

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

**Part no.** P1-40/I2H/SVB-SW/HI11  
**199926**  
**EL Number** 1403744  
**(Norway)**

| <b>General specifications</b>                  |  |
|--|--|
| Product name                                   | Eaton Moeller® series P1 Main switch   |
| Part no.                                       | P1-40/I2H/SVB-SW/HI11  |
| EAN  | 4015082953485  |
| Product Length/Depth                           | 115 millimetre   |
| Product height                                 | 180 millimetre   |
| Product width                                  | 100 millimetre   |
| Product weight                                 | 0.596 kilogram   |
| Compliances                                    | CE<br>UKCA   |
| Certifications                                 | IEC/EN 60947-3<br>IEC/EN 60947<br>IEC/EN 60204                                 |
| 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                |
| <b>Features &amp; Functions</b>                |  |
| Enclosure material                             | Polycarbonate  |
| Features                                       | Version as main switch<br>Version as maintenance-/service switch               |
| Fitted with:                                   | Black rotary handle and locking ring   |
| Functions                                      | STOP function<br>Interlockable   |
| 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                           | 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 °   |
| <b>Climatic environmental conditions</b>       |  |
| 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<br>Damp heat, cyclic, to IEC 60068-2-30 |
| <b>Terminal capacities</b>                     |  |

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| Terminal capacity  | 1 x (1 - 4) mm <sup>2</sup> , flexible with ferrules to DIN 46228<br>2 x (1 - 4) mm <sup>2</sup> , flexible with ferrules to DIN 46228<br>1 x 10 mm <sup>2</sup> with fork terminal<br>2 x 10 mm <sup>2</sup> with fork terminal |
| Screw size   | M4, Terminal screw   |
| Tightening torque  | 1.6 Nm, Screw terminals  |
| <b>Electrical rating</b>   |  |
| 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.  |
| <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>  |  |
| Load rating  | 1.3 x I# (with intermittent operation class 12, 60 % duty factor)<br>1.6 x I# (with intermittent operation class 12, 40 % 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)                          | 1  |
| Number of auxiliary contacts (normally open contacts)                            | 1  |
| <b>Actuator</b>  |  |
| Actuator color   | Black  |
| Actuator type  | Door coupling rotary drive   |
| <b>Design verification</b>   |  |
| 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.   |
| 10.2.6 Mechanical impact   | Does not apply, since the entire switchgear needs to be evaluated.   |

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| 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

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|---|--|----|----------------------------|
| Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)   |  |    |                            |
| Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss10.0.1-27-37-14-03 [AKF060013]) |  |    |                            |
| 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 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  |  |    | Black                      |
| 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                       |

