## Eaton 207331

Eaton Moeller® series P1 Safety switch, P1, 32 A, 3 pole, 1 N/O, 1 N/C, Emergency switching off function, With red rotary handle and yellow locking ring, Lockable in position 0 with cover interlock, with warning label "safety switch"

PRODUCT NAME	Eaton Moeller® series P1 Safety switch
CATALOG NUMBER	207331
PRODUCT LENGTH/DEPTH	125 mm
PRODUCT HEIGHT	180 mm
PRODUCT WIDTH	100 mm
PRODUCT WEIGHT	0.462 kg
CERTIFICATIONS	EN 60947 IEC 60947 EN 60204 VDE VDE 0660 IEC/EN 60947-3 IEC/EN 60204 IEC/EN 60947
CATALOG NOTES	Rated Short-time Withstand Current (Icw) for a time of 1 second



PRODUCT CATEGORY	Safety switch
FEATURES	Version as safety switch Version as emergency stop installation
ACTUATOR COLOR	Red
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.

eaton-rotary-switches-
surface-mounting-p1-
main-switch-
<u>dimensions.eps</u>
eaton-rotary-switches-p3-
safety-3d-drawing.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	ls the panel builder's responsibility.
10.9.2 POWER- FREQUENCY ELECTRIC STRENGTH	Is the panel builder's responsibility.
10.9.3 IMPULSE WITHSTAND VOLTAGE	ls the panel builder's responsibility.
10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL	ls the panel builder's responsibility.
FITTED WITH:	Red rotary handle and yellow locking ring Warning label "Safety switch"
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	32 A
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 (ICW)	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
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)	1
RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ)	80 kA
OVERVOLTAGE CATEGORY	III

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	Three-pole
MOUNTING METHOD	Surface mounting
DEGREE OF PROTECTION	NEMA 12
SUITABLE FOR	Ground mounting
LOCKING FACILITY	Lockable in the 0 (Off) position (cover interlock)
FUNCTIONS	Emergency switching off function Interlockable
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, Half- sinusoidal shock 20 ms
LIFESPAN, MECHANICAL	300,000 Operations
LOAD RATING	$2 \times I_e$ (with intermittent operation class 12, 25 % duty factor)  1.6 $\times I_e$ (with intermittent operation class 12, 40 % duty factor)  1.3 $\times I_e$ (with intermittent operation class 12, 60 % duty factor)
TERMINAL CAPACITY	2 x (1.5 - 6) mm <sup>2</sup> , solid or stranded 1 x (1 - 4) mm <sup>2</sup> , flexible with ferrules to DIN 46228 2 x (1 - 4) mm <sup>2</sup> , flexible with ferrules to DIN 46228 1 x (1.5 - 6) mm <sup>2</sup> , solid or stranded
SAFETY PARAMETER (EN ISO 13849-1)	B10d values as per EN ISO 13849-1, table C.1
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	1
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, 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 PROTECTION RATING	50 A gG/gL, Fuse, Contacts
RATED OPERATIONAL CURRENT (IE) AT AC-21, 440 V	32 A
RATED OPERATIONAL CURRENT (IE) AT AC-23A, 230 V	32 A
RATED OPERATIONAL CURRENT (IE) AT AC-23A, 400 V, 415 V	32 A
RATED OPERATIONAL CURRENT (IE) AT AC-23A, 500 V	30 A
RATED OPERATIONAL CURRENT (IE) AT AC-23A, 690 V	19.8 A
CURRENT (IE) AT AC-23A,	19.8 A 26.4 A

RATED OPERATIONAL CURRENT (IE) AT AC-3, 380 V, 400 V, 415 V	26.4 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 500 V	23.4 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 660 V, 690 V	14.7 A
RATED OPERATIONAL CURRENT (IE) AT DC-1, LOAD-BREAK SWITCHES L/R = 1 MS	32 A
RATED OPERATIONAL CURRENT (IE) AT DC-23A, 120 V	12 A
RATED OPERATIONAL CURRENT (IE) AT DC-23A, 24 V	25 A
RATED OPERATIONAL CURRENT (IE) AT DC-23A, 48 V	25 A
RATED OPERATIONAL CURRENT (IE) 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	14.1 lb-in, Screw terminals

	1.6 Nm, Screw terminals
UNINTERRUPTED CURRENT	Rated uninterrupted current lu is specified for max. cross-section.
HOUSING COLOR	Gray
HOUSING MATERIAL	Plastic

## **PROJECT NAME: PROJECT NUMBER: PREPARED BY:**



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