DATASHEET - P3-63/EA/SVB/N

Main switch, P3, 63 A, flush mounting, 3 pole + N, Emergency switching off function, With red rotary handle and yellow locking ring, Lockable in the 0 (Off) position



| | 01 | -63/EA/SVB/N 0398 17003 | | | |
|----------------------------------|-----------|-------------------------------|---|--|--|
| General specifications | | | | | |
| Product name | | | Eaton Moeller® series P3 Main switch | | |
| Part no. | | | P3-63/EA/SVB/N | | |
| EAN | | | 4015080103981 | | |
| Product Length/Depth | | | 128 millimetre | | |
| Product height | | | 102 millimetre | | |
| Product width | | | 90 millimetre | | |
| Product weight | | | 0.496 kilogram | | |
| Certifications | | | UL File No.: E36332 IEC/EN 60947 CSA UL CE VDE 0660 CSA File No.: 012528 UL 60947-4-1 CSA-C22.2 No. 60947-4-1-14 CSA-C22.2 No. 60947-4-1-14 CSA Class No.: 3211-05 IEC/EN 60204 UL Category Control No.: NLRV IEC/EN 60947-3 | | |
| Product Tradename | | | P3 | | |
| Product Type | | | Main switch | | |
| Product Sub Type | | | None | | |
| Catalog Notes | | | Rated Short-time Withstand Current (Icw) for a time of 1 second | | |
| Features & Functions | | | | | |
| Features | | | Version as emergency stop installation Version as main switch Version as maintenance-/service switch | | |
| Fitted with: | | | Red rotary handle and yellow locking ring | | |
| Functions | | | Emergency switching off function Interlockable | | |
| Locking facility | | | Lockable in the 0 (Off) position | | |
| Number of poles | | | Four-pole | | |
| General information | | | | | |
| Accessories | | | Auxiliary contact fitted by user. | | |
| Degree of protection | | | NEMA 1 | | |
| Degree of protection (front side | e) | | IP65 | | |
| Lifespan, mechanical | | | 100,000 Operations | | |
| Mounting method | | | Flush mounting | | |
| Mounting position | | | As required | | |
| Operating frequency | | | 1200 Operations/h | | |
| Overvoltage category | | | III | | |
| Pollution degree | | | 3 | | |
| Rated impulse withstand voltag | ge (Uimp) | | 6000 V AC | | |
| Safe isolation | | | 440 V AC, Between the contacts, According to EN 61140 | | |
| Safety parameter (EN ISO 1384 | 19-1) | | 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 | | | Front mounting 4-hole Branch circuits, suitable as motor disconnect, (UL/CSA) | | |
| Climatic environmental co | onditions | | | | |
| | | | | | |

Ambient operating temperature - min

-25 °C

| Ambient operating temperature - max | 50 °C | | |
|--|---|--|--|
| Ambient operating temperature (enclosed) - min | -25 °C | | |
| Ambient operating temperature (enclosed) - max | 40 °C | | |
| Climatic proofing | Damp heat, cyclic, to IEC 60068-2-30 | | |
| Terminal capacities | Damp heat, constant, to IEC 60068-2-78 | | |
| Terminal capacity | 1 x (1.5 - 25) mm ² , flexible with ferrules to DIN 46228 | | |
| | 2 x (1.5 - 10) mm ² , solid or stranded 14 - 2 AWG, solid or flexible with ferrule 2 x (1.5 - 6) mm ² , flexible with ferrules to DIN 46228 1 x (2.5 - 35) mm ² , solid or stranded | | |
| Screw size | M5, Terminal screw | | |
| Tightening torque | 26.5 lb-in, Screw terminals 3 Nm, Screw terminals | | |
| Electrical rating | | | |
| Rated breaking capacity at 220/230 V (cos phi to IEC 60947-3) | 640 A | | |
| Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3) | 600 A | | |
| Rated breaking capacity at 500 V (cos phi to IEC 60947-3) | 590 A | | |
| Rated breaking capacity at 660/690 V (cos phi to IEC 60947-3) | 340 A | | |
| Rated operational current (Ie) at AC-3, 220 V, 230 V, 240 V | 51 A | | |
| Rated operational current (Ie) at AC-3, 380 V, 400 V, 415 V | 55 A | | |
| Rated operational current (Ie) at AC-3, 500 V | 44 A | | |
| Rated operational current (Ie) at AC-3, 660 V, 690 V | 22.1 A | | |
| Rated operational current (Ie) at AC-21, 440 V | 63 A | | |
| Rated operational current (Ie) at AC-23A, 230 V | 63 A | | |
| Rated operational current (Ie) at AC-23A, 400 V, 415 V | 63 A | | |
| Rated operational current (Ie) at AC-23A, 500 V | 63 A | | |
| Rated operational current (Ie) at AC-23A, 690 V | 63 A | | |
| Rated operational current (Ie) at DC-1, load-break switches I/r = 1 ms | 63 A | | |
| Rated operational current (Ie) at DC-23A, 24 V | 50 A | | |
| Rated operational current (Ie) at DC-23A, 48 V | 50 A | | |
| Rated operational current (Ie) at DC-23A, 60 V | 50 A | | |
| Rated operational current (le) at DC-23A, 120 V | 25 A | | |
| Rated operational power at AC-3, 380/400 V, 50 Hz | 30 kW | | |
| Rated operational power at AC-3, 415 V, 50 Hz | 30 kW | | |
| | | | |
| Rated operational power at AC-3, 500 V, 50 Hz | 30 kW | | |
| Rated operational power at AC-3, 690 V, 50 Hz | 30 kW | | |
| Rated operational power at AC-23A, 220/230 V, 50 Hz | 18.5 kW | | |
| Rated operational power at AC-23A, 400 V, 50 Hz | 30 kW | | |
| Rated operational power at AC-23A, 500 V, 50 Hz | 45 kW | | |
| Rated operational power at AC-23A, 690 V, 50 Hz | 55 kW | | |
| Rated operational voltage (Ue) at AC - max | 690 V | | |
| Rated uninterrupted current (Iu) | 63 A | | |
| Uninterrupted current | Rated uninterrupted current lu is specified for max. cross-section. | | |
| Short-circuit rating | | | |
| Rated conditional short-circuit current (Iq) | 4 kA (Load side) 100 kA (Supply side) | | |
| Rated short-time withstand current (Icw) | 1.26 kA | | |
| Short-circuit current rating (basic rating) | 150A, max. Fuse, SCCR (UL/CSA) 10 kA, SCCR (UL/CSA) | | |
| Short-circuit protection rating | 80 A gG/gL, Fuse, Contacts | | |
| Switching capacity | | | |
| Load rating | 1.6 x I# (with intermittent operation class 12, 40 % duty factor) 1.3 x I# (with intermittent operation class 12, 60 % duty factor) 2 x I# (with intermittent operation class 12, 25 % duty factor) | | |
| 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 | | |
| Number of contacts in series at DC-23A, 120 V | 3 | | |

| Switching apposity (main contacts, several use) | 60 A. Botod upinterrunted surrout may (UII (CCA) |
|--|--|
| Switching capacity (main contacts, general use) | 60 A, Rated uninterrupted current max. (UL/CSA) |
| Switching capacity (auxiliary contacts, general use) | 10A, IU, (UL/CSA) |
| Switching capacity (auxiliary contacts, pilot duty) | A600 (UL/CSA) P600 (UL/CSA) |
| Rated making capacity up to 690 V (cos phi to IEC/EN 60947-3) | 800 A |
| Voltage per contact pair in series | 60 V |
| Motor rating | |
| Assigned motor power at 115/120 V, 60 Hz, 1-phase | 3 HP |
| Assigned motor power at 200/208 V, 60 Hz, 1-phase | 7.5 HP |
| Assigned motor power at 200/208 V, 60 Hz, 3-phase | 15 HP |
| Assigned motor power at 230/240 V, 60 Hz, 1-phase | 10 HP |
| Assigned motor power at 230/240 V, 60 Hz, 3-phase | 15 HP |
| Assigned motor power at 460/480 V, 60 Hz, 3-phase | 40 HP |
| Assigned motor power at 575/600 V, 60 Hz, 3-phase | 50 HP |
| Contacts | |
| 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) | 0 |
| Actuator | |
| Actuator color | Red |
| | |
| Actuator type | Door coupling rotary drive |
| Design verification | |
| Equipment heat dissipation, current-dependent Pvid | 0 W |
| Heat dissipation capacity Pdiss | 0 W |
| Heat dissipation per pole, current-dependent Pvid | 4.5 W |
| Rated operational current for specified heat dissipation (In) | 63 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 disconnector (low voltage) (EC000216)

| Electric engineering, automation, process control engineering / Low-voltage switc [AKF060018]) | h technology / Off-I | load sw | ritch, circuit breaker, control switch / Switch disconnector (ecl@ss13-27-37-14-03 |
|---|----------------------|---------|--|
| Version as main switch | | | Yes |
| Version as maintenance-/service switch | | | Yes |
| Version as safety switch | | | No |
| Version as emergency stop installation | | | Yes |
| 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 lu | А | | 63 |
| Rated permanent current at AC-23, 400 V | А | | 63 |
| Rated permanent current at AC-21, 400 V | А | | 63 |
| Rated operation power at AC-3, 400 V | kW | V | 30 |
| Rated short-time withstand current Icw | kA | 4 | 1.26 |
| Rated operation power at AC-23, 400 V | kW | V | 30 |
| Switching power at 400 V | kW | V | 30 |
| Conditioned rated short-circuit current Iq | kA | ۱ | 100 |
| Number of poles | | | 4 |
| Number of auxiliary contacts as normally closed contact | | | 0 |
| Number of auxiliary contacts as normally open contact | | | 0 |
| Number of auxiliary contacts as change-over contact | | | 0 |
| Motor drive optional | | | No |
| Motor drive integrated | | | No |
| Voltage release optional | | | No |
| Device construction | | | Built-in device fixed built-in technique |
| Suitable for floor mounting | | | No |
| Suitable for front mounting 4-hole | | | Yes |
| Suitable for front mounting centre | | | No |
| Suitable for distribution board installation | | | No |
| Suitable for intermediate mounting | | | No |
| Colour control element | | | Red |
| Type of control element | | | Door coupling rotary drive |
| Interlockable | | | Yes |
| 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) | | | 1 |
| Width | mn | m | 90 |
| Height | mn | m | 102 |
| Depth | mn | m | 128 |
| Width in number of modular spacings | | | |
| | | | |