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Eaton 280949

Eaton Moeller® series P5 On-Off switch, P5, 315 A, flush mounting, 3 pole, with black thumb grip and front plate

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PRODUCT NAME	Eaton Moeller® series P5 On-off switch
CATALOG NUMBER	280949
PRODUCT LENGTH/DEPTH	150 mm
PRODUCT HEIGHT	150 mm
PRODUCT WIDTH	130 mm
PRODUCT WEIGHT	1.8 kg
COMPLIANCES	CE Marked
CERTIFICATIONS	EN 60947-3 UL 508 IEC 60947 CSA Std. C22.2 No. 14-05 VDE UL File No.: E36332 CE CSA File No.: 223805 IEC/EN 60204 IEC/EN 60947 VDE 0660 CSA CSA-C22.2 No. 14-05 CSA Class No.: 3211-05 UL UL Category Control No.: NLRV CSA-C22.2 No. 94 IEC/EN 60947-3
CATALOG NOTES	Rated Short-time Withstand Current (Icw) for a time of 1 second

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PRODUCT CATEGORY	On-Off switch
ACTUATOR COLOR	Black
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.
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	Meets the product

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DECLARATIONS OF CONFORMITY	eaton-main-switch-declaration-of-conformity-uk251297en.pdf
MCAD MODEL	p5_315.e.stp
000	eaton-rotary-switches-p5-main-switch-wiring-diagram.eps
00	eaton-rotary-switches-mounting-p5-on-off-switch-dimensions-002.eps
00	eaton-rotary-switches-front-plate-t0-on-off-switch-symbol-002.eps

CREEPAGE DISTANCES	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.
FITTED WITH:	Black thumb grip and front plate
OPERATING FREQUENCY	50 Operations/h
POLLUTION DEGREE	3
CLIMATIC PROOFING	Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	8000 V AC
RATED PERMANENT CURRENT AT AC-21, 400 V	315 A
RATED PERMANENT CURRENT AT AC-23, 400 V	315 A
RATED UNINTERRUPTED CURRENT (IU)	315 A
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS	0 W
SWITCHING POWER AT 400 V	110 kW
VOLTAGE PER CONTACT PAIR IN SERIES	42 V
ACCESSORIES	Auxiliary contact or neutral conductor fitted by user.
RATED OPERATIONAL POWER AT AC-3, 500 V, 50 Hz	90 kW

DEVICE CONSTRUCTION	Built-in device fixed built-in technique
RATED SHORT-TIME WITHSTAND CURRENT (ICW)	5,8 kA, Contacts, 1 second 5.8 kA
ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Frame clamp
MOUNTING POSITION	As required
ACTUATOR TYPE	Short thumb-grip
AMBIENT OPERATING TEMPERATURE - MAX	50 °C
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX	40 °C
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MIN	-25 °C
ASSIGNED MOTOR POWER AT 115/120 V, 60 HZ, 1-PHASE	20 HP
ASSIGNED MOTOR POWER AT 115/120 V, 60 HZ, 3-PHASE	40 HP
ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 1-PHASE	35 HP
ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 3-PHASE	75 HP
ASSIGNED MOTOR POWER AT 277 V, 60 HZ, 1-PHASE	35 HP
ASSIGNED MOTOR POWER AT 460/480 V, 60 HZ, 3-PHASE	100 HP
ASSIGNED MOTOR POWER AT 575/600 V, 60 HZ, 3-PHASE	100 HP
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	12.7 W
HEAT DISSIPATION CAPACITY PDISS	0 W
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	12.7 W
NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS)	0

NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	0
RATED CONDITIONAL SHORT-CIRCUIT CURRENT (I_Q)	15 kA
OVERVOLTAGE CATEGORY	III
CONTROL CIRCUIT RELIABILITY	1 failure per 100,000 switching operations statistically determined, at 24 V DC, 10 mA)
DEGREE OF PROTECTION (FRONT SIDE)	IP65
NUMBER OF POLES	3
MOUNTING METHOD	Flush mounting
DEGREE OF PROTECTION	NEMA 12
SUITABLE FOR	Front mounting 4-hole Branch circuits, suitable as motor disconnect, (UL/CSA)
NUMBER OF SWITCHES	1
SAFE ISOLATION	440 V AC, Between the contacts, According to EN 61140
SCREW SIZE	6 mm AF, Hexagon socket-head spanner, Terminal screw
LIFESPAN, MECHANICAL	80,000 Operations
LOAD RATING	1.6 x I _e (with intermittent operation class 12, 40 % duty factor) 1.3 x I _e (with intermittent operation class 12, 60 % duty factor) 2 x I _e (with intermittent operation class 12, 25 % duty factor)
SWITCHING CAPACITY (AUXILIARY CONTACTS, GENERAL USE)	10A, IU, (UL/CSA)
SWITCHING CAPACITY (AUXILIARY CONTACTS, PILOT DUTY)	A600 (UL/CSA)
TERMINAL CAPACITY	350 MCM (AWG), solid or flexible conductor with ferrule 300 MCM (AWG), flexible 1 x 120 mm ² , flexible with ferrules to DIN 46228 2 x 70 mm ² , solid or stranded 2 x 20 x 3 mm Number of

segments x width x thickness, copper strip 1 x 185 mm ² , solid or stranded	
1 x 20 x 5 mm Number of segments x width x thickness, copper strip 2 x 50 mm ² , flexible with ferrules to DIN 46228	
SWITCHING CAPACITY (MAIN CONTACTS, GENERAL USE)	300 A, Rated uninterrupted current max. (UL/CSA)
SAFETY PARAMETER (EN ISO 13849-1)	B10d values as per EN ISO 13849-1, table C.1
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	0
NUMBER OF CONTACTS IN SERIES AT DC-23A, 120 V	3
NUMBER OF CONTACTS IN SERIES AT DC-23A, 24 V	3
NUMBER OF CONTACTS IN SERIES AT DC-23A, 48 V	3
NUMBER OF CONTACTS IN SERIES AT DC-23A, 60 V	3
RATED BREAKING CAPACITY AT 220/230 V (COS PHI TO IEC 60947-3)	1800 A
RATED BREAKING CAPACITY AT 400/415 V (COS PHI TO IEC 60947-3)	1650 A
RATED BREAKING CAPACITY AT 500 V (COS PHI TO IEC 60947-3)	1550 A
RATED BREAKING CAPACITY AT 660/690 V (COS PHI TO IEC 60947-3)	400 A
RATED MAKING CAPACITY UP TO 690 V (COS PHI TO IEC/EN 60947-3)	2050 A
RATED OPERATING VOLTAGE (UE) - MAX	690 V
RATED OPERATING VOLTAGE (UE) - MIN	690 V
RATED OPERATIONAL VOLTAGE (UE) AT AC - MAX	690 V
SHORT-CIRCUIT CURRENT RATING (BASIC RATING)	10 kA, SCCR (UL/CSA) 800A Class RK1, max. Fuse, SCCR (UL/CSA)
SHORT-CIRCUIT CURRENT	65 kA, SCCR (UL/CSA)

RATING (HIGH FAULT)	400 A, Class J, max. Fuse, SCCR (UL/CSA)
SHORT-CIRCUIT PROTECTION RATING	315 A gG/gL, Fuse, Contacts
RATED OPERATIONAL CURRENT (IE) AT AC-21, 440 V	315 A
RATED OPERATIONAL CURRENT (IE) AT AC-23A, 230 V	182 A
RATED OPERATIONAL CURRENT (IE) AT AC-23A, 400 V, 415 V	205 A
RATED OPERATIONAL CURRENT (IE) AT AC-23A, 500 V	184 A
RATED OPERATIONAL CURRENT (IE) AT AC-23A, 690 V	50 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 220 V, 230 V, 240 V	147 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 380 V, 400 V, 415 V	138 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 500 V	135 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 660 V, 690 V	50 A
RATED OPERATIONAL CURRENT (IE) AT DC-1, LOAD-BREAK SWITCHES L/R = 1 MS	315 A
RATED OPERATIONAL CURRENT (IE) AT DC-23A, 120 V	100 A
RATED OPERATIONAL CURRENT (IE) AT DC-23A, 24 V	315 A
RATED OPERATIONAL CURRENT (IE) AT DC-23A, 48 V	315 A
RATED OPERATIONAL CURRENT (IE) AT DC-23A, 60 V	315 A
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	315 A
RATED OPERATIONAL POWER AT AC-23A, 220/230 V, 50 Hz	55 kW

RATED OPERATIONAL
POWER AT AC-23A, 400 V, 50 Hz 110 kW

RATED OPERATIONAL
POWER AT AC-23A, 500 V, 50 Hz 132 kW

RATED OPERATIONAL
POWER AT AC-23A, 690 V, 50 Hz 45 kW

RATED OPERATIONAL
POWER AT AC-3, 380/400 V, 50 Hz 75 kW

RATED OPERATIONAL
POWER AT AC-3, 415 V, 50 Hz 75 kW

RATED OPERATIONAL
POWER AT AC-3, 690 V, 50 Hz 45 kW

TIGHTENING TORQUE 140 lb-in, Screw terminals
16 Nm, Screw terminals

UNINTERRUPTED CURRENT Rated uninterrupted current I_u is specified for max. cross-section.

RATED SWITCHING CAPACITY 100 HP at 480 V AC, three-phase
100 HP at 600 V AC, three-phase
20 HP at 120 V AC, single-phase
35 HP at 240 V AC, single-phase
35 HP at 277 V AC, single-phase
40 HP at 120 V AC, three-phase
75 HP at 240 V AC, three-phase

HOUSING COLOR Black

HOUSING MATERIAL Plastic

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