

**Main switch, P3, 100 A, surface mounting, 3 pole, Emergency switching off function, With red rotary handle and yellow locking ring, UL/CSA**



**Part no. P3-100/I5/SVB-NA  
255903**

Product name	Eaton Moeller® series P3 Main switch
Part no.	P3-100/I5/SVB-NA
EAN	4015082559038
Product Length/Depth	169 millimetre
Product height	280 millimetre
Product width	200 millimetre
Product weight	1.5 kilogram
Certifications	UL 60947-4-1 CSA File No.: 012528 CE IEC/EN 60204 VDE 0660 UL Category Control No.: NLRV CSA-C22.2 No. 94 CSA IEC/EN 60947-3 UL File No.: E36332 CSA-C22.2 No. 60947-4-1-14 CSA Class No.: 3211-05 UL IEC/EN 60947
Product Tradename	P3
Product Type	Main switch
Product Sub Type	None
Catalog Notes	Rated Short-time Withstand Current (Icw) for a time of 1 second UL/CSA
Features	Version as emergency stop installation Version as maintenance-/service switch Version as main switch
Fitted with:	Red rotary handle and yellow locking ring
Functions	Interlockable Emergency switching off function
Number of poles	3
Accessories	Auxiliary contact or neutral conductor fitted by user.
Degree of protection	NEMA 12
Degree of protection (front side)	IP65
Lifespan, mechanical	100,000 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 Branch circuits, suitable as motor disconnect, (UL/CSA)
Ambient operating temperature - min	-25 °C
Ambient operating temperature - max	40 °C
Ambient operating temperature (enclosed) - min	-25 °C

Ambient operating temperature (enclosed) - max		40 °C
Climatic proofing		Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78
Terminal capacity		2 x (2.5 - 10) mm <sup>2</sup> , solid or stranded 1 x (2.5 - 35) mm <sup>2</sup> , solid or stranded 2 x (1.5 - 6) mm <sup>2</sup> , flexible with ferrules to DIN 46228 1 x (1.5 - 25) mm <sup>2</sup> , flexible with ferrules to DIN 46228 14 - 2 AWG, solid or flexible with ferrule
Screw size		M5, Terminal screw
Tightening torque		3 Nm, Screw terminals 26.5 lb-in, Screw terminals
Rated breaking capacity at 220/230 V (cos phi to IEC 60947-3)		760 A
Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3)		740 A
Rated breaking capacity at 500 V (cos phi to IEC 60947-3)		880 A
Rated breaking capacity at 660/690 V (cos phi to IEC 60947-3)		520 A
Rated operational current (Ie) at AC-3, 220 V, 230 V, 240 V		71 A
Rated operational current (Ie) at AC-3, 380 V, 400 V, 415 V		71 A
Rated operational current (Ie) at AC-3, 500 V		65 A
Rated operational current (Ie) at AC-3, 660 V, 690 V		23.8 A
Rated operational current (Ie) at AC-21, 440 V		100 A
Rated operational current (Ie) at AC-23A, 230 V		100 A
Rated operational current (Ie) at AC-23A, 400 V, 415 V		100 A
Rated operational current (Ie) at AC-23A, 500 V		96 A
Rated operational current (Ie) at AC-23A, 690 V		68 A
Rated operational current (Ie) at DC-1, load-break switches I/r = 1 ms		100 A
Rated operational current (Ie) at DC-23A, 24 V		50 A
Rated operational current (Ie) at DC-23A, 48 V		50 A
Rated operational current (Ie) at DC-23A, 60 V		50 A
Rated operational current (Ie) at DC-23A, 120 V		25 A
Rated operational power at AC-3, 380/400 V, 50 Hz		37 kW
Rated operational power at AC-3, 415 V, 50 Hz		37 kW
Rated operational power at AC-3, 690 V, 50 Hz		37 kW
Rated operational power at AC-23A, 220/230 V, 50 Hz		30 kW
Rated operational power at AC-23A, 400 V, 50 Hz		55 kW
Rated operational power at AC-23A, 500 V, 50 Hz		55 kW
Rated operational power at AC-23A, 690 V, 50 Hz		55 kW
Rated operational voltage (Ue) at AC - min		690 V
Rated operational voltage (Ue) at AC - max		690 V
Rated uninterrupted current (Iu)		100 A
Uninterrupted current		Rated uninterrupted current Iu is specified for max. cross-section.
Rated conditional short-circuit current (Iq)		4 kA (Load side) 80 kA (Supply side)
Rated short-time withstand current (Icw)		2 kA
Short-circuit current rating (basic rating)		10 kA, SCCR (UL/CSA) 150A, max. Fuse, SCCR (UL/CSA)
Short-circuit protection rating		100 A gG/gL, Fuse, Contacts
Load rating		2 x I# (with intermittent operation class 12, 25 % duty factor) 1.6 x I# (with intermittent operation class 12, 40 % duty factor) 1.3 x I# (with intermittent operation class 12, 60 % duty factor)
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
Number of contacts in series at DC-23A, 120 V		3
Switching capacity (main contacts, general use)		100 A, If used with neutral conductor IU = max. 90 A, Rated uninterrupted current max. (UL/CSA)
Switching capacity (auxiliary contacts, general use)		10A, IU, (UL/CSA)

Switching capacity (auxiliary contacts, pilot duty)		A600 (UL/CSA) P600 (UL/CSA)
Rated making capacity up to 690 V (cos phi to IEC/EN 60947-3)		950 A
Voltage per contact pair in series		60 V
Assigned motor power at 115/120 V, 60 Hz, 1-phase		5 HP
Assigned motor power at 200/208 V, 60 Hz, 1-phase		10 HP
Assigned motor power at 200/208 V, 60 Hz, 3-phase		20 HP
Assigned motor power at 230/240 V, 60 Hz, 1-phase		15 HP
Assigned motor power at 230/240 V, 60 Hz, 3-phase		25 HP
Assigned motor power at 460/480 V, 60 Hz, 3-phase		60 HP
Assigned motor power at 575/600 V, 60 Hz, 3-phase		75 HP
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 color		Red
Actuator type		Door coupling rotary drive
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>		7.5 W
Rated operational current for specified heat dissipation (I <sub>n</sub> )		100 A
Static heat dissipation, non-current-dependent P <sub>vs</sub>		0 W
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.
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 disconnecter (EC000216)		
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnecter (ecl@ss10.0.1-27-37-14-03 [AKF060013])		
Version as main switch		Yes

Version as maintenance-/service switch		Yes
Version as safety switch		No
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 Iu	A	100
Rated permanent current at AC-23, 400 V	A	100
Rated permanent current at AC-21, 400 V	A	100
Rated operation power at AC-3, 400 V	kW	37
Rated short-time withstand current Icw	kA	2
Rated operation power at AC-23, 400 V	kW	55
Switching power at 400 V	kW	55
Conditioned rated short-circuit current Iq	kA	80
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