## **DATASHEET - T5-3-8342/I5/SVB-SW**



Main switch, T5, 100 A, surface mounting, 3 contact unit(s), 6 pole, STOP function, With black rotary handle and locking ring, Lockable in the 0 (Off) position



Part no. T5-3-8342/I5/SVB-SW Catalog No. 207280

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|--|--------|--|
|  |        |  |
|  |        |  |

| Delivery program                       |                |                    |  |
|--|----------------|--------------------|--|
| Product range                          |                |                    | Main switch<br>maintenance switch<br>Repair switch                           |
| Part group reference                   |                |                    | T5   |
| Stop Function                          |                |                    | STOP function  |
|  |                |                    | With black rotary handle and locking ring                                    |
| Number of poles                        |                |                    | 6 pole   |
| Locking facility                       |                |                    | Lockable in the 0 (Off) position   |
| Degree of Protection                   |                |                    | IP65   |
|  |                |                    | totally insulated  |
| Design                                 |                |                    | surface mounting   |
|  |                |                    |  |
| Contact sequence                       |                |                    | 0                                      |
| Switching angle                        |                | 0                  | 90   |
| Design number                          |                |                    | 8342   |
| Function                               |                |                    | OFF O  |
| Motor rating AC-23A, 50 - 60 Hz        |                |                    |  |
| 400 V                                  | P              | kW                 | 55   |
| Rated uninterrupted current            | I <sub>u</sub> | Α                  | 100  |
| Note on rated uninterrupted current !u |                |                    | Rated uninterrupted current $I_{\rm u}$ is specified for max. cross-section. |
| Number of contact units                |                | contact<br>unit(s) | 3  |

# Technical data

| delleral                              |                  |      |   |
|---------------------------------------|------------------|------|---|
| Standards                             |                  |      | IEC/EN 60947, VDE 0660, IEC/EN 60204<br>Switch-disconnector according to IEC/EN 60947-3 |
| Climatic proofing                     |                  |      | Damp heat, constant, to IEC 60068-2-78<br>Damp heat, cyclic, to IEC 60068-2-30          |
| Ambient temperature                   |                  |      |   |
| Enclosed                              |                  | °C   | -25 - +40   |
| Overvoltage category/pollution degree |                  |      | III/3   |
| Rated impulse withstand voltage       | $U_{\text{imp}}$ | V AC | 6000  |
| Mechanical shock resistance           |                  | g    | 15  |

| Mounting position   |                 |                   | As required  |
|---|-----------------|-------------------|--|
| Contacts  |                 |                   | 7.0.04402  |
| Mechanical variables  |                 |                   |  |
| Number of poles   |                 |                   | 6 pole   |
| Electrical characteristics  |                 |                   |  |
| Rated operational voltage   | U <sub>e</sub>  | V AC              | 690  |
| Rated uninterrupted current   | Iu              | A                 | 100  |
| Note on rated uninterrupted current !u                                  |                 |                   | Rated uninterrupted current $I_u$ is specified for max. cross-section. |
| Load rating with intermittent operation, class 12                       |                 |                   |  |
| AB 25 % DF  |                 | x I <sub>e</sub>  | 2  |
| AB 40 % DF  |                 | x I <sub>e</sub>  | 1.6  |
| AB 60 % DF  |                 | x I <sub>e</sub>  | 1.3  |
|   |                 | x 16              | 1.0  |
| Short-circuit rating Fuse   |                 | A aC/al           | 100  |
| Rated short-time withstand current (1 s current)                        |                 | A gG/gL           | 1700   |
|   | I <sub>cw</sub> | A <sub>rms</sub>  |  |
| Note on rated short-time withstand current lcw                          |                 |                   | Current for a time of 1 second   |
| Rated conditional short-circuit current                                 | Iq              | kA                | 2  |
| Switching capacity cos φ rated making capacity as per IEC 60947-3       |                 | Α                 | 950  |
| Rated breaking capacity cos φ to IEC 60947-3                            |                 | A                 |  |
| 230 V   |                 | A                 | 760  |
| 400/415 V   |                 | A                 | 740  |
| 500 V   |                 | A                 | 590  |
| 690 V   |                 | A                 | 420  |
| Safe isolation to EN 61140  |                 | ^                 | 720  |
| between the contacts  |                 | V AC              | 440  |
| Current heat loss per contact at I <sub>e</sub>                         |                 | W                 | 7.5  |
|   |                 |                   | 7.5  |
| Current heat loss per auxiliary circuit at I <sub>e</sub> (AC-15/230 V) | 0               | CO                |  |
| Lifespan, mechanical  | Operations      | x 10 <sup>6</sup> | > 0.5  |
| Maximum operating frequency   | Operations/h    |                   | 1200   |
| AC  |                 |                   |  |
| AC-3  |                 |                   |  |
| Rating, motor load switch   | Р               | kW                |  |
| 220 V 230 V   | Р               | kW                | 22   |
| 230 V Star-delta  | Р               | kW                | 30   |
| 400 V 415 V   | Р               | kW                | 30   |
| 400 V Star-delta  | Р               | kW                | 45   |
| 500 V   | Р               | kW                | 30   |
| 500 V Star-delta  | P               | kW                | 45   |
| 690 V   | P               | kW                | 15   |
| 690 V Star-delta  | Р               | kW                | 22   |
| Rated operational current motor load switch                             |                 |                   |  |
| 230 V   | I <sub>e</sub>  | Α                 | 71   |
| 230 V star-delta  | l <sub>e</sub>  | Α                 | 100  |
| 400V 415 V  | le              | Α                 | 55   |
| 400 V star-delta  | l <sub>e</sub>  | Α                 | 95.3   |
| 500 V   | l <sub>e</sub>  | Α                 | 44   |
| 500 V star-delta  | I <sub>e</sub>  | Α                 | 76.2   |
| 690 V   | I <sub>e</sub>  | Α                 | 17   |
| 690 V star-delta  | I <sub>e</sub>  | A                 | 29.4   |
| AC-21A  | -               |                   |  |
| Rated operational current switch  |                 |                   |  |
| 440 V   | I <sub>e</sub>  | Α                 | 100  |
| AC-23A  | - 6             |                   |  |
| 1.0 2UM   |                 |                   |  |

| Motor rating AC-23A, 50 - 60 Hz               | P                 | kW              |  |
|---|-------------------|-----------------|--|
| 230 V   | P                 | kW              | 30   |
| 400 V 415 V                                   | P                 | kW              | 55   |
| 500 V   | P                 | kW              | 37   |
| 690 V   | Р                 | kW              | 30   |
| Rated operational current motor load switch   |                   |                 |  |
| 230 V   | l <sub>e</sub>    | Α               | 100  |
| 400 V 415 V                                   | I <sub>e</sub>    | Α               | 100  |
| 500 V   | l <sub>e</sub>    | Α               | 55   |
| 690 V   | l <sub>e</sub>    | Α               | 32   |
| DC  |                   |                 |  |
| DC-1, Load-break switches L/R = 1 ms          |                   |                 |  |
| Rated operational current                     | le                | Α               | 80   |
| Voltage per contact pair in series            |                   | V               | 60   |
| Control circuit reliability at 24 V DC, 10 mA | Fault probability | H <sub>F</sub>  | $< 10^{-5}, < 1$ failure in 100,000 switching operations |
| Terminal capacities                           |                   |                 |  |
| Solid or stranded                             |                   | mm <sup>2</sup> | 1 x (2,5 - 35)<br>2 x (2,5 - 16)                         |
| Flexible with ferrules to DIN 46228           |                   | mm <sup>2</sup> | 1 x (1 - 25)<br>2 x (1.5 - 10)                           |
| Terminal screw                                |                   |                 | M6   |
| Tightening torque for terminal screw          |                   | Nm              | 4  |
| Fechnical safety parameters:                  |                   |                 |  |
| Notes   |                   |                 | B10 <sub>d</sub> values as per EN ISO 13849-1, table C1  |
|   |                   |                 |  |
| Rating data for approved types                |                   |                 |  |
|   |                   |                 |  |
| Rating data for approved types                |                   |                 | M6   |

## Design verification as per IEC/EN 61439

| echnical data for design verification  |                   |    |  |
|--|-------------------|----|--|
| Rated operational current for specified heat dissipation   | In                | Α  | 100  |
| Heat dissipation per pole, current-dependent   | $P_{\text{vid}}$  | W  | 7.5  |
| Equipment heat dissipation, current-dependent  | $P_{vid}$         | W  | 0  |
| Static heat dissipation, non-current-dependent   | $P_{vs}$          | W  | 0  |
| Heat dissipation capacity  | P <sub>diss</sub> | W  | 0  |
| Operating ambient temperature min.   |                   | °C | -25  |
| Operating ambient temperature max.   |                   | °C | 40   |
| EC/EN 61439 design verification  |                   |    |  |
| 10.2 Strength of materials and parts   |                   |    |  |
| 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 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric 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 Insulation properties   |                   |    |  |

| 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.                         |

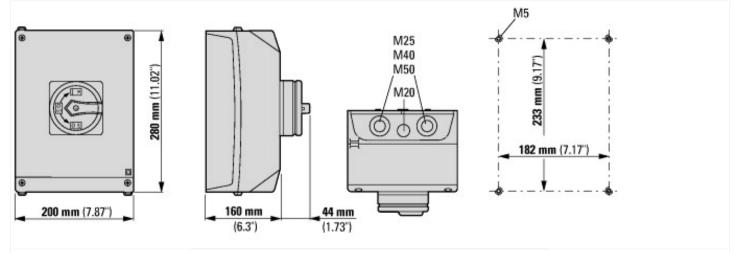
## **Technical data ETIM 7.0**

Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)

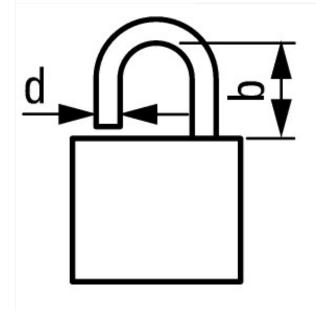
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss10.0.1-27-37-14-03 [AKF060013])

| Version as main switch                                  |    | Yes                        |
|---|----|----------------------------|
| Version as maintenance-/service switch                  |    | Yes                        |
| Version as safety switch                                |    | No                         |
| Version as emergency stop installation                  |    | 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 lu                              | Α  | 100                        |
| Rated permanent current at AC-23, 400 V                 | Α  | 100                        |
| Rated permanent current at AC-21, 400 V                 | Α  | 100                        |
| Rated operation power at AC-3, 400 V                    | kW | 30                         |
| Rated short-time withstand current lcw                  | 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   |    | 6                          |
| 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 ground 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                                 |    | 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)                             |    | Other                      |
|   |    |                            |

#### **Dimensions**



Cam switches T5B and T5 are of identical design, only their contacts are different



**d = 4 - 8 mm b + d ≤ 47 mm**d = 0.16 - 0.31"
b + d ≤ 1.85"

≦3 padlocks

#### **Assets (links)**

**Declaration of CE Conformity** 

00003073

**Instruction Leaflets** 

IL03801009Z2018\_05

#### **Additional product information (links)**

| IL03801009Z (AWA1150-1692) Cam switch: swit                  | tch-disconnector   |  |
|--|--|--|
| IL03801009Z (AWA1150-1692) Cam switch: switch-disconnector   | ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03801009Z2018_05.pdf              |  |
| Display flip catalog page.                                   | http://ecat.moeller.net/flip-cat/?edition=K115A&startpage=130                            |  |
| Technical overview cam switch, switch-disconnector           | http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.2                       |  |
| System overview cam switch T                                 | http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.4                       |  |
| System overview switch-disconnector P                        | http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.6                       |  |
| Key to part numbers Cam switch                               | http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.8                       |  |
| Key to part numbers Switch-disconnector                      | http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.8                       |  |
| Switches for ATEX  | http://www.coopercrouse-hinds.eu/en/products/25-ex-safety-and-main-current-switches.html |  |
| Ordering form for SOND switches and SOND front plates(DE_EN) | ftp://ftp.moeller.net/D0CUMENTATION/PDF/MZ008005ZU_Orderform_Customized_Switch.pdf       |  |
| Ordering form for SOND switches and SOND front plates(DE_EN) | ftp://ftp.moeller.net/DOCUMENTATION/PDF/MZ008006ZU_Orderform_Customized_Switch.pdf       |  |