### **DATASHEET - T5B-3-8342/I4**



On-Off switch, T5B, 63 A, surface mounting, 3 contact unit(s), 6 pole, with black thumb grip and front plate  $\frac{1}{2} \left( \frac{1}{2} \right) = \frac{1}{2} \left( \frac{1}{2} \right) \left( \frac{1}{2} \right$ 



T5B-3-8342/I4 Part no. Catalog No. 207226

| Delivery      | þι | υg | Ιd | Ш |
|---------------|----|----|----|---|
| Product range |    |    |    |   |

| Delivery program                       |                |                    |   |
|--|----------------|--------------------|---|
| Product range                          |                |                    | On-Off switch   |
| Part group reference                   |                |                    | T5B   |
|  |                |                    | with black thumb grip and front plate   |
| Number of poles                        |                |                    | 6 pole  |
| Degree of Protection                   |                |                    | IP65  |
|  |                |                    | totally insulated   |
| Design                                 |                |                    | surface mounting  |
|  |                |                    |   |
| Contact sequence                       |                |                    | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   |
| Switching angle                        |                | 0                  | 90  |
| Switching performance                  |                |                    | maintained  |
| Design number                          |                |                    | 8342  |
| Front plate no.                        |                |                    | FS 908  |
| front plate                            |                |                    | 0-1   |
| Motor rating AC-23A, 50 - 60 Hz        |                |                    |   |
| 400 V                                  | Р              | kW                 | 30  |
| Rated uninterrupted current            | l <sub>u</sub> | Α                  | 63  |
| Note on rated uninterrupted current !u |                |                    | Rated uninterrupted current I <sub>u</sub> is specified for max. cross-section. |
| Number of contact units                |                | contact<br>unit(s) | 3   |

# **Technical data**

| General                               |           |      |  |
|---------------------------------------|-----------|------|--|
| Standards                             |           |      | IEC/EN 60947, VDE 0660, IEC/EN 60204, CSA, UL<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       | $U_{imp}$ | V AC | 6000   |
| Mechanical shock resistance           |           | g    | 15   |

| Mounting position   |                 |                   | As required   |
|---|-----------------|-------------------|---|
| Contacts  |                 |                   | To roquirou   |
| Mechanical variables  |                 |                   |   |
| Number of poles   |                 |                   | 6 pole  |
| Electrical characteristics  |                 |                   |   |
| Rated operational voltage   | U <sub>e</sub>  | V AC              | 690   |
| Rated uninterrupted current   | Iu              | Α                 | 63  |
| Note on rated uninterrupted current !u                                  | u               |                   | Rated uninterrupted current I <sub>u</sub> is specified for max. cross-section. |
| Load rating with intermittent operation, class 12                       |                 |                   | Takes diministrative serior (ii e operanor in maniferone socialis)              |
| AB 25 % DF  |                 | v I               | 2   |
| AB 40 % DF  |                 | x l <sub>e</sub>  |   |
|   |                 | x l <sub>e</sub>  | 1.6   |
| AB 60 % DF  |                 | x l <sub>e</sub>  | 1.3   |
| Short-circuit rating  |                 |                   |   |
| Fuse  |                 | A gG/gL           |   |
| Rated short-time withstand current (1 s current)                        | I <sub>cw</sub> | A <sub>rms</sub>  | 1300  |
| 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  |                 | ٨                 | 000   |
| cos φ rated making capacity as per IEC 60947-3                          |                 | A                 | 800   |
| Rated breaking capacity cos φ to IEC 60947-3                            |                 | A                 | 520   |
| 230 V   |                 | A                 | 520   |
| 400/415 V   |                 | A                 | 600   |
| 500 V   |                 | A                 | 480   |
| 690 V   |                 | Α                 | 340   |
| Safe isolation to EN 61140  |                 | V 40              |   |
| between the contacts  |                 | V AC              | 440   |
| Current heat loss per contact at I <sub>e</sub>                         |                 | W                 | 4.5   |
| Current heat loss per auxiliary circuit at I <sub>e</sub> (AC-15/230 V) |                 | CO                | 4.5   |
| Lifespan, mechanical  | Operations      | x 10 <sup>6</sup> | > 0.5   |
| Maximum operating frequency   | Operations/h    |                   | 1200  |
| AC  |                 |                   |   |
| AC-3  |                 |                   |   |
| Rating, motor load switch   | P               | kW                |   |
| 220 V 230 V   | P               | kW                | 15  |
| 230 V Star-delta  | P               | kW                | 18.5  |
| 400 V 415 V   | P               | kW                | 22  |
| 400 V Star-delta  | P               | kW                | 30  |
| 500 V   | P               | kW                | 22  |
| 500 V Star-delta  | Р               | kW                | 37  |
| 690 V   | Р               | kW                | 15  |
| 690 V Star-delta  | P               | kW                | 22  |
| Rated operational current motor load switch                             |                 |                   |   |
| 230 V   | I <sub>e</sub>  | Α                 | 51  |
| 230 V star-delta  | I <sub>e</sub>  | Α                 | 63  |
| 400V 415 V  | l <sub>e</sub>  | Α                 | 41  |
| 400 V star-delta  | I <sub>e</sub>  | Α                 | 63  |
| 500 V   | I <sub>e</sub>  | A                 | 33  |
| 500 V star-delta  |                 | A                 | 57.2  |
|   | l <sub>e</sub>  |                   |   |
| 690 V   | l <sub>e</sub>  | A                 | 17  |
| 690 V star-delta  | l <sub>e</sub>  | Α                 | 29.4  |
| AC-23A  |                 |                   |   |
| Motor rating AC-23A, 50 - 60 Hz   | Р               | kW                |   |
| 230 V   | Р               | kW                | 18.5  |
| 400 V 415 V   | P               | kW                | 30  |

| 500 V  | Р                 | kW              | 22  |
|--|-------------------|-----------------|---|
| 690 V  | Р                 | kW              | 22  |
| Rated operational current motor load switch                        |                   |                 |   |
| 230 V  | I <sub>e</sub>    | Α               | 63  |
| 400 V 415 V  | I <sub>e</sub>    | Α               | 63  |
| 500 V  | I <sub>e</sub>    | Α               | 33  |
| 690 V  | I <sub>e</sub>    | Α               | 23.8  |
| DC   | ·e                | , ·             |   |
| DC-1, Load-break switches L/R = 1 ms                               |                   |                 |   |
| Rated operational current  | I <sub>e</sub>    | Α               | 63  |
| Voltage per contact pair in series                                 | ·e                | V               | 60  |
| DC-23A, motor load switch L/R = 15 ms                              |                   |                 |   |
| 24 V   |                   |                 |   |
| Rated operational current  | I <sub>e</sub>    | A               | 50  |
| Contacts   | · ·               | Quantity        |   |
| 48 V   |                   | ,               |   |
| Rated operational current  | l <sub>e</sub>    | Α               | 50  |
| Contacts   |                   | Quantity        | 2   |
| 60 V   |                   | ,               |   |
| Rated operational current  | I <sub>e</sub>    | Α               | 50  |
| Contacts   |                   | Quantity        | 3   |
| 120 V  |                   |                 |   |
| Rated operational current  | l <sub>e</sub>    | Α               | 25  |
| Contacts   |                   | Quantity        | 3   |
| 240 V  |                   |                 |   |
| Rated operational current  | l <sub>e</sub>    | Α               | 20  |
| Contacts   |                   | Quantity        | 6   |
| DC-13, Control switches L/R = 50 ms                                |                   |                 |   |
| Rated operational current  | l <sub>e</sub>    | Α               | 25  |
| Voltage per contact pair in series                                 |                   | ٧               | 24  |
| Control circuit reliability at 24 V DC, 10 mA                      | Fault probability | H <sub>F</sub>  | < 10 <sup>-5</sup> ,< 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  Technical safety parameters: |                   | Nm              | 4   |
| Notes  |                   |                 | B10 <sub>d</sub> values as per EN ISO 13849-1, table C1         |
| Rating data for approved types                                     |                   |                 |   |
| Contacts   |                   |                 |   |
| Rated operational voltage  | U <sub>e</sub>    | V AC            | 600   |
| Rated uninterrupted current max.                                   |                   |                 |   |
| Main conducting paths  |                   |                 |   |
| General use  |                   | Α               | 63  |
| Switching capacity   |                   |                 |   |
| Maximum motor rating   |                   |                 |   |
| Single-phase   |                   |                 |   |
| 120 V AC   |                   | HP              | 3   |
| 200 V AC   |                   | НР              | 7.5   |
| 240 V AC   |                   | HP              | 10  |
| Three-phase  |                   | ш               |   |
| 200 V AC   |                   | HP              | 15  |
| 240 V AC   |                   | HP              | 15  |

| 480 V AC                                 | HP    | 40           |
|--|-------|--------------|
| 600 V AC                                 | HP    | 40           |
| Short Circuit Current Rating             | SCCR  |              |
| High fault rating                        | kA    | 10           |
| max. Fuse                                | А     | 100, Class J |
| Terminal capacity                        |       |              |
| Solid or flexible conductor with ferrule | AWG   | 12 - 4       |
| Terminal screw                           |       | M6           |
| Tightening torque                        | lb-in | 35.4         |

## Design verification as per IEC/EN 61439

| Technical data for design verification   |                   |    |  |
|--|-------------------|----|--|
| Rated operational current for specified heat dissipation   | In                | Α  | 63   |
| Heat dissipation per pole, current-dependent   | P <sub>vid</sub>  | W  | 4.5  |
| Equipment heat dissipation, current-dependent  | P <sub>vid</sub>  | W  | 0  |
| Static heat dissipation, non-current-dependent   | P <sub>vs</sub>   | W  | 0  |
| Heat dissipation capacity  | P <sub>diss</sub> | W  | 0  |
| Operating ambient temperature min.   |                   | °C | -25  |
| Operating ambient temperature max.   |                   | °C | 40   |
| 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   |                   |    | 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])

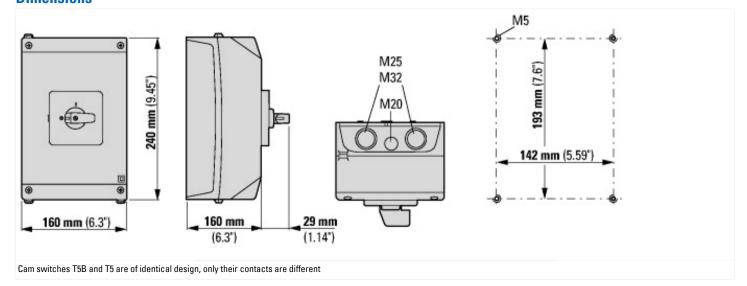
| Version as main switch                 | No |
|--|----|
| Version as maintenance-/service switch | No |
| Version as safety switch               | No |
| Version as emergency stop installation | No |

| Version as reversing switch                             |    | No                         |
|---|----|----------------------------|
| Number of switches                                      |    | 1                          |
| Max. rated operation voltage Ue AC                      | V  | 690                        |
| Rated operating voltage                                 | V  | 690 - 690                  |
| Rated permanent current lu                              | Α  | 63                         |
| Rated permanent current at AC-23, 400 V                 | А  | 63                         |
| Rated permanent current at AC-21, 400 V                 | А  | 63                         |
| Rated operation power at AC-3, 400 V                    | kW | 22                         |
| Rated short-time withstand current lcw                  | kA | 1.3                        |
| Rated operation power at AC-23, 400 V                   | kW | 30                         |
| Switching power at 400 V                                | kW | 30                         |
| 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                                 |    | Toggle                     |
| Interlockable   |    | No                         |
| Type of electrical connection of main circuit           |    | Screw connection           |
| Degree of protection (IP), front side                   |    | IP65                       |
| Degree of protection (NEMA)                             |    | 12                         |
|   |    |                            |

# Approvals

| • •                                  |   |
|--------------------------------------|---|
| Product Standards                    | UL 60947-4-1;CSA - C22.2 No. 60947-4-1-14; CSA-C22.2 No. 94; IEC/EN 60947-3; CE marking             |
| UL File No.                          | E36332  |
| UL Category Control No.              | NLRV  |
| CSA File No.                         | 12528   |
| CSA Class No.                        | 3211-07   |
| North America Certification          | UL listed, CSA certified  |
| Specially designed for North America | Yes, additional labeling according to UL on the enclosure in combination with "+NA-<br>14" (105868) |
| Suitable for                         | Branch circuits, suitable as motor disconnect   |
| Degree of Protection                 | IEC: IP65; UL/CSA Type 1, 12  |

### **Dimensions**



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

| · · · · · · · · · · · · · · · · · · ·              |  |
|--|--|
| 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 |