Main switch, P1, 25 A, surface mounting, 3 pole, Emergency switching off function, With red rotary handle and yellow locking ring, Lockable in the 0 (Off) position, in steel enclosure



Part no. P1-25/SE1/SVB 197346

General specifications	
Product name	Eaton Moeller® series P1 Main switch
Part no.	P1-25/SE1/SVB
EAN	4015080896906
Product Length/Depth	200 millimetre
Product height	135 millimetre
Product width	150 millimetre
Product weight	1.65 kilogram
Certifications	IEC/EN 60204 IEC/EN 60947 IEC/EN 60947-3 VDE 0660
Product Tradename	P1
Product Type	Main switch
Product Sub Type	None
Catalog Notes	in steel enclosure Rated Short-time Withstand Current (Icw) for a time of 1 second
Features & Functions	
Features	Version as maintenance-/service switch Version as main switch Version as safety switch Version as emergency stop installation
Fitted with:	Red rotary handle and yellow locking ring
Functions	Emergency switching off function Interlockable
Locking facility	Lockable in the 0 (Off) position
Number of poles	Three-pole
General information	
Accessories	Auxiliary contact or neutral conductor fitted by user.
Degree of protection	NEMA 12
Degree of protection (front side)	IP65
Lifespan, mechanical	300,000 Operations
Mounting method	Surface mounting
Mounting position	As required
Operating frequency	1200 Operations/h
Overvoltage category	III
Pollution degree	3
Rated impulse withstand voltage (Uimp)	6000 V AC
Safe isolation	440 V AC, Between the contacts, According to EN 61140
Safety parameter (EN ISO 13849-1)	B10d values as per EN ISO 13849-1, table C.1
Shock resistance	15 g, Mechanical, According to IEC/EN 60068-2-27, Half-sinusoidal shock 20 ms
Suitable for	Ground mounting
Switching angle	90 °
Climatic environmental conditions	
Ambient operating temperature (enclosed) - min	-25 °C
Ambient operating temperature (enclosed) - max	40 °C
Terminal capacities	
Terminal capacity	$2 \times (1.5 - 6) \text{ mm}^2$, solid or stranded $2 \times (1 - 4) \text{ mm}^2$, flexible with ferrules to DIN 46228 $1 \times (1 - 4) \text{ mm}^2$, flexible with ferrules to DIN 46228 $1 \times (1.5 - 6) \text{ mm}^2$, solid or stranded

Screw size	M4, Terminal screw
Tightening torque	1.6 Nm, Screw terminals 14 Nm, Screw terminals
Electrical rating	
Rated breaking capacity at 220/230 V (cos phi to IEC 60947-3)	190 A
Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3)	150 A
Rated breaking capacity at 500 V (cos phi to IEC 60947-3)	170 A
Rated breaking capacity at 660/690 V (cos phi to IEC 60947-3)	150 A
Rated operational current (le) at AC-21, 440 V	25 A
Rated operational current (le) at AC-23A, 230 V	25 A
Rated operational current (le) at AC-23A, 400 V, 415 V	25 A
Rated operational current (le) at AC-23A, 500 V	17.4 A
Rated operational current (le) at AC-23A, 690 V	12 A
Rated operational current (le) at AC-3, 220 V, 230 V, 240 V	19.6 A
	15.2 A
Rated operational current (le) at AC-3, 380 V, 400 V, 415 V	
Rated operational current (le) at AC-3, 500 V	12.1 A
Rated operational current (le) at AC-3, 660 V, 690 V	8.8 A
Rated operational current (le) at DC-1, load-break switches l/r = 1 ms	25 A
Rated operational current (le) at DC-23A, 24 V	25 A
Number of contacts in series at DC-23A, 24 V	1 25 A
Rated operational current (le) at DC-23A, 48 V	25 A
Number of contacts in series at DC-23A, 48 V	2
Rated operational current (le) at DC-23A, 60 V	25 A
Number of contacts in series at DC-23A, 60 V	2
Rated operational current (le) at DC-23A, 120 V	12 A
Number of contacts in series at DC-23A, 120 V	3
Rated operational power at AC-23A, 220/230 V, 50 Hz	5.5 kW
Rated operational power at AC-23A, 400 V, 50 Hz	13 kW
Rated operational power at AC-23A, 500 V, 50 Hz	11 kW
Rated operational power at AC-23A, 690 V, 50 Hz	11 kW
Rated operational power at AC-3, 380/400 V, 50 Hz	7.5 kW
Rated operational power at AC-3, 415 V, 50 Hz	7.5 kW
Rated operational power at AC-3, 690 V, 50 Hz	7.5 kW
Rated operational voltage (Ue) at AC - max	690 V
Rated uninterrupted current (Iu)	25 A
Uninterrupted current	Rated uninterrupted current lu is specified for max. cross-section.
Voltage per contact pair in series	60 V
Short-circuit rating	
Rated conditional short-circuit current (Iq)	50 kA
Rated short-time withstand current (Icw)	0.64 kA 640 A, Contacts, 1 second
Short-circuit protection rating	25 A gG/gL, Fuse, Contacts
Switching capacity	
Rated making capacity up to 690 V (cos phi to IEC/EN 60947-3)	240 A
Load rating	1.3 x l# (with intermittent operation class 12, 60 % duty factor) $2 \times l$ # (with intermittent operation class 12, 25 % duty factor) 1.6 x l# (with intermittent operation class 12, 40 % duty factor)
Contacts	
Control circuit reliability	1 failure per 100,000 switching operations statistically determined, at 24 V DC, 10 mA)
Number of auxiliary contacts (change-over contacts)	0
Number of auxiliary contacts (normally closed contacts)	0
Number of auxiliary contacts (normally open contacts)	0
Actuator	
Actuator color	Red
Actuator type	Door coupling rotary drive

Design verification	
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.
10.2.5 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.
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.
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 8.0

Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss10.0.1-27-37-14-03 [AKF060013])

Version as main switch			Yes
Version as maintenance-/service switch			Yes
Version as safety switch			Yes
Version as emergency stop installation			Yes
Version as reversing switch			No
Number of switches			1
Max. rated operation voltage Ue AC	\	V	690
Rated operating voltage	\	V	690 - 690
Rated permanent current lu	,	A	25
Rated permanent current at AC-23, 400 V	,	A	25
Rated permanent current at AC-21, 400 V	,	A	25
Rated operation power at AC-3, 400 V	ŀ	kW	7.5
Rated short-time withstand current lcw	ŀ	kA	0.64
Rated operation power at AC-23, 400 V	ŀ	kW	13
Switching power at 400 V	ŀ	kW	11
Conditioned rated short-circuit current Iq	ŀ	kA	50
Number of poles			3
Number of auxiliary contacts as normally closed contact			0
Number of auxiliary contacts as normally open contact			0
Number of auxiliary contacts as change-over contact			0
Motor drive optional			No
Motor drive integrated			No
Voltage release optional			No
Device construction			Complete device in housing
Suitable for floor mounting			Yes
Suitable for front mounting 4-hole			No
Suitable for front mounting centre			No

Suitable for distribution board installation	No
Suitable for intermediate mounting	No
Colour control element	Red
Type of control element	Door coupling rotary drive
Interlockable	Yes
Type of electrical connection of main circuit	Screw connection
Degree of protection (IP), front side	IP65
Degree of protection (NEMA)	12