



□□□□

## Eaton 096654

Eaton Moeller® series T5 On-Off switch, T5, 100 A, rear mounting, 3 contact unit(s), 3 pole + N, 1 N/O, 1 N/C, with black thumb grip and front plate

□□□□

|                             |   |
|-----------------------------|---|
| <b>PRODUCT NAME</b>         | Eaton Moeller® series T5 On-off switch                          |
| <b>CATALOG NUMBER</b>       | 096654  |
| <b>PRODUCT LENGTH/DEPTH</b> | 165 mm  |
| <b>PRODUCT HEIGHT</b>       | 88 mm   |
| <b>PRODUCT WIDTH</b>        | 88 mm   |
| <b>PRODUCT WEIGHT</b>       | 0.623 kg  |
| <b>CERTIFICATIONS</b>       | IEC/EN 60204<br>VDE 0660<br>IEC/EN 60947-3<br>IEC/EN 60947      |
| <b>CATALOG NOTES</b>        | Rated Short-time Withstand Current (Icw) for a time of 1 second |



Powering Business Worldwide

□□□□

|   |  |
|---|--|
| <b>PRODUCT CATEGORY</b>   | On-Off switch  |
| <b>ACTUATOR COLOR</b>   | Black  |
| <b>ACTUATOR FUNCTION</b>  | Maintained   |
| <b>10.10 TEMPERATURE RISE</b>   | The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices. |
| <b>10.11 SHORT-CIRCUIT RATING</b>   | Is the panel builder's responsibility. The specifications for the switchgear must be observed.                                   |
| <b>10.12 ELECTROMAGNETIC COMPATIBILITY</b>  | Is the panel builder's responsibility. The specifications for the switchgear must be observed.                                   |
| <b>10.13 MECHANICAL FUNCTION</b>  | The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.                         |
| <b>10.2.2 CORROSION RESISTANCE</b>  | Meets the product standard's requirements.   |
| <b>10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES</b>                         | Meets the product standard's requirements.   |
| <b>10.2.3.2 VERIFICATION OF RESISTANCE OF INSULATING MATERIALS TO NORMAL HEAT</b>       | Meets the product standard's requirements.   |
| <b>10.2.3.3 RESIST. OF INSUL. MAT. TO ABNORMAL HEAT/FIRE BY INTERNAL ELECT. EFFECTS</b> | Meets the product standard's requirements.   |
| <b>10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION</b>                                 | UV resistance only in connection with protective shield.   |
| <b>10.2.5 LIFTING</b>   | Does not apply, since the entire switchgear needs to be evaluated.   |
| <b>10.2.6 MECHANICAL IMPACT</b>   | Does not apply, since the entire switchgear needs to be evaluated.   |
| <b>10.2.7 INSCRIPTIONS</b>  | Meets the product standard's requirements.   |
| <b>10.3 DEGREE OF PROTECTION OF ASSEMBLIES</b>  | Does not apply, since the entire switchgear needs to be evaluated.   |

□□

|       |   |
|-------|---|
| □□□□□ | <a href="#">IL03801009Z</a>   |
| □□□   | <a href="#">eaton-rotary-switches-t3-main-switch-wiring-diagram.eps</a>                   |
|       | <a href="#">eaton-rotary-switches-t3-main-switch-wiring-diagram-002.eps</a>               |
| □□    | <a href="#">eaton-rotary-switches-mounting-t5b-non-standard-switch-dimensions-012.eps</a> |
|       | <a href="#">eaton-rotary-switches-front-plate-t0-on-off-switch-symbol-002.eps</a>         |

|   |  |
|---|--|
| <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>   | Black thumb grip and 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>       | 45 kW  |
| <b>RATED OPERATIONAL POWER STAR-DELTA AT 690 V, 50 HZ</b>       | 22 kW  |
| <b>RATED PERMANENT CURRENT AT AC-21, 400 V</b>                  | 100 A  |
| <b>RATED UNINTERRUPTED CURRENT (IU)</b>                         | 100 A  |
| <b>STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS</b>       | 0 W  |
| <b>SWITCHING ANGLE</b>  | 90 °   |
| <b>SWITCHING POWER AT 400 V</b>                                 | 55 kW  |
| <b>VOLTAGE PER CONTACT PAIR IN SERIES</b>                       | 60 V   |

|  |   |
|--|---|
| <b>RATED OPERATIONAL POWER AT AC-3, 500 V, 50 HZ</b>           | 30 kW   |
| <b>DEVICE CONSTRUCTION</b>                                     | Built-in device fixed built-in technique  |
| <b>RATED SHORT-TIME WITHSTAND CURRENT (ICW)</b>                | 1,7 kA, Contacts, 1 second<br>1.7 kA  |
| <b>ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT</b>              | Screw connection  |
| <b>DESIGN</b>  | 130   |
| <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>EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID</b>      | 0 W   |
| <b>HEAT DISSIPATION CAPACITY PDISS</b>                         | 0 W   |
| <b>HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID</b>       | 7.5 W   |
| <b>NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS)</b>     | 0   |
| <b>NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)</b> | 1   |
| <b>RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ)</b>            | 2 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>   | 4   |
| <b>MOUNTING METHOD</b>   | Rear mounting   |

|  |   |
|--|---|
| <b>DEGREE OF PROTECTION</b>  | NEMA 12   |
| <b>SUITABLE FOR</b>  | Intermediate mounting<br>Ground mounting  |
| <b>NUMBER OF SWITCHES</b>  | 1   |
| <b>SAFE ISOLATION</b>  | 440 V AC, Between the contacts, According to EN 61140   |
| <b>SCREW SIZE</b>  | M6, 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>  | 500,000 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)         |
| <b>TERMINAL CAPACITY</b>   | 1 x (1 - 25) mm <sup>2</sup> , flexible with ferrules to DIN 46228<br>2 x (2.5 - 16) mm <sup>2</sup> , solid or stranded<br>1 x (2.5 - 35) mm <sup>2</sup> , solid or stranded<br>2 x (1.5 - 10) mm <sup>2</sup> , flexible with ferrule to DIN 46228 |
| <b>SWITCHING CAPACITY (MAIN CONTACTS, GENERAL USE)</b>               | 63 A, Rated uninterrupted current max. (UL/CSA)   |
| <b>SAFETY PARAMETER (EN ISO 13849-1)</b>                             | B10d values as per EN ISO 13849-1, table C.1  |
| <b>NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)</b>         | 1   |
| <b>NUMBER OF CONTACT UNITS</b>                                       | 3   |
| <b>RATED BREAKING CAPACITY AT 220/230 V (COS PHI TO IEC 60947-3)</b> | 760 A   |
| <b>RATED BREAKING CAPACITY AT 400/415 V (COS PHI TO IEC 60947-3)</b> | 740 A   |
| <b>RATED BREAKING CAPACITY AT 500 V (COS PHI TO IEC 60947-3)</b>     | 590 A   |
| <b>RATED BREAKING CAPACITY AT 660/690 V (COS PHI TO IEC 60947-3)</b> | 420 A   |

|   |                             |
|---|-----------------------------|
| <b>RATED MAKING CAPACITY UP TO 690 V (COS PHI TO IEC/EN 60947-3)</b>          | 950 A                       |
| <b>RATED OPERATING VOLTAGE (UE) - MAX</b>                                     | 690 V                       |
| <b>RATED OPERATING VOLTAGE (UE) - MIN</b>                                     | 690 V                       |
| <b>RATED OPERATIONAL VOLTAGE (UE) AT AC - MAX</b>                             | 690 V                       |
| <b>SHORT-CIRCUIT PROTECTION RATING</b>  | 100 A gG/gL, Fuse, Contacts |
| <b>RATED OPERATIONAL CURRENT (IE) AT AC-21, 440 V</b>                         | 100 A                       |
| <b>RATED OPERATIONAL CURRENT (IE) AT AC-23A, 230 V</b>                        | 100 A                       |
| <b>RATED OPERATIONAL CURRENT (IE) AT AC-23A, 400 V, 415 V</b>                 | 100 A                       |
| <b>RATED OPERATIONAL CURRENT (IE) AT AC-23A, 500 V</b>                        | 55 A                        |
| <b>RATED OPERATIONAL CURRENT (IE) AT AC-23A, 690 V</b>                        | 32 A                        |
| <b>RATED OPERATIONAL CURRENT (IE) AT AC-3, 220 V, 230 V, 240 V</b>            | 71 A                        |
| <b>RATED OPERATIONAL CURRENT (IE) AT AC-3, 380 V, 400 V, 415 V</b>            | 55 A                        |
| <b>RATED OPERATIONAL CURRENT (IE) AT AC-3, 500 V</b>                          | 44 A                        |
| <b>RATED OPERATIONAL CURRENT (IE) AT AC-3, 660 V, 690 V</b>                   | 17 A                        |
| <b>RATED OPERATIONAL CURRENT (IE) AT DC-1, LOAD-BREAK SWITCHES L/R = 1 MS</b> | 80 A                        |
| <b>RATED OPERATIONAL CURRENT (IE) STAR-DELTA AT AC-3, 220/230 V</b>           | 100 A                       |
| <b>RATED OPERATIONAL CURRENT (IE) STAR-DELTA AT AC-3, 380/400 V</b>           | 95.3 A                      |
| <b>RATED OPERATIONAL CURRENT (IE) STAR-DELTA AT AC-3, 500 V</b>               | 76.2 A                      |

|  |   |
|--|---|
| <b>RATED OPERATIONAL CURRENT (IE) STAR-DELTA AT AC-3, 690 V</b>      | 29.4 A  |
| <b>RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)</b> | 100 A   |
| <b>RATED OPERATIONAL POWER AT AC-23A, 220/230 V, 50 HZ</b>           | 30 kW   |
| <b>RATED OPERATIONAL POWER AT AC-23A, 400 V, 50 HZ</b>               | 55 kW   |
| <b>RATED OPERATIONAL POWER AT AC-23A, 500 V, 50 HZ</b>               | 37 kW   |
| <b>RATED OPERATIONAL POWER AT AC-23A, 690 V, 50 HZ</b>               | 30 kW   |
| <b>RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ</b>             | 30 kW   |
| <b>RATED OPERATIONAL POWER AT AC-3, 415 V, 50 HZ</b>                 | 30 kW   |
| <b>RATED OPERATIONAL POWER AT AC-3, 690 V, 50 HZ</b>                 | 15 kW   |
| <b>RATED OPERATIONAL POWER STAR-DELTA AT 220/230 V, 50 HZ</b>        | 30 kW   |
| <b>RATED OPERATIONAL POWER STAR-DELTA AT 380/400 V, 50 HZ</b>        | 45 kW   |
| <b>TIGHTENING TORQUE</b>   | 4 Nm, Screw terminals   |
| <b>UNINTERRUPTED CURRENT</b>   | Rated uninterrupted current I <sub>u</sub> is specified for max. cross-section. |
| <b>HOUSING MATERIAL</b>  | Plastic   |

