#### **DATASHEET - T3-2-15042/E**



ON-OFF switches, T3, 32 A, flush mounting, 2 contact unit(s), Contacts: 4, 90 °, maintained, With 0 (Off) position, 0-1-0-1, design no. 15042



Part no. T3-2-15042/E Catalog No. 047599

Dolivory program

Similar to illustration

| Delivery program                       |                |                    |  |
|--|----------------|--------------------|--|
| Product range                          |                |                    | Control switches   |
| Part group reference                   |                |                    | T3   |
| Basic function                         |                |                    | ON-OFF switches  |
|  |                |                    | with black thumb grip and front plate  |
| Contacts                               |                |                    | 4  |
| Degree of Protection                   |                |                    | Front IP65   |
| Design                                 |                |                    | flush mounting   |
|  |                |                    |  |
| Contact sequence                       |                |                    | 0 1 0 1 1 0 2 0  |
| Switching angle                        |                | 0                  | 90   |
| Switching performance                  |                |                    | maintained With 0 (Off) position   |
| Design number                          |                |                    | 15042  |
| Front plate no.                        |                |                    | FS 926   |
| front plate                            |                |                    | 0-1-0-1  |
| Motor rating AC-23A, 50 - 60 Hz        |                |                    |  |
| 400 V                                  | P              | kW                 | 15   |
| Rated uninterrupted current            | I <sub>u</sub> | Α                  | 32   |
| Note on rated uninterrupted current !u |                |                    | Rated uninterrupted current $\mathbf{I}_{\mathbf{U}}$ is specified for max. cross-section. |
| Number of contact units                |                | contact<br>unit(s) | 2  |

# 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 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  |
| Contacts  |                 |                   |  |
| Electrical characteristics  |                 |                   |  |
| Rated operational voltage   | U <sub>e</sub>  | V AC              | 690  |
| Rated uninterrupted current   | Iu              | Α                 | 32   |
| Note on rated uninterrupted current !u                                  |                 |                   | Rated uninterrupted current $I_{\rm u}$ is specified for max. cross-section. |
| Load rating with intermittent operation, class 12                       |                 |                   |  |
| AB 25 % DF  |                 | x l <sub>e</sub>  | 2  |
| AB 40 % DF  |                 | x I <sub>e</sub>  | 1.6  |
| AB 60 % DF  |                 | x I <sub>e</sub>  | 1.3  |
| Short-circuit rating  |                 |                   |  |
| Fuse  |                 | A gG/gL           | 35   |
| Rated short-time withstand current (1 s current)                        | I <sub>cw</sub> | $A_{rms}$         | 650  |
| Note on rated short-time withstand current lcw                          |                 |                   | Current for a time of 1 second   |
| Rated conditional short-circuit current                                 | $I_q$           | kA                | 1  |
| Switching capacity  |                 |                   |  |
| cos φ rated making capacity as per IEC 60947-3                          |                 | A                 | 320  |
| Rated breaking capacity cos φ to IEC 60947-3                            |                 | Α                 |  |
| 230 V   |                 | A                 | 260  |
| 400/415 V   |                 | A                 | 260  |
| 500 V   |                 | A                 | 240  |
| 690 V   |                 | Α                 | 170  |
| Safe isolation to EN 61140  |                 | V AC              | 440  |
| between the contacts  Current heat less per contact at I                |                 | V AC<br>W         | 440  |
| Current heat loss per contact at I <sub>e</sub>                         |                 |                   | 1.1  |
| Current heat loss per auxiliary circuit at I <sub>e</sub> (AC-15/230 V) |                 | CO                | 1.1  |
| 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                | 5.5  |
| 230 V Star-delta  | P               | kW                | 7.5  |
| 400 V 415 V   | P               | kW                | 11   |
| 400 V Star-delta<br>500 V   | P<br>P          | kW                | 15   |
| 500 V<br>500 V Star-delta   | P<br>P          | kW                | 15<br>18.5   |
| 500 V Star-deita<br>690 V   | P               | kW                | 11   |
| 690 V Star-delta  | P               | kW                | 22   |
| Rated operational current motor load switch                             |                 | KVV               | <u></u>  |
| 230 V   | I <sub>e</sub>  | Α                 | 23.7   |
| 230 V star-delta  | I <sub>e</sub>  | A                 | 32   |
| 400V 415 V  |                 | A                 | 23.7   |
| 400 V star-delta  | l <sub>e</sub>  |                   | 32   |
|   | le              | A                 |  |
| 500 V   | l <sub>e</sub>  | A                 | 23.7   |
| 500 V star-delta  |                 | Α                 | 32   |
|   | l <sub>e</sub>  |                   |  |
| 690 V   | I <sub>e</sub>  | Α                 | 14.7   |
|   |                 |                   | 14.7<br>25.5   |

| Motor rating AC 22A FO COLL                   | Р                 | LAAZ            |   |
|---|-------------------|-----------------|---|
| Motor rating AC-23A, 50 - 60 Hz               |                   | kW              | 7.  |
| 230 V   | P                 | kW              | 7.5   |
| 400 V 415 V                                   | P                 | kW              | 15  |
| 500 V   | P                 | kW              | 15  |
| 690 V   | Р                 | kW              | 15  |
| Rated operational current motor load switch   |                   |                 |   |
| 230 V   | l <sub>e</sub>    | Α               | 32  |
| 400 V 415 V                                   | l <sub>e</sub>    | Α               | 32  |
| 500 V   | l <sub>e</sub>    | Α               | 26.4  |
| 690 V   | l <sub>e</sub>    | Α               | 17  |
| DC  |                   |                 |   |
| DC-1, Load-break switches L/R = 1 ms          |                   |                 |   |
| Rated operational current                     | le                | Α               | 25  |
| Voltage per contact pair in series            |                   | ٧               | 60  |
| DC-21A  | l <sub>e</sub>    | Α               |   |
| Rated operational current                     | I <sub>e</sub>    | Α               | 1   |
| Contacts                                      |                   | Quantity        | 1   |
| DC-23A, motor load switch L/R = 15 ms         |                   |                 |   |
| 24 V  |                   |                 |   |
| Rated operational current                     | l <sub>e</sub>    | Α               | 25  |
| Contacts                                      | ·e                | Quantity        |   |
| 48 V  |                   | Quantity        |   |
| Rated operational current                     | I <sub>e</sub>    | Α               | 25  |
|   | 'e                |                 |   |
| Contacts                                      |                   | Quantity        | 2   |
| 60 V  |                   | ^               | ar.   |
| Rated operational current                     | l <sub>e</sub>    | Α               | 25  |
| Contacts                                      |                   | Quantity        | 3   |
| 120 V   |                   |                 |   |
| Rated operational current                     | l <sub>e</sub>    | Α               | 12  |
| Contacts                                      |                   | Quantity        | 3   |
| 240 V   |                   |                 |   |
| Rated operational current                     | l <sub>e</sub>    | Α               | 5   |
| Contacts                                      |                   | Quantity        | 5   |
| DC-13, Control switches L/R = 50 ms           |                   |                 |   |
| Rated operational current                     | l <sub>e</sub>    | Α               | 20  |
| Voltage per contact pair in series            |                   | V               | 24  |
| Control circuit reliability at 24 V DC, 10 mA | Fault probability | $H_{F}$         | $< 10^{-5}$ , $< 1$ failure in 100,000 switching operations |
| Terminal capacities                           | probability       |                 |   |
| Solid or stranded                             |                   | mm <sup>2</sup> | 1 x (1 - 6)   |
|   |                   |                 | 2 x (1 - 6)   |
| Flexible with ferrules to DIN 46228           |                   | $\mathrm{mm}^2$ | 1 x (0.75 - 4)<br>2 x (0.75 - 4)                            |
| Terminal screw                                |                   |                 | M4  |
| Tightening torque for terminal screw          |                   | Nm              | 1.6   |
| Technical safety parameters:                  |                   | 1410            |   |
| 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               | 25  |
| Auxiliary contacts                            |                   |                 |   |
| General Use                                   | lu                | Α               | 10  |
| Pilot Duty                                    |                   |                 | A 600   |
| ,   |                   |                 |   |

| Switching capacity                       |       |             |
|--|-------|-------------|
| Maximum motor rating                     |       |             |
| Single-phase                             |       |             |
| 120 V AC                                 | HP    | 1.5         |
| 200 V AC                                 | HP    | 3           |
| 240 V AC                                 | HP    | 3           |
| Three-phase                              |       |             |
| 200 V AC                                 | HP    | 3           |
| 240 V AC                                 | HP    | 3           |
| 480 V AC                                 | HP    | 7.5         |
| 600 V AC                                 | HP    | 10          |
| Short Circuit Current Rating             | SCCR  |             |
| Basic Rating                             | kA    | 5           |
| max. Fuse                                | А     | 40          |
| High fault rating                        | kA    | 10          |
| max. Fuse                                | Α     | 40, Class J |
| Terminal capacity                        |       |             |
| Solid or flexible conductor with ferrule | AWG   | 14 - 10     |
| Terminal screw                           |       | M4          |
| Tightening torque                        | lb-in | 17.7        |

## Design verification as per IEC/EN 61439

| -  |                   |    |  |
|--|-------------------|----|--|
| Technical data for design verification   |                   |    |  |
| Rated operational current for specified heat dissipation   | In                | Α  | 32   |
| Heat dissipation per pole, current-dependent   | $P_{vid}$         | W  | 1.1  |
| 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 | 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   |                   |    | 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) / Control switch (EC002611)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Control switch (ecl@ss10.0.1-27-37-14-14 [ACN998011])

| p.o.toooo                                    |   |                 |
|--|---|-----------------|
| Type of switch                               |   | On/Off switch   |
| Number of poles                              |   | 4               |
| Max. rated operation voltage Ue AC           | V | 690             |
| Rated permanent current lu                   | Α | 32              |
| Number of switch positions                   |   | 4               |
| With 0 (off) position                        |   | Yes             |
| With retraction in 0-position                |   | No              |
| Device construction                          |   | Built-in device |
| Width in number of modular spacings          |   | 0               |
| Suitable for ground mounting                 |   | No              |
| Suitable for front mounting 4-hole           |   | Yes             |
| Suitable for distribution board installation |   | No              |
| Suitable for intermediate mounting           |   | No              |
| Complete device in housing                   |   | No              |
| Type of control element                      |   | Toggle          |
| Front shield size                            |   | 48x48 mm        |
| Degree of protection (IP), front side        |   | IP65            |
| Degree of protection (NEMA), front side      |   | 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.               | 3211-05   |
| North America Certification | UL listed, CSA certified  |
| Suitable for                | Branch circuits, suitable as motor disconnect   |
| Degree of Protection        | IEC: IP65; UL/CSA Type 1, 12  |

#### **Dimensions**

