

# Eaton 223007

Catalog Number: 223007

Eaton Moeller® series T5B Multi-speed switches, T5B, 63 A, surface mounting, 4 contact unit(s), Contacts: 8, 90 °, maintained, Without 0 (Off) position, 1-2, SOND 28, Design number 11



### General specifications

#### Product Name

Eaton Moeller® series T5B Multi-speed switch

#### Catalog Number

223007

#### EAN

4015082230074

#### Product Length/Depth

240 mm

#### Product Height

197 mm

#### Product Width

160 mm

#### Product Weight

1.435 kg

#### Certifications

IEC/EN 60947-3

UL

UL File No.: E36332

CSA-C22.2 No. 60947-4-1-14

IEC/EN 60947

CSA Class No.: 3211-07

UL Category Control No.: NLRV

VDE 0660

CE

CSA-C22.2 No. 94

IEC/EN 60204

UL 60947-4-1

CSA

CSA File No.: 012528

#### Catalog Notes

Rated Short-time Withstand Current (Icw) for a time of 1 second

## Product specifications

### Type

Multi-speed switch

### Product Category

Control switches

### Features

Complete device in housing

### Actuator function

Maintained

Without 0 (Off) position

### 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.

### 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

## Resources

### Brochures

Brochure - T Rotary Cam switch and P Switch-disconnector

### Catalogs

P Switch-disconnectors and T Rotary cam switches catalogue  
CA042001EN

### Declarations of conformity

DA-DC-00004897.pdf

DA-DC-00004925.pdf

### Drawings

eaton-rotary-switches-t5b-changeover-switch-dimensions-002.eps

eaton-general-rotary-switch-t0-step-switch-symbol.eps

eaton-rotary-switches-front-plate-t0-changeover-switch-symbol-014.eps

eaton-general-totally-insulated-t0-main-switch-symbol.eps

### eCAD model

DA-CE-ETN.T5B-4-11\_I4

### Installation instructions

IL03801009Z

### Installation videos

Eaton's P Switch-disconnectors used in a factory

### mCAD model

DA-CD-bauform14

DA-CS-bauform14

### Product notifications

MZ008006ZU\_Orderform\_Customized\_Switch.pdf

MZ008005ZU\_Orderform\_Customized\_Switch.pdf

### Wiring diagrams

eaton-rotary-switches-t0-multi-speed-switch-wiring-diagram-014.eps

eaton-rotary-switches-t0-multi-speed-switch-wiring-diagram-013.eps

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.

#### 10.9.2 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.

#### Fitted with:

Black thumb grip and front plate

#### Operating frequency

1200 Operations/h

#### Pollution degree

3

#### Climatic proofing

Damp heat, cyclic, to IEC 60068-2-30

Damp heat, constant, to IEC 60068-2-78

#### Enclosure material

Plastic

#### Rated impulse withstand voltage (Uimp)

6000 V AC

Actuator type

Short thumb-grip

Ambient operating temperature - max

40 °C

Ambient operating temperature - min

-25 °C

Ambient operating temperature (enclosed) - max

40 °C

Ambient operating temperature (enclosed) - min

-25 °C

Assigned motor power at 115/120 V, 60 Hz, 1-phase

3 HP

Assigned motor power at 200/208 V, 60 Hz, 1-phase

7.5 HP

Assigned motor power at 200/208 V, 60 Hz, 3-phase

15 HP

Assigned motor power at 230/240 V, 60 Hz, 1-phase

10 HP

Assigned motor power at 230/240 V, 60 Hz, 3-phase

15 HP

Assigned motor power at 460/480 V, 60 Hz, 3-phase

40 HP

Assigned motor power at 575/600 V, 60 Hz, 3-phase

40 HP

Equipment heat dissipation, current-dependent P<sub>vid</sub>

0 W

Heat dissipation capacity P<sub>diss</sub>

0 W

Heat dissipation per pole, current-dependent P<sub>vid</sub>

4.5 W

Number of auxiliary contacts (change-over contacts)

0

Number of auxiliary contacts (normally closed contacts)

0

Number of auxiliary contacts (normally open contacts)

0

Number of contact units

**Rated short-time withstand current (I<sub>cw</sub>)**

1,3 kA, Contacts, 1 second

**Electrical connection type of main circuit**

Screw connection

**Mounting position**

As required

**Rated conditional short-circuit current (I<sub>q</sub>)**

2 kA

**Mounting method**

Surface mounting

**Overvoltage category**

III

**Control circuit reliability**

1 failure per 100,000 switching operations statistically determined, at 24 V DC, 10 mA)

**Number of poles**

3

**Degree of protection**

NEMA 1

IP65

NEMA 12

**Number of contacts**

8

**Model**

Dahlander switch

**Degree of protection (front side)**

IP65

NEMA 12

**Inscription**

1-2

**Switch function type**

One tapped winding, 2 speeds

**Lifespan, mechanical**

500,000 Operations

**Safe isolation**

440 V AC, Between the contacts, According to EN 61140

**Rated operational current (I<sub>e</sub>)**

63 A at AC-3, 400 V star-delta  
29.4 A at AC-3, 690 V star-delta  
63 A at AC-3, 230 V star-delta  
57.2 A at AC-3, 500 V star-delta

#### Screw size

M6, Terminal screw

#### Shock resistance

15 g, Mechanical, According to IEC/EN 60068-2-27, Half-sinusoidal shock 20 ms

#### Load rating

1.6 x  $I_e$  (with intermittent operation class 12, 40 % duty factor)  
2 x  $I_e$  (with intermittent operation class 12, 25 % duty factor)  
1.3 x  $I_e$  (with intermittent operation class 12, 60 % duty factor)

#### Tightening torque

4 Nm, Screw terminals  
35.4 lb-in, Screw terminals

#### Number of contacts in series at DC-23A, 120 V

3

#### Number of contacts in series at DC-23A, 24 V

1

#### Number of contacts in series at DC-23A, 240 V

6

#### Number of contacts in series at DC-23A, 48 V

2

#### Number of contacts in series at DC-23A, 60 V

3

#### Rated breaking capacity at 220/230 V (cos phi to IEC 60947-3)

520 A

#### Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3)

600 A

#### Rated breaking capacity at 500 V (cos phi to IEC 60947-3)

480 A

#### Rated breaking capacity at 660/690 V (cos phi to IEC 60947-3)

340 A

#### Rated making capacity up to 690 V (cos phi to IEC/EN 60947-3)

800 A

#### Rated operational current ( $I_e$ ) at AC-21, 440 V

63 A

Rated operational current (I<sub>e</sub>) at AC-23A, 230 V

63 A

Rated operational current (I<sub>e</sub>) at AC-23A, 400 V, 415 V

63 A

Rated operational current (I<sub>e</sub>) at AC-23A, 500 V

33 A

Rated operational current (I<sub>e</sub>) at AC-23A, 690 V

23.8 A

Rated operational current (I<sub>e</sub>) at AC-3, 220 V, 230 V, 240 V

51 A

Rated operational current (I<sub>e</sub>) at AC-3, 380 V, 400 V, 415 V

41 A

Rated operational current (I<sub>e</sub>) at AC-3, 500 V

33 A

Rated operational current (I<sub>e</sub>) at AC-3, 660 V, 690 V

17 A

Switching capacity (main contacts, general use)

63 A, Rated uninterrupted current max. (UL/CSA)

Safety parameter (EN ISO 13849-1)

B10d values as per EN ISO 13849-1, table C.1

Short-circuit protection rating

80 A gG/gL, Fuse, Contacts

Terminal capacity (flexible with ferrule)

2 x (1.5 - 10) mm<sup>2</sup>, ferrule to DIN 46228

1 x (1 - 25) mm<sup>2</sup>, ferrules to DIN 46228

Suitable for

Ground mounting

Branch circuits, suitable as motor disconnect, (UL/CSA)

Rated operational current (I<sub>e</sub>) at DC-1, load-break switches I/r = 1 ms

63 A

Rated operational current (I<sub>e</sub>) at DC-13, control switches L/R = 50 ms

25 A

Rated operational current (I<sub>e</sub>) at DC-23A, 120 V

25 A

Rated operational current (I<sub>e</sub>) at DC-23A, 24 V

50 A

Rated operational current (I<sub>e</sub>) at DC-23A, 240 V

20 A

Rated operational current (I<sub>e</sub>) at DC-23A, 48 V

50 A

Rated operational current (I<sub>e</sub>) at DC-23A, 60 V

50 A

Rated operational current for specified heat dissipation (I<sub>n</sub>)

63 A

Rated operational power at AC-23A, 220/230 V, 50 Hz

18.5 kW

Rated operational power at AC-23A, 400 V, 50 Hz

30 kW

Rated operational power at AC-23A, 500 V, 50 Hz

22 kW

Rated operational power at AC-23A, 690 V, 50 Hz

22 kW

Rated operational power at AC-3, 380/400 V, 50 Hz

37 kW

Rated operational power at AC-3, 415 V, 50 Hz

22 kW

Rated operational power at AC-3, 690 V, 50 Hz

15 kW

Rated operational power star-delta at 220/230 V, 50 Hz

18.5 kW

Rated operational power star-delta at 380/400 V, 50 Hz

30 kW

Rated operational power star-delta at 500 V, 50 Hz

37 kW

Rated operational power star-delta at 690 V, 50 Hz

22 kW

Rated operational voltage (U<sub>e</sub>) at AC - max

690 V

Rated uninterrupted current (I<sub>u</sub>)

63 A

Static heat dissipation, non-current-dependent P<sub>vs</sub>

0 W

Switching angle



90 °

Voltage per contact pair in series

60 V

Short-circuit current rating (high fault)

10 kA, SCCR (UL/CSA)

100 A, Class J, max. Fuse, SCCR (UL/CSA)

Terminal capacity (solid/flexible with ferrule AWG)

12 - 4

Terminal capacity (solid/stranded)

1 x (2.5 - 35) mm<sup>2</sup>

2 x (2.5 - 16) mm<sup>2</sup>

Uninterrupted current

Rated uninterrupted current I<sub>u</sub> is specified for max. cross-section.



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