Coding switches, TM, 10 A, centre mounting, 2 contact unit(s), Contacts: 4, 30 °, maintained, With 0 (Off) position, 0-9, Design number 8550



Part no. TM-2-8550/EZ

000699

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|                               | EL Number<br>(Norway) | 14561 |
|-------------------------------|-----------------------|-------|
| <b>General specifications</b> |                       |       |
| Product name                  |                       |       |

| General specifications                 |   |
|--|---|
| Product name                           | Eaton Moeller® series TM Insulated enclosure  |
| Part no.                               | TM-2-8550/EZ  |
| EAN                                    | 4015080006992   |
| Product Length/Depth                   | 87 millimetre   |
| Product height                         | 30 millimetre   |
| Product width                          | 30 millimetre   |
| Product weight                         | 0.044 kilogram  |
| Certifications                         | UL File No.: E36332 UL Category Control No.: NLRV IEC/EN 60947 UL 508 VDE 0660 IEC/EN 60947-5-1 CSA-C22.2 No. 94 CSA IEC/EN 60947-3 UL report applies to both US and Canada UL Certified by UL for use in Canada CSA-C22.2 No. 14-05 CE |
| Product Tradename                      | TM  |
| Product Type                           | Insulated enclosure   |
| Product Sub Type                       | None  |
| Features & Functions                   |   |
| Fitted with:                           | 0 (off) position<br>Black thumb grip and front plate  |
| Inscription                            | 0-9   |
| Number of poles                        | Single-pole   |
| Switch function type                   | BCD Code 0-9  |
| General information                    |   |
| Degree of protection                   | IP65  |
| Degree of protection (front side)      | IP65<br>NEMA 12   |
| Lifespan, mechanical                   | 1,000,000 Operations  |
| Mounting method                        | Center mounting   |
| Mounting position                      | As required   |
| Number of contact units                | 2   |
| Operating frequency                    | 1200 Operations/h   |
| Overvoltage category                   | III   |
| Pollution degree                       | 3   |
| Product category                       | Control switches  |
| Rated impulse withstand voltage (Uimp) | 4000 V AC   |
| Suitable for                           | Front mounting  |
| Switching angle                        | 30 °  |
| Туре                                   | Coding switch   |
| Climatic environmental conditions      |   |
| Ambient operating temperature - min    | -25 °C  |
| Ambient operating temperature - max    | 50 °C   |
| Climatic proofing                      | Damp heat, constant, to IEC 60068-2-78<br>Damp heat, cyclic, to IEC 60068-2-30  |
| Terminal capacities                    |   |

| Terminal capacity (flexible with ferrule)  | 1 x 1.0 mm², ferrules to DIN 46228<br>2 x 1.0 mm², ferrules to DIN 46228                |
|--|---|
| Terminal capacity (flexible)   | 1 x 1.5 mm <sup>2</sup><br>2 x 1.5 mm <sup>2</sup>                                      |
| Terminal capacity (solid/flexible with ferrule AWG)                              | 14  |
| Terminal capacity (solid/stranded)   | 2 x 1,5 mm <sup>2</sup><br>1 x 1.5 mm <sup>2</sup>                                      |
| Screw size   | M2.5, Terminal screw  |
| Tightening torque  | 0.4 Nm, Screw terminals   |
| Electrical rating  | 3.5 lb-in, Screw terminals  |
|  | 500 V   |
| Rated operating voltage (Ue) at AC - max   | 500 V   |
| Rated operational current (Ie) at AC-21, 440 V                                   | 10 A  |
| Rated operational power at AC-23A, 400 V, 50 Hz                                  | 3 kW  |
| Rated uninterrupted current (Iu)   | 10 A  |
| Uninterrupted current  | Rated uninterrupted current lu is specified for max. cross-section.                     |
| Short-circuit rating   |   |
| Short-circuit protection rating  | 10 A gG/gL, Fuse, Contacts  |
| Switching capacity   |   |
| Switching capacity (main contacts, general use)                                  | 10 A, Rated uninterrupted current max. (UL/CSA)   |
| Switching capacity (auxiliary contacts, general use)                             | 10A, IU, (UL/CSA)   |
| Switching capacity (auxiliary contacts, pilot duty)                              | A300 (UL/CSA)   |
| Motor rating   |   |
| Assigned motor power at 115/120 V, 60 Hz, 1-phase                                | 0.33 HP   |
| Assigned motor power at 115/120 V, 60 Hz, 3-phase                                | 0.75 HP   |
| Assigned motor power at 230/240 V, 60 Hz, 1-phase                                | 0.75 HP   |
| Assigned motor power at 230/240 V, 60 Hz, 3-phase                                | 1 HP  |
| Assigned motor power at 277 V, 60 Hz, 1-phase                                    | 0.75 HP   |
| Contacts   |   |
| Control circuit reliability  | 1 failure per 100,000 switching operations statistically determined, at 24 V DC, 10 mA) |
| Number of contacts   | 4   |
| Actuator   |   |
| Actuator function  | Maintained<br>With 0 (Off) position   |
| Actuator type  | Toggle  |
| Number of switch positions   | 10  |
| Design verification  |   |
| Equipment heat dissipation, current-dependent Pvid                               | 0 W   |
| Heat dissipation capacity Pdiss  | 0 W   |
| Heat dissipation per pole, current-dependent Pvid                                | 0.15 W  |
| Rated operational current for specified heat dissipation (In)                    | 10 A  |
| Static heat dissipation, non-current-dependent Pvs                               | 0 W   |
| 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 Resist. of insul. mat. to abnormal heat/fire by internal elect. 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.  |
|  | Is the panel builder's responsibility.  |

| 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 9.0**

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@ss13-27-37-14-14 [ACN998016])

| [ACN998016])                                 |   |                 |
|--|---|-----------------|
| Type of switch                               |   | Coding switch   |
| Number of poles                              |   | 1               |
| Max. rated operation voltage Ue AC           | V | 500             |
| Rated permanent current lu                   | А | 10              |
| Number of switch positions                   |   | 10              |
| With zero (off) position                     |   | Yes             |
| With retraction in 0-position                |   | No              |
| Device construction                          |   | Built-in device |
| Width in number of modular spacings          |   | 0               |
| Suitable for floor mounting                  |   | No              |
| Suitable for front mounting                  |   | 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                            |   | 30x30 mm        |
| Degree of protection (IP), front side        |   | IP65            |
| Degree of protection (NEMA), front side      |   | 12              |
|  |   |                 |