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Worldwide English



TM-2-8550/EZ - Coding switches, TM, 10 A, centre mounting, 2 contact unit(s), Contacts: 4, 30 °, maintained, With 0 (Off) position, 0-9, design no. 8550



000699 TM-2-8550/EZ

[Overview](#) [Specifications](#) [Resources](#)



000699 TM-2-8550/EZ

Coding switches, TM, 10 A, centre mounting, 2 contact unit(s), Contacts: 4, 30 °, maintained, With 0 (Off) position, 0-9, design no. 8550

EL-Nummer (Norway)

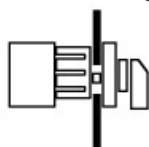
1456173

Coding switch, Product range: Control switches, Standards: IEC/EN 60947, VDE 0660, CSA, UL, Control switch as per IEC/EN 60947-5-1, Auxiliary switch as per IEC/EN 60947-5-1, Part group reference: TM, with black thumb grip and front plate, Contacts: 4, Degree of Protection: Front IP65, Design: centre mounting, switching function: BCD Code 0-9, Switching angle: 30 °, Switching performance: maintained, With 0 (Off) position, 2 contact unit(s), Rated uninterrupted current: I_u= 10 A, front plate: 0-9

- [Delivery program](#)
- [Technical data](#)
- [Design verification as per IEC/EN 61439](#)
- [Technical data ETIM 7.0](#)
- [Approvals](#)
- [Dimensions](#)

Delivery program

Product range
Control switches
Part group reference
TM
Basic function
Coding switches
with black thumb grip and front plate
Contacts
4
Degree of Protection
Front IP65
Design
centre mounting

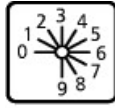


Contact sequence

0	X	X	X	X
1	X	X	X	X
2	X	X	X	X
3	X	X	X	X
4	X	X	X	X
5	X	X	X	X
6	X	X	X	X
7	X	X	X	X
8	X	X	X	X
9	X	X	X	X

switching function
BCD Code 0-9

Switching angle
30 °
Switching performance
maintained
With 0 (Off) position
Design number
8550
Front plate no.



F 007
front plate
0-9
Motor rating AC-23A, 50 - 60 Hz [P]
400 V [P]
3 kW
Rated uninterrupted current [I_u]
10 A
Note on rated uninterrupted current I_u
Rated uninterrupted current I_u is specified for max. cross-section.
Number of contact units
2 contact unit(s)

Technical data

General
Standards
IEC/EN 60947, VDE 0660, CSA, UL
Control switch as per IEC/EN 60947-5-1
Auxiliary switch as per IEC/EN 60947-5-1
Climatic proofing
Damp heat, constant, to IEC 60068-2-78
Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature Open
-25 - +50 °C
Overvoltage category/pollution degree
III/3
Rated impulse withstand voltage [U_{imp}]
4000 V AC
Mounting position
As required
Contacts
Electrical characteristics Rated operational voltage [U_e]
500 V AC
Electrical characteristics Rated uninterrupted current [I_u]
10 A
Electrical characteristics Note on rated uninterrupted current I_u
Rated uninterrupted current I_u is specified for max. cross-section.
Short-circuit rating Fuse
10 A gG/gL
Switching capacity
Safe isolation to EN 61140 Current heat loss per contact at I_e
0.15 W
Safe isolation to EN 61140 Current heat loss per auxiliary circuit at I_e (AC-15/230 V)
0.15 CO
Lifespan, mechanical [Operations]
> 1 x 10⁶
Maximum operating frequency [Operations/h]
1200
AC AC-21A Rated operational current switch 400 V 415 V [I_e]
10 A
AC AC-23A Motor rating AC-23A, 50 - 60 Hz [P] 400 V 415 V [P]
3 kW
Control circuit reliability at 24 V DC, 10 mA [Fault probability]
< 10⁻⁵, < 1 failure in 100,000 switching operations H_F
Terminal capacities
Solid or stranded

1 x 1,5
 2 x 1,5 mm²
 Flexible with ferrules to DIN 46228
 1 x 1.0
 2 x 1.0 mm²
 Flexible
 1 x 1.5
 2 x 1.5 mm²
 Terminal screw
 M2.5
 Tightening torque for terminal screw
 0.4 Nm
 Rating data for approved types
 Contacts Rated operational voltage [U_o]
 300 V AC
 Contacts Rated uninterrupted current max. Main conducting paths General use
 10 A
 Contacts Rated uninterrupted current max. Auxiliary contacts General Use [I_u]
 10 A
 Contacts Rated uninterrupted current max. Auxiliary contacts Pilot Duty
 A 300
 Switching capacity Maximum motor rating Single-phase 120 V AC
 0.33 HP
 Switching capacity Maximum motor rating Single-phase 240 V AC
 0.75 HP
 Switching capacity Maximum motor rating Single-phase 277 V AC
 0.75 HP
 Switching capacity Maximum motor rating Three-phase 120 V AC
 0.75 HP
 Switching capacity Maximum motor rating Three-phase 240 V AC
 1 HP
 Terminal capacity Solid or flexible conductor with ferrule
 14 AWG
 Terminal capacity Terminal screw
 M2.5
 Terminal capacity Tightening torque
 3.5 lb-in

Design verification as per IEC/EN 61439

Technical data for design verification

Rated operational current for specified heat dissipation [I_r]

10 A

Heat dissipation per pole, current-dependent [P_{vid}]

0.15 W

Equipment heat dissipation, current-dependent [P_{vid}]

0 W

Static heat dissipation, non-current-dependent [P_{vs}]

0 W

Heat dissipation capacity [P_{diss}]

0 W

Operating ambient temperature min.

-25 °C

Operating ambient temperature max.

+50 °C

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 Strength of materials and parts 10.2.3.1 Verification of thermal stability of enclosures

Meets the product standard's requirements.

10.2 Strength of materials and parts 10.2.3.2 Verification of resistance of insulating materials to normal heat

Meets the product standard's requirements.

10.2 Strength of materials and parts 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 Strength of materials and parts 10.2.4 Resistance to ultra-violet (UV) radiation

UV resistance only in connection with protective shield.

10.2 Strength of materials and parts 10.2.5 Lifting

Does not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts 10.2.6 Mechanical impact
Does not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts 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 Insulation properties 10.9.3 Impulse withstand voltage
Is the panel builder's responsibility.

10.9 Insulation properties 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])

Type of switch

Coding switch

Number of poles

1

Max. rated operation voltage U_e AC

500 V

Rated permanent current I_u

10 A

Number of switch positions

10

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

30x30 mm

Degree of protection (IP), front side
IP65
Degree of protection (NEMA), front side
Other

Approvals

Product Standards
UL 508; CSA-C22.2 No. 14-05; CSA-C22.2 No. 94; IEC/EN 60947-3; CE marking
UL File No.
E36332
UL Category Control No.
NLRV
CSA File No.
UL report applies to both US and Canada
North America Certification
UL listed, certified by UL for use in Canada
Degree of Protection
IEC: IP65; UL/CSA Type: –

Dimensions



Key operation lock mechanism

Door drilling dimensions

Drilling dimensions: either 16.2 mm = without reduction RMQ16 or 22.3 mm = with reduction RMQ Titan

CAD data

- [Product-specific CAD data](#)
(Web)
- [3D Preview](#)
(Web)

DWG files

- [DA-CD-tm2_ez](#)
File
(Web)

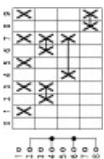
edz files

- [DA-CE-ETN.TM2-8550_EZ](#)
File
(Web)

Step files

- [DA-CS-tm2_ez](#)
File
(Web)

Wiring diagram



- [115S098-2](#)
Line drawing
Complementary BCD code 0-9

Dimensions single product

-

[115X073](#)

Line drawing

Centre mounting, drilling dimensions



[115X342](#)

Line drawing

Centre mounting



[115X350](#)

Line drawing

Centre mounting with key operation

Product photo



[1150PIC-1549](#)

Photo

3D drawing



[1150DRW-7](#)

Line drawing

Centre mounting style

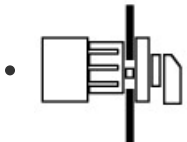
Instruction Leaflet

- [Mni Rotary switch: step switch, reversing switch, coding switch \(IL03801027Z\)](#)

Asset

(PDF, multilingual)

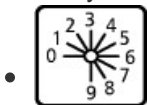
Symbol



[000Z081](#)

Graphic

Rotary switches centrally mounted



[F 007](#)

[115K191](#)

Graphic

FS007 standard front plate

Declaration of Conformity

EU

- [TMMni Rotary Cam Switch \(DA-DC-00003706\)](#)

Asset

(PDF)

UK

- [TMMni Rotary Cam Switch \(DA-DC-00003806\)](#)

Asset

(PDF)

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