DATASHEET - P3-63/E/N

On-Off switch, P3, 63 A, flush mounting, 3 pole + N, with black thumb grip and front plate



	Part no. EL Number (Norway)	P3-63/E/N 019894 1456126	
General specifications			
Product name			
Part no.			

deneral specifications	
Product name	Eaton Moeller® series P3 On-Off switch
Part no.	P3-63/E/N
EAN	4015080198949
Product Length/Depth	96 millimetre
Product height	87 millimetre
Product width	90 millimetre
Product weight	0.4 kilogram
Certifications	CSA CSA-C22.2 No. 94 UL 60947-4-1 UL CE IEC/EN 60204 CSA-C22.2 No. 60947-4-1-14 IEC/EN 60947-3 IEC/EN 60947 UL Category Control No.: NLRV CSA File No.: 012528 UL File No.: 012528 UL File No.: 012528 UL File No.: 3211-05 VDE 0660 CSA UL
Product Tradename	P3
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	
Fitted with:	Black thumb grip and front plate
Number of poles	4
General information	
Accessories	Auxiliary contact fitted by user.
Degree of protection	NEMA 12
Degree of protection (front side)	IP65
Lifespan, mechanical	100,000 Operations
Mounting method	Flush mounting
Mounting position	As required
Operating frequency	1200 Operations/h
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	Branch circuits, suitable as motor disconnect, (UL/CSA) Front mounting 4-hole
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		2 x (2.5 - 10) mm², solid or stranded
	:	2 x (1.5 - 6) mm ² , flexible with ferrules to DIN 46228 14 - 2 AWG, solid or flexible with ferrule 1 x (1.5 - 25) mm ² , flexible with ferrules to DIN 46228 1 x (2.5 - 35) mm ² , solid or stranded
Screw size		M5, Terminal screw
Tightening torque		26.5 lb-in, Screw terminals 3 Nm, Screw terminals
Electrical rating		
Rated breaking capacity at 220/230 V (cos phi to IEC 60947-3)		640 A
Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3)		600 A
Rated breaking capacity at 500 V (cos phi to IEC 60947-3)		590 A
Rated breaking capacity at 660/690 V (cos phi to IEC 60947-3)	;	340 A
Rated operational current (Ie) at AC-3, 220 V, 230 V, 240 V		51 A
Rated operational current (Ie) at AC-3, 380 V, 400 V, 415 V	!	55 A
Rated operational current (Ie) at AC-3, 500 V		44 A
Rated operational current (Ie) at AC-3, 660 V, 690 V		22.1 A
Rated operational current (Ie) at AC-21, 440 V		63 A
Rated operational current (Ie) at AC-23A, 230 V		63 A
Rated operational current (Ie) at AC-23A, 400 V, 415 V		63 A
Rated operational current (Ie) at AC-23A, 500 V		63 A
Rated operational current (Ie) at AC-23A, 690 V		63 A
Rated operational current (Ie) at DC-1, load-break switches I/r = 1 ms		63 A
Rated operational current (Ie) at DC-23A, 24 V	1	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		30 kW
Rated operational power at AC-3, 415 V, 50 Hz	:	30 kW
Rated operational power at AC-3, 500 V, 50 Hz		30 kW
Rated operational power at AC-3, 690 V, 50 Hz	:	30 kW
Rated operational power at AC-23A, 220/230 V, 50 Hz		18.5 kW
Rated operational power at AC-23A, 400 V, 50 Hz	:	30 kW
Rated operational power at AC-23A, 500 V, 50 Hz		45 kW
Rated operational power at AC-23A, 690 V, 50 Hz	1	55 kW
Rated operational voltage (Ue) at AC - max		690 V
Rated uninterrupted current (Iu)		63 A
Uninterrupted current		Rated uninterrupted current lu is specified for max. cross-section.
Short-circuit rating		
Rated conditional short-circuit current (Iq)		4 kA (Load side) 100 kA (Supply side)
Rated short-time withstand current (Icw)		1.26 kA
Short-circuit current rating (basic rating)		10 kA, SCCR (UL/CSA) 150A, max. Fuse, SCCR (UL/CSA)
Short-circuit protection rating		80 A gG/gL, Fuse, Contacts
Switching capacity		
Load rating		2 x l# (with intermittent operation class 12, 25 % duty factor) 1.3 x l# (with intermittent operation class 12, 60 % duty factor) 1.6 x l# (with intermittent operation class 12, 40 % 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)		60 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)	1	800 A

Voltage per contact pair in series	60 V
Motor rating	
Assigned motor power at 115/120 V, 60 Hz, 1-phase	3 HP
Assigned motor power at 200/208 V, 60 Hz, 1-phase	7.5 HP
Assigned motor power at 200/208 V, 60 Hz, 3-phase	15 HP
Assigned motor power at 230/240 V, 60 Hz, 1-phase	10 HP
Assigned motor power at 230/240 V, 60 Hz, 3-phase	15 HP
Assigned motor power at 460/480 V, 60 Hz, 3-phase	40 HP
Assigned motor power at 575/600 V, 60 Hz, 3-phase	50 HP
Contacts	
	1 failure per 100 000 quitabing operations statistically determined at 24 V DC 10
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	Black
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	4.5 W
Rated operational current for specified heat dissipation (In)	63 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 observed.
10.12 Electromagnetic compatibility	Is the panel builder's responsibility. The specifications for the switchgear must 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 No Version as reversing switch No Number of switches No Rated operation voltage Ue AC So Rated permanent current lu A Rated permanent current at AC-23, 400 V KM Rated operation power at AC-23, 400 V KM Switching power at AO-2, 400 V KM Number of auxiliary contacts as normally closed contact KM Number of auxiliary contacts as normally closed contact KM Number of auxiliary contacts as change-over contact Mo Suitable for front mounting No Suitable for front mounting No Suitable for front mounting <	
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Degree of protection (NEMA) 12 Width mm 90	
Width mm 90	
Height mm 87	
Depth mm 96	
Width in number of modular spacings	