

Main switch, P1, 40 A, surface mounting, 3 pole, 1 N/O, 1 N/C, Emergency switching off function, With red rotary handle and yellow locking ring, Lockable in the 0 (Off) position, hard knockout version

Part no. P1-40/I2H/SVB/HI11
199923
EL Number 1403720
(Norway)

| General specifications | |
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| Product name | Eaton Moeller® series P1 Main switch |
| Part no. | P1-40/I2H/SVB/HI11 |
| EAN | 4015082953492 |
| Product Length/Depth | 115 millimetre |
| Product height | 180 millimetre |
| Product width | 100 millimetre |
| Product weight | 0.014 kilogram |
| Compliances | UKCA CE |
| Certifications | IEC/EN 60204 IEC/EN 60947 IEC/EN 60947-3 |
| Product Tradename | P1 |
| Product Type | Main switch |
| Product Sub Type | None |
| Catalog Notes | Rated Short-time Withstand Current (Icw) for a time of 1 second |
| Features & Functions | |
| Enclosure material | Polycarbonate |
| Features | Version as main switch Version as maintenance-/service switch Version as emergency stop installation |
| 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 | 3 |
| General information | |
| Accessories | Auxiliary contact or neutral conductor fitted by user. |
| Degree of protection | IP65 |
| Degree of protection (front side) | IP65 |
| Lifespan, mechanical | 300,000 Operations |
| Mounting method | Surface mounting |
| Mounting position | As required |
| Operating frequency | 50 Operations/h |
| Overvoltage category | III |
| Pollution degree | 3 |
| Rated impulse withstand voltage (Uimp) | 6000 V AC |
| Safe isolation | 440 V AC, Between the contacts, According to EN 61140 |
| Shock resistance | 15 g, Mechanical, According to IEC/EN 60068-2-27, Half-sinusoidal shock 20 ms |
| Switching angle | 90 ° |
| Climatic environmental conditions | |
| Ambient operating temperature - min | -25 °C |
| Ambient operating temperature - max | 40 °C |
| Ambient operating temperature (enclosed) - min | -25 °C |
| Ambient operating temperature (enclosed) - max | 40 °C |
| Climatic proofing | Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 |

| Terminal capacities | | |
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| Terminal capacity | | 1 x (1 - 4) mm ² , flexible with ferrules to DIN 46228 2 x (1 - 4) mm ² , flexible with ferrules to DIN 46228 1 x 10 mm ² with fork terminal 2 x 10 mm ² with fork terminal |
| Screw size | | M4, Terminal screw |
| Tightening torque | | 1.6 Nm, Screw terminals |
| Electrical rating | | |
| 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 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 (Ie) at AC-21, 440 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 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 |
| 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 voltage (Ue) at AC - min | | 690 V |
| Rated operational voltage (Ue) at AC - max | | 690 V |
| Rated uninterrupted current (Iu) | | 40 A |
| Uninterrupted current | | Rated uninterrupted current Iu is specified for max. cross-section. |
| Short-circuit rating | | |
| Rated conditional short-circuit current (Iq) | | 80 kA |
| Rated short-time withstand current (Icw) | | 0.64 kA 640 A, Contacts, 1 second |
| Short-circuit protection rating | | 50 A gG/gL, Fuse, Contacts |
| Switching capacity | | |
| Load rating | | 1.3 x I# (with intermittent operation class 12, 60 % duty factor) 1.6 x I# (with intermittent operation class 12, 40 % duty factor) 2 x I# (with intermittent operation class 12, 25 % duty factor) |
| 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) | | 1 |
| Number of auxiliary contacts (normally open contacts) | | 1 |
| Actuator | | |
| Actuator color | | Red |
| Actuator type | | Door coupling rotary drive |
| Design verification | | |
| Equipment heat dissipation, current-dependent Pvid | | 0 W |
| Heat dissipation capacity Pdis | | 0 W |
| Heat dissipation per pole, current-dependent Pvid | | 3.5 W |
| Rated operational current for specified heat dissipation (In) | | 40 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. |

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| 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 8.0

Low-voltage industrial components (EG000017) / Switch disconnecter (EC000216)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnecter (ecl@ss10.0.1-27-37-14-03 [AKF060013])

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|---|----|----------------------------|
| 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 Iu | A | 40 |
| Rated permanent current at AC-23, 400 V | A | 40 |
| Rated permanent current at AC-21, 400 V | A | 40 |
| Rated operation power at AC-3, 400 V | kW | 15 |
| Rated short-time withstand current Icw | kA | 0.64 |
| Rated operation power at AC-23, 400 V | kW | 22 |
| Switching power at 400 V | kW | 22 |
| Conditioned rated short-circuit current Iq | kA | 80 |
| Number of poles | | 3 |
| Number of auxiliary contacts as normally closed contact | | 1 |
| Number of auxiliary contacts as normally open contact | | 1 |
| Number of auxiliary contacts as change-over contact | | 0 |
| Motor drive optional | | No |
| Motor drive integrated | | No |
| Voltage release optional | | No |
| Device construction | | Complete device in housing |
| Suitable for floor mounting | | No |
| Suitable for front mounting 4-hole | | No |
| 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 |

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|---------------------------------------|--|--|------|
| Degree of protection (IP), front side | | | IP65 |
| Degree of protection (NEMA) | | | |