



Eaton 011110

Eaton Moeller® series T0 On-Off switch, 3 pole + N, 20 A, 90 °, rear mounting T0-2-10/Z

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| PRODUCT NAME | Eaton Moeller® series T0 On-off switch |
| CATALOG NUMBER | 011110 |
| PRODUCT LENGTH/DEPTH | 128 mm |
| PRODUCT HEIGHT | 48 mm |
| PRODUCT WIDTH | 48 mm |
| PRODUCT WEIGHT | 0.134 kg |
| CERTIFICATIONS | CSA Class No.: 3211-05 IEC/EN 60204 UL 60947-4-1 CSA-C22.2 No. 94 UL File No.: E36332 UL Category Control No.: NLRV IEC/EN 60947-3 UL CSA File No.: 012528 IEC/EN 60947 CSA CE VDE 0660 CSA-C22.2 No. 60947-4-1- 14 |
| CATALOG NOTES | Rated Short-time Withstand Current (Icw) for a time of 1 second |

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| PRODUCT CATEGORY | On-Off switch |
| ACTUATOR COLOR | Black |
| 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. |
| 10.3 DEGREE OF PROTECTION OF ASSEMBLIES | Does not apply, since the entire switchgear needs to be evaluated. |

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| DECLARATIONS OF CONFORMITY | eaton-step-switch-declaration-of-conformity-uk251327en.pdf |
| IL03801021Z | eaton-rotary-switches-t0-on-off-switch-wiring-diagram-027.eps |
| | eaton-rotary-switches-t0-on-off-switch-wiring-diagram-028.eps |
| | eaton-rotary-switches-mounting-t0-step-switch-dimensions-019.eps |
| | eaton-rotary-switches-front-plate-t0-on-off-switch-symbol-002.eps |

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| 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. |
| FITTED WITH: | Black thumb grip and front plate |
| OPERATING FREQUENCY | 1200 Operations/h |
| POLLUTION DEGREE | 3 |
| CLIMATIC PROOFING | Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 |
| RATED IMPULSE WITHSTAND VOLTAGE (UIMP) | 6000 V AC |
| 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 PERMANENT CURRENT AT AC-21, 400 V | 20 A |
| RATED UNINTERRUPTED CURRENT (IU) | 20 A |
| STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS | 0 W |
| SWITCHING ANGLE | 90 ° |
| SWITCHING POWER AT 400 V | 5.5 kW |
| VOLTAGE PER CONTACT PAIR IN SERIES | 60 V |

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| RATED OPERATIONAL POWER AT AC-3, 500 V, 50 HZ | 5.5 kW |
| DEVICE CONSTRUCTION | Built-in device fixed built-in technique |
| RATED SHORT-TIME WITHSTAND CURRENT (ICW) | 0.32 kA 320 A, Contacts, 1 second |
| ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT | Screw connection |
| DESIGN | 10 |
| MOUNTING POSITION | As required |
| ACTUATOR TYPE | Door coupling rotary drive |
| AMBIENT OPERATING TEMPERATURE - MAX | 50 °C |
| AMBIENT OPERATING TEMPERATURE - MIN | -25 °C |
| AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX | 40 °C |
| AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MIN | -25 °C |
| ASSIGNED MOTOR POWER AT 115/120 V, 60 HZ, 1-PHASE | 0.5 HP |
| ASSIGNED MOTOR POWER AT 200/208 V, 60 HZ, 1-PHASE | 1 HP |
| ASSIGNED MOTOR POWER AT 200/208 V, 60 HZ, 3-PHASE | 3 HP |
| ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 1-PHASE | 1.5 HP |
| ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 3-PHASE | 3 HP |
| ASSIGNED MOTOR POWER AT 460/480 V, 60 HZ, 3-PHASE | 7.5 HP |
| ASSIGNED MOTOR POWER AT 575/600 V, 60 HZ, 3-PHASE | 7.5 HP |
| EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT PVID | 0 W |
| HEAT DISSIPATION CAPACITY PDISS | 0 W |
| HEAT DISSIPATION PER | 0.6 W |

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| POLE, CURRENT-DEPENDENT PVID | |
| NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS) | 0 |
| NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS) | 0 |
| RATED CONDITIONAL SHORT-CIRCUIT CURRENT (I_Q) | 6 kA |
| OVERVOLTAGE CATEGORY | III |
| CONTROL CIRCUIT RELIABILITY | 1 failure per 100,000 switching operations statistically determined, at 24 V DC, 10 mA) |
| DEGREE OF PROTECTION (FRONT SIDE) | IP65 |
| NUMBER OF POLES | 4 |
| MOUNTING METHOD | Rear mounting |
| DEGREE OF PROTECTION | NEMA 12 |
| SUITABLE FOR | Intermediate mounting Branch circuits, suitable as motor disconnect, (UL/CSA) Ground mounting |
| NUMBER OF SWITCHES | 1 |
| SAFE ISOLATION | 440 V AC, Between the contacts, According to EN 61140 |
| SCREW SIZE | M3.5, Terminal screw |
| INSCRIPTION | 0-1 |
| SHOCK RESISTANCE | 15 g, Mechanical, According to IEC/EN 60068-2-27, Half-sinusoidal shock 20 ms |
| LIFESPAN, MECHANICAL | 400,000 Operations |
| LOAD RATING | 2 x I _e (with intermittent operation class 12, 25 % duty factor) 1.6 x I _e (with intermittent operation class 12, 40 % duty factor) 1.3 x I _e (with intermittent operation class 12, 60 % duty factor) |
| SWITCHING CAPACITY (AUXILIARY CONTACTS, GENERAL USE) | 10A, IU, (UL/CSA) |
| SWITCHING CAPACITY (AUXILIARY CONTACTS, | P300 (UL/CSA) A600 (UL/CSA) |

PILOT DUTY)

18 - 14 AWG, solid or
flexible with ferrule
2 x (1 - 2.5) mm², solid or
stranded
2 x (0.75 - 2.5) mm²,
flexible with ferrules to
DIN 46228
1 x (0.75 - 2.5) mm²,
flexible with ferrules to
DIN 46228
1 x (1 - 2.5) mm², solid or
stranded

TERMINAL CAPACITY

1 x (1 - 2.5) mm²,
flexible with ferrules to
DIN 46228
1 x (1 - 2.5) mm², solid or
stranded

**SWITCHING CAPACITY
(MAIN CONTACTS,
GENERAL USE)**

16 A, Rated uninterrupted
current max. (UL/CSA)

**SAFETY PARAMETER (EN
ISO 13849-1)**

B10d values as per EN ISO
13849-1, table C.1

**NUMBER OF AUXILIARY
CONTACTS (NORMALLY
OPEN CONTACTS)**

0

**NUMBER OF CONTACT
UNITS**

2

**NUMBER OF CONTACTS
IN SERIES AT DC-21A, 240
V**

1

**NUMBER OF CONTACTS
IN SERIES AT DC-23A, 120
V**

3

**NUMBER OF CONTACTS
IN SERIES AT DC-23A, 24 V**

1

**NUMBER OF CONTACTS
IN SERIES AT DC-23A, 240
V**

5

**NUMBER OF CONTACTS
IN SERIES AT DC-23A, 48 V**

2

**NUMBER OF CONTACTS
IN SERIES AT DC-23A, 60 V**

3

**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 MAKING
CAPACITY UP TO 690 V
(COS PHI TO IEC/EN**

130 A

60947-3)

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| RATED OPERATING VOLTAGE (UE) - MAX | 690 V |
| RATED OPERATING VOLTAGE (UE) - MIN | 690 V |
| RATED OPERATIONAL VOLTAGE (UE) AT AC - MAX | 690 V |
| SHORT-CIRCUIT CURRENT RATING (BASIC RATING) | 5 kA, SCCR (UL/CSA) 50A, max. Fuse, SCCR (UL/CSA) |
| SHORT-CIRCUIT CURRENT RATING (HIGH FAULT) | 10 kA, SCCR (UL/CSA) 20 A, Class J, max. Fuse, SCCR (UL/CSA) |
| SHORT-CIRCUIT PROTECTION RATING | 20 A gG/gL, Fuse, Contacts |
| 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 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 DC-1, LOAD-BREAK SWITCHES L/R = 1 MS | 10 A |
| RATED OPERATIONAL CURRENT (IE) AT DC-13, CONTROL SWITCHES L/R = 50 MS | 10 A |
| RATED OPERATIONAL | 1 A |

CURRENT (IE) AT DC-21,

240 V

RATED OPERATIONAL

CURRENT (IE) AT DC-23A, 5 A

120 V

RATED OPERATIONAL

CURRENT (IE) AT DC-23A, 10 A

24 V

RATED OPERATIONAL

CURRENT (IE) AT DC-23A, 5 A

240 V

RATED OPERATIONAL

CURRENT (IE) AT DC-23A, 10 A

48 V

RATED OPERATIONAL

CURRENT (IE) AT DC-23A, 10 A

60 V

RATED OPERATIONAL

CURRENT (IE) STAR- 20 A

DELTA AT AC-3, 220/230 V

RATED OPERATIONAL

CURRENT (IE) STAR- 20 A

DELTA AT AC-3, 380/400 V

RATED OPERATIONAL

CURRENT (IE) STAR- 15.6 A

DELTA AT AC-3, 500 V

RATED OPERATIONAL

CURRENT (IE) STAR- 8.5 A

DELTA AT AC-3, 690 V

RATED OPERATIONAL

CURRENT FOR SPECIFIED 20 A

HEAT DISSIPATION (IN)

RATED OPERATIONAL

POWER AT AC-23A, 3 kW

220/230 V, 50 Hz

RATED OPERATIONAL

POWER AT AC-23A, 400 V, 5.5 kW

50 Hz

RATED OPERATIONAL

POWER AT AC-23A, 500 V, 7.5 kW

50 Hz

RATED OPERATIONAL

POWER AT AC-23A, 690 V, 5.5 kW

50 Hz

RATED OPERATIONAL

POWER AT AC-3, 380/400 5.5 kW

V, 50 Hz

RATED OPERATIONAL

POWER AT AC-3, 415 V, 50 5.5 kW

Hz

RATED OPERATIONAL

POWER AT AC-3, 690 V, 50 4 kW

Hz

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| 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 1 Nm, Screw terminals |
| UNINTERRUPTED CURRENT | Rated uninterrupted current I_u is specified for max. cross-section. |
| HOUSING COLOR | Black |
| HOUSING MATERIAL | Plastic |

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