## DATASHEET - P1-32/E/SVB

Part no.

Main switch, P1, 32 A, flush mounting, 3 pole, Emergency switching off function, With red rotary handle and yellow locking ring

P1-32/E/SVB



110198 **General specifications** Product name Eaton Moeller® series P1 Main switch P1-32/E/SVB Part no. EAN 4015081097555 Product Length/Depth 119 millimetre 65 millimetre Product height 65 millimetre Product width Product weight 0.17 kilogram Certifications CSA Class No.: 3211-05 CSA UL 60947-4-1 IEC/EN 60947-3 IEC/EN 60204 UL File No.: E36332 UL Category Control No.: NLRV IEC/EN 60947 CSA File No.: 012528 UL VDE 0660 CSA-C22.2 No. 60947-4-1-14 CSA-C22.2 No. 94 CE Product Tradename P1 Product Type Main switch Product Sub Type None **Catalog Notes** Rated Short-time Withstand Current (Icw) for a time of 1 second **Features & Functions** Features Version as maintenance-/service switch Version as emergency stop installation Version as main switch Fitted with Red rotary handle and yellow locking ring Functions Interlockable Emergency switching off function Number of poles 3 **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 Flush mounting As required Mounting position 1200 Operations/h **Operating frequency** ш Overvoltage category 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 Front mounting 4-hole Branch circuits, suitable as motor disconnect, (UL/CSA) **Climatic environmental conditions** Ambient operating temperature - min -25 °C 50 °C Ambient operating temperature - max -25 °C Ambient operating temperature (enclosed) - min

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 capacities	
Terminal capacity	1 x (1.5 - 6) mm <sup>2</sup> , solid or stranded 2 x (1.5 - 6) mm <sup>2</sup> , solid or stranded 14 - 8 AWG, solid or flexible with ferrule 2 x (1 - 4) mm <sup>2</sup> , flexible with ferrules to DIN 46228 1 x (1 - 4) mm <sup>2</sup> , flexible with ferrules to DIN 46228
Screw size Tightening torque	M4, Terminal screw 1.6 Nm, Screw terminals
Electrical rating	14.1 lb-in, Screw terminals
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 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 Rated operational current (le) at AC-3, 500 V	26.4 A 23.4 A
Rated operational current (le) at AC-3, 500 V Rated operational current (le) at AC-3, 660 V, 690 V	23.4 A 14.7 A
Rated operational current (le) at AC-3, 600 V, 690 V	32 A
	32 A 32 A
Rated operational current (le) at AC-23A, 230 V Rated operational current (le) at AC-23A, 400 V, 415 V	32 A 32 A
Rated operational current (le) at AC-23A, 400 V, 413 V	30 A
Rated operational current (le) at AC-23A, 690 V	19.8 A
Rated operational current (le) at DC-1, load-break switches I/r = 1 ms	32 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 (le) at DC-23A, 120 V	12 A
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, 500 V, 50 Hz	18.5 kW
Rated operational power at AC-3, 690 V, 50 Hz	15 kW
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 voltage (Ue) at AC - max	690 V
Rated uninterrupted current (Iu)	32 A
Uninterrupted current	Rated uninterrupted current lu is specified for max. cross-section.
Short-circuit rating	
Rated conditional short-circuit current (Iq)	80 kA
Rated short-time withstand current (Icw)	0.64 kA 640 A, Contacts, 1 second
Short-circuit current rating (basic rating)	110A, max. Fuse, SCCR (UL/CSA) 5 kA, 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
Switching capacity	
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)	30 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)	320 A
Voltage per contact pair in series	60 V
Motor rating	
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
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	
Equipment heat dissipation, current-dependent Pvid	0 W
Heat dissipation capacity Pdiss	0 W
Heat dissipation per pole, current-dependent Pvid	1.8 W
Rated operational current for specified heat dissipation (In)	32 A
Static heat dissipation, non-current-dependent Pvs	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.
10.11 Short-circuit rating       10.12 Electromagnetic compatibility	

## **Technical data ETIM 8.0**

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

Electric engine [AKF060013])	ng, 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
[AIXI 000013])	

Variable as safety switch         Vision as some gency sup inclution         Vision as some gency sup inclution         Vision as some gency sup inclution           Version as some gency sup inclution         Vision as some gency sup inclution         Vision as some gency sup inclution           Version as some gency sup inclution         Vision as some gency sup inclution         Vision as some gency sup inclution           Number of switch         Vision as some gency sup inclution         Vision as some gency sup inclution           Rated permanent current at AC-23,400 V         Vision as some gency sup inclution         Vision as some gency sup inclution           Rated operation power at AC-31,400 V         Kine (Construction)         Vision as some gency sup inclution           Rated operation power at AC-31,400 V         Kine (Construction)         Vision (Construction)           Switching operated softs inclution current law         Kine (Construction)         Vision (Construction)           Number of availiary contacts as normally closed contact         Kine (Construction)         Vision (Construction)           Number of availiary contacts as normally closed contact         Kine (Construction)         Vision (Construction)           Number of availiary contacts as normally closed contact         Kine (Construction)         Vision (Construction)           Number of availiary contacts as normally closed contact         Kine (Construction)         Vision (Construction) </th <th>[AKF000013])</th> <th></th> <th></th>	[AKF000013])		
Version as dersy witch         Image: Provide and Section (Section (Se	Version as main switch		Yes
Version as enversing switch         Version as reversing switch         Nonbor of switches           Number of switches         V         Nonbor of switches           Ask, rated operation voltage Ue AC         V         80-900           Rated operation voltage Ue AC         V         80-900           Rated operating voltage         V         80-900           Rated operating voltage Ue AC         V         80-900           Rated operating voltage AC         V         80-900           Rated operating voltage AC         V         80-900           Rated operating voltage AC         V         80-900           Rated short-ticut current Iq         V         80-900           Number of voltage volta	Version as maintenance-/service switch		Yes
Variation as reversing switch         No           Number of switches         I           Max. rest operation votage Uo AC         V         60           Rated operation routing Unit         A         2           Rated operation routing Unit         V         60           Rated operation power at AC-23, 400 V         V         60           Rated operation power at AC-23, 400 V         V         60           Rated operation power at AC-32, 400 V         V         60           Switching power at AC-32, 400 V         V         60           Number of auxiliary contacts as normally closed contact         V         60           Number of auxiliary contacts as normally closed contact         V         60           Number of auxiliary contacts as normally closed contact         No         No           Switabe of normounting         V         No	Version as safety switch		No
Number of switches         Image of switches	Version as emergency stop installation		Yes
Asc. rated operation voltage Ue AC         V         60           Rated operation voltage         V         60         600           Rated operation voltage         A         2         2           Rated operation voltage Ue AC         A         2         3           Rated operation voltage Ue AC         A         2         3           Rated operation power at AC-3, 400 V         A         3         3           Rated operation power at AC-3, 400 V         KW         13         3           Rated operation power at AC-3, 400 V         KW         15         3           Switching power at AC-3, 400 V         KW         15         3           Number of power at AC-3, 400 V         KW         16         3           Switching power at AC-3, 400 V         KW         16         3           Number of power at AC-3, 400 V         KW         16         3           Number of power at AC-3, 400 V         KW         16         3           Number of power at AC-3, 400 V         KM         16         3           Number of power at AC-3, 400 V         KM         16         16           Number of power at AC-3, 400 V         KM         16         16           Number of power at AC-3, 4	Version as reversing switch		No
Rated operament current lu         80 - 690           Rated permanent current lu AC-23, 400 V         A           Rated permanent current at AC-23, 400 V         C           Rated operasion power at AC-23, 400 V         C           Switching power at AC-24, 400 V         C           Switching power at AC-24, 400 V         C           Switching power at AC-24, 400 V         Switching Switchi	Number of switches		1
Rated permanent current lu       A       2         Rated permanent current at AC-23, 400 V       A       2         Rated permanent current at AC-21, 400 V       A       3         Rated permanent current at AC-23, 400 V       KA       3         Rated permanent current at AC-21, 400 V       KA       3         Rated permanent current at AC-23, 400 V       KA       3         Rated permanent current low       KA       3         Rated permanent current low       KA       3         Rated permanent current low       KA       3         Switching power at AC-23, 400 V       KM       15         Conditioned rated short-circuit current low       KM       3         Number of polos       Sumber of polos       3         Number of suxiliary contacts as normally open contact       M       0         Number of suxiliary contacts as normally open contact       M       None         Number of suxiliary contacts as normally open contact       None       None         Number of suxiliary contacts as normally open contact       None       None         Number of suxiliary contacts as normally open contact       None       None         Sutable for fint mounting 4-holo       None       None         Sutable for fint mounting 4-holo <td>Max. rated operation voltage Ue AC</td> <td>V</td> <td>690</td>	Max. rated operation voltage Ue AC	V	690
Rated permanent current at AC-23, 400 V       A       2         Rated operation power at AC-3, 400 V       KW       3         Rated operation power at AC-3, 400 V       KW       3         Rated operation power at AC-23, 400 V       KW       5         Rated short-time withstand current (w       KW       5         Rated short-time withstand current (w       KW       6         Number of auxiliary contracts an ormally closed contact       KW       6         Number of auxiliary contacts as normally closed contact       M       6         Number of auxiliary contacts as normally closed contact       M       6         Number of auxiliary contacts as normally closed contact       M       N         Number of auxiliary contacts as normally closed contact       M       N         Number of auxiliary contacts as normally closed contact       M       N         Number of auxiliary contacts as normally closed contact       M       N         Number of auxiliary contacts as normally closed contact       M       N         Number of auxiliary contacts as normally closed contact       N       N         Number of auxiliary contacts as normally closed contact       N       N         Number of auxiliary contacts as normally closed contact       N       N         Number of	Rated operating voltage	V	690 - 690
Atted operation power at AC-3,400 V       Pate doparation power at AC-3,400 V       I3         Rated operation power at AC-3,400 V       IA       0.84         Rated operation power at AC-23,400 V       IM       IS         Switch ing ower at 400 V       IM       IS         Switch ing ower at 400 V       IM       IS         Conditioned rated short-circuit current lq       IM       IS         Number of auxiliary contacts as normally closed contact       IM       IS         Number of auxiliary contacts as normally closed contact       IM       IS         Number of auxiliary contacts as normally closed contact       IM       IS         Number of auxiliary contacts as normally closed contact       IM       IS         Number of auxiliary contacts as normally closed contact       IM       IS         Number of auxiliary contacts as normally closed contact       IM       IS         Number of auxiliary contacts as normally closed contact       IM       IS         Number of auxiliary contacts as normally closed contact       IM       IM         Number of auxiliary contacts as normally closed contact       IM       IM         Number of auxiliary contacts as normally closed contact       IM       IM       IM         Notact charts as normally closed contact       IM       IM <td>Rated permanent current lu</td> <td>А</td> <td>32</td>	Rated permanent current lu	А	32
And operation power at AC-3, 400 V         Image: Add operation power at AC-23, 400 V	Rated permanent current at AC-23, 400 V	А	32
Rated short-time withstand current low       Role       Role       Role         Rated short-time withstand current low       Role       Role       Role         Switching power at 400 V       KW       Sold       Role         Conditioned rated short-circuit current lq       Role	Rated permanent current at AC-21, 400 V	А	32
Rated operation power at AC-23, 400 V       Image: Provide a state of the state of	Rated operation power at AC-3, 400 V	kW	13
Witching power at 400 VImage: Marcine state short-circuit current lqImage: Marcine short-current lq<	Rated short-time withstand current lcw	kA	0.64
Additional reade short-circuit current lq         KA         80           Number of poles         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3         3	Rated operation power at AC-23, 400 V	kW	15
Number of poles         Image: Second Se	Switching power at 400 V	kW	15
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         No           Suitable for floor mounting 4-hole         No           Suitable for front mounting centre         No           Suitable for instruction obserd installation         No           Suitable for instruction dementing         No           Suitable for instruction function         No           Suitable for instruction dementing         No           Suitable for instruction functing centre         No           Suitable for instruction function         No           Suitable for instruction function         No           Suitable for instruction         So <t< td=""><td>Conditioned rated short-circuit current Iq</td><td>kA</td><td>80</td></t<>	Conditioned rated short-circuit current Iq	kA	80
Number of auxiliary contacts as normally open contact       0         Number of auxiliary contacts as change-over contact       0         Motor drive optional       0         Motor drive optional       0         Motor drive integrated       0         Voltage release optional       0         Device construction       0         Suitable for floor mounting       0         Suitable for front mounting 4-hole       0         Suitable for front mounting open contact       0         Suitable for front mounting 4-hole       0         Suitable for intermediate mounting       0	Number of poles		3
Number of auxiliary contacts as change-over contact         Image: second s	Number of auxiliary contacts as normally closed contact		0
Androme optional         Mode	Number of auxiliary contacts as normally open contact		0
Motor drive integrated         Moder drive integrated<	Number of auxiliary contacts as change-over contact		0
Valuage release optional         No           Device construction         Built-in device fixed built-in technique           Suitable for floor mounting         No           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         No           Type of centre formation formation formation formation         No           Type of electrical connection of main circuit         No           Buge of protection (IP), front side         Sector formation	Motor drive optional		No
Device constructionBuilt-in device fixed built-in techniqueSuitable for floor mountingNoSuitable for front mounting 4-holeYesSuitable for front mounting centreNoSuitable for fixed built-in techniqueNoSuitable for intermediate mountingNoSuitable for intermediate mountingNoColour control elementNoType of control elementSor coupling rotary driveInterlockableYesType of electrical connection of main circuitSor Sor coupling rotary driveInterlockableSor Sor Coupling rotary driveInterlockableSor Sor Sor Sor Sor Sor Sor Sor Sor Sor	Motor drive integrated		No
Suitable for floor mountingNoSuitable for front mounting 4-holeYesSuitable for front mounting centreNoSuitable for distribution board installationNoSuitable for intermediate mountingNoSuitable for intermediate mountingNoColour control elementNoType of control elementSoir coupling rotary driveInterlockableYesType of electrical connection of main circuitSoit Soit Soit Soit Soit Soit Soit Soit	Voltage release optional		No
Suitable for front mounting 4-holeYesSuitable for front mounting centreNoSuitable for distribution board installationNoSuitable for intermediate mountingNoColour control elementRedType of control elementDoor coupling rotary driveInterlockableYesType of electrical connection of main circuitSector connectionDegree of protection (IP), front sideSector connection	Device construction		Built-in device fixed built-in technique
Suitable for front mounting centreMoSuitable for distribution board installationNoSuitable for intermediate mountingNoColour control elementRedType of control elementDoor coupling rotary driveInterlockableYesType of electrical connection of main circuitSciew connectionDegree of protection (IP), front sideInterlockable	Suitable for floor mounting		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       Image: Screw connection of main circuit	Suitable for front mounting 4-hole		Yes
Suitable for intermediate mountingNoColour control elementRedType of control elementDoor coupling rotary driveInterlockableYesType of electrical connection of main circuitScrew connectionDegree of protection (IP), front sideGood Screw connection	Suitable for front mounting centre		No
Colour control elementRedType of control elementDoor coupling rotary driveInterlockableYesType of electrical connection of main circuitScrew connectionDegree of protection (IP), front sideGood Screw connection	Suitable for distribution board installation		No
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     Image: Screw connection	Suitable for intermediate mounting		No
Interlockable     Yes       Type of electrical connection of main circuit     Screw connection       Degree of protection (IP), front side     IP65	Colour control element		Red
Type of electrical connection of main circuit     Screw connection       Degree of protection (IP), front side     IP65	Type of control element		Door coupling rotary drive
Degree of protection (IP), front side	Interlockable		Yes
	Type of electrical connection of main circuit		Screw connection
Degree of protection (NEMA) 12	Degree of protection (IP), front side		IP65
	Degree of protection (NEMA)		12