## **DATASHEET - T5-6-15252/X**



T5, 100 A, rear mounting, Basic switch, 6 contact unit(s), Contacts: 11, 30  $^{\circ},$  design no. 15252



Part no. T5-6-15252/X Catalog No. 094878

Similar to illustration

| Delivery program                       |                |                    |  |
|--|----------------|--------------------|--|
| Product range                          |                |                    | Control switches   |
| Part group reference                   |                |                    | T5   |
| Contacts                               |                |                    | 11   |
| Design                                 |                |                    | rear mounting<br>Basic switch  |
| Contact sequence                       |                |                    |  |
| Switching angle                        |                | 0                  | 30   |
| Design number                          |                |                    | 15252  |
| Front plate no.                        |                |                    | FS 302   |
| 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 $\mathbf{I}_{\mathbf{u}}$ is specified for max. cross-section. |
| Number of contact units                |                | contact<br>unit(s) | 6  |

## **Technical data**

| _  |   |   |   |    |
|----|---|---|---|----|
| •  | _ | _ | _ |    |
| 11 | е | п | е | гн |

| 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  |
| Contacts  |                |                  |  |
| Electrical characteristics                        |                |                  |  |
| Rated operational voltage                         | U <sub>e</sub> | V AC             | 690  |
| Rated uninterrupted current                       | I <sub>u</sub> | Α                | 100  |
| Note on rated uninterrupted current !u            |                |                  | Rated uninterrupted current $\mathbf{I}_{\mathbf{U}}$ 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  |                 | v I               | 12                             |
|---|-----------------|-------------------|--------------------------------|
|   |                 | x I <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>  | 1700                           |
| 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  |                 | Δ.                | 050                            |
| cos φ rated making capacity as per IEC 60947-3 Rated breaking capacity cos φ to IEC 60947-3 |                 | A                 | 950                            |
| 230 V   |                 | A                 | 700                            |
| 230 V<br>400/415 V  |                 | A                 | 760<br>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                            |
|   |                 | CO                |                                |
| Current heat loss per auxiliary circuit at I <sub>e</sub> (AC-15/230 V)                     | 0               |                   | 7.5                            |
| 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                | 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<br>P          | kW                | 45                             |
| 690 V<br>690 V Star-delta   | P               | kW                | 15<br>22                       |
| Rated operational current motor load switch   |                 | KVV               |                                |
| 230 V   | I <sub>e</sub>  | A                 | 71                             |
| 230 V star-delta  |                 | A                 | 100                            |
| 400V 415 V  | l <sub>e</sub>  |                   | 55                             |
|   | l <sub>e</sub>  | A                 |                                |
| 400 V star-delta  | l <sub>e</sub>  | A                 | 95.3                           |
| 500 V   | l <sub>e</sub>  | Α                 | 44                             |
| 500 V star-delta  | l <sub>e</sub>  | Α                 | 76.2                           |
| 690 V   | l <sub>e</sub>  | Α                 | 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                | 30                             |
| 400 V 415 V   | Р               | kW                | 55                             |
| 500 V   | Р               | 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   | l <sub>e</sub>  | Α                 | 100                            |
| 500 V   | l <sub>e</sub>  | Α                 | 55                             |
| 690 V   | I <sub>e</sub>  | Α                 | 32                             |
| DC  |                 |                   |                                |
| DC-1, Load-break switches L/R = 1 ms  |                 |                   |                                |
| Rated operational current   | l <sub>e</sub>  | 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   |
| Technical safety parameters:                  |                   |                 |   |
| Notes   |                   |                 | B10 <sub>d</sub> values as per EN ISO 13849-1, table C1     |
| Rating data for approved types                |                   |                 |   |
| Terminal capacity                             |                   |                 |   |
| Terminal screw                                |                   |                 | M6  |

## Design verification as per IEC/EN 61439

| besign vermeation as per indicate or 100   |                   |    |  |
|--|-------------------|----|--|
| Technical data for design verification   |                   |    |  |
| Rated operational current for specified heat dissipation   | In                | Α  | 100  |
| Heat dissipation per pole, current-dependent   | P <sub>vid</sub>  | W  | 7.5  |
| 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 | 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 switch<br>gear must b observed. $\label{eq:constraint}$        |
| 10.12 Electromagnetic compatibility  |                   |    | Is the panel builder's responsibility. The specifications for the switch<br>gear must be observed. $\label{eq:constraint}$       |
| 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])

| Type of switch | Level switch |  |
|----------------|--------------|--|

|   | 1               |
|---|-----------------|
| V | 690             |
| Α | 100             |
|   | 11              |
|   | Yes             |
|   | No              |
|   | Built-in device |
|   | 0               |
|   | No              |
|   | Other           |
|   | Other           |
|   | Other           |
|   | Other           |
|   |                 |