# DATASHEET - T5-1-102/EA/SVB

**Main switch, T5, 100 A, flush mounting, 1 contact unit(s), 2 pole, Emergency switching off function, With red rotary handle and yellow locking ring, Lockable in the 0 (Off) position**

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| **Part no.** | **T5-1-102/EA/SVB** |
| | **098808** |
| **EL Number (Norway)** | **1417126** |

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|---|---|
| Product name | Eaton Moeller® series T5 Main switch |
| Part no. | T5-1-102/EA/SVB |
| EAN | 4015080988083 |
| Product Length/Depth | 123 millimetre |
| Product height | 88 millimetre |
| Product width | 88 millimetre |
| Product weight | 0.47 kilogram |
| Certifications | IEC/EN 60947-3<br>IEC/EN 60204<br>IEC/EN 60947<br>VDE 0660 |
| Product Tradename | T5 |
| Product Type | Main switch |
| Product Sub Type | None |
| Catalog Notes | Rated Short-time Withstand Current (Icw) for a time of 1 second |
| | |
| Features | Version as main switch<br>Version as maintenance-/service switch<br>Version as emergency stop installation |
| 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 | 2 |
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| Degree of protection | NEMA 12 |
| Degree of protection (front side) | IP65 |
| Lifespan, mechanical | 500,000 Operations |
| Mounting method | Flush mounting |
| Mounting position | As required |
| Number of contact units | 1 |
| 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 | Front mounting center |
| Switching angle | 90 ° |
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| 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 |

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| Terminal capacity | 1 x (2.5 - 35) $mm^2$, solid or stranded<br>1 x (1 - 25) $mm^2$, flexible with ferrules to DIN 46228<br>2 x (1.5 - 10) $mm^2$, flexible with ferrule to DIN 46228<br>2 x (2.5 - 16) $mm^2$, solid or stranded |
| Screw size | M6, Terminal screw |
| Tightening torque | 35.4 lb-in, Screw terminals<br>4 Nm, Screw terminals |
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| Rated breaking capacity at 220/230 V (cos phi to IEC 60947-3) | 760 A |
| Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3) | 740 A |
| Rated breaking capacity at 500 V (cos phi to IEC 60947-3) | 590 A |
| Rated breaking capacity at 660/690 V (cos phi to IEC 60947-3) | 420 A |
| Rated operational current (Ie) at AC-3, 220 V, 230 V, 240 V | 71 A |
| Rated operational current (Ie) at AC-3, 380 V, 400 V, 415 V | 55 A |
| Rated operational current (Ie) at AC-3, 500 V | 44 A |
| Rated operational current (Ie) at AC-3, 660 V, 690 V | 17 A |
| Rated operational current (Ie) at AC-21, 440 V | 100 A |
| Rated operational current (Ie) at AC-23A, 230 V | 100 A |
| Rated operational current (Ie) at AC-23A, 400 V, 415 V | 100 A |
| Rated operational current (Ie) at AC-23A, 500 V | 55 A |
| Rated operational current (Ie) at AC-23A, 690 V | 32 A |
| Rated operational current (Ie) at DC-1, load-break switches l/r = 1 ms | 80 A |
| Rated operational current (Ie) star-delta at AC-3, 220/230 V | 100 A |
| Rated operational current (Ie) star-delta at AC-3, 380/400 V | 95.3 A |
| Rated operational current (Ie) star-delta at AC-3, 500 V | 76.2 A |
| Rated operational current (Ie) star-delta at AC-3, 690 V | 29.4 A |
| Rated operational power at AC-3, 380/400 V, 50 Hz | 30 kW |
| Rated operational power at AC-3, 415 V, 50 Hz | 30 kW |
| Rated operational power at AC-3, 500 V, 50 Hz | 30 kW |
| Rated operational power at AC-3, 690 V, 50 Hz | 15 kW |
| Rated operational power at AC-23A, 220/230 V, 50 Hz | 30 kW |
| Rated operational power at AC-23A, 400 V, 50 Hz | 55 kW |
| Rated operational power at AC-23A, 500 V, 50 Hz | 37 kW |
| Rated operational power at AC-23A, 690 V, 50 Hz | 30 kW |
| Rated operational power star-delta at 220/230 V, 50 Hz | 30 kW |
| Rated operational power star-delta at 380/400 V, 50 Hz | 45 kW |
| Rated operational power star-delta at 500 V, 50 Hz | 45 kW |
| Rated operational power star-delta at 690 V, 50 Hz | 22 kW |
| Rated operational voltage (Ue) at AC - min | 690 V |
| Rated operational voltage (Ue) at AC - max | 600 V |
| Rated uninterrupted current (Iu) | 100 A |
| Uninterrupted current | Rated uninterrupted current Iu is specified for max. cross-section. |
| | |
| Rated conditional short-circuit current (Iq) | 2 kA |
| Rated short-time withstand current (Icw) | 1.7 kA<br>1,7 kA, Contacts, 1 second |
| Short-circuit protection rating | 100 A gG/gL, Fuse, Contacts |
| | |
| 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) |
| Switching capacity (main contacts, general use) | 63 A, Rated uninterrupted current max. (UL/CSA) |
| Rated making capacity up to 690 V (cos phi to IEC/EN 60947-3) | 950 A |
| Voltage per contact pair in series | 60 V |
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| 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 |

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| Number of auxiliary contacts (normally open contacts) | | 0 |
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| Actuator color | | Red |
| Actuator type | | Door coupling rotary drive |
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| Equipment heat dissipation, current-dependent Pvid | | 0 W |
| Heat dissipation capacity Pdiss | | 0 W |
| Heat dissipation per pole, current-dependent Pvid | | 7.5 W |
| Rated operational current for specified heat dissipation (In) | | 100 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. |
| 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 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 | | Yes |
| Version as reversing switch | | No |
| Number of switches | | 1 |
| Max. rated operation voltage Ue AC | V | 600 |
| Rated operating voltage | V | 690 |
| Rated permanent current Iu | A | 100 |
| Rated permanent current at AC-23, 400 V | A | |
| Rated permanent current at AC-21, 400 V | A | 100 |
| Rated operation power at AC-3, 400 V | kW | 30 |
| Rated short-time withstand current Icw | kA | 1.7 |
| Rated operation power at AC-23, 400 V | kW | 55 |
| Switching power at 400 V | kW | 55 |
| Conditioned rated short-circuit current Iq | kA | 2 |
| Number of poles | | 2 |

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| 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 | Yes |
| 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 |


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