Eaton 255892

Catalog Number: 255892

Eaton Moeller® series P1 Main switch, P1, 32 A, surface mounting, 3 pole, STOP function, With black rotary handle and locking ring, UL/CSA

General specifications

Product Name Catalog Number

Eaton Moeller® series P1 Main switch 255892

EAN Product Length/Depth

4015082558925 115 mm

Product Height Product Width

180 mm 100 mm

Product Weight Certifications

0.443 kg CSA File No.: 012528

CSA

VDE 0660

IEC/EN 60947

IEC/EN 60947-3

UL File No.: E36332

CSA Class No.: 3211-05

CSA-C22.2 No. 94

IEC/EN 60204

UL 60947-4-1

CSA-C22.2 No. 60947-4-1-14
UL Category Control No.: NLRV

UL

CE



Product specifications

Product Category

Main switch

Features

Version as maintenance-/service switch

Version as main switch

Actuator color

Black

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

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

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-00005059.pdf

DA-DC-00005061.pdf

Drawings

eaton-rotary-switches-p1-main-switch-dimensions-002.eps
eaton-rotary-switches-padlock-t0-main-switch-dimensions.eps
eaton-general-switch-t0-main-switch-symbol.eps
eaton-rotary-switches-t0-main-switch-symbol.eps
eaton-general-totally-insulated-t0-main-switch-symbol.eps

eCAD model

ETN.255892.edz

Installation instructions

IL03802001Z

Installation videos

Eaton's P Switch-disconnectors used in a factory

mCAD model

DA-CD-bauform5

DA-CS-bauform5

Product notifications

 $MZ008006ZU_Orderform_Customized_Switch.pdf$

MZ008005ZU_Orderform_Customized_Switch.pdf

Wiring diagrams

 $eaton-rotary-switches-on-off-switch-p3-main-switch-wiring-\\ diagram.eps$

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 rotary handle and locking ring

Operating frequency

1200 Operations/h

Pollution degree

3

Climatic proofing

Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30

Rated impulse withstand voltage (Uimp)

6000 V AC

Rated permanent current at AC-21, 400 V

32 A

Rated permanent current at AC-23, 400 V

Rated uninterrupted current (Iu) 32 A
Static heat dissipation, non-current-dependent Pvs 0 W
Switching power at 400 V 15 kW
Voltage per contact pair in series 60 V
Accessories
Auxiliary contact or neutral conductor fitted by user.
Rated operational power at AC-3, 500 V, 50 Hz 18.5 kW
Device construction
Complete device in housing
Rated short-time withstand current (lcw)
0.64 kA
640 A, Contacts, 1 second
Electrical connection type of main circuit
Screw connection
Mounting position
As required
Actuator type
Door coupling rotary drive
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
1 HP
Assigned motor power at 200/208 V, 60 Hz, 1-phase
2 HP
Assigned motor power at 200/208 V, 60 Hz, 3-phase
3 HP

Assigned motor power at 230/240 V, 60 Hz, 1-phase 3 HP Assigned motor power at 230/240 V, 60 Hz, 3-phase 7.5 HP Assigned motor power at 460/480 V, 60 Hz, 3-phase 10 HP Assigned motor power at 575/600 V, 60 Hz, 3-phase 15 HP Equipment heat dissipation, current-dependent Pvid 1.8 W Heat dissipation capacity Pdiss 0 W Heat dissipation per pole, current-dependent Pvid 1.8 W Number of auxiliary contacts (change-over contacts) 0 Number of auxiliary contacts (normally closed contacts) Rated conditional short-circuit current (Iq) 80 kA Overvoltage category Ш Control circuit reliability 1 failure per 100,000 switching operations statistically determined, at 24 V DC, 10 mA) Degree of protection (front side) IP65 Number of poles 3 Mounting method Surface mounting Degree of protection NEMA 12 Suitable for Ground mounting Branch circuits, suitable as motor disconnect, (UL/CSA)

Functions

Interlockable

STOP function

Number of switches

1

Safe isolation

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

Screw size

M4, Terminal screw

Shock resistance

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

Lifespan, mechanical

300,000 Operations

Load rating

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)

1.6 x I_e (with intermittent operation class 12, 40 % duty

factor)

Switching capacity (auxiliary contacts, general use)

10A, IU, (UL/CSA)

Switching capacity (auxiliary contacts, pilot duty)

P600 (UL/CSA)

A600 (UL/CSA)

Terminal capacity

1 x (1 - 4) mm², flexible with ferrules to DIN 46228

1 x (1.5 - 6) mm², solid or stranded

14 - 8 AWG, solid or flexible with ferrule

2 x (1.5 - 6) mm², solid or stranded

2 x (1 - 4) mm², flexible with ferrules to DIN 46228

Switching capacity (main contacts, general use)

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

Safety parameter (EN ISO 13849-1)

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

Number of auxiliary contacts (normally open contacts)

0

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

3

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

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Number of contacts in series at DC-23A, 48 V
2
Number of contacts in series at DC-23A, 60 V
2
Rated breaking capacity at 220/230 V (cos phi to IEC 60947-3)
260 A
Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3)
300 A
Rated breaking capacity at 500 V (cos phi to IEC 60947-3)
290 A
Rated breaking capacity at 660/690 V (cos phi to IEC 60947-3)
250 A
Rated making capacity up to 690 V (cos phi to IEC/EN 60947-3)
320 A
Rated operating voltage (Ue) - max
690 V
Rated operating voltage (Ue) - min
690 V
Rated operational voltage (Ue) at AC - max
690 V
Short-circuit current rating (basic rating)
5 kA, SCCR (UL/CSA)
110A, max. Fuse, SCCR (UL/CSA)
Short-circuit current rating (high fault)
10 kA, SCCR (UL/CSA)
50 A, Class J, max. Fuse, SCCR (UL/CSA)
Short-circuit protection rating
50 A gG/gL, Fuse, Contacts
Rated operational current (le) at AC-21, 440 V
32 A
Rated operational current (le) at AC-23A, 230 V
32 A
Rated operational current (le) at AC-23A, 400 V, 415 V
32 A
Rated operational current (le) at AC-23A, 500 V
30 A
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Rated operational current (le) at AC-23A, 690 V

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19.8 A
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Rated operational current (le) at AC-3, 220 V, 230 V, 240 V

26.4 A

Rated operational current (le) at AC-3, 380 V, 400 V, 415 V

26.4 A

Rated operational current (le) at AC-3, 500 V

23.4 A

Rated operational current (le) at AC-3, 660 V, 690 V

14.7 A

Rated operational current (le) at DC-1, load-break switches l/r = 1 ms

32 A

Rated operational current (le) at DC-23A, 120 V

12 A

Rated operational current (le) at DC-23A, 24 V

25 A

Rated operational current (le) at DC-23A, 48 V

25 A

Rated operational current (le) at DC-23A, 60 V

25 A

Rated operational current for specified heat dissipation (In)

32 A

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

7.5 kW

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

15 kW

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

18.5 kW

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

15 kW

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

13 kW

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

13 kW

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

15 kW

Tightening torque

1.6 Nm, Screw terminals

Uninterrupted current

Rated uninterrupted current lu is specified for max. crosssection.

Rated Switching Capacity

1 HP at 120 V AC, single-phase 10 HP at 480 V AC, three-phase 15 HP at 600 V AC, three-phase 2 HP at 200 V AC, single-phase 3 HP at 200 V AC, three-phase 3 HP at 240 V AC, single-phase 7.5 HP at 240 V AC, three-phase



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