Main switch, P1, 40 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. P1-40/SE1/SVB

199946

EL Number 1403765

(Norway)

(Norway)	
General specifications	
Product name	Eaton Moeller® series P1 Main switch
Part no.	P1-40/SE1/SVB
EAN	4015082953645
Product Length/Depth	200 millimetre
Product height	135 millimetre
Product width	150 millimetre
Product weight	1.65 kilogram
Compliances	UKCA CE
Certifications	IEC/EN 60947-3 IEC/EN 60204 IEC/EN 60947
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	
Enclosure material	Steel
Features	Version as main switch Version as maintenance-/service switch Version as emergency stop installation Version as safety switch
Fitted with:	Red rotary handle and yellow locking ring Auxiliary contact
Functions	Emergency switching off function Interlockable
Locking facility	Lockable in the 0 (Off) position
Number of poles	3
General information	
Degree of protection	IP65
Degree of protection (front side)	IP65
Lifespan, mechanical	300,000 Operations
Mounting method	Surface mounting
Mounting position	As required
Operating frequency	50 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
Shock resistance	15 g, Mechanical, According to IEC/EN 60068-2-27, Half-sinusoidal shock 20 ms
Switching angle	90 °
Climatic environmental conditions	
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, constant, to IEC 60068-2-78
	Damp heat, cyclic, to IEC 60068-2-30

Terminal capacities	
Terminal capacity	1 x (1 - 4) mm ² , flexible with ferrules to DIN 46228
	2 x (1 - 4) mm², flexible with ferrules to DIN 46228 1 x 10 mm² with fork terminal
	2 x 10 mm ² with fork terminal
Screw size	M4, Terminal screw
Tightening torque	1.6 Nm, Screw terminals
Electrical rating	
Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3)	290 kA
Rated breaking capacity at 660/690 V (cos phi to IEC 60947-3)	130 kA
Rated operational current (Ie) at AC-3, 220 V, 230 V, 240 V	30 A
Rated operational current (le) at AC-3, 380 V, 400 V, 415 V	30 A
Rated operational current (le) at AC-3, 660 V, 690 V	17 A
Rated operational current (Ie) at AC-21, 440 V	40 A
Rated operational current (Ie) at AC-23A, 230 V	40 A
Rated operational current (Ie) at AC-23A, 400 V, 415 V	40 A
Rated operational current (Ie) at AC-23A, 690 V	20 A
Rated operational power at AC-3, 380/400 V, 50 Hz	15 kW
Rated operational power at AC-3, 415 V, 50 Hz	15 kW
Rated operational power at AC-3, 690 V, 50 Hz	15 kW
Rated operational power at AC-23A, 220/230 V, 50 Hz	11 kW
Rated operational power at AC-23A, 400 V, 50 Hz	22 kW
Rated operational power at AC-23A, 690 V, 50 Hz	18.5 kW
Rated operational voltage (Ue) at AC - min	690 V
Rated operational voltage (Ue) at AC - max	690 V
Rated uninterrupted current (Iu)	40 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 protection rating	50 A gG/gL, Fuse, Contacts
Switching capacity	30 A guige, ruse, contacts
	40.1%/ 21.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.
Load rating	1.3 x l# (with intermittent operation class 12, 60 % duty factor) 1.6 x l# (with intermittent operation class 12, 40 % duty factor)
	2 x I# (with intermittent operation class 12, 25 % 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	•
	Dod
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	3.5 W
Rated operational current for specified heat dissipation (In)	40 A
Static heat dissipation, non-current-dependent Pvs	0 W
10.2.2 Corrosion resistance	Meets the product standard's requirements.
	Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures	Mark the second of the second
10.2.3.2 Verification of resistance of insulating materials to normal heat	Meets the product standard's requirements.
	Meets the product standard's requirements. Meets the product standard's requirements. UV resistance only in connection with protective shield.

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])

Varsion as smialmenance-service switch 4 Yes Version as saintenance-service switch 4 Yes Version as servering switch 6 Yes Version as servering switch 6 Yes Number of switches 1 Yes Number of switches 1 Yes Number of switches 2 Yes Rated operation voltage Ue AC 2 Yes Rated operation voltage 2 A 4 Rated operation power at AC-2,400 Y A 4 Rated operation power at AC-3,400 Y A 4 Rated operation power at AC-2,400 Y A 4 Number of obscillation of rated short-circuit current Iq A 4 Number of auxiliary contacts as normally closed contact B 4 A Number of auxiliary contacts as normally closed contact B A A	W		W.
Version as afety switch Feet Section of Semergency stop installation Feet Section of	Version as main switch		Yes
Version as mergency stop installation Fee			
Varion as reversing switch Me No Number of switches 1 Max. rad operation voltage Ue AC V 800 Rated operation voltage AD 800 Rated permanent current ur A 40 Rated permanent current at AC-23, 400 V A 40 Rated operation power at AC-3, 400 V RM 50 Rated operation power at AC-3, 400 V W 52 Rated operation power at AC-3, 400 V W 52 Rated operation power at AC-3, 400 V W 52 Switching power at 400 V W 2 2 Conditioned rated short-circuit current lq M 3 3 Number of auxiliary contacts as normally closed contact M 9 1 Number of auxiliary contacts as change-over contact M 9 1 Motor drive optional M 9 1 1 Motor drive optional M N 0 1 Motor drive optional M N 0 1 Motor drive optional <td>Version as safety switch</td> <td></td> <td>Yes</td>	Version as safety switch		Yes
Number of switches I 1 Max. rated operation voltage Ue AC V 890 Rated operation voltage Ue AC V 890 - 890 Rated permanent current Ia Q A 4 Rated permanent current at AC-23, 400 V A 4 Rated permanent current at AC-23, 400 V A 4 Rated short-time withstand current Icw MW 5 Rated permanent durrent Icw A 4 Rated short-time withstand current Icw A 4 9 Rated permanent durrent Icw A 4 9 Rated short-time withstand current Icw A 4 9 Rated permanent durrent Icw A 4 9 Rated short-time withstand current Icw A 8 9 Rated permanent durrent Icw A 8 9 Rate depermanent durrent Icw	Version as emergency stop installation		Yes
Max. rated operation voltage Ue AC V 690 Rated operating voltage V 690 - 890 Rated permanent current to Uernet at AC-23, 400 V A 4 Rated permanent current at AC-21, 400 V A 4 0 Rated permanent current at AC-21, 400 V AW 15 Rated operation power at AC-3, 400 V WW 15 Rated operation power at AC-23, 400 V WW 22 Rated operation power at AC-23, 400 V WW 22 Rated operation power at AC-23, 400 V WW 22 Conditioned rated short-circuit current lq WW 22 Conditioned rated short-circuit current lq WW 22 Number of poles WW 3 3 Number of poles WW 2 3 Number of auxiliary contacts as normally open contact WW 2 0 Number of auxiliary contacts as normally open contact WW No No Voltage relases optional WW No No Suitable for floor mounting WW WW WW	Version as reversing switch		No
Rated operating voltage V 890 - 890 Rated permanent current lu A 40 Rated permanent current at AC-23, 400 V A 40 Rated permanent current at AC-21, 400 V A 40 Rated permanent current at AC-21, 400 V A 40 Rated permanent current lcw kA 40 Rated short-time withstand current lcw kW 22 Switching power at AC-23, 400 V kW 22 Switching power at ACD-23, 400 V kW 22 Switching power at 400 V kW 22 Conditioned rated short-circuit current lq kA 80 Number of poles kA 80 Number of auxiliary contacts as normally open contact 0 0 Number of auxiliary contacts as change-over contact No No Motor drive entegrated No No Voltage release optional No	Number of switches		1
Rated permanent current lu A 40 Rated permanent current at AC-23,400 V A 40 Rated permanent current at AC-3,400 V AW 5 Rated permanent current lcw AM 0.84 Rated permanent current lcw AM 0.84 Rated permanent current lcw AM 0.84 Rated peration power at AC-3, 400 V AM 0.84 Rated operation power at AC-23, 400 V AM 0.84 Switching power at 400 V 22 22 Conditioned rated short-circuit current lq AM 80 Number of poles AM 80 Number of auxiliary contacts as normally closed contact AM 0 Number of auxiliary contacts as normally open contact AM 0 Number of auxiliary contacts as change-over contact AM No Motor drive optional AM No Motor drive optional AM No Votage release optional AM No Suitable for floor mounting AM No Suitable for front mounting eartre	Max. rated operation voltage Ue AC	V	690
Rated permanent current at AC-23, 400 V Rated permanent current at AC-21, 400 V Rated operation power at AC-3, 400 V Rated short-time withstand current lcw Rated operation power at AC-23, 400 V Rated short-time withstand current lcw Rated operation power at AC-23, 400 V Rated short-time withstand current lcw Rated short-time withstand short-time withstand short-time withstand short-time distribution board installation Rated short-time withstand short-time distribution board installation Rated short-time withstand short-time distribution board installation Rated short-time distribution board installation Rated short-time withstand short-time distribution board installation Rated short-time withstand short-time distribution board installation Rated short-time withstand short-time distribution board installation Rated short-time distribution board installation Rated short-time withstand short-time distribution board installation Rated short-time withstand	Rated operating voltage	V	690 - 690
Rated permanent current at AC-21, 400 V	Rated permanent current lu	Α	40
Rated operation power at AC-3, 400 V Rated short-time withstand current lcw Rated operation power at AC-23, 400 V Rated operation power at AC-23, 400 V Row 22 Switching power at 400 V Conditioned rated short-circuit current lq Row	Rated permanent current at AC-23, 400 V	Α	40
Rated short-time withstand current lcw Rated operation power at AC-23, 400 V Switching power at 400 V Conditioned rated short-circuit current Iq kA Number of poles Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact No Motor drive optional Motor drive integrated No Voltage release optional Device construction Suitable for floor mounting Suitable for front mounting 4-hole Suitable for fort mounting 4-hole Suitable for first mounting centre Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Interlockable No Coor coupling rotary drive Yes	Rated permanent current at AC-21, 400 V	Α	40
Rated operation power at AC-23, 400 V Switching power at 400 V Conditioned rated short-circuit current Iq Number of poles Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Notor drive optional Motor drive integrated No Voltage release optional Device construction Suitable for floor mounting Suitable for front mounting 4-hole Suitable for front mounting centre Suitable for firont mounting centre Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of centrol element Interlockable No Res Type of centrol element Interlockable	Rated operation power at AC-3, 400 V	kW	15
Switching power at 400 V Conditioned rated short-circuit current Iq Number of poles Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact Notor drive optional Notor drive integrated Notor dri	Rated short-time withstand current lcw	kA	0.64
Conditioned rated short-circuit current Iq kA 80 Number of poles Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact Notor drive optional Motor drive integrated Voltage release optional Device construction Suitable for floor mounting Suitable for front mounting 4-hole Suitable for front mounting centre Suitable for first mounting centre Suitable for intermediate mounting Suitable for intermediate mounting Colour control element Type of control element Interlockable Na Sala A 3 Sala	Rated operation power at AC-23, 400 V	kW	22
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 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 firont mounting centre No Suitable for intermediate mounting No Colour control element Red Type of control element Door coupling rotary drive Interlockable Yes	Switching power at 400 V	kW	22
Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Motor drive optional Motor drive integrated No Voltage release optional No Device construction Suitable for floor mounting Suitable for front mounting 4-hole Suitable for front mounting centre Suitable for front mounting centre Suitable for intermediate mounting Suitable for intermediate mounting Colour control element Type of control element Interlockable O O O O O O O O O O O O O	Conditioned rated short-circuit current Iq	kA	80
Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Motor drive optional Motor drive integrated No Voltage release optional Device construction Suitable for floor mounting Suitable for front mounting 4-hole Suitable for front mounting centre Suitable for front mounting centre Suitable for intermediate mounting Suitable for intermediate mounting Colour control element Type of control element Interlockable O O O O O O O O O O O O O	Number of poles		3
Number of auxiliary contacts as change-over contact Motor drive optional Motor drive integrated No Voltage release optional Device construction Suitable for floor mounting Suitable for front mounting 4-hole Suitable for front mounting centre Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Interlockable No No O O O O O O O O O O O O O	Number of auxiliary contacts as normally closed contact		0
Motor drive optional Motor drive integrated No Voltage release optional No Device construction Suitable for floor mounting Suitable for front mounting 4-hole Suitable for front mounting centre No Suitable for distribution board installation No Suitable for intermediate mounting Colour control element Type of control element Interlockable No No No No Colour control element No Door coupling rotary drive Yes	Number of auxiliary contacts as normally open contact		0
Motor drive integrated Voltage release optional No Device construction Suitable for floor mounting Suitable for front mounting 4-hole Suitable for front mounting centre No Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Interlockable No No No No Red Door coupling rotary drive Interlockable	Number of auxiliary contacts as change-over contact		0
Voltage release optional Device construction Suitable for floor mounting Suitable for front mounting 4-hole Suitable for front mounting centre No Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Interlockable No No No No Red Door coupling rotary drive Yes	Motor drive optional		No
Device construction Suitable for floor mounting Suitable for front mounting 4-hole Suitable for front mounting centre No Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Interlockable Built-in device fixed built-in technique No No No Red Door coupling rotary drive Yes	Motor drive integrated		No
Suitable for floor mounting 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	Voltage release optional		No
Suitable for front mounting 4-hole Suitable for front mounting centre No Suitable for distribution board installation No Suitable for intermediate mounting No Colour control element Type of control element Interlockable No No Red Yes	Device construction		Built-in device fixed built-in technique
Suitable for front mounting centre No Suitable for distribution board installation No Suitable for intermediate mounting Colour control element Type of control element Interlockable No No Red Door coupling rotary drive Yes	Suitable for floor mounting		No
Suitable for distribution board installation Suitable for intermediate mounting No Colour control element Type of control element Interlockable No Red Door coupling rotary drive Yes	Suitable for front mounting 4-hole		No
Suitable for intermediate mounting Colour control element Type of control element Interlockable No Red Door coupling rotary drive Yes	Suitable for front mounting centre		No
Colour control element Type of control element Interlockable Red Door coupling rotary drive Yes	Suitable for distribution board installation		No
Type of control element Door coupling rotary drive Interlockable Yes	Suitable for intermediate mounting		No
Interlockable Yes	Colour control element		Red
	Type of control element		Door coupling rotary drive
Type of electrical connection of main circuit Screw connection	Interlockable		Yes
	Type of electrical connection of main circuit		Screw connection

Degree of protection (IP), front side	IP65	
Degree of protection (NEMA)		