DATASHEET - P1-32/IVS-RT/HI11

On-Off switch, P1, 32 A, service distribution board mounting, 3 pole, 1 N/O, 1 N/C, Emergency switching off function, with red thumb grip and yellow front plate

Powering Business Worldwide™

Part no. P1-32/IVS-RT/HI11
025005

General specifications	
Product name	Eaton Moeller® series P1 On-Off switch
Part no.	P1-32/IVS-RT/HI11
EAN	4015080250050
Product Length/Depth	90 millimetre
Product height	70 millimetre
Product width	63 millimetre
Product weight	0.193 kilogram
Certifications	IEC/EN 60204 CSA-C22.2 No. 94 IEC/EN 60947-3 IEC/EN 60947 VDE 0660 CSA File No.: 012528 UL 60947-4-1 UL File No.: E36332 CE CSA-C22.2 No. 60947-4-1-14 CSA UL Category Control No.: NLRV CSA Class No.: 3211-05 UL
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
Features & 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
General information	
Accessories	Auxiliary contact or neutral conductor fitted by user.
Degree of protection	NEMA Other
Degree of protection (front side)	IP30
Lifespan, mechanical	300,000 Operations
Mounting method	Service distribution board 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	Distribution board installation Branch circuits, suitable as motor disconnect, (UL/CSA)
Climatic 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
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) mm², solid or stranded 14 - 8 AWG, solid or flexible with ferrule 2 x (1 - 4) mm², flexible with ferrules to DIN 46228 1 x (1 - 4) mm², flexible with ferrules to DIN 46228 2 x (1.5 - 6) mm², solid or stranded
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)	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 (Ie) at AC-3, 220 V, 230 V, 240 V	26.4 A
Rated operational current (Ie) at AC-3, 380 V, 400 V, 415 V	26.4 A
Rated operational current (Ie) at AC-3, 500 V	23.4 A
Rated operational current (Ie) at AC-3, 660 V, 690 V	14.7 A
Rated operational current (Ie) at AC-21, 440 V	32 A
Rated operational current (Ie) at AC-23A, 230 V	32 A
Rated operational current (Ie) at AC-23A, 400 V, 415 V	32 A
Rated operational current (Ie) at AC-23A, 500 V	30 A
Rated operational current (Ie) at AC-23A, 690 V	19.8 A
Rated operational current (Ie) at DC-1, load-break switches l/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 (Ie) 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 Iu is specified for max. cross-section.
Short-circuit rating	
Rated conditional short-circuit current (Iq)	80 kA
Rated short-time withstand current (Icw)	640 A, Contacts, 1 second 0.64 kA
Short-circuit current rating (basic rating)	110A, max. Fuse, SCCR (UL/CSA) 5 kA, SCCR (UL/CSA)
Short-circuit current rating (high fault)	50 A, Class J, max. Fuse, SCCR (UL/CSA) 10 kA, SCCR (UL/CSA)
Short-circuit protection rating	50 A gG/gL, Fuse, Contacts
Switching capacity	
Load rating	1.6 x I# (with intermittent operation class 12, 40 % duty factor) 2 x I# (with intermittent operation class 12, 25 % 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)	1
Number of auxiliary contacts (normally open contacts)	1

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	1.8 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	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 9.0

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

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss13-27-37-14-03 [AKF060018])

Version as main switch			No
Version as maintenance-/service switch			No
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	32
Rated permanent current at AC-23, 400 V		A	32
Rated permanent current at AC-21, 400 V		A	32
Rated operation power at AC-3, 400 V		kW	13
Rated short-time withstand current Icw		kA	0.64
Rated operation power at AC-23, 400 V		kW	15
Switching power at 400 V		kW	15
Conditioned rated short-circuit current Iq		kA	80
Number of poles			3
Number of auxiliary contacts as normally closed contact			1
Number of auxiliary contacts as normally open contact			1
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 distribution board installation			Yes
Suitable for intermediate mounting			No
Colour control element			Red
Type of control element			Short thumb-grip
Interlockable			No
Type of electrical connection of main circuit			Screw connection
With pre-assembled cabling			No
Degree of protection (IP), front side			IP30
Degree of protection (NEMA)			Other
Width		mm	63
Height		mm	70
Depth		mm	90
Width in number of modular spacings			