



Eaton 280924

Eaton Moeller® series P5 Main switch, P5, 160 A, flush mounting, 3 pole + N, Emergency switching off function, With red rotary handle and yellow locking ring, Lockable in the 0 (Off) position

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PRODUCT NAME	Eaton Moeller® series P5 Main switch
CATALOG NUMBER	280924
PRODUCT LENGTH/DEPTH	150 mm
PRODUCT HEIGHT	150 mm
PRODUCT WIDTH	130 mm
PRODUCT WEIGHT	1.444 kg
CERTIFICATIONS	UL Category Control No.: NLRV, NLRV7 UL 508 CSA Class No.: 3211-05 CE CSA-C22.2 No. 14-05 IEC/EN 60947 VDE 0660 UL File No.: E36332 IEC/EN 60947-3 IEC/EN 60204 UL CSA CSA-C22.2 No. 94 CSA File No.: 223805
CATALOG NOTES	Rated Short-time Withstand Current (Icw) for a time of 1 second

PRODUCT CATEGORY	Main switch
FEATURES	Version as main switch Version as maintenance- /service switch Version as emergency stop installation
ACTUATOR COLOR	Red
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

DECLARATIONS OF CONFORMITY	eaton-main-switch-declaration-of-conformity-uk251299en.pdf
□□□	eaton-rotary-switches-p5-main-switch-wiring-diagram-002.eps
□□	eaton-rotary-switches-mounting-p5-main-switch-dimensions-003.eps

	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.
FITTED WITH:	Red rotary handle and yellow locking ring
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	160 A
RATED PERMANENT CURRENT AT AC-23, 400 V	160 A
RATED UNINTERRUPTED CURRENT (IU)	160 A
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS	0 W
SWITCHING POWER AT 400 V	55 kW
VOLTAGE PER CONTACT PAIR IN SERIES	42 V
ACCESSORIES	Auxiliary contact fitted by

	user.
RATED OPERATIONAL POWER AT AC-3, 500 V, 50 HZ	55 kW
DEVICE CONSTRUCTION	Built-in device fixed built-in technique
RATED SHORT-TIME WITHSTAND CURRENT (ICW)	3 kA 3 kA, Contacts, 1 second
ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Frame clamp
MOUNTING POSITION	As required
ACTUATOR TYPE	Door coupling rotary drive
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	10 HP
ASSIGNED MOTOR POWER AT 115/120 V, 60 HZ, 3-PHASE	20 HP
ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 1-PHASE	25 HP
ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 3-PHASE	40 HP
ASSIGNED MOTOR POWER AT 277 V, 60 HZ, 1-PHASE	25 HP
ASSIGNED MOTOR POWER AT 460/480 V, 60 HZ, 3-PHASE	60 HP
ASSIGNED MOTOR POWER AT 575/600 V, 60 HZ, 3-PHASE	60 HP
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	5 W
HEAT DISSIPATION CAPACITY PDISS	0 W
HEAT DISSIPATION PER	5 W

POLE, CURRENT-DEPENDENT PVID	
NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS)	0
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	0
RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ)	30 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	4
MOUNTING METHOD	Flush mounting
DEGREE OF PROTECTION	NEMA 12
SUITABLE FOR	Front mounting 4-hole Branch circuits, suitable as motor disconnect, (UL/CSA)
LOCKING FACILITY	Lockable in the 0 (Off) position
FUNCTIONS	Interlockable Emergency switching off function
NUMBER OF SWITCHES	1
SAFE ISOLATION	440 V AC, Between the contacts, According to EN 61140
SCREW SIZE	5 mm AF, Hexagon socket-head spanner, Terminal screw
LIFESPAN, MECHANICAL	100,000 Operations
LOAD RATING	1.3 x I _e (with intermittent operation class 12, 60 % duty factor) 1.6 x I _e (with intermittent operation class 12, 40 % 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	A600 (UL/CSA)

**(AUXILIARY CONTACTS,
PILOT DUTY)**

TERMINAL CAPACITY	1 x 13 x 3 mm Number of segments x width x thickness, copper strip 2/0 AWG, flexible 2 x 13 x 1.5 mm Number of segments x width x thickness, copper strip 1 x 95 mm ² , solid or stranded 1 x 70 mm ² , flexible with ferrules to DIN 46228 3/0 AWG, solid or flexible conductor with ferrule 2 x 25 mm ² , flexible with ferrules to DIN 46228 2 x 35 mm ² , solid or stranded
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SWITCHING CAPACITY (MAIN CONTACTS, GENERAL USE)	200 A, Rated uninterrupted current max. (UL/CSA)
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SAFETY PARAMETER (EN ISO 13849-1)	B10d values as per EN ISO 13849-1, table C.1
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NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	0
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NUMBER OF CONTACTS IN SERIES AT DC-23A, 120 V	3
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NUMBER OF CONTACTS IN SERIES AT DC-23A, 24 V	3
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NUMBER OF CONTACTS IN SERIES AT DC-23A, 48 V	3
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NUMBER OF CONTACTS IN SERIES AT DC-23A, 60 V	3
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RATED BREAKING CAPACITY AT 220/230 V (COS PHI TO IEC 60947-3)	900 A
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RATED BREAKING CAPACITY AT 400/415 V (COS PHI TO IEC 60947-3)	850 A
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RATED BREAKING CAPACITY AT 500 V (COS PHI TO IEC 60947-3)	850 A
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RATED BREAKING CAPACITY AT 660/690 V (COS PHI TO IEC 60947-3)	340 A
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RATED MAKING CAPACITY UP TO 690 V (COS PHI TO IEC/EN 60947-3)	1050 A
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RATED OPERATING VOLTAGE (UE) - MAX	690 V
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RATED OPERATING VOLTAGE (UE) - MIN	690 V
RATED OPERATIONAL VOLTAGE (UE) AT AC - MAX	690 V
SHORT-CIRCUIT CURRENT RATING (BASIC RATING)	400A Class RK1, max. Fuse, SCCR (UL/CSA) 10 kA, SCCR (UL/CSA)
SHORT-CIRCUIT CURRENT RATING (HIGH FAULT)	300 A, Class J, max. Fuse, SCCR (UL/CSA) 65 kA, SCCR (UL/CSA)
SHORT-CIRCUIT PROTECTION RATING	160 A gG/gL, Fuse, Contacts
RATED OPERATIONAL CURRENT (IE) AT AC-21, 440 V	160 A
RATED OPERATIONAL CURRENT (IE) AT AC-23A, 230 V	103 A
RATED OPERATIONAL CURRENT (IE) AT AC-23A, 400 V, 415 V	105 A
RATED OPERATIONAL CURRENT (IE) AT AC-23A, 500 V	106 A
RATED OPERATIONAL CURRENT (IE) AT AC-23A, 690 V	42 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 220 V, 230 V, 240 V	103 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 380 V, 400 V, 415 V	85 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 500 V	80 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 660 V, 690 V	42 A
RATED OPERATIONAL CURRENT (IE) AT DC-1, LOAD-BREAK SWITCHES L/R = 1 MS	160 A
RATED OPERATIONAL CURRENT (IE) AT DC-23A, 120 V	50 A
RATED OPERATIONAL CURRENT (IE) AT DC-23A, 24 V	160 A
RATED OPERATIONAL CURRENT (IE) AT DC-23A, 48 V	160 A

RATED OPERATIONAL CURRENT (IE) AT DC-23A, 60 V	160 A
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	160 A
RATED OPERATIONAL POWER AT AC-23A, 220/230 V, 50 HZ	30 kW
RATED OPERATIONAL POWER AT AC-23A, 400 V, 50 HZ	55 kW
RATED OPERATIONAL POWER AT AC-23A, 500 V, 50 HZ	75 kW
RATED OPERATIONAL POWER AT AC-23A, 690 V, 50 HZ	37 kW
RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ	45 kW
RATED OPERATIONAL POWER AT AC-3, 415 V, 50 HZ	45 kW
RATED OPERATIONAL POWER AT AC-3, 690 V, 50 HZ	37 kW
TIGHTENING TORQUE	14 Nm, Screw terminals 125 lb-in, Screw terminals
UNINTERRUPTED CURRENT	Rated uninterrupted current I _u is specified for max. cross-section.
RATED SWITCHING CAPACITY	10 HP at 120 V AC, single- phase 20 HP at 120 V AC, three- phase 25 HP at 240 V AC, single- phase 25 HP at 277 V AC, single- phase 40 HP at 240 V AC, three- phase 60 HP at 480 V AC, three- phase 60 HP at 600 V AC, three- phase
HOUSING MATERIAL	Plastic

