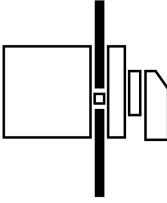




Non-standard switch, T5, 100 A, flush mounting, 1 contact unit(s)

Part no. **T5-1-SOND\*/E**  
Article no. **907978**

## Delivery program

|                                        |       |                 |                                                                                    |
|----------------------------------------|-------|-----------------|------------------------------------------------------------------------------------|
| Product range                          |       |                 | Non-standard switch                                                                |
| Part group reference                   |       |                 | T5                                                                                 |
| Notes                                  |       |                 | customized version according to form                                               |
| Degree of Protection                   |       |                 | Front IP65                                                                         |
| Design                                 |       |                 | flush mounting                                                                     |
|                                        |       |                 |  |
| <b>Motor rating AC-23A, 50 - 60 Hz</b> |       |                 |                                                                                    |
| 400 V                                  | P     | kW              | 55                                                                                 |
| Rated uninterrupted current            | $I_u$ | A               | 100                                                                                |
| Number of contact units                |       | contact unit(s) | 1                                                                                  |

## Technical data

### General

|                                                                       |           |      |                                                                                         |
|-----------------------------------------------------------------------|-----------|------|-----------------------------------------------------------------------------------------|
| 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                                                   |           |      |                                                                                         |
| Open                                                                  |           | °C   | -25 - +50                                                                               |
| Enclosed                                                              |           | °C   | -25 - +40                                                                               |
| Overvoltage category/pollution degree                                 |           |      | III/3                                                                                   |
| Rated impulse withstand voltage                                       | $U_{imp}$ | V AC | 6000                                                                                    |
| Mechanical shock resistance                                           |           | g    | 15                                                                                      |
| Mounting position                                                     |           |      | As required                                                                             |
| Protection against direct contact when actuated from front (EN 50274) |           |      | Finger and back-of-hand proof                                                           |

### Contacts

|                                                     |          |           |                                                                        |
|-----------------------------------------------------|----------|-----------|------------------------------------------------------------------------|
| Electrical characteristics                          |          |           |                                                                        |
| Rated operational voltage                           | $U_e$    | V AC      | 690                                                                    |
| Rated uninterrupted current                         | $I_u$    | A         | 100                                                                    |
| Note on rated uninterrupted current $I_u$           |          |           | Rated uninterrupted current $I_u$ is specified for max. cross-section. |
| Load rating with intermittent operation, class 12   |          |           |                                                                        |
| AB 25 % DF                                          |          | $x I_e$   | 2                                                                      |
| AB 40 % DF                                          |          | $x I_e$   | 1.6                                                                    |
| AB 60 % DF                                          |          | $x I_e$   | 1.3                                                                    |
| Short-circuit rating                                |          |           |                                                                        |
| Fuse                                                |          | A gG/gL   | 100                                                                    |
| Rated short-time withstand current (1 s current)    | $I_{cw}$ | $A_{rms}$ | 1700                                                                   |
| Note on rated short-time withstand current $I_{cw}$ |          |           | Current for a time of 1 second                                         |
| Rated conditional short-circuit current             | $I_q$    | kA        | 2                                                                      |

### Switching capacity

|                                                     |  |   |     |
|-----------------------------------------------------|--|---|-----|
| cos $\phi$ rated making capacity as per IEC 60947-3 |  | A | 950 |
| Rated breaking capacity cos $\phi$ 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                                     |                   |               |                                              |
| between the contacts                                           |                   | V AC          | 440                                          |
| Current heat loss per contact at $I_e$                         |                   | W             | 7.5                                          |
| Current heat loss per auxiliary circuit at $I_e$ (AC-15/230 V) |                   | CO            | 7.5                                          |
| Lifespan, mechanical                                           | Operations        | $\times 10^6$ | > 0.5                                        |
| Maximum operating frequency                                    | Operations/h      |               | 1200                                         |
| AC                                                             |                   |               |                                              |
| AC-3                                                           |                   |               |                                              |
| Rating, motor load switch                                      | P                 | kW            |                                              |
| 220 V 230 V                                                    | P                 | kW            | 22                                           |
| 230 V Star-delta                                               | P                 | kW            | 30                                           |
| 400 V 415 V                                                    | P                 | kW            | 30                                           |
| 400 V Star-delta                                               | P                 | kW            | 45                                           |
| 500 V                                                          | P                 | kW            | 30                                           |
| 500 V Star-delta                                               | P                 | kW            | 45                                           |
| 690 V                                                          | P                 | kW            | 15                                           |
| 690 V Star-delta                                               | P                 | kW            | 22                                           |
| Rated operational current motor load switch                    |                   |               |                                              |
| 230 V                                                          | $I_e$             | A             | 71                                           |
| 230 V star-delta                                               | $I_e$             | A             | 100                                          |
| 400V 415 V                                                     | $I_e$             | A             | 55                                           |
| 400 V star-delta                                               | $I_e$             | A             | 95.3                                         |
| 500 V                                                          | $I_e$             | A             | 44                                           |
| 500 V star-delta                                               | $I_e$             | A             | 76.2                                         |
| 690 V                                                          | $I_e$             | A             | 17                                           |
| 690 V star-delta                                               | $I_e$             | A             | 29.4                                         |
| AC-21A                                                         |                   |               |                                              |
| Rated operational current switch                               |                   |               |                                              |
| 440 V                                                          | $I_e$             | A             | 100                                          |
| AC-23A                                                         |                   |               |                                              |
| 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                                                          | P                 | kW            | 30                                           |
| Rated operational current motor load switch                    |                   |               |                                              |
| 230 V                                                          | $I_e$             | A             | 100                                          |
| 400 V 415 V                                                    | $I_e$             | A             | 100                                          |
| 500 V                                                          | $I_e$             | A             | 55                                           |
| 690 V                                                          | $I_e$             | A             | 32                                           |
| DC                                                             |                   |               |                                              |
| DC-1, Load-break switches L/R = 1 ms                           |                   |               |                                              |
| Rated operational current                                      | $I_e$             | A             | 80                                           |
| Voltage per contact pair in series                             |                   | V             | 60                                           |
| Control circuit reliability at 24 V DC, 10 mA                  | Fault probability | $H_F$         | $< 10^{-5}$ , < 1 fault in 100000 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                               |
| Max. tightening torque              |  | Nm              | 4                                |

## Technical safety parameters:

|                                       |  |  |                                                         |
|---------------------------------------|--|--|---------------------------------------------------------|
| <b>Notes</b>                          |  |  | B10 <sub>q</sub> values as per EN ISO 13849-1, table C1 |
| <b>Rating data for approved types</b> |  |  |                                                         |
| Terminal capacity                     |  |  |                                                         |
| Terminal screw                        |  |  | M6                                                      |

## Design verification as per IEC/EN 61439

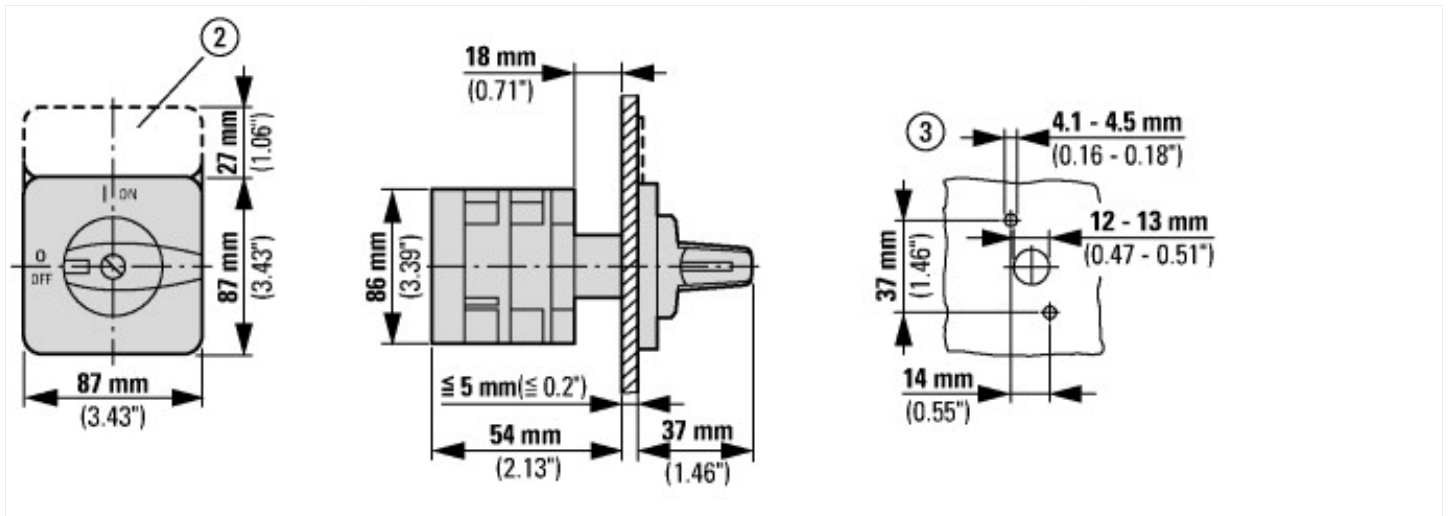
|                                                                                                                        |            |    |                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------|------------|----|----------------------------------------------------------------------------------------------------------------------------------|
| Technical data for design verification                                                                                 |            |    |                                                                                                                                  |
| Rated operational current for specified heat dissipation                                                               | $I_n$      | A  | 100                                                                                                                              |
| Heat dissipation per pole, current-dependent                                                                           | $P_{vid}$  | 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                                                                                              | $P_{diss}$ | W  | 0                                                                                                                                |
| Operating ambient temperature min.                                                                                     |            | °C | -25                                                                                                                              |
| Operating ambient temperature max.                                                                                     |            | °C | 50                                                                                                                               |
| IEC/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                                                                       |            |    | Please enquire                                                                                                                   |
| 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 6.0

|                                                                                                                                                                                                            |  |   |           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---|-----------|
| 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@ss8.1-27-37-14-03 [AKF060010]) |  |   |           |
| 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        |
| Max. rated operation voltage $U_e$ AC                                                                                                                                                                      |  | V | 690       |
| Rated operating voltage                                                                                                                                                                                    |  | V | 690 - 690 |
| Rated permanent current $I_u$                                                                                                                                                                              |  | A | 100       |
| 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 I <sub>cw</sub>      | 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 I <sub>q</sub>  | kA | 2                                        |
| Number of poles                                         |    | 0                                        |
| 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 ground mounting                            |    | No                                       |
| Suitable for front mounting 4-hole                      |    | Yes                                      |
| Suitable for front mounting center                      |    | 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           |    | Screw connection                         |
| Degree of protection (IP), front side                   |    | IP65                                     |

## Dimensions



② ZFS... Label mount not included as standard

③ Drilling dimensions door

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

## Additional product information (links)

### IL03801009Z (AWA1150-1692) Cam switch: switch-disconnector

|                                                            |                                                                                                                                                                                                 |
|------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IL03801009Z (AWA1150-1692) Cam switch: switch-disconnector | <a href="ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03801009Z2016_07.pdf">ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03801009Z2016_07.pdf</a>                           |
| Form for ordering non-standard switches                    | <a href="http://ecat.moeller.net/flip-cat/?edition=HPLEN&amp;startpage=4.84">http://ecat.moeller.net/flip-cat/?edition=HPLEN&amp;startpage=4.84</a>                                             |
| Form for ordering non-standard front plates                | <a href="http://ecat.moeller.net/flip-cat/?edition=HPLEN&amp;startpage=4.87">http://ecat.moeller.net/flip-cat/?edition=HPLEN&amp;startpage=4.87</a>                                             |
| Technical overview cam switch, switch-disconnector         | <a href="http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.2">http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.2</a>                                     |
| System overview cam switch T                               | <a href="http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.4">http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.4</a>                                     |
| System overview switch-disconnector P                      | <a href="http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.6">http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.6</a>                                     |
| Key to part numbers Cam switch                             | <a href="http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.8">http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.8</a>                                     |
| Key to part numbers Switch-disconnector                    | <a href="http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.8">http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.8</a>                                     |
| Switches for ATEX                                          | <a href="http://www.coopercrouse-hinds.eu/en/products/25-ex-safety-and-main-current-switches.html">http://www.coopercrouse-hinds.eu/en/products/25-ex-safety-and-main-current-switches.html</a> |

