

**Main switch, P1, 32 A, surface mounting, 3 pole, Emergency switching off function, With red rotary handle and yellow locking ring, Lockable in the 0 (Off) position, in steel enclosure**



**Part no. P1-32/SE1/SVB  
197354**

| <b>General specifications</b>                  |  |  |
|--|--|--|
| Product name                                   |  | Eaton Moeller® series P1 Main switch   |
| Part no.                                       |  | P1-32/SE1/SVB  |
| EAN  |  | 4015080894919  |
| Product Length/Depth                           |  | 200 millimetre   |
| Product height                                 |  | 135 millimetre   |
| Product width                                  |  | 150 millimetre   |
| Product weight                                 |  | 1.65 kilogram  |
| Certifications                                 |  | IEC/EN 60947-3<br>VDE 0660<br>IEC/EN 60204<br>IEC/EN 60947   |
| Product Tradename                              |  | P1   |
| Product Type                                   |  | Main switch  |
| Product Sub Type                               |  | None   |
| Catalog Notes                                  |  | in steel enclosure<br>Rated Short-time Withstand Current (Icw) for a time of 1 second  |
| <b>Features &amp; Functions</b>                |  |  |
| Features                                       |  | Version as emergency stop installation<br>Version as safety switch<br>Version as maintenance-/service switch<br>Version as main switch   |
| Fitted with:                                   |  | Red rotary handle and yellow locking ring  |
| Functions                                      |  | Interlockable<br>Emergency switching off function  |
| Locking facility                               |  | Lockable in the 0 (Off) position   |
| Number of poles                                |  | Three-pole   |
| <b>General information</b>                     |  |  |
| Accessories                                    |  | Auxiliary contact or neutral conductor fitted by user.   |
| Degree of protection                           |  | NEMA 12  |
| Degree of protection (front side)              |  | IP65   |
| Lifespan, mechanical                           |  | 300,000 Operations   |
| Mounting method                                |  | Surface mounting   |
| Mounting position                              |  | As required  |
| Operating frequency                            |  | 1200 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  |
| Safety parameter (EN ISO 13849-1)              |  | 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                                   |  | Ground mounting  |
| Switching angle                                |  | 90 °   |
| <b>Climatic environmental conditions</b>       |  |  |
| Ambient operating temperature (enclosed) - min |  | -25 °C   |
| Ambient operating temperature (enclosed) - max |  | 40 °C  |
| <b>Terminal capacities</b>                     |  |  |
| Terminal capacity                              |  | 1 x (1 - 4) mm <sup>2</sup> , flexible with ferrules to DIN 46228<br>1 x (1.5 - 6) mm <sup>2</sup> , solid or stranded<br>2 x (1 - 4) mm <sup>2</sup> , flexible with ferrules to DIN 46228<br>2 x (1.5 - 6) mm <sup>2</sup> , solid or stranded |

|  |   |
|--|---|
| Screw size   | M4, Terminal screw  |
| Tightening torque  | 14 Nm, Screw terminals<br>1.6 Nm, Screw terminals   |
| <b>Electrical rating</b>   |   |
| Rated breaking capacity at 220/230 V (cos phi to IEC 60947-3)          | 260 A   |
| Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3)          | 300 A   |
| Rated breaking capacity at 500 V (cos phi to IEC 60947-3)              | 290 A   |
| Rated breaking capacity at 660/690 V (cos phi to IEC 60947-3)          | 250 A   |
| Rated operational current (Ie) at AC-21, 440 V                         | 32 A  |
| Rated operational current (Ie) at AC-23A, 230 V                        | 32 A  |
| Rated operational current (Ie) at AC-23A, 400 V, 415 V                 | 32 A  |
| Rated operational current (Ie) at AC-23A, 500 V                        | 30 A  |
| Rated operational current (Ie) at AC-23A, 690 V                        | 19.8 A  |
| Rated operational current (Ie) at AC-3, 220 V, 230 V, 240 V            | 26.4 A  |
| Rated operational current (Ie) at AC-3, 380 V, 400 V, 415 V            | 26.4 A  |
| Rated operational current (Ie) at AC-3, 500 V                          | 23.4 A  |
| Rated operational current (Ie) at AC-3, 660 V, 690 V                   | 14.7 A  |
| Rated operational current (Ie) at DC-1, load-break switches I/r = 1 ms | 32 A  |
| Rated operational current (Ie) at DC-23A, 24 V                         | 25 A  |
| Number of contacts in series at DC-23A, 24 V                           | 1   |
| Rated operational current (Ie) at DC-23A, 48 V                         | 25 A  |
| Number of contacts in series at DC-23A, 48 V                           | 2   |
| Rated operational current (Ie) at DC-23A, 60 V                         | 25 A  |
| Number of contacts in series at DC-23A, 60 V                           | 2   |
| Rated operational current (Ie) at DC-23A, 120 V                        | 12 A  |
| Number of contacts in series at DC-23A, 120 V                          | 3   |
| Rated operational power at AC-23A, 220/230 V, 50 Hz                    | 7.5 kW  |
| Rated operational power at AC-23A, 400 V, 50 Hz                        | 15 kW   |
| Rated operational power at AC-23A, 500 V, 50 Hz                        | 18.5 kW   |
| Rated operational power at AC-23A, 690 V, 50 Hz                        | 15 kW   |
| Rated operational power at AC-3, 380/400 V, 50 Hz                      | 13 kW   |
| Rated operational power at AC-3, 415 V, 50 Hz                          | 13 kW   |
| Rated operational power at AC-3, 690 V, 50 Hz                          | 15 kW   |
| Rated operational voltage (Ue) at AC - max                             | 690 V   |
| Rated uninterrupted current (Iu)                                       | 32 A  |
| Uninterrupted current  | Rated uninterrupted current Iu is specified for max. cross-section.   |
| Voltage per contact pair in series                                     | 60 V  |
| <b>Short-circuit rating</b>  |   |
| Rated conditional short-circuit current (Iq)                           | 80 kA   |
| Rated short-time withstand current (Icw)                               | 0.64 kA<br>640 A, Contacts, 1 second  |
| Short-circuit protection rating  | 50 A gG/gL, Fuse, Contacts  |
| <b>Switching capacity</b>  |   |
| Rated making capacity up to 690 V (cos phi to IEC/EN 60947-3)          | 320 A   |
| Load rating  | 1.6 x I# (with intermittent operation class 12, 40 % duty factor)<br>1.3 x I# (with intermittent operation class 12, 60 % duty factor)<br>2 x I# (with intermittent operation class 12, 25 % duty factor) |
| <b>Contacts</b>  |   |
| 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   |
| <b>Actuator</b>  |   |
| Actuator color   | Red   |
| Actuator type  | Door coupling rotary drive  |

| Design verification  |  |  |
|--|--|--|
| 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.   |
| 10.2.5 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 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]) |    |  |                            |
| Version as main switch  |    |  | Yes                        |
| Version as maintenance-/service switch  |    |  | Yes                        |
| Version as safety switch  |    |  | Yes                        |
| Version as emergency stop installation  |    |  | Yes                        |
| Version as reversing switch   |    |  | No                         |
| Number of switches  |    |  | 1                          |
| Max. rated operation voltage U <sub>e</sub> AC  | V  |  | 690                        |
| Rated operating voltage   | V  |  | 690 - 690                  |
| Rated permanent current I <sub>u</sub>  | A  |  | 32                         |
| Rated permanent current at AC-23, 400 V   | A  |  | 32                         |
| Rated permanent current at AC-21, 400 V   | A  |  | 32                         |
| Rated operation power at AC-3, 400 V  | kW |  | 13                         |
| Rated short-time withstand current I <sub>cw</sub>  | kA |  | 0.64                       |
| Rated operation power at AC-23, 400 V   | kW |  | 15                         |
| Switching power at 400 V  | kW |  | 15                         |
| Conditioned rated short-circuit current I <sub>q</sub>  | kA |  | 80                         |
| Number of poles   |    |  | 3                          |
| 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   |    |  | Complete device in housing |
| Suitable for floor mounting   |    |  | Yes                        |
| 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           |
| Degree of protection (IP), front side         |  |  | IP65                       |
| Degree of protection (NEMA)                   |  |  | 12                         |