On-Off switch, P1, 25 A, flush mounting, 3 pole, Emergency switching off function, with red thumb grip and yellow front plate ${\bf r}$



Part no. P1-25/E-RT 002388

eneral specifications	
Product name	Eaton Moeller® series P1 On-Off switch
Part no.	P1-25/E-RT
EAN	4015080023883
Product Length/Depth	94 millimetre
Product height	70 millimetre
Product width	49 millimetre
Product weight	0.141 kilogram
Certifications	IEC/EN 60947-3 UL UL Category Control No.: NLRV CE CSA Class No.: 3211-05 IEC/EN 60947 UL File No.: E36332 IEC/EN 60204 CSA-C22.2 No. 94 CSA File No.: 012528 CSA VDE 0660 UL 60947-4-1 CSA-C22.2 No. 60947-4-1-14 UL CSA
Product Tradename	P1
Product Type	On-Off switch
Product Sub Type	None
Catalog Notes	Rated Short-time Withstand Current (Icw) for a time of 1 second
eatures & Functions	
Features	Version as emergency stop installation
Fitted with:	Red thumb grip and yellow front plate
Functions	Emergency switching off function
Number of poles	Three-pole
deneral information	тись рыс
	Auditor and the control of the contr
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
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 m
Suitable for	Branch circuits, suitable as motor disconnect, (UL/CSA) Front mounting 4-hole
limatic environmental conditions	
Ambient operating temperature - min	-25 °C
Ambient operating temperature - max	50 °C
Ambient operating temperature (enclosed) - min	-25 °C
Ambient operating temperature (enclosed) - max	40 °C

Torminal connection	Damp heat, constant, to IEC 60068-2-78
Terminal capacities	
Terminal capacity	$2 \times (1 - 4) \text{ mm}^2$, flexible with ferrules to DIN 46228 $1 \times (1.5 - 6) \text{ mm}^2$, solid or stranded 14 - 8 AWG, solid or flexible with ferrule $2 \times (1.5 - 6) \text{ mm}^2$, solid or stranded $1 \times (1 - 4) \text{ mm}^2$, flexible with ferrules to DIN 46228
Screw size	M4, Terminal screw
Tightening torque	14.1 lb-in, Screw terminals 1.6 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 (Ie) at AC-3, 220 V, 230 V, 240 V	19.6 A
Rated operational current (Ie) at AC-3, 380 V, 400 V, 415 V	15.2 A
Rated operational current (Ie) at AC-3, 500 V	12.1 A
Rated operational current (Ie) at AC-3, 660 V, 690 V	8.8 A
Rated operational current (Ie) at AC-21, 440 V	25 A
Rated operational current (Ie) at AC-23A, 230 V	25 A
Rated operational current (le) at AC-23A, 400 V, 415 V	25 A
Rated operational current (Ie) at AC-23A, 500 V	17.4 A
Rated operational current (Ie) at AC-23A, 690 V	12.6 A
Rated operational current (Ie) at DC-1, load-break switches I/r = 1 ms	25 A
Rated operational current (le) 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	7.5 kW
Rated operational power at AC-3, 415 V, 50 Hz	7.5 kW
Rated operational power at AC-3, 500 V, 50 Hz	7.5 kW
Rated operational power at AC-3, 690 V, 50 Hz	7.5 kW
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 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.
Short-circuit rating	
Rated conditional short-circuit current (Iq)	50 kA
Rated short-time withstand current (Icw)	640 A, Contacts, 1 second
Short-circuit current rating (basic rating)	0.64 kA 5 kA, SCCR (UL/CSA)
Short-circuit current rating (high fault)	110A, max. Fuse, SCCR (UL/CSA) 50 A, Class J, max. Fuse, SCCR (UL/CSA)
	10 kA, SCCR (UL/CSA)
Short-circuit protection rating	25 A gG/gL, Fuse, Contacts
Switching capacity	
Load rating	1.6 x l# (with intermittent operation class 12, 40 % duty factor) 2 x l# (with intermittent operation class 12, 25 % duty factor) 1.3 x l# (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)	20 A, Rated uninterrupted current max. (UL/CSA)

Switching capacity (auxiliary contacts, general use)	10A, IU, (UL/CSA)
Switching capacity (auxiliary contacts, general user)	A600 (UL/CSA)
	P600 (UL/CSA)
Rated making capacity up to 690 V (cos phi to IEC/EN 60947-3)	240 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	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	Short thumb-grip
Design verification	
Equipment heat dissipation, current-dependent Pvid	0 W
Heat dissipation capacity Pdiss	0 W
Heat dissipation per pole, current-dependent Pvid	1.1 W
Rated operational current for specified heat dissipation (In)	25 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.
10.12 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 9.0

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

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Name of autiliary contacts as namely cleared contact Not of autiliary contacts as namely cleared contact Number of autili	[AKF060018])		
Marcian as safety switch	Version as main switch		No
Version as emorgency stop installation Park	Version as maintenance-/service switch		No
No No No No No No No No	Version as safety switch		No
Number of switches 1 Max. rated operation voltage Ue AC V 600 Max. rated operation voltage Ue AC V 600 600 Retud operating voltage V 600 600 Retud operating voltage V 600 600 Retud operating voltage A 25 Retud operation op over at 4C-23, 400 V A 25 Return operation power at 4C-23, 400 V KW 13 Return operation op over at 4C0 V KW 13 Return operation op over at 4C0 V KW 13 Return operation op over at 4C0 V KW 13 Return operation op over at 4C0 V KW 13 Return operation op over at 4C0 V KW 13 Return operation op over at 4C0 V KW 13 Return operation op over at 4C0 V KW 13 Number of auxiliary contacts as normally closed contact KW 13 Number of auxiliary contacts as normally closed contact No No Number of auxiliary contacts as change-over contact No No	Version as emergency stop installation		Yes
Max. rated operation voltage Un AC V 890 -890 Rated operation yoltage V 890 -890 Rated permanent current at AC-23 -400 V A 25 Rated permanent current at AC-23 -400 V A 25 Rated permanent current at AC-23 -400 V BA 25 Rated short-dine wirthstand current low BA 0.84 Rated permanent active at AC-23, 400 V BA 0.94 Switching power at 400 V BA 0.94 Where of operation owner at AC-23, 400 V BA 0.94 Where of operation owner at AC-23, 400 V BA 0.94 Where of operation owner at AC-23, 400 V BA 0.94 Where of operation owner at AC-23, 400 V BA 0.94 Where of operation owner at AC-23, 400 V BA 0.94 Where of operation owner at AC-23, 400 V BA 0.94 Where of operation owner at AC-23, 400 V	Version as reversing switch		No
Rated operating voltage V 890 -890 Rated permanent current it AC-23, 400 V A 2 Rated operanent current at AC-23, 400 V W 7.5 Rated short-sine withstand current lcw kW 7.5 Rated short-sine withstand current lcw kW 1.0 Rated short-sine withstand current lcw kW 1.3 Short-sing power at AC-23, 400 V kW 1.3 Short-sing power at AC-25, 400 V kW 1.0 Number of sucklisty contacts as normally closed contact kW 1.0 Number of sucklisty contacts as normally closed contact kW 1.0 Motor drive integrated kW N Motor drive optional kW 1.0 Suitable for front mounting kW N Suita	Number of switches		1
Rated permanent current to Lorent Lor	Max. rated operation voltage Ue AC	V	690
Bated permanent current at AC-23, 400 V A 25 Rated permanent current at AC-21, 400 V KW 7.5 Rated short-time withstand current lew KA 0.84 Rated operation power at AC-23, 400 V KW 13 Rated operation power at AC-23, 400 V KW 13 Rated operation power at AC-23, 400 V KW 13 Switching power at 400 V KW 13 Conditional rated short-circuit current Iq KW 13 Number of poles 3 3 Number of auxiliany contacts as normally closed contact 9 0 Number of auxiliany contacts as change-over contact 9 0 Word of vive integrated 9 No Device construction 9 No Suitable for front mounting - 1-bile 9 Yes Suitable for front mounting centre 9 No Suitable for front mounting centre	Rated operating voltage	V	690 - 690
Rated permanent current at AC-21, 400 V KW 75 Rated operation power at AC-3, 400 V KA 0.64 Rated sport at no power at AC-3, 400 V KW 13 Switching power at AC-3, 400 V KW 13 Switching power at 400 V KW 13 Conditioned rated short-circuit current Iq KA 50 Number of poles Current Iq KW 10 Number of poles and power at AC-3, 400 V KW 10 Number of poles Protectic current Iq KW 3 Number of poles Protection Interest as normally closed contact CW 0 Number of auxiliary contacts as normally closed contact CW 0 Number of inviting a contacts as change-over contact CW 0 Motor drive optional CW No Motor drive integrated CW No Voltage release optional CW Suitable for for mounting CW Yes Suitable for for mounting 4-hole CW Yes Yes Suitable for for thin mounting 4-hole CW No Yes <td>Rated permanent current lu</td> <td>Α</td> <td>25</td>	Rated permanent current lu	Α	25
Rated operation power at AC-3, 400 V kW 7.5 Rated operation power at AC-23, 400 V kW 13 Switching power at 400 V kW 3 Switching power at 400 V kW 3 Switching power at 400 V kW 3 Number of pack at short-circuit current Iq kW 3 Number of auxiliary contacts as normally closed contact W 0 Number of auxiliary contacts as normally open contact W 0 Number of auxiliary contacts as normally open contact W 0 Number of auxiliary contacts as normally open contact W 0 Number of auxiliary contacts as change-over contact W 0 Number of number of auxiliary contacts as change-over contact W 0 Motor of vice integrated W No 0 Word of river integrated W No 0 Suitable for front mounting 4-loe W No 0 Suitable for intermediate mounting W No 0 Suitable for intermediate mounting W No No <td>Rated permanent current at AC-23, 400 V</td> <td>Α</td> <td>25</td>	Rated permanent current at AC-23, 400 V	Α	25
Rated short-time withstand current low KA 0.64 Rated operation power at AC-23, 400 V KW 13 Switching power at 400 V KW 13 Donding of rated short-circuit current lq KA 50 Number of poles 3 3 Number of pusitiary contacts as normally closed contact 0 0 Number of auxiliary contacts as change-over contact 0 0 Motor drive optional No No Motor drive optional No No Motor drive integrated No No Voltage release optional No No Suitable for front mounting No No Suitable for front mounting 4-hole No No Suitable for flost mounting centre No No Suitable for flost distribution board installation No No Suitable for intermediate mounting No No Colour control element No No Interlockable No No Vivip per a control element No No <td>Rated permanent current at AC-21, 400 V</td> <td>Α</td> <td>25</td>	Rated permanent current at AC-21, 400 V	Α	25
Reted operation power at AC-22,400 V	Rated operation power at AC-3, 400 V	kW	7.5
Switching power at 400 V kW 13 Conditioned rated short-circuit current Iq kA 50 Number of poles 3 3 Number of auxiliary contacts as normally open contact 0 0 Number of auxiliary contacts as normally open contact 0 0 Number of auxiliary contacts as change-over contact 0 0 Motor drive integrated No No Work of drive integrated No No Voltage release optional No No Device construction Built-in device fixed built-in technique Suitable for front mounting 4-ble No No Suitable for front mounting centre No No Suitable for intermediate mounting No No Suitable for intermediate mounting No Red Uppe of control element No No Uppe of control element	Rated short-time withstand current lcw	kA	0.64
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 achange-over contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as normally open contact Numb	Rated operation power at AC-23, 400 V	kW	13
Number of poles 3 Number of auxiliary contacts as normally closed contact 6 Number of auxiliary contacts as normally open contact 6 Number of auxiliary contacts as change-over contact 6 Motor drive optional 6 Motor drive integrated 6 Voltage release optional 6 Device construction 8 Suitable for floor mounting 6 Suitable for front mounting 4-hole 6 Suitable for front mounting centre 7 Suitable for intermediate mounting 6 Suitable for intermediate mounting 7 Colour control element 6 Specie control element 7 Interlockable 7 Specie of protection of main circuit 7 Specie electrical connection of main circuit 7 Specie electrical connection of main circuit 7 Specie electrical connection (NEMA) 7 Degree of protection (NEMA) 7 Degree of protection (NEMA) 7 Degree of protection (NEMA) 7 Degree of protec	Switching power at 400 V	kW	13
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 normally open contact Number of auxiliary contacts as change-over contacts a	Conditioned rated short-circuit current Iq	kA	50
Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Motor drive optional Motor drive integrated Motor drive integrated No No Device construction Suitable for floor mounting Suitable for front mounting e-hole Suitable for front mounting e-hole Suitable for front mounting e-hole Suitable for distribution board installation Suitable for distribution board installation Suitable for distribution board installation Suitable for intermediate mounting Loclour control element Type of control element Type of control element Type of control element Type of protection (NEMA) With pre-assembled cabling Degree of protection (NEMA) Middh mm Middh Middh Middh mm Middh	Number of poles		3
Number of auxiliary contacts as change-over contact Motor drive optional Motor drive optional Motor drive integrated No No No No No No No No 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 No No Solotrol delement No No Solotrol thumb-grip Interlockable Type of electrical connection of main circuit With pre-assembled cabling Degree of protection (IP), front side Degree of protection (IP), front side Degree of protection (IP), front side Degree of protection (INEMA) With Height Degree of protection (NEMA) Degre	Number of auxiliary contacts as normally closed contact		0
Motor drive optional Motor drive integrated Motor drive integrated Motor drive integrated No No No No Built-in device fixed built-in technique Built-in device fixed built-in technique No No Suitable for floor mounting Suitable for front mounting 4-hole Suitable for front mounting 4-hole Suitable for distribution board installation Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Type of control element Type of electrical connection of main circuit With pre-assembled cabling Degree of protection (IP), front side Degree of protection (NEMA) Width Height Degree of protection (NEMA) Type of the state	Number of auxiliary contacts as normally open contact		0
Motor drive integrated Motor drive interneding Motor drive interneding Motor drive interneding Motor drive interneding Motor drive integrated Mo	Number of auxiliary contacts as change-over contact		0
Notage 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 distribution board installation Suitable for intermediate mounting Colour control element Type of control element Type of control element Type of eletrical connection of main circuit With pre-assembled cabling Degree of protection (IP), front side Degree of protection (NEMA) With Height Depth Depth Degree of protection (NEMA) Degree of protec	Motor drive optional		No
Device construction Suitable for floor mounting Suitable for front mounting 4-hole Suitable for front mounting entre Suitable for front mounting centre Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit With pre-assembled cabling Degree of protection (IP), front side Degree of protection (NEMA) Width Height Degree of main circuit With pre-assembled cable Type of electrical connection of main circuit With pre-assembled cable Type of main circuit With pre-assembled cable Type of protection (IP), front side Type of protection (NEMA) Type of electrical connection of main circuit Type of protection (NEMA) Type of electrical connection of main circuit Type of electrical connection of main	Motor drive integrated		No
Suitable for floor mounting Suitable for front mounting 4-hole Suitable for front mounting centre Suitable for front mounting centre Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit With pre-assembled cabling Degree of protection (IP), front side Degree of protection (NEMA) Width Height Depth No No Red Short thumb-grip No Screw connection No Screw connection No IP65 I2 mm 49 Height Depth Degree of mm 70 Height Depth Degree of mm 94	Voltage release optional		No
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 Suitable for intermediate mounting Suitabl	Device construction		Built-in device fixed built-in technique
Suitable for front mounting centre Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Type of electrical connection of main circuit With pre-assembled cabling Degree of protection (IP), front side Degree of protection (NEMA) Width Height Degrhe of mm Type of electrical connection of main circuit Width Midth	Suitable for floor mounting		No
Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Interlockable Interlockable Interlockable With pre-assembled cabling Degree of protection (IP), front side Degree of protection (NEMA) Width Height Degree of main circuit Width Height Degree of main circuit Midth M	Suitable for front mounting 4-hole		Yes
Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit With pre-assembled cabling Degree of protection (IP), front side Degree of protection (NEMA) Width Height Depth No No Screw connection No 12 Width mm 49 Height Depth Mo P4	Suitable for front mounting centre		No
Colour control element Type of control element Interlockable Type of electrical connection of main circuit With pre-assembled cabling Degree of protection (IP), front side Degree of protection (NEMA) With Height Height Depth Red Red Red Red Red Red Red Red Red Re	Suitable for distribution board installation		No
Type of control element Interlockable Interlockable Interlockable Interlockable Itype of electrical connection of main circuit With pre-assembled cabling Degree of protection (IP), front side Interlockable Itype of electrical connection of main circuit Itype o	Suitable for intermediate mounting		No
Interlockable In	Colour control element		Red
Type of electrical connection of main circuit With pre-assembled cabling Degree of protection (IP), front side Degree of protection (NEMA) Width Height Depth Screw connection No 1P65 12 12 March	Type of control element		Short thumb-grip
With pre-assembled cabling Degree of protection (IP), front side Degree of protection (NEMA) Width Height Depth No 1P65 12 49 49 49 Depth mm 70 mm 94	Interlockable		No
Degree of protection (IP), front side IP65 Degree of protection (NEMA) 12 Width mm 49 Height mm 70 Depth mm 94	Type of electrical connection of main circuit		Screw connection
Degree of protection (NEMA) mm 49 Height mm 70 Depth mm 94	With pre-assembled cabling		No
Widthmm49Heightmm70Depthmm94	Degree of protection (IP), front side		IP65
Height mm 70 Depth mm 94	Degree of protection (NEMA)		12
Depth mm 94	Width	mm	49
	Height	mm	70
Width in number of modular spacings	Depth	mm	94
	Width in number of modular spacings		