

# Specifications



Photo is representative



## Eaton 207343

Eaton Moeller® series P3 Main switch, P3, 63 A, surface mounting, 3 pole, Emergency switching off function, With red rotary handle and yellow locking ring, Lockable in the 0 (Off) position

### General specifications

|                      |                                                                         |
|----------------------|-------------------------------------------------------------------------|
| PRODUCT NAME         | Eaton Moeller® series P3 Main switch                                    |
| CATALOG NUMBER       | 207343                                                                  |
| MODEL CODE           | P3-63/I4/SVB                                                            |
| EAN                  | 4015082073435                                                           |
| PRODUCT LENGTH/DEPTH | 139 mm                                                                  |
| PRODUCT HEIGHT       | 180 mm                                                                  |
| PRODUCT WIDTH        | 160 mm                                                                  |
| PRODUCT WEIGHT       | 1.065 kg                                                                |
| CERTIFICATIONS       | CSA<br>IEC/EN 60947-3<br>VDE 0660<br>UL<br>IEC/EN 60947<br>IEC/EN 60204 |
| CATALOG NOTES        | Rated Short-time<br>Withstand Current (Icw)<br>for a time of 1 second   |

## Actuator

|                       |                            |
|-----------------------|----------------------------|
| <b>ACTUATOR COLOR</b> | Red                        |
| <b>ACTUATOR TYPE</b>  | Door coupling rotary drive |

## Contacts

|                                                                |                                                                                         |
|----------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| <b>CONTROL CIRCUIT RELIABILITY</b>                             | 1 failure per 100,000 switching operations statistically determined, at 24 V DC, 10 mA) |
| <b>NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS)</b>     | 0                                                                                       |
| <b>NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)</b> | 0                                                                                       |
| <b>NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)</b>   | 0                                                                                       |

## Climatic environmental conditions

|                                                       |                                                                                |
|-------------------------------------------------------|--------------------------------------------------------------------------------|
| <b>AMBIENT OPERATING TEMPERATURE - MAX</b>            | 40 °C                                                                          |
| <b>AMBIENT OPERATING TEMPERATURE - MIN</b>            | -25 °C                                                                         |
| <b>AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX</b> | 40 °C                                                                          |
| <b>AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MIN</b> | -25 °C                                                                         |
| <b>CLIMATIC PROOFING</b>                              | Damp heat, constant, to IEC 60068-2-78<br>Damp heat, cyclic, to IEC 60068-2-30 |

## Design verification

|                                                                                         |                                                                                                                                  |
|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>10.10 TEMPERATURE RISE</b>                                                           | The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices. |
| <b>10.11 SHORT-CIRCUIT RATING</b>                                                       | Is the panel builder's responsibility. The specifications for the switchgear must be observed.                                   |
| <b>10.12 ELECTROMAGNETIC COMPATIBILITY</b>                                              | Is the panel builder's responsibility. The specifications for the switchgear must be observed.                                   |
| <b>10.13 MECHANICAL FUNCTION</b>                                                        | The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.                         |
| <b>10.2.2 CORROSION RESISTANCE</b>                                                      | Meets the product standard's requirements.                                                                                       |
| <b>10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES</b>                         | Meets the product standard's requirements.                                                                                       |
| <b>10.2.3.2 VERIFICATION OF RESISTANCE OF INSULATING MATERIALS TO NORMAL HEAT</b>       | Meets the product standard's requirements.                                                                                       |
| <b>10.2.3.3 RESIST. OF INSUL. MAT. TO ABNORMAL HEAT/FIRE BY INTERNAL ELECT. EFFECTS</b> | Meets the product standard's requirements.                                                                                       |

|                                                                      |                                                                    |
|----------------------------------------------------------------------|--------------------------------------------------------------------|
| <b>10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION</b>              | UV resistance only in connection with protective shield.           |
| <b>10.2.5 LIFTING</b>                                                | Does not apply, since the entire switchgear needs to be evaluated. |
| <b>10.2.6 MECHANICAL IMPACT</b>                                      | Does not apply, since the entire switchgear needs to be evaluated. |
| <b>10.2.7 INSCRIPTIONS</b>                                           | Meets the product standard's requirements.                         |
| <b>10.3 DEGREE OF PROTECTION OF ASSEMBLIES</b>                       | Does not apply, since the entire switchgear needs to be evaluated. |
| <b>10.4 CLEARANCES AND CREEPAGE DISTANCES</b>                        | Meets the product standard's requirements.                         |
| <b>10.5 PROTECTION AGAINST ELECTRIC SHOCK</b>                        | Does not apply, since the entire switchgear needs to be evaluated. |
| <b>10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS</b>        | Does not apply, since the entire switchgear needs to be evaluated. |
| <b>10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS</b>             | Is the panel builder's responsibility.                             |
| <b>10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS</b>                      | Is the panel builder's responsibility.                             |
| <b>10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH</b>                      | Is the panel builder's responsibility.                             |
| <b>10.9.3 IMPULSE WITHSTAND VOLTAGE</b>                              | Is the panel builder's responsibility.                             |
| <b>10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL</b>      | Is the panel builder's responsibility.                             |
| <b>EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID</b>            | 4.5 W                                                              |
| <b>HEAT DISSIPATION CAPACITY PDISS</b>                               | 0 W                                                                |
| <b>HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID</b>             | 4.5 W                                                              |
| <b>RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)</b> | 63 A                                                               |
| <b>STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS</b>            | 0 W                                                                |

## Electrical rating

**RATED BREAKING  
CAPACITY AT 220/230 V** 640 A  
(COS PHI TO IEC 60947-3)

**RATED BREAKING  
CAPACITY AT 400/415 V** 600 A  
(COS PHI TO IEC 60947-3)

**RATED BREAKING  
CAPACITY AT 500 V (COS  
PHI TO IEC 60947-3)** 590 A

**RATED BREAKING  
CAPACITY AT 660/690 V** 340 A  
(COS PHI TO IEC 60947-3)

**RATED OPERATIONAL  
CURRENT (IE) AT AC-21,  
440 V** 63 A

**RATED OPERATIONAL  
CURRENT (IE) AT AC-23A,  
230 V** 63 A

**RATED OPERATIONAL  
CURRENT (IE) AT AC-23A,  
400 V, 415 V** 63 A

**RATED OPERATIONAL  
CURRENT (IE) AT AC-23A,  
500 V** 63 A

**RATED OPERATIONAL  
CURRENT (IE) AT AC-23A,  
690 V** 63 A

**RATED OPERATIONAL  
CURRENT (IE) AT AC-3,  
220 V, 230 V, 240 V** 51 A

**RATED OPERATIONAL  
CURRENT (IE) AT AC-3,  
380 V, 400 V, 415 V** 55 A

**RATED OPERATIONAL  
CURRENT (IE) AT AC-3,  
500 V** 44 A

**RATED OPERATIONAL  
CURRENT (IE) AT AC-3,  
660 V, 690 V** 22.1 A

**RATED OPERATIONAL  
CURRENT (IE) AT DC-1,  
LOAD-BREAK SWITCHES  
L/R = 1 MS** 63 A

**RATED OPERATIONAL  
CURRENT (IE) AT DC-23A,  
120 V** 25 A

**RATED OPERATIONAL  
CURRENT (IE) AT DC-23A,  
24 V** 50 A

**RATED OPERATIONAL  
CURRENT (IE) AT DC-23A,** 50 A

## Features & functions

### FEATURES

Version as main switch  
Version as emergency stop  
installation  
Version as maintenance-  
/service switch  
Version as safety switch

### FITTED WITH:

Red rotary handle and  
yellow locking ring

### FUNCTIONS

Interlockable  
Emergency switching off  
function

### LOCKING FACILITY

Lockable in the 0 (Off)  
position

### NUMBER OF POLES

3

|                                                            |                                                                                 |
|------------------------------------------------------------|---------------------------------------------------------------------------------|
| <b>48 V</b>                                                |                                                                                 |
| <b>RATED OPERATIONAL CURRENT (IE) AT DC-23A, 60 V</b>      | 50 A                                                                            |
| <b>RATED OPERATIONAL POWER AT AC-23A, 220/230 V, 50 HZ</b> | 18.5 kW                                                                         |
| <b>RATED OPERATIONAL POWER AT AC-23A, 400 V, 50 HZ</b>     | 30 kW                                                                           |
| <b>RATED OPERATIONAL POWER AT AC-23A, 500 V, 50 HZ</b>     | 45 kW                                                                           |
| <b>RATED OPERATIONAL POWER AT AC-23A, 690 V, 50 HZ</b>     | 55 kW                                                                           |
| <b>RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ</b>   | 30 kW                                                                           |
| <b>RATED OPERATIONAL POWER AT AC-3, 415 V, 50 HZ</b>       | 30 kW                                                                           |
| <b>RATED OPERATIONAL POWER AT AC-3, 500 V, 50 HZ</b>       | 30 kW                                                                           |
| <b>RATED OPERATIONAL POWER AT AC-3, 690 V, 50 HZ</b>       | 30 kW                                                                           |
| <b>RATED OPERATIONAL VOLTAGE (UE) AT AC - MAX</b>          | 690 V                                                                           |
| <b>RATED UNINTERRUPTED CURRENT (IU)</b>                    | 63 A                                                                            |
| <b>UNINTERRUPTED CURRENT</b>                               | Rated uninterrupted current I <sub>u</sub> is specified for max. cross-section. |

## General information

|                                               |                                                                               |
|-----------------------------------------------|-------------------------------------------------------------------------------|
| <b>ACCESSORIES</b>                            | Auxiliary contact or neutral conductor fitted by user.                        |
| <b>DEGREE OF PROTECTION</b>                   | NEMA 12                                                                       |
| <b>DEGREE OF PROTECTION (FRONT SIDE)</b>      | IP65                                                                          |
| <b>LIFESPAN, MECHANICAL</b>                   | 100,000 Operations                                                            |
| <b>MOUNTING METHOD</b>                        | Surface mounting                                                              |
| <b>MOUNTING POSITION</b>                      | As required                                                                   |
| <b>OPERATING FREQUENCY</b>                    | 1200 Operations/h                                                             |
| <b>OVERVOLTAGE CATEGORY</b>                   | III                                                                           |
| <b>POLLUTION DEGREE</b>                       | 3                                                                             |
| <b>PRODUCT CATEGORY</b>                       | Main switch                                                                   |
| <b>RATED IMPULSE WITHSTAND VOLTAGE (UIMP)</b> | 6000 V AC                                                                     |
| <b>SAFE ISOLATION</b>                         | 440 V AC, Between the contacts, According to EN 61140                         |
| <b>SAFETY PARAMETER (EN ISO 13849-1)</b>      | B10d values as per EN ISO 13849-1, table C.1                                  |
| <b>SHOCK RESISTANCE</b>                       | 15 g, Mechanical, According to IEC/EN 60068-2-27, Half-sinusoidal shock 20 ms |
| <b>SUITABLE FOR</b>                           | Ground mounting                                                               |
| <b>SWITCHING ANGLE</b>                        | 90 °                                                                          |

## Short-circuit rating

|                                                     |                                                        |
|-----------------------------------------------------|--------------------------------------------------------|
| <b>RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ)</b> | 4 kA (Load side)<br>100 kA (Supply side)               |
| <b>RATED SHORT-TIME WITHSTAND CURRENT (ICW)</b>     | 1.26 kA                                                |
| <b>SHORT-CIRCUIT CURRENT RATING (BASIC RATING)</b>  | 150A, max. Fuse, SCCR (UL/CSA)<br>10 kA, SCCR (UL/CSA) |
| <b>SHORT-CIRCUIT PROTECTION RATING</b>              | 80 A gG/gL, Fuse, Contacts                             |

## Motor rating

|                                                          |        |
|----------------------------------------------------------|--------|
| <b>ASSIGNED MOTOR POWER AT 115/120 V, 60 HZ, 1-PHASE</b> | 3 HP   |
| <b>ASSIGNED MOTOR POWER AT 200/208 V, 60 HZ, 1-PHASE</b> | 7.5 HP |
| <b>ASSIGNED MOTOR POWER AT 200/208 V, 60 HZ, 3-PHASE</b> | 15 HP  |
| <b>ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 1-PHASE</b> | 10 HP  |
| <b>ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 3-PHASE</b> | 15 HP  |
| <b>ASSIGNED MOTOR POWER AT 460/480 V, 60 HZ, 3-PHASE</b> | 40 HP  |
| <b>ASSIGNED MOTOR POWER AT 575/600 V, 60 HZ, 3-PHASE</b> | 50 HP  |

## Switching capacity

|                                                      |                                                                                                                                                                                                                                   |
|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>LOAD RATING</b>                                   | $2 \times I_e$ (with intermittent operation class 12, 25 % duty factor)<br>$1.3 \times I_e$ (with intermittent operation class 12, 60 % duty factor)<br>$1.6 \times I_e$ (with intermittent operation class 12, 40 % duty factor) |
| <b>NUMBER OF CONTACTS IN SERIES AT DC-23A, 120 V</b> | 3                                                                                                                                                                                                                                 |
| <b>NUMBER OF CONTACTS IN SERIES AT DC-23A, 24 V</b>  | 1                                                                                                                                                                                                                                 |
| <b>NUMBER OF CONTACTS IN SERIES AT DC-23A, 48 V</b>  | 2                                                                                                                                                                                                                                 |
| <b>NUMBER OF CONTACTS</b>                            | 2                                                                                                                                                                                                                                 |

**IN SERIES AT DC-23A, 60 V**

|                                                                      |       |
|----------------------------------------------------------------------|-------|
| <b>RATED MAKING CAPACITY UP TO 690 V (COS PHI TO IEC/EN 60947-3)</b> | 800 A |
|----------------------------------------------------------------------|-------|

|                                                             |                   |
|-------------------------------------------------------------|-------------------|
| <b>SWITCHING CAPACITY (AUXILIARY CONTACTS, GENERAL USE)</b> | 10A, IU, (UL/CSA) |
|-------------------------------------------------------------|-------------------|

|                                                            |                                |
|------------------------------------------------------------|--------------------------------|
| <b>SWITCHING CAPACITY (AUXILIARY CONTACTS, PILOT DUTY)</b> | A600 (UL/CSA)<br>P600 (UL/CSA) |
|------------------------------------------------------------|--------------------------------|

|                                                        |                                                 |
|--------------------------------------------------------|-------------------------------------------------|
| <b>SWITCHING CAPACITY (MAIN CONTACTS, GENERAL USE)</b> | 60 A, Rated uninterrupted current max. (UL/CSA) |
|--------------------------------------------------------|-------------------------------------------------|

|                                           |      |
|-------------------------------------------|------|
| <b>VOLTAGE PER CONTACT PAIR IN SERIES</b> | 60 V |
|-------------------------------------------|------|

## Terminal capacities

|                          |                                                                                                                                                                                                                                                                                                       |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>SCREW SIZE</b>        | M5, Terminal screw                                                                                                                                                                                                                                                                                    |
| <b>TERMINAL CAPACITY</b> | 2 x (2.5 - 10) mm <sup>2</sup> , solid or stranded<br>1 x (1.5 - 25) mm <sup>2</sup> , flexible with ferrules to DIN 46228<br>2 x (1.5 - 6) mm <sup>2</sup> , flexible with ferrules to DIN 46228<br>1 x (2.5 - 35) mm <sup>2</sup> , solid or stranded<br>14 - 2 AWG, solid or flexible with ferrule |
| <b>TIGHTENING TORQUE</b> | 3 Nm, Screw terminals<br>26.5 lb-in, Screw terminals                                                                                                                                                                                                                                                  |

## Resources

|           |                                                                          |
|-----------|--------------------------------------------------------------------------|
| BROCHURES | <a href="#">Brochure - T Rotary Cam switch and P Switch-disconnector</a> |
|-----------|--------------------------------------------------------------------------|

|            |                                                                                       |
|------------|---------------------------------------------------------------------------------------|
| CATALOGUES | <a href="#">P Switch-disconnectors and T Rotary cam switches catalogue CA042001EN</a> |
|------------|---------------------------------------------------------------------------------------|

|                            |                                                                                                                                                          |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| DECLARATIONS OF CONFORMITY | <a href="#">eaton-main-switch-declaration-of-conformity-eu250811en.pdf</a><br><a href="#">eaton-main-switch-declaration-of-conformity-uk251294en.pdf</a> |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|

|          |                                                                                                                                                                                                                                                |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DRAWINGS | <a href="#">eaton-rotary-switches-p3-main-switch-dimensions-012.eps</a><br><a href="#">eaton-rotary-switches-padlock-t0-main-switch-dimensions.eps</a><br><a href="#">eaton-rotary-switches-surface-mounting-t0-main-switch-3d-drawing.eps</a> |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                           |                                                                                                                                                                                                                |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                           | <a href="#">eaton-rotary-switches-t0-main-switch-symbol.eps</a><br><a href="#">eaton-general-switch-t0-main-switch-symbol.eps</a><br><a href="#">eaton-general-totally-insulated-t0-main-switch-symbol.eps</a> |
| ECAD MODEL                | <a href="#">ETN.P3-63 I4 SVB</a>                                                                                                                                                                               |
| INSTALLATION INSTRUCTIONS | <a href="#">eaton-rotary-switches-cam-switch-p3-il03801010z.pdf</a>                                                                                                                                            |
| INSTALLATION VIDEOS       | <a href="#">Eaton's P Switch-disconnectors used in a factory</a>                                                                                                                                               |
| MCAD MODEL                | <a href="#">eaton-erd-mcad-drawings-p3-i4-svb.dwg</a><br><a href="#">eaton-switch-mcad-drawings-bauform11.dwg</a><br><a href="#">eaton-erd-mcad-3d-models-p3-i4-svb.stp</a>                                    |
| PEP ECO-PASSPORT          | <a href="#">eaton-enclosed-rotary-disconnects-pep-eato-00166-v0101-en.pdf</a>                                                                                                                                  |
| PRODUCT NOTIFICATIONS     | <a href="#">MZ008005ZU_Orderform_Customized_Switch.pdf</a><br><a href="#">MZ008006ZU_Orderform_Customized_Switch.pdf</a>                                                                                       |
| WIRING DIAGRAMS           | <a href="#">eaton-rotary-switches-t0-on-off-switch-wiring-diagram-068.eps</a><br><a href="#">eaton-rotary-switches-on-off-switch-p3-main-switch-wiring-diagram.eps</a>                                         |

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|-----------------|
| PROJECT NAME:   |
| PROJECT NUMBER: |
| PREPARED BY:    |
| DATE:           |