

**Main switch, P5, 125 A, rear mounting, 3 pole, STOP function, With black rotary handle and locking ring, Lockable in the 0 (Off) position**

**Part no. P5-125/V/SVB-SW  
280917**

| <b>General specifications</b>          |  |
|--|--|
| Product name                           | Eaton Moeller® series P5 Main switch   |
| Part no.                               | P5-125/V/SVB-SW  |
| EAN                                    | 4015082809171  |
| Product Length/Depth                   | 115 millimetre   |
| Product height                         | 150 millimetre   |
| Product width                          | 130 millimetre   |
| Product weight                         | 1.326 kilogram   |
| Compliances                            | CE Marked  |
| Certifications                         | CSA Std. C22.2 No. 14-05<br>UL 508<br>IEC 60947<br>EN 60947-3<br>VDE<br>IEC/EN 60204<br>UL File No.: E36332<br>CSA File No.: 223805<br>CSA-C22.2 No. 14-05<br>VDE 0660<br>IEC/EN 60947-3<br>CSA-C22.2 No. 94<br>UL Category Control No.: NLRV, NLRV7<br>CSA Class No.: 3211-05<br>CE<br>UL<br>IEC/EN 60947<br>CSA<br>CSA<br>UL |
| Product Tradename                      | P5   |
| Product Type                           | Main switch  |
| Product Sub Type                       | None   |
| Catalog Notes                          | Rated Short-time Withstand Current (Icw) for a time of 1 second  |
| <b>Features &amp; Functions</b>        |  |
| Features                               | Version as main switch<br>Version as maintenance-/service switch   |
| Fitted with:                           | Black rotary handle and locking ring   |
| Functions                              | Interlockable<br>STOP function   |
| Locking facility                       | Lockable in the 0 (Off) position   |
| Number of poles                        | 3  |
| <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                   | 100,000 Operations   |
| Mounting method                        | Rear mounting  |
| Mounting position                      | As required  |
| Operating frequency                    | 50 Operations/h  |
| Overvoltage category                   | III  |
| Pollution degree                       | 3  |
| Rated impulse withstand voltage (Uimp) | 8000 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   |
| Suitable for                           | Branch circuits, suitable as motor disconnect, (UL/CSA)<br>Intermediate mounting   |

| <b>Climatic environmental conditions</b>                               |  |
|--|--|
| 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, constant, to IEC 60068-2-78<br>Damp heat, cyclic, to IEC 60068-2-30   |
| <b>Terminal capacities</b>   |  |
| Terminal capacity  | 1 x 13 x 3 mm Number of segments x width x thickness, copper strip<br>2 x 13 x 1.5 mm Number of segments x width x thickness, copper strip<br>3/0 AWG, solid or flexible conductor with ferrule<br>2/0 AWG, flexible<br>1 x 95 mm <sup>2</sup> , solid or stranded<br>1 x 70 mm <sup>2</sup> , flexible with ferrules to DIN 46228<br>2 x 25 mm <sup>2</sup> , flexible with ferrules to DIN 46228<br>2 x 35 mm <sup>2</sup> , solid or stranded |
| Screw size   | 5 mm AF, Hexagon socket-head spanner, Terminal screw   |
| Tightening torque  | 14 Nm, Screw terminals<br>125 lb-in, Screw terminals   |
| <b>Electrical rating</b>   |  |
| Rated breaking capacity at 220/230 V (cos phi to IEC 60947-3)          | 800 A  |
| Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3)          | 750 A  |
| Rated breaking capacity at 500 V (cos phi to IEC 60947-3)              | 650 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            | 72 A   |
| Rated operational current (Ie) at AC-3, 380 V, 400 V, 415 V            | 66 A   |
| Rated operational current (Ie) at AC-3, 500 V                          | 58 A   |
| Rated operational current (Ie) at AC-3, 660 V, 690 V                   | 32 A   |
| Rated operational current (Ie) at AC-21, 440 V                         | 125 A  |
| Rated operational current (Ie) at AC-23A, 230 V                        | 96 A   |
| Rated operational current (Ie) at AC-23A, 400 V, 415 V                 | 80 A   |
| Rated operational current (Ie) at AC-23A, 500 V                        | 78 A   |
| Rated operational current (Ie) at AC-23A, 690 V                        | 39 A   |
| Rated operational current (Ie) at DC-1, load-break switches I/r = 1 ms | 125 A  |
| Rated operational current (Ie) at DC-23A, 24 V                         | 125 A  |
| Rated operational current (Ie) at DC-23A, 48 V                         | 125 A  |
| Rated operational current (Ie) at DC-23A, 60 V                         | 125 A  |
| Rated operational current (Ie) at DC-23A, 120 V                        | 40 A   |
| Rated operational power at AC-3, 380/400 V, 50 Hz                      | 37 kW  |
| Rated operational power at AC-3, 415 V, 50 Hz                          | 37 kW  |
| Rated operational power at AC-3, 500 V, 50 Hz                          | 45 kW  |
| Rated operational power at AC-3, 690 V, 50 Hz                          | 30 kW  |
| Rated operational power at AC-23A, 220/230 V, 50 Hz                    | 30 kW  |
| Rated operational power at AC-23A, 400 V, 50 Hz                        | 45 kW  |
| Rated operational power at AC-23A, 500 V, 50 Hz                        | 55 kW  |
| Rated operational power at AC-23A, 690 V, 50 Hz                        | 37 kW  |
| Rated operational voltage (Ue) at AC - max                             | 690 V  |
| Rated uninterrupted current (Iu)                                       | 125 A  |
| Uninterrupted current  | Rated uninterrupted current Iu is specified for max. cross-section.  |
| <b>Short-circuit rating</b>  |  |
| Rated conditional short-circuit current (Iq)                           | 30 kA  |
| Rated short-time withstand current (Icw)                               | 2,5 kA, Contacts, 1 second<br>2.5 kA   |
| Short-circuit current rating (basic rating)                            | 10 kA, SCCR (UL/CSA)<br>350A Class RK1, max. Fuse, SCCR (UL/CSA)   |
| Short-circuit current rating (high fault)                              | 65 kA, SCCR (UL/CSA)<br>300 A, Class J, max. Fuse, SCCR (UL/CSA)   |
| Short-circuit protection rating  | 125 A gG/gL, Fuse, Contacts  |
| <b>Switching capacity</b>  |  |
| Load rating  | 1.3 x I# (with intermittent operation class 12, 60 % duty factor)  |

|  |  |  |
|--|--|--|
|  |  | 2 x I# (with intermittent operation class 12, 25 % duty factor)<br>1.6 x I# (with intermittent operation class 12, 40 % duty factor) |
| Number of contacts in series at DC-23A, 24 V                                     |  | 3  |
| Number of contacts in series at DC-23A, 48 V                                     |  | 3  |
| Number of contacts in series at DC-23A, 60 V                                     |  | 3  |
| Number of contacts in series at DC-23A, 120 V                                    |  | 3  |
| Switching capacity (main contacts, general use)                                  |  | 150 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)  |
| Rated making capacity up to 690 V (cos phi to IEC/EN 60947-3)                    |  | 850 A  |
| Voltage per contact pair in series   |  | 42 V   |
| <b>Motor rating</b>  |  |  |
| Assigned motor power at 115/120 V, 60 Hz, 1-phase                                |  | 7.5 HP   |
| Assigned motor power at 115/120 V, 60 Hz, 3-phase                                |  | 15 HP  |
| Assigned motor power at 230/240 V, 60 Hz, 1-phase                                |  | 20 HP  |
| Assigned motor power at 230/240 V, 60 Hz, 3-phase                                |  | 30 HP  |
| Assigned motor power at 277 V, 60 Hz, 1-phase                                    |  | 20 HP  |
| Assigned motor power at 460/480 V, 60 Hz, 3-phase                                |  | 60 HP  |
| Assigned motor power at 575/600 V, 60 Hz, 3-phase                                |  | 60 HP  |
| <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   |  | Black  |
| Actuator type  |  | Door coupling rotary drive   |
| <b>Design verification</b>   |  |  |
| Equipment heat dissipation, current-dependent Pvid                               |  | 3.1 W  |
| Heat dissipation capacity Pdiss  |  | 0 W  |
| Heat dissipation per pole, current-dependent Pvid                                |  | 3.1 W  |
| Rated operational current for specified heat dissipation (In)                    |  | 125 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.                                       |

## Technical data ETIM 9.0

| Low-voltage industrial components (EG000017) / Switch disconnecter (low voltage) (EC000216)   |    |  |  |
|---|----|--|--|
| Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnecter (ecI@ss13-27-37-14-03 [AKF060018]) |    |  |  |
| Version as main switch  |    |  | Yes                                      |
| Version as maintenance-/service switch  |    |  | Yes                                      |
| Version as safety switch  |    |  | No                                       |
| Version as emergency stop installation  |    |  | No                                       |
| 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                                      |
| Rated permanent current I <sub>u</sub>  | A  |  | 125                                      |
| Rated permanent current at AC-23, 400 V   | A  |  | 125                                      |
| Rated permanent current at AC-21, 400 V   | A  |  | 125                                      |
| Rated operation power at AC-3, 400 V  | kW |  | 37                                       |
| Rated short-time withstand current I <sub>cw</sub>  | kA |  | 2.5                                      |
| Rated operation power at AC-23, 400 V   | kW |  | 45                                       |
| Switching power at 400 V  | kW |  | 45                                       |
| Conditioned rated short-circuit current I <sub>q</sub>  | kA |  | 30                                       |
| 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   |    |  | Built-in device fixed built-in technique |
| 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  |    |  | Yes                                      |
| Colour control element  |    |  | Black                                    |
| Type of control element   |    |  | Door coupling rotary drive               |
| Interlockable   |    |  | Yes                                      |
| Type of electrical connection of main circuit   |    |  | Frame clamp                              |
| With pre-assembled cabling  |    |  | No                                       |
| Degree of protection (IP), front side   |    |  | IP65                                     |
| Degree of protection (NEMA)   |    |  | 12                                       |
| Width   | mm |  | 130                                      |
| Height  | mm |  | 150                                      |
| Depth   | mm |  | 115                                      |
| Width in number of modular spacings   |    |  |  |