

Switch-disconnector, DC current, 20A, 2 strings MC4

Part no. SOL20/2MC4
120915
EL Number 4300308
(Norway)

| General specifications | | |
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| Product name | | Eaton Moeller® series P-SOL Switch-disconnector |
| Part no. | | SOL20/2MC4 |
| EAN | | 4015081187454 |
| Product Length/Depth | | 234 millimetre |
| Product height | | 130 millimetre |
| Product width | | 100 millimetre |
| Product weight | | 0.888 kilogram |
| Certifications | | IEC/EN 60947-3 TÜV-certified |
| Product Tradename | | P-SOL |
| Product Type | | Switch-disconnector |
| Product Sub Type | | None |
| Catalog Notes | | MC4 connector (Stäubli) |
| Features & Functions | | |
| Actuator color | | Black |
| Actuator type | | Toggle |
| Design | | Enclosed |
| Features | | Isolating characteristics |
| Fitted with: | | Voltage release optional |
| Locking facility | | Lockable in the 0 (Off) position |
| Number of poles | | Two-pole |
| General information | | |
| Connection type | | MC4, Outputs MC4, Inputs |
| Degree of protection | | NEMA Other |
| Degree of protection (front side) | | IP65 |
| Lifespan, electrical | | 1,500 Operations |
| Lifespan, mechanical | | 100,000 Operations |
| Mounting position | | As required |
| Operating frequency | | 120 Operations/h |
| Protection class | | 2 |
| Suitable for | | Ground mounting |
| Climatic environmental conditions | | |
| Ambient operating temperature - min | | -25 °C |
| Ambient operating temperature - max | | 60 °C |
| Climatic proofing | | Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 |
| Electrical rating | | |
| Rated operational current (Ie) at DC-21A | | 20 A |
| Rated operational power at AC-23A, 400 V, 50 Hz | | 0 kW |
| Rated operational power at AC-3, 380/400 V, 50 Hz | | 0 kW |
| Rated operational voltage (Ue) at AC - min | | 1000 V |
| Rated operational voltage (Ue) at AC - max | | 1000 V |
| Rated uninterrupted current (Iu) | | 20 A |
| Resistance | | 8 mΩ (internal) |
| Short-circuit rating | | |
| Rated conditional short-circuit current (Iq) | | 0 kA |

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| Rated short-circuit making capacity (Icm) | | 0.32 kA (up to 440 V, 50/60 Hz) |
| Rated short-time withstand current (Icw) | | 0.36 kA |
| Contacts | | |
| Number of auxiliary contacts (change-over contacts) | | 0 |
| Number of auxiliary contacts (normally closed contacts) | | 0 |
| Number of auxiliary contacts (normally open contacts) | | 0 |
| 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 9.0

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| 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 (ec1@ss13-27-37-14-03 [AKF060018]) | | | |
| Version as main switch | | | No |
| Version as maintenance-/service switch | | | No |
| 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 | | 1000 |
| Rated operating voltage | V | | 1000 |
| Rated permanent current Iu | A | | 20 |
| Rated permanent current at AC-23, 400 V | A | | 0 |
| Rated permanent current at AC-21, 400 V | A | | 0 |
| Rated operation power at AC-3, 400 V | kW | | 0 |
| Rated short-time withstand current Icw | kA | | 0.36 |
| Rated operation power at AC-23, 400 V | kW | | 0 |
| Switching power at 400 V | kW | | 20 |
| Conditioned rated short-circuit current Iq | kA | | 0 |
| Number of poles | | | 2 |
| 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 |

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| Motor drive integrated | | | No |
| Voltage release optional | | | Yes |
| 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 | | | Black |
| Type of control element | | | Toggle |
| Interlockable | | | No |
| Type of electrical connection of main circuit | | | Other |
| With pre-assembled cabling | | | No |
| Degree of protection (IP), front side | | | IP65 |
| Degree of protection (NEMA) | | | Other |
| Width | | mm | 100 |
| Height | | mm | 130 |
| Depth | | mm | 234 |
| Width in number of modular spacings | | | |