

## On-Off switch, 3 pole + 1 N/O, 20 A, 90 °, surface mounting

Part no. **T0-2-15679/I1**  
**207094**  
 EL Number **1417149**  
 (Norway)

| General specifications                         |  |
|--|--|
| Product name                                   | Eaton Moeller® series T0 On-Off switch   |
| Part no.                                       | T0-2-15679/I1  |
| EAN  | 4015082070946  |
| Product Length/Depth                           | 137 millimetre   |
| Product height                                 | 102 millimetre   |
| Product width                                  | 80 millimetre  |
| Product weight                                 | 0.264 kilogram   |
| Certifications                                 | IEC/EN 60947<br>IEC/EN 60204<br>IEC/EN 60947-3<br>VDE 0660   |
| Product Tradename                              | T0   |
| Product Type                                   | On-Off switch  |
| Product Sub Type                               | None   |
| Catalog Notes                                  | Rated Short-time Withstand Current (Icw) for a time of 1 second  |
| Features & Functions                           |  |
| Fitted with:                                   | Black thumb grip and front plate   |
| Inscription                                    | 0-1  |
| Number of poles                                | 3  |
| General information                            |  |
| Degree of protection                           | NEMA 12  |
| Degree of protection (front side)              | IP65   |
| Lifespan, mechanical                           | 400,000 Operations   |
| Mounting method                                | Surface mounting   |
| Mounting position                              | As required  |
| Number of contact units                        | 2  |
| Operating frequency                            | 1200 Operations/h  |
| Overvoltage category                           | III  |
| Pollution degree                               | 3  |
| Rated impulse withstand voltage (Uimp)         | 6000 V AC  |
| Safe isolation                                 | 440 V AC, Between the contacts, According to EN 61140  |
| Safety parameter (EN ISO 13849-1)              | B10d values as per EN ISO 13849-1, table C.1   |
| Shock resistance                               | 15 g, Mechanical, According to IEC/EN 60068-2-27, Half-sinusoidal shock 20 ms  |
| Suitable for                                   | Ground mounting  |
| Switching angle                                | 90 °   |
| Climatic environmental conditions              |  |
| Ambient operating temperature - min            | -25 °C   |
| Ambient operating temperature - max            | 40 °C  |
| Ambient operating temperature (enclosed) - min | -25 °C   |
| Ambient operating temperature (enclosed) - max | 40 °C  |
| Climatic proofing                              | Damp heat, constant, to IEC 60068-2-78<br>Damp heat, cyclic, to IEC 60068-2-30   |
| Terminal capacities                            |  |
| Terminal capacity                              | 1 x (0.75 - 2.5) mm <sup>2</sup> , flexible with ferrules to DIN 46228<br>2 x (0.75 - 2.5) mm <sup>2</sup> , flexible with ferrules to DIN 46228<br>1 x (1 - 2.5) mm <sup>2</sup> , solid or stranded<br>2 x (1 - 2.5) mm <sup>2</sup> , solid or stranded |
| Screw size                                     | M3.5, Terminal screw   |
| Tightening torque                              | 1 Nm, Screw terminals  |

|  |  |   |
|--|--|---|
|  |  | 8.8 lb-in, Screw terminals  |
| <b>Electrical rating</b>   |  |   |
| Rated breaking capacity at 220/230 V (cos phi to IEC 60947-3)          |  | 100 A   |
| Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3)          |  | 110 A   |
| Rated breaking capacity at 500 V (cos phi to IEC 60947-3)              |  | 80 A  |
| Rated breaking capacity at 660/690 V (cos phi to IEC 60947-3)          |  | 60 A  |
| Rated operational current (Ie) at AC-3, 220 V, 230 V, 240 V            |  | 11.5 A  |
| Rated operational current (Ie) at AC-3, 380 V, 400 V, 415 V            |  | 11.5 A  |
| Rated operational current (Ie) at AC-3, 500 V                          |  | 9 A   |
| Rated operational current (Ie) at AC-3, 660 V, 690 V                   |  | 4.9 A   |
| Rated operational current (Ie) at AC-21, 440 V                         |  | 20 A  |
| Rated operational current (Ie) at AC-23A, 230 V                        |  | 13.3 A  |
| Rated operational current (Ie) at AC-23A, 400 V, 415 V                 |  | 13.3 A  |
| Rated operational current (Ie) at AC-23A, 500 V                        |  | 13.3 A  |
| Rated operational current (Ie) at AC-23A, 690 V                        |  | 7.6 A   |
| Rated operational current (Ie) at DC-1, load-break switches I/r = 1 ms |  | 10 A  |
| Rated operational current (Ie) at DC-13, control switches L/R = 50 ms  |  | 10 A  |
| Rated operational current (Ie) at DC-21, 240 V                         |  | 1 A   |
| Rated operational current (Ie) at DC-23A, 24 V                         |  | 10 A  |
| Rated operational current (Ie) at DC-23A, 48 V                         |  | 10 A  |
| Rated operational current (Ie) at DC-23A, 60 V                         |  | 10 A  |
| Rated operational current (Ie) at DC-23A, 120 V                        |  | 5 A   |
| Rated operational current (Ie) at DC-23A, 240 V                        |  | 5 A   |
| Rated operational current (Ie) star-delta at AC-3, 220/230 V           |  | 20 A  |
| Rated operational current (Ie) star-delta at AC-3, 380/400 V           |  | 20 A  |
| Rated operational current (Ie) star-delta at AC-3, 500 V               |  | 15.6 A  |
| Rated operational current (Ie) star-delta at AC-3, 690 V               |  | 8.5 A   |
| Rated operational power at AC-3, 380/400 V, 50 Hz                      |  | 5.5 kW  |
| Rated operational power at AC-3, 415 V, 50 Hz                          |  | 5.5 kW  |
| Rated operational power at AC-3, 500 V, 50 Hz                          |  | 5.5 kW  |
| Rated operational power at AC-3, 690 V, 50 Hz                          |  | 4 kW  |
| Rated operational power at AC-23A, 220/230 V, 50 Hz                    |  | 3 kW  |
| Rated operational power at AC-23A, 400 V, 50 Hz                        |  | 5.5 kW  |
| Rated operational power at AC-23A, 500 V, 50 Hz                        |  | 7.5 kW  |
| Rated operational power at AC-23A, 690 V, 50 Hz                        |  | 5.5 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  |
| Rated operational power star-delta at 500 V, 50 Hz                     |  | 7.5 kW  |
| Rated operational power star-delta at 690 V, 50 Hz                     |  | 5.5 kW  |
| Rated operational voltage (Ue) at AC - max                             |  | 690 V   |
| Rated uninterrupted current (Iu)                                       |  | 20 A  |
| Uninterrupted current  |  | Rated uninterrupted current Iu is specified for max. cross-section.   |
| <b>Short-circuit rating</b>  |  |   |
| Rated conditional short-circuit current (Iq)                           |  | 6 kA  |
| Rated short-time withstand current (Icw)                               |  | 320 A, Contacts, 1 second<br>0.32 kA  |
| Short-circuit protection rating  |  | 20 A gG/gL, Fuse, Contacts  |
| <b>Switching capacity</b>  |  |   |
| Load rating  |  | 2 x I# (with intermittent operation class 12, 25 % duty factor)<br>1.6 x I# (with intermittent operation class 12, 40 % duty factor)<br>1.3 x I# (with intermittent operation class 12, 60 % duty factor) |
| Number of contacts in series at DC-21A, 240 V                          |  | 1   |
| Number of contacts in series at DC-23A, 24 V                           |  | 1   |
| Number of contacts in series at DC-23A, 48 V                           |  | 2   |
| Number of contacts in series at DC-23A, 60 V                           |  | 3   |
| Number of contacts in series at DC-23A, 120 V                          |  | 3   |

|  |  |  |
|--|--|--|
| Number of contacts in series at DC-23A, 240 V                                    |  | 5  |
| Rated making capacity up to 690 V (cos phi to IEC/EN 60947-3)                    |  | 130 A  |
| Voltage per contact pair in series   |  | 60 V   |
| <b>Contacts</b>  |  |  |
| Control circuit reliability  |  | 1 failure per 100,000 switching operations statistically determined, at 24 V DC, 10 mA)  |
| Number of auxiliary contacts (change-over contacts)                              |  | 0  |
| Number of auxiliary contacts (normally closed contacts)                          |  | 0  |
| Number of auxiliary contacts (normally open contacts)                            |  | 1  |
| <b>Actuator</b>  |  |  |
| Actuator color   |  | Black  |
| Actuator function  |  | Maintained   |
| Actuator type  |  | Short thumb-grip   |
| <b>Design verification</b>   |  |  |
| Equipment heat dissipation, current-dependent Pvid                               |  | 0.6 W  |
| Heat dissipation capacity Pdis   |  | 0 W  |
| Heat dissipation per pole, current-dependent Pvid                                |  | 0.6 W  |
| Rated operational current for specified heat dissipation (In)                    |  | 20 A   |
| Static heat dissipation, non-current-dependent Pvs                               |  | 0 W  |
| 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.   |
| 10.3 Degree of protection of assemblies  |  | Does not apply, since the entire switchgear needs to be evaluated.   |
| 10.4 Clearances and creepage distances   |  | Meets the product standard's requirements.   |
| 10.5 Protection against electric shock   |  | Does not apply, since the entire switchgear needs to be evaluated.   |
| 10.6 Incorporation of switching devices and components                           |  | Does not apply, since the entire switchgear needs to be evaluated.   |
| 10.7 Internal electrical circuits and connections                                |  | Is the panel builder's responsibility.   |
| 10.8 Connections for external conductors   |  | Is the panel builder's responsibility.   |
| 10.9.2 Power-frequency electric strength   |  | Is the panel builder's responsibility.   |
| 10.9.3 Impulse withstand voltage   |  | Is the panel builder's responsibility.   |
| 10.9.4 Testing of enclosures made of insulating material                         |  | Is the panel builder's responsibility.   |
| 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.                         |

## Technical data ETIM 9.0

|   |   |           |
|---|---|-----------|
| Low-voltage industrial components (EG000017) / Switch disconnecter (low voltage) (EC000216)   |   |           |
| Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnecter (ecl@ss13-27-37-14-03 [AKF060018]) |   |           |
| Version as main switch  |   | No        |
| Version as maintenance-/service switch  |   | No        |
| Version as safety switch  |   | No        |
| Version as emergency stop installation  |   | No        |
| Version as reversing switch   |   | No        |
| Number of switches  |   | 1         |
| Max. rated operation voltage Ue AC  | V | 690       |
| Rated operating voltage   | V | 690 - 690 |

|   |    |                            |
|---|----|----------------------------|
| Rated permanent current I <sub>u</sub>                  | A  | 20                         |
| Rated permanent current at AC-23, 400 V                 | A  | 13.3                       |
| Rated permanent current at AC-21, 400 V                 | A  | 20                         |
| Rated operation power at AC-3, 400 V                    | kW | 5.5                        |
| Rated short-time withstand current I <sub>cw</sub>      | kA | 0.32                       |
| Rated operation power at AC-23, 400 V                   | kW | 5.5                        |
| Switching power at 400 V                                | kW | 5.5                        |
| Conditioned rated short-circuit current I <sub>q</sub>  | kA | 6                          |
| Number of poles   |    | 3                          |
| Number of auxiliary contacts as normally closed contact |    | 0                          |
| Number of auxiliary contacts as normally open contact   |    | 1                          |
| Number of auxiliary contacts as change-over contact     |    | 0                          |
| Motor drive optional                                    |    | No                         |
| Motor drive integrated                                  |    | No                         |
| Voltage release optional                                |    | No                         |
| Device construction                                     |    | Complete device in housing |
| Suitable for floor mounting                             |    | Yes                        |
| Suitable for front mounting 4-hole                      |    | No                         |
| Suitable for front mounting centre                      |    | No                         |
| Suitable for distribution board installation            |    | No                         |
| Suitable for intermediate mounting                      |    | No                         |
| Colour control element                                  |    | Black                      |
| Type of control element                                 |    | Short thumb-grip           |
| Interlockable   |    | No                         |
| Type of electrical connection of main circuit           |    | Screw connection           |
| With pre-assembled cabling                              |    | No                         |
| Degree of protection (IP), front side                   |    | IP65                       |
| Degree of protection (NEMA)                             |    | 12                         |
| Width   | mm | 80                         |
| Height  | mm | 102                        |
| Depth   | mm | 137                        |
| Width in number of modular spacings                     |    |                            |