

Eaton 199964

Eaton Moeller® series P1 On-Off switch, 40 A, rear mounting, 3 pole, with black thumb grip and front plate

| 0000 | |
|-------------------------|---|
| PRODUCT NAME | Eaton Moeller® series P1 On-off switch |
| CATALOG NUMBER | 199964 |
| PRODUCT LENGTH/DEPTH | 130 mm |
| PRODUCT HEIGHT | 70 mm |
| PRODUCT WIDTH | 49 mm |
| PRODUCT WEIGHT | 0.131 kg |
| COMPLIANCES | UKCA CE |
| CERTIFICATIONS | IEC/EN 60947 IEC/EN 60947-3 IEC/EN 60204 |
| CATALOG NOTES | Rated Short-time Withstand Current (lcw) for a time of 1 second |



| PRODUCT CATEGORY | On-Off switch |
|---|--|
| ACTUATOR COLOR | Black |
| 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 entire switchgear needs to be evaluated. |
| IMPACT | be evaluated. |
| | Meets the product standard's requirements. |
| IMPACT | Meets the product |

| 00 | |
|----------------------------|--|
| DECLARATIONS OF CONFORMITY | eaton-on-off-switch- declaration-of-conformity- uk251288en.pdf |

| TOPE PAGE DISTANCES 10.5 PROTECTION AGAINST ELECTRIC SHOCK 10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS 10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS 10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS 10.9.2 POWER- FREQUENCY ELECTRIC STRENGTH 10.9.3 IMPULSE WITHSTAND VOLTAGE 10.9.4 TESTING OF INSULATING MATERIAL FITTED WITH: CLIMATIC PROOFING RATED IMPULSE WITHSTAND VOLTAGE CLIMATIC PROOFING RATED PERMANENT CURRENT AT AC-21, 400 V RATED PERMANENT CURRENT (IU) STATIC HEAT | | |
|--|--|--|
| AGAINST ELECTRIC SHOCK 10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS 10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS 10.8 CONNECTIONS 10.9.2 POWER- FREQUENCY ELECTRIC STRENGTH 10.9.3 IMPULSE WITHSTAND VOLTAGE INSULATING MATERIAL FITTED WITH: CLIMATIC PROOFING RATED IMPULSE WITHSTAND VOLTAGE (UIMP) RATED PERMANENT CURRENT AT AC-21, 400 V RATED PERMANENT CURRENT (IU) Does not apply, since the entire switchgear needs to be evaluated. Does not apply, since the entire switchgear needs to be evaluated. Is the panel builder's responsibility. Black thumb grip and front plate Auxiliary contact OPERATING FREQUENCY 50 Operations/h Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 RATED IMPULSE WITHSTAND VOLTAGE (UIMP) RATED PERMANENT CURRENT AT AC-21, 400 V RATED UNINTERRUPTED CURRENT (IU) 40 A | CREEPAGE DISTANCES | standard's requirements. |
| SWITCHING DEVICES AND COMPONENTS 10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS 10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS 10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH 10.9.3 IMPULSE WITHSTAND VOLTAGE FITTED WITH: CLIMATIC PROOFING RATED IMPULSE WITHSTAND VOLTAGE RATED PERMANENT CURRENT AT AC-21, 400 V RATED UNINTERRUPTED CURRENT (IU) 10.7 INTERNAL ELECTRIC Streeponsibility. Is the panel builder's responsibility. Is the panel builder | AGAINST ELECTRIC | entire switchgear needs to |
| Is the panel builder's responsibility. | SWITCHING DEVICES AND | entire switchgear needs to |
| TEXTERNAL CONDUCTORS 10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH 10.9.3 IMPULSE Is the panel builder's responsibility. 10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL FITTED WITH: CLIMATIC PROOFING RATED IMPULSE WITHSTAND VOLTAGE RATED PERMANENT CURRENT AT AC-21, 400 V RATED UNINTERRUPTED CURRENT (IU) 10.9.4 TESTING OF Exponsibility. Is the panel builder's responsibility. Is the panel b | ELECTRICAL CIRCUITS | |
| FREQUENCY ELECTRIC STRENGTH 10.9.3 IMPULSE WITHSTAND VOLTAGE 10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL FITTED WITH: COPERATING FREQUENCY POLLUTION DEGREE CLIMATIC PROOFING RATED IMPULSE WITHSTAND VOLTAGE (UIMP) RATED PERMANENT CURRENT AT AC-23, 400 V RATED UNINTERRUPTED CURRENT (IU) Is the panel builder's responsibility. | | |
| MITHSTAND VOLTAGE 10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL FITTED WITH: Black thumb grip and front plate Auxiliary contact OPERATING FREQUENCY POLLUTION DEGREE CLIMATIC PROOFING CLIMATIC PROOFING RATED IMPULSE WITHSTAND VOLTAGE (UIMP) RATED PERMANENT CURRENT AT AC-21, 400 V RATED UNINTERRUPTED CURRENT (IU) RATED UNINTERRUPTED CURRENT (IU) Is the panel builder's responsibility. Black thumb grip and front plate Auxiliary contact Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 AUXILIARY AC 400 A A A A A A A A A A A A A A A A A A | FREQUENCY ELECTRIC | |
| Is the panel builder's responsibility. Black thumb grip and front plate Auxiliary contact OPERATING FREQUENCY POLLUTION DEGREE CLIMATIC PROOFING CLIMATIC PROOFING Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 RATED IMPULSE WITHSTAND VOLTAGE (UIMP) RATED PERMANENT CURRENT AT AC-21, 400 V RATED UNINTERRUPTED CURRENT (IU) RATED UNINTERRUPTED CURRENT (IU) RATED VININTERRUPTED CURRENT (IU) | | |
| FITTED WITH: front plate Auxiliary contact OPERATING FREQUENCY FOLLUTION DEGREE CLIMATIC PROOFING Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 RATED IMPULSE WITHSTAND VOLTAGE (UIMP) RATED PERMANENT CURRENT AT AC-21, 400 V RATED PERMANENT CURRENT AT AC-23, 400 V RATED UNINTERRUPTED CURRENT (IU) AU A 40 A | ENCLOSURES MADE OF | • |
| POLLUTION DEGREE CLIMATIC PROOFING Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 RATED IMPULSE WITHSTAND VOLTAGE (UIMP) RATED PERMANENT CURRENT AT AC-21, 400 V RATED PERMANENT CURRENT AT AC-23, 400 V RATED UNINTERRUPTED CURRENT (IU) AU A 40 A | FITTED WITH: | front plate |
| CLIMATIC PROOFING Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 RATED IMPULSE WITHSTAND VOLTAGE (UIMP) RATED PERMANENT CURRENT AT AC-21, 400 V RATED PERMANENT CURRENT AT AC-23, 400 V RATED UNINTERRUPTED CURRENT (IU) Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 40 A 40 A | OPERATING FREQUENCY | 50 Operations/h |
| CLIMATIC PROOFING IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 RATED IMPULSE WITHSTAND VOLTAGE (UIMP) RATED PERMANENT CURRENT AT AC-21, 400 V RATED PERMANENT CURRENT AT AC-23, 400 V RATED UNINTERRUPTED CURRENT (IU) RATED UNINTERRUPTED | POLLUTION DEGREE | 3 |
| WITHSTAND VOLTAGE (UIMP) RATED PERMANENT CURRENT AT AC-21, 400 V RATED PERMANENT CURRENT AT AC-23, 400 V RATED UNINTERRUPTED CURRENT (IU) 6000 V AC 40 A 40 A | CLIMATIC PROOFING | IEC 60068-2-78 Damp heat, cyclic, to IEC |
| CURRENT AT AC-21, 400 V RATED PERMANENT CURRENT AT AC-23, 400 V RATED UNINTERRUPTED CURRENT (IU) 40 A 40 A | WITHSTAND VOLTAGE | 6000 V AC |
| CURRENT AT AC-23, 400 V RATED UNINTERRUPTED CURRENT (IU) 40 A | | 40 A |
| CURRENT (IU) | | 40 A |
| STATIC HEAT | | 40 A |
| DISSIPATION, NON- CURRENT-DEPENDENT PVS | DISSIPATION, NON- CURRENT-DEPENDENT | 0 W |
| SWITCHING ANGLE 90 ° | SWITCHING ANGLE | 90 ° |
| SWITCHING POWER AT | SWITCHING POWER AT 400 V | 22 kW |
| 400 V | DEVICE CONSTRUCTION | Built-in device fixed built- in technique |
| DEVICE CONSTRUCTION Built-in device fixed built- | RATED SHORT-TIME WITHSTAND CURRENT (ICW) | 0.64 kA 640 A, Contacts, 1 second |
| DEVICE CONSTRUCTION Built-in device fixed built-in technique RATED SHORT-TIME WITHSTAND CURRENT 0.64 kA 640 A. Contacts, 1 second | ELECTRICAL | Screw connection |

| CONNECTION TYPE OF | |
|---|--|
| MAIN CIRCUIT | |
| MOUNTING POSITION | As required |
| ACTUATOR TYPE | Short thumb-grip |
| 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 |
| EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT PVID | 0 W |
| HEAT DISSIPATION CAPACITY PDISS | 0 W |
| HEAT DISSIPATION PER POLE, CURRENT- DEPENDENT PVID | 1.9 W |
| NUMBER OF AUXILIARY CONTACTS (CHANGE- OVER CONTACTS) | 0 |
| NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS) | 0 |
| HANDLE COLOR | Black |
| RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ) | 80 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 | 3 |
| MOUNTING METHOD | Rear mounting |
| DEGREE OF PROTECTION | IP65 NEMA Other |
| NUMBER OF SWITCHES | 1 |
| SAFE ISOLATION | 440 V AC, Between the contacts, According to EN 61140 |
| SCREW SIZE | M4, Terminal screw |
| SHOCK RESISTANCE | 15 g, Mechanical, |
| | |

| | According to IEC/EN 60068-2-27, Half- sinusoidal shock 20 ms |
|---|---|
| LIFESPAN, MECHANICAL | 300,000 Operations |
| LOAD RATING | $1.3 \times l_e$ (with intermittent operation class 12, 60 % duty factor) $1.6 \times l_e$ (with intermittent operation class 12, 40 % duty factor) $2 \times l_e$ (with intermittent operation class 12, 25 % duty factor) |
| TERMINAL CAPACITY | 1 x (1 - 4) mm², flexible with ferrules to DIN 46228 2 x (1 - 4) mm², flexible with ferrules to DIN 46228 1 x 10 mm² with fork terminal 2 x 10 mm² with fork terminal |
| NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS) | 0 |
| RATED BREAKING CAPACITY AT 400/415 V (COS PHI TO IEC 60947-3) | 290 kA |
| RATED BREAKING CAPACITY AT 660/690 V (COS PHI TO IEC 60947-3) | 130 kA |
| 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 PROTECTION RATING | 50 A gG/gL, Fuse, Contacts |
| RATED OPERATIONAL CURRENT (IE) AT AC-21, 440 V | 40 A |
| RATED OPERATIONAL CURRENT (IE) AT AC-21, 500 V | 40 A |
| RATED OPERATIONAL CURRENT (IE) AT AC-21, 690 V | 40 A |
| RATED OPERATIONAL CURRENT (IE) AT AC-22, 380 V, 400 V, 415 V | 40 A |
| RATED OPERATIONAL CURRENT (IE) AT AC-22, 500 V | 40 A |

| RATED OPERATIONAL CURRENT (IE) AT AC-22, 690 V | 40 A |
|---|---|
| RATED OPERATIONAL CURRENT (IE) AT AC-23A, 230 V | 40 A |
| RATED OPERATIONAL CURRENT (IE) AT AC-23A, 400 V, 415 V | 40 A |
| RATED OPERATIONAL CURRENT (IE) AT AC-23A, 690 V | 20 A |
| RATED OPERATIONAL CURRENT (IE) AT AC-3, 220 V, 230 V, 240 V | 30 A |
| RATED OPERATIONAL CURRENT (IE) AT AC-3, 380 V, 400 V, 415 V | 30 A |
| RATED OPERATIONAL CURRENT (IE) AT AC-3, 660 V, 690 V | 17 A |
| RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN) | 40 A |
| RATED OPERATIONAL POWER AT AC-23A, 220/230 V, 50 HZ | 11 kW |
| RATED OPERATIONAL POWER AT AC-23A, 400 V, 50 HZ | 22 kW |
| RATED OPERATIONAL POWER AT AC-23A, 690 V, 50 HZ | 18.5 kW |
| RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ | 15 kW |
| RATED OPERATIONAL POWER AT AC-3, 415 V, 50 HZ | 15 kW |
| RATED OPERATIONAL POWER AT AC-3, 690 V, 50 HZ | 15 kW |
| TIGHTENING TORQUE | 1.6 Nm, Screw terminals |
| UNINTERRUPTED CURRENT | Rated uninterrupted current lu is specified for max. cross-section. |
| HOUSING COLOR | Black |
| HOUSING MATERIAL | Plastic |

| 0000: | | |
|-------|--|--|
| 0000: | | |
| 000: | | |
| 00: | | |



□□□□ Eaton House 30 Pembroke Road Dublin 4, □□□ Eaton.com 







