Eaton 081587

Eaton Moeller® series P1 Main switch, P1, 25 A, flush mounting, 3 pole + N, Emergency switching off function, With red rotary handle and yellow locking ring, Lockable in the 0 (Off) position

| PRODUCT NAME | Eaton Moeller® series P1 Main switch |
|-------------------------|---|
| CATALOG NUMBER | 081587 |
| PRODUCT LENGTH/DEPTH | 119 mm |
| PRODUCT HEIGHT | 65 mm |
| PRODUCT WIDTH | 83 mm |
| PRODUCT WEIGHT | 0.22 kg |
| CERTIFICATIONS | UL IEC/EN 60204 CSA-C22.2 No. 60947-4-1- 14 UL Category Control No.: NLRV CSA File No.: 012528 UL File No.: E36332 CSA IEC/EN 60947-3 VDE 0660 CSA-C22.2 No. 94 IEC/EN 60947 UL 60947-4-1 CE CSA Class No.: 3211-05 |
| CATALOG NOTES | Rated Short-time Withstand Current (lcw) for a time of 1 second |



| PRODUCT CATEGORY | Main switch |
|--|--|
| FEATURES | Version as emergency stop installation Version as main switch Version as maintenance- /service switch |
| ACTUATOR COLOR | Red |
| 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 | Does not apply, since the |

| eaton-rotary-switches-on- off-switch-p3-main-switch- wiring-diagram-002.eps |
|---|
| eaton-rotary-switches- mounting-p1-main-switch- dimensions.eps |

| IMPACT | 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 | ls the panel builder's responsibility. |
| 10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS | ls the panel builder's responsibility. |
| 10.9.2 POWER- FREQUENCY ELECTRIC STRENGTH | ls the panel builder's responsibility. |
| 10.9.3 IMPULSE WITHSTAND VOLTAGE | ls the panel builder's responsibility. |
| 10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL | ls the panel builder's responsibility. |
| FITTED WITH: | Red rotary handle and yellow locking ring |
| OPERATING FREQUENCY | 1200 Operations/h |
| POLLUTION DEGREE | 3 |
| CLIMATIC PROOFING | Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 |
| RATED IMPULSE WITHSTAND VOLTAGE (UIMP) | 6000 V AC |
| RATED PERMANENT CURRENT AT AC-21, 400 V | 25 A |
| RATED PERMANENT CURRENT AT AC-23, 400 V | 25 A |
| RATED UNINTERRUPTED CURRENT (IU) | 25 A |
| STATIC HEAT DISSIPATION, NON- CURRENT-DEPENDENT PVS | 0 W |

| SWITCHING POWER AT 400 V | 13 kW |
|---|--|
| VOLTAGE PER CONTACT PAIR IN SERIES | 60 V |
| ACCESSORIES | Auxiliary contact fitted by user. |
| RATED OPERATIONAL POWER AT AC-3, 500 V, 50 HZ | 7.5 kW |
| DEVICE CONSTRUCTION | Built-in device fixed built- in technique |
| RATED SHORT-TIME WITHSTAND CURRENT (ICW) | 0.64 kA 640 A, Contacts, 1 second |
| ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT | Screw connection |
| 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 | 1 HP |
| ASSIGNED MOTOR POWER AT 200/208 V, 60 HZ, 1-PHASE | 2 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 | 3 HP |
| ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 3-PHASE | 5 HP |
| ASSIGNED MOTOR POWER AT 460/480 V, 60 HZ, 3-PHASE | 10 HP |
| ASSIGNED MOTOR POWER AT 575/600 V, 60 | 15 HP |

| HZ, 3-PHASE | |
|---|---|
| EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT PVID | 0 W |
| HEAT DISSIPATION CAPACITY PDISS | 0 W |
| HEAT DISSIPATION PER POLE, CURRENT- DEPENDENT PVID | 1.1 W |
| NUMBER OF AUXILIARY CONTACTS (CHANGE- OVER CONTACTS) | 0 |
| NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS) | 0 |
| RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ) | 50 kA |
| OVERVOLTAGE CATEGORY | Ш |
| CONTROL CIRCUIT RELIABILITY | 1 failure per 100,000 switching operations statistically determined, at 24 V DC, 10 mA) |
| DEGREE OF PROTECTION | IP65 |
| (FRONT SIDE) | |
| NUMBER OF POLES | 4 |
| - | 4 Flush mounting |
| NUMBER OF POLES | <u> </u> |
| NUMBER OF POLES MOUNTING METHOD | Flush mounting |
| NUMBER OF POLES MOUNTING METHOD DEGREE OF PROTECTION | Flush mounting NEMA 12 Branch circuits, suitable as motor disconnect, (UL/CSA) |
| NUMBER OF POLES MOUNTING METHOD DEGREE OF PROTECTION SUITABLE FOR | Flush mounting NEMA 12 Branch circuits, suitable as motor disconnect, (UL/CSA) Front mounting 4-hole Lockable in the 0 (Off) |
| NUMBER OF POLES MOUNTING METHOD DEGREE OF PROTECTION SUITABLE FOR LOCKING FACILITY | Flush mounting NEMA 12 Branch circuits, suitable as motor disconnect, (UL/CSA) Front mounting 4-hole Lockable in the 0 (Off) position Interlockable Emergency switching off |
| NUMBER OF POLES MOUNTING METHOD DEGREE OF PROTECTION SUITABLE FOR LOCKING FACILITY FUNCTIONS | Flush mounting NEMA 12 Branch circuits, suitable as motor disconnect, (UL/CSA) Front mounting 4-hole Lockable in the 0 (Off) position Interlockable Emergency switching off function |
| NUMBER OF POLES MOUNTING METHOD DEGREE OF PROTECTION SUITABLE FOR LOCKING FACILITY FUNCTIONS NUMBER OF SWITCHES | Flush mounting NEMA 12 Branch circuits, suitable as motor disconnect, (UL/CSA) Front mounting 4-hole Lockable in the 0 (Off) position Interlockable Emergency switching off function 1 440 V AC, Between the contacts, According to EN |
| NUMBER OF POLES MOUNTING METHOD DEGREE OF PROTECTION SUITABLE FOR LOCKING FACILITY FUNCTIONS NUMBER OF SWITCHES SAFE ISOLATION | Flush mounting NEMA 12 Branch circuits, suitable as motor disconnect, (UL/CSA) Front mounting 4-hole Lockable in the 0 (Off) position Interlockable Emergency switching off function 1 440 V AC, Between the contacts, According to EN 61140 |

| LOAD RATING | $2 \times l_e$ (with intermittent operation class 12, 25 % duty factor) $1.3 \times l_e$ (with intermittent operation class 12, 60 % duty factor) $1.6 \times l_e$ (with intermittent operation class 12, 40 % duty factor) |
|---|---|
| SWITCHING CAPACITY (AUXILIARY CONTACTS, GENERAL USE) | 10A, IU, (UL/CSA) |
| SWITCHING CAPACITY (AUXILIARY CONTACTS, PILOT DUTY) | P600 (UL/CSA) A600 (UL/CSA) |
| TERMINAL CAPACITY | 1 x (1.5 - 6) mm ² , solid or stranded 1 x (1 - 4) mm ² , flexible with ferrules to DIN 46228 2 x (1.5 - 6) mm ² , solid or stranded 2 x (1 - 4) mm ² , flexible with ferrules to DIN 46228 14 - 8 AWG, solid or flexible with ferrule |
| SWITCHING CAPACITY (MAIN CONTACTS, GENERAL USE) | 20 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 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, 48 V | 2 |
| NUMBER OF CONTACTS IN SERIES AT DC-23A, 60 V | 2 |
| RATED BREAKING CAPACITY AT 220/230 V (COS PHI TO IEC 60947-3) | 190 A |
| RATED BREAKING CAPACITY AT 400/415 V (COS PHI TO IEC 60947-3) | 150 A |
| RATED BREAKING CAPACITY AT 500 V (COS PHI TO IEC 60947-3) | 170 A |

| RATED BREAKING CAPACITY AT 660/690 V (COS PHI TO IEC 60947-3) | 150 A |
|--|--|
| RATED MAKING CAPACITY UP TO 690 V (COS PHI TO IEC/EN 60947-3) | 240 A |
| 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) 110A, max. Fuse, SCCR (UL/CSA) |
| SHORT-CIRCUIT CURRENT RATING (HIGH FAULT) | 50 A, Class J, max. Fuse, SCCR (UL/CSA) 10 kA, SCCR (UL/CSA) |
| SHORT-CIRCUIT PROTECTION RATING | 25 A gG/gL, Fuse, Contacts |
| RATED OPERATIONAL CURRENT (IE) AT AC-21, 440 V | 25 A |
| RATED OPERATIONAL CURRENT (IE) AT AC-23A, 230 V | 25 A |
| RATED OPERATIONAL CURRENT (IE) AT AC-23A, 400 V, 415 V | 25 A |
| RATED OPERATIONAL CURRENT (IE) AT AC-23A, 500 V | 17.4 A |
| RATED OPERATIONAL CURRENT (IE) AT AC-23A, 690 V | 12.6 A |
| RATED OPERATIONAL CURRENT (IE) AT AC-3, 220 V, 230 V, 240 V | 19.6 A |
| RATED OPERATIONAL CURRENT (IE) AT AC-3, 380 V, 400 V, 415 V | 15.2 A |
| RATED OPERATIONAL CURRENT (IE) AT AC-3, 500 V | 12.1 A |
| RATED OPERATIONAL CURRENT (IE) AT AC-3, 660 V, 690 V | 8.8 A |
| RATED OPERATIONAL | 25 A |

| 12 A |
|---|
| 25 A |
| 25 A |
| 25 A |
| 25 A |
| 5.5 kW |
| 13 kW |
| 11 kW |
| 11 kW |
| 7.5 kW |
| 7.5 kW |
| 7.5 kW |
| 14.1 lb-in, Screw terminals 1.6 Nm, Screw terminals |
| Rated uninterrupted current lu is specified for max. cross-section. |
| |

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



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