rotary-switches-mounting-t0-step-switch-dimensions-034.eps</a><br><a href="#">eaton-rotary-switches-front-plate-t0-on-off-switch-symbol-003.eps</a> |

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| <b>10.3 DEGREE OF PROTECTION OF ASSEMBLIES</b>                  | Does not apply, since the entire switchgear needs to be evaluated.             |
| <b>10.4 CLEARANCES AND CREEPAGE DISTANCES</b>                   | Meets the product standard's requirements.                                     |
| <b>10.5 PROTECTION AGAINST ELECTRIC SHOCK</b>                   | Does not apply, since the entire switchgear needs to be evaluated.             |
| <b>10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS</b>   | Does not apply, since the entire switchgear needs to be evaluated.             |
| <b>10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS</b>        | Is the panel builder's responsibility.                                         |
| <b>10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS</b>                 | Is the panel builder's responsibility.                                         |
| <b>10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH</b>                 | Is the panel builder's responsibility.                                         |
| <b>10.9.3 IMPULSE WITHSTAND VOLTAGE</b>                         | Is the panel builder's responsibility.                                         |
| <b>10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL</b> | Is the panel builder's responsibility.                                         |
| <b>FITTED WITH:</b>                                             | Red thumb grip and yellow front plate                                          |
| <b>OPERATING FREQUENCY</b>                                      | 1200 Operations/h                                                              |
| <b>POLLUTION DEGREE</b>                                         | 3                                                                              |
| <b>CLIMATIC PROOFING</b>                                        | Damp heat, cyclic, to IEC 60068-2-30<br>Damp heat, constant, to IEC 60068-2-78 |
| <b>RATED IMPULSE WITHSTAND VOLTAGE (UIMP)</b>                   | 6000 V AC                                                                      |
| <b>RATED OPERATIONAL POWER STAR-DELTA AT 500 V, 50 HZ</b>       | 7.5 kW                                                                         |
| <b>RATED OPERATIONAL POWER STAR-DELTA AT 690 V, 50 HZ</b>       | 5.5 kW                                                                         |
| <b>RATED PERMANENT CURRENT AT AC-21, 400 V</b>                  | 20 A                                                                           |
| <b>RATED UNINTERRUPTED CURRENT (IU)</b>                         | 20 A                                                                           |
| <b>STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS</b>       | 0 W                                                                            |
| <b>SWITCHING ANGLE</b>                                          | 90 °                                                                           |
| <b>SWITCHING POWER AT</b>                                       | 5.5 kW                                                                         |

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| <b>400 V</b>                                              |                                          |
| <b>VOLTAGE PER CONTACT PAIR IN SERIES</b>                 | 60 V                                     |
| <b>RATED OPERATIONAL POWER AT AC-3, 500 V, 50 HZ</b>      | 5.5 kW                                   |
| <b>DEVICE CONSTRUCTION</b>                                | Built-in device fixed built-in technique |
| <b>RATED SHORT-TIME WITHSTAND CURRENT (ICW)</b>           | 320 A, Contacts, 1 second<br>0.32 kA     |
| <b>ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT</b>         | Screw connection                         |
| <b>DESIGN</b>                                             | 102                                      |
| <b>MOUNTING POSITION</b>                                  | As required                              |
| <b>ACTUATOR TYPE</b>                                      | Short thumb-grip                         |
| <b>AMBIENT OPERATING TEMPERATURE - MAX</b>                | 50 °C                                    |
| <b>AMBIENT OPERATING TEMPERATURE - MIN</b>                | -25 °C                                   |
| <b>AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX</b>     | 40 °C                                    |
| <b>AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MIN</b>     | -25 °C                                   |
| <b>ASSIGNED MOTOR POWER AT 115/120 V, 60 HZ, 1-PHASE</b>  | 0.5 HP                                   |
| <b>ASSIGNED MOTOR POWER AT 200/208 V, 60 HZ, 1-PHASE</b>  | 1 HP                                     |
| <b>ASSIGNED MOTOR POWER AT 200/208 V, 60 HZ, 3-PHASE</b>  | 3 HP                                     |
| <b>ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 1-PHASE</b>  | 1.5 HP                                   |
| <b>ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 3-PHASE</b>  | 3 HP                                     |
| <b>ASSIGNED MOTOR POWER AT 460/480 V, 60 HZ, 3-PHASE</b>  | 7.5 HP                                   |
| <b>ASSIGNED MOTOR POWER AT 575/600 V, 60 HZ, 3-PHASE</b>  | 7.5 HP                                   |
| <b>EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID</b> | 0 W                                      |

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| <b>HEAT DISSIPATION CAPACITY PDISS</b>                         | 0 W                                                                                                                                                                                                                                           |
| <b>HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID</b>       | 0.6 W                                                                                                                                                                                                                                         |
| <b>NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS)</b>     | 0                                                                                                                                                                                                                                             |
| <b>NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)</b> | 0                                                                                                                                                                                                                                             |
| <b>RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ)</b>            | 6 kA                                                                                                                                                                                                                                          |
| <b>OVERVOLTAGE CATEGORY</b>                                    | III                                                                                                                                                                                                                                           |
| <b>CONTROL CIRCUIT RELIABILITY</b>                             | 1 failure per 100,000 switching operations statistically determined, at 24 V DC, 10 mA)                                                                                                                                                       |
| <b>DEGREE OF PROTECTION (FRONT SIDE)</b>                       | IP65                                                                                                                                                                                                                                          |
| <b>NUMBER OF POLES</b>                                         | 2                                                                                                                                                                                                                                             |
| <b>MOUNTING METHOD</b>                                         | Flush mounting                                                                                                                                                                                                                                |
| <b>DEGREE OF PROTECTION</b>                                    | NEMA 12                                                                                                                                                                                                                                       |
| <b>SUITABLE FOR</b>                                            | Branch circuits, suitable as motor disconnect, (UL/CSA)<br>Front mounting 4-hole                                                                                                                                                              |
| <b>FUNCTIONS</b>                                               | Emergency switching off function                                                                                                                                                                                                              |
| <b>NUMBER OF SWITCHES</b>                                      | 1                                                                                                                                                                                                                                             |
| <b>SAFE ISOLATION</b>                                          | 440 V AC, Between the contacts, According to EN 61140                                                                                                                                                                                         |
| <b>SCREW SIZE</b>                                              | M3.5, Terminal screw                                                                                                                                                                                                                          |
| <b>INSCRIPTION</b>                                             | 0-1                                                                                                                                                                                                                                           |
| <b>SHOCK RESISTANCE</b>                                        | 15 g, Mechanical, According to IEC/EN 60068-2-27, Half-sinusoidal shock 20 ms                                                                                                                                                                 |
| <b>LIFESPAN, MECHANICAL</b>                                    | 400,000 Operations                                                                                                                                                                                                                            |
| <b>LOAD RATING</b>                                             | 1.6 x I <sub>e</sub> (with intermittent operation class 12, 40 % duty factor)<br>2 x I <sub>e</sub> (with intermittent operation class 12, 25 % duty factor)<br>1.3 x I <sub>e</sub> (with intermittent operation class 12, 60 % duty factor) |

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| <b>SWITCHING CAPACITY<br/>(AUXILIARY CONTACTS,<br/>GENERAL USE)</b>          | 10A, IU, (UL/CSA)                                                                                                                                                                                                                                                                                                              |
| <b>SWITCHING CAPACITY<br/>(AUXILIARY CONTACTS,<br/>PILOT DUTY)</b>           | P300 (UL/CSA)<br>A600 (UL/CSA)                                                                                                                                                                                                                                                                                                 |
| <b>TERMINAL CAPACITY</b>                                                     | 2 x (1 - 2.5) mm <sup>2</sup> , solid or<br>stranded<br>1 x (0.75 - 2.5) mm <sup>2</sup> ,<br>flexible with ferrules to<br>DIN 46228<br>1 x (1 - 2.5) mm <sup>2</sup> , solid or<br>stranded<br>18 - 14 AWG, solid or<br>flexible with ferrule<br>2 x (0.75 - 2.5) mm <sup>2</sup> ,<br>flexible with ferrules to<br>DIN 46228 |
| <b>SWITCHING CAPACITY<br/>(MAIN CONTACTS,<br/>GENERAL USE)</b>               | 16 A, Rated uninterrupted<br>current max. (UL/CSA)                                                                                                                                                                                                                                                                             |
| <b>SAFETY PARAMETER (EN<br/>ISO 13849-1)</b>                                 | B10d values as per EN ISO<br>13849-1, table C.1                                                                                                                                                                                                                                                                                |
| <b>NUMBER OF AUXILIARY<br/>CONTACTS (NORMALLY<br/>OPEN CONTACTS)</b>         | 0                                                                                                                                                                                                                                                                                                                              |
| <b>NUMBER OF CONTACT<br/>UNITS</b>                                           | 1                                                                                                                                                                                                                                                                                                                              |
| <b>NUMBER OF CONTACTS<br/>IN SERIES AT DC-21A, 240<br/>V</b>                 | 1                                                                                                                                                                                                                                                                                                                              |
| <b>NUMBER OF CONTACTS<br/>IN SERIES AT DC-23A, 120<br/>V</b>                 | 3                                                                                                                                                                                                                                                                                                                              |
| <b>NUMBER OF CONTACTS<br/>IN SERIES AT DC-23A, 24 V</b>                      | 1                                                                                                                                                                                                                                                                                                                              |
| <b>NUMBER OF CONTACTS<br/>IN SERIES AT DC-23A, 240<br/>V</b>                 | 5                                                                                                                                                                                                                                                                                                                              |
| <b>NUMBER OF CONTACTS<br/>IN SERIES AT DC-23A, 48 V</b>                      | 2                                                                                                                                                                                                                                                                                                                              |
| <b>NUMBER OF CONTACTS<br/>IN SERIES AT DC-23A, 60 V</b>                      | 3                                                                                                                                                                                                                                                                                                                              |
| <b>RATED BREAKING<br/>CAPACITY AT 220/230 V<br/>(COS PHI TO IEC 60947-3)</b> | 100 A                                                                                                                                                                                                                                                                                                                          |
| <b>RATED BREAKING<br/>CAPACITY AT 400/415 V<br/>(COS PHI TO IEC 60947-3)</b> | 110 A                                                                                                                                                                                                                                                                                                                          |
| <b>RATED BREAKING<br/>CAPACITY AT 500 V (COS<br/>PHI TO IEC 60947-3)</b>     | 80 A                                                                                                                                                                                                                                                                                                                           |
| <b>RATED BREAKING</b>                                                        | 60 A                                                                                                                                                                                                                                                                                                                           |

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| <b>CAPACITY AT 660/690 V<br/>(COS PHI TO IEC 60947-3)</b>                                 |                                                                    |
| <b>RATED MAKING<br/>CAPACITY UP TO 690 V<br/>(COS PHI TO IEC/EN<br/>60947-3)</b>          | 130 A                                                              |
| <b>RATED OPERATING<br/>VOLTAGE (UE) - MAX</b>                                             | 690 V                                                              |
| <b>RATED OPERATING<br/>VOLTAGE (UE) - MIN</b>                                             | 690 V                                                              |
| <b>RATED OPERATIONAL<br/>VOLTAGE (UE) AT AC -<br/>MAX</b>                                 | 690 V                                                              |
| <b>SHORT-CIRCUIT CURRENT<br/>RATING (BASIC RATING)</b>                                    | 5 kA, SCCR (UL/CSA)<br>50A, max. Fuse, SCCR<br>(UL/CSA)            |
| <b>SHORT-CIRCUIT CURRENT<br/>RATING (HIGH FAULT)</b>                                      | 10 kA, SCCR (UL/CSA)<br>20 A, Class J, max. Fuse,<br>SCCR (UL/CSA) |
| <b>SHORT-CIRCUIT<br/>PROTECTION RATING</b>                                                | 20 A gG/gL, Fuse, Contacts                                         |
| <b>RATED OPERATIONAL<br/>CURRENT (IE) AT AC-21,<br/>440 V</b>                             | 20 A                                                               |
| <b>RATED OPERATIONAL<br/>CURRENT (IE) AT AC-23A,<br/>230 V</b>                            | 13.3 A                                                             |
| <b>RATED OPERATIONAL<br/>CURRENT (IE) AT AC-23A,<br/>400 V, 415 V</b>                     | 13.3 A                                                             |
| <b>RATED OPERATIONAL<br/>CURRENT (IE) AT AC-23A,<br/>500 V</b>                            | 13.3 A                                                             |
| <b>RATED OPERATIONAL<br/>CURRENT (IE) AT AC-23A,<br/>690 V</b>                            | 7.6 A                                                              |
| <b>RATED OPERATIONAL<br/>CURRENT (IE) AT AC-3,<br/>220 V, 230 V, 240 V</b>                | 11.5 A                                                             |
| <b>RATED OPERATIONAL<br/>CURRENT (IE) AT AC-3,<br/>380 V, 400 V, 415 V</b>                | 11.5 A                                                             |
| <b>RATED OPERATIONAL<br/>CURRENT (IE) AT AC-3,<br/>500 V</b>                              | 9 A                                                                |
| <b>RATED OPERATIONAL<br/>CURRENT (IE) AT AC-3,<br/>660 V, 690 V</b>                       | 4.9 A                                                              |
| <b>RATED OPERATIONAL<br/>CURRENT (IE) AT DC-1,<br/>LOAD-BREAK SWITCHES<br/>L/R = 1 MS</b> | 10 A                                                               |

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| <b>RATED OPERATIONAL<br/>CURRENT (IE) AT DC-13,<br/>CONTROL SWITCHES L/R<br/>= 50 MS</b> | 10 A   |
| <b>RATED OPERATIONAL<br/>CURRENT (IE) AT DC-21,<br/>240 V</b>                            | 1 A    |
| <b>RATED OPERATIONAL<br/>CURRENT (IE) AT DC-23A,<br/>120 V</b>                           | 5 A    |
| <b>RATED OPERATIONAL<br/>CURRENT (IE) AT DC-23A,<br/>24 V</b>                            | 10 A   |
| <b>RATED OPERATIONAL<br/>CURRENT (IE) AT DC-23A,<br/>240 V</b>                           | 5 A    |
| <b>RATED OPERATIONAL<br/>CURRENT (IE) AT DC-23A,<br/>48 V</b>                            | 10 A   |
| <b>RATED OPERATIONAL<br/>CURRENT (IE) AT DC-23A,<br/>60 V</b>                            | 10 A   |
| <b>RATED OPERATIONAL<br/>CURRENT (IE) STAR-<br/>DELTA AT AC-3, 220/230 V</b>             | 20 A   |
| <b>RATED OPERATIONAL<br/>CURRENT (IE) STAR-<br/>DELTA AT AC-3, 380/400 V</b>             | 20 A   |
| <b>RATED OPERATIONAL<br/>CURRENT (IE) STAR-<br/>DELTA AT AC-3, 500 V</b>                 | 15.6 A |
| <b>RATED OPERATIONAL<br/>CURRENT (IE) STAR-<br/>DELTA AT AC-3, 690 V</b>                 | 8.5 A  |
| <b>RATED OPERATIONAL<br/>CURRENT FOR SPECIFIED<br/>HEAT DISSIPATION (IN)</b>             | 20 A   |
| <b>RATED OPERATIONAL<br/>POWER AT AC-23A,<br/>220/230 V, 50 HZ</b>                       | 3 kW   |
| <b>RATED OPERATIONAL<br/>POWER AT AC-23A, 400 V,<br/>50 HZ</b>                           | 5.5 kW |
| <b>RATED OPERATIONAL<br/>POWER AT AC-23A, 500 V,<br/>50 HZ</b>                           | 7.5 kW |
| <b>RATED OPERATIONAL<br/>POWER AT AC-23A, 690 V,<br/>50 HZ</b>                           | 5.5 kW |
| <b>RATED OPERATIONAL<br/>POWER AT AC-3, 380/400<br/>V, 50 HZ</b>                         | 5.5 kW |
| <b>RATED OPERATIONAL</b>                                                                 | 5.5 kW |

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| POWER AT AC-3, 415 V, 50 HZ                            |                                                                                 |
| RATED OPERATIONAL POWER AT AC-3, 690 V, 50 HZ          | 4 kW                                                                            |
| RATED OPERATIONAL POWER STAR-DELTA AT 220/230 V, 50 HZ | 5.5 kW                                                                          |
| RATED OPERATIONAL POWER STAR-DELTA AT 380/400 V, 50 HZ | 7.5 kW                                                                          |
| TIGHTENING TORQUE                                      | 8.8 lb-in, Screw terminals<br>1 Nm, Screw terminals                             |
| UNINTERRUPTED CURRENT                                  | Rated uninterrupted current I <sub>u</sub> is specified for max. cross-section. |
| HOUSING MATERIAL                                       | Plastic                                                                         |

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