Specifications

Eaton 197477

Eaton Moeller® series T3 Main switch, T3, 32 A, surface mounting, 3 contact unit(s), 3 pole, 2 N/O, 1 N/C, STOP function, With black rotary handle and locking ring, Lockable in the 0 (Off) position, in steel enclosure

General specifications	
PRODUCT NAME	Eaton Moeller® series T3 Main switch
CATALOG NUMBER	197477
EAN	4015081938513
PRODUCT LENGTH/DEPTH	250 mm
PRODUCT HEIGHT	155 mm
PRODUCT WIDTH	200 mm
PRODUCT WEIGHT	2.505 kg
CERTIFICATIONS	IEC/EN 60947-3 IEC/EN 60204 VDE 0660 IEC/EN 60947
MODEL CODE	T3-3-15683/SE2/SVB-SW

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Features & Functions

FEATURES	Version as main switch Version as maintenance-/service switch
FITTED WITH:	Black rotary handle and locking ring
FUNCTIONS	STOP function Interlockable
LOCKING FACILITY	Lockable in the 0 (Off) position
NUMBER OF POLES	Three-pole

General

DEGREE OF PROTECTION	NEMA 12
DEGREE OF PROTECTION (FRONT SIDE)	IP65
LIFESPAN, MECHANICAL	500,000 Operations
MOUNTING METHOD	Surface mounting
MOUNTING POSITION	As required
NUMBER OF CONTACT UNITS	3
OPERATING FREQUENCY	1200 Operations/h
OVERVOLTAGE CATEGORY	III
POLLUTION DEGREE	3
PRODUCT CATEGORY	Main switch
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	Ground mounting
SWITCHING ANGLE	90 °

Climatic environmental conditions

AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MIN	-25 °C
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX	40 °C

Terminal capacities

TERMINAL CAPACITY	2 x (0.75 - 4) mm^2, flexible with ferrules to DIN 46228 1 x (0.75 - 4) mm^2, flexible with ferrules to DIN 46228 1 x (1 - 6) mm^2, solid or stranded 2 x (1 - 6) mm^2, solid or stranded
SCREW SIZE	M4, Terminal screw
TIGHTENING TORQUE	1.6 Nm, Screw terminals 17.7 lb-in, 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)	260 A
RATED BREAKING CAPACITY AT 500 V (COS PHI TO IEC 60947-3)	240 A
RATED BREAKING CAPACITY AT 660/690 V (COS PHI TO IEC 60947-3)	170 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	26.4 A
RATED OPERATIONAL CURRENT (IE) AT AC-23A, 690 V	17 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 220 V, 230 V, 240 V	23.7 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 380 V, 400 V, 415 V	23.7 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 500 V	23.7 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 660 V, 690 V	14.7 A
RATED OPERATIONAL CURRENT (IE) AT DC-1, LOAD-BREAK SWITCHES L/R = 1 MS	25 A
RATED OPERATIONAL CURRENT (IE) AT DC-13, CONTROL SWITCHES L/R = 50 MS	20 A
RATED OPERATIONAL CURRENT (IE) AT DC-21,	1 A

Short-circuit rating

RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ)	1 kA
RATED SHORT-TIME WITHSTAND CURRENT (ICW)	650 A, Contacts, 1 second 0.65 kA
SHORT-CIRCUIT PROTECTION RATING	35 A gG/gL, Fuse, Contacts

240 V	
RATED OPERATIONAL CURRENT (IE) AT DC-23A, 120 V	12 A
RATED OPERATIONAL CURRENT (IE) AT DC-23A, 24 V	25 A
RATED OPERATIONAL CURRENT (IE) AT DC-23A, 240 V	5 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) STAR-DELTA AT AC-3, 220/230 V	32 A
RATED OPERATIONAL CURRENT (IE) STAR-DELTA AT AC-3, 380/400 V	32 A
RATED OPERATIONAL CURRENT (IE) STAR-DELTA AT AC-3, 500 V	32 A
RATED OPERATIONAL CURRENT (IE) STAR-DELTA AT AC-3, 690 V	25.5 A
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	15 kW
RATED OPERATIONAL POWER AT AC-23A, 690 V, 50 HZ	15 kW
RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ	11 kW
RATED OPERATIONAL POWER AT AC-3, 415 V, 50 HZ	11 kW
RATED OPERATIONAL POWER AT AC-3, 690 V, 50 HZ	11 kW
RATED OPERATIONAL	7.5 kW

POWER STAR-DELTA AT 220/230 V, 50 HZ	
RATED OPERATIONAL POWER STAR-DELTA AT 380/400 V, 50 HZ	15 kW
RATED OPERATIONAL POWER STAR-DELTA AT 500 V, 50 HZ	18.5 kW
RATED OPERATIONAL POWER STAR-DELTA AT 690 V, 50 HZ	22 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.
UNINTERRUPTED CURRENT	Rated uninterrupted current Iu is specified for max. cross-section.

Switching capacity

NUMBER OF CONTACTS IN SERIES AT DC-21A, 240 V	1
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	3
NUMBER OF CONTACTS IN SERIES AT DC-23A, 120 V	3
NUMBER OF CONTACTS IN SERIES AT DC-23A, 240 V	5
RATED MAKING CAPACITY UP TO 690 V (COS PHI TO IEC/EN 60947-3)	320 A
VOLTAGE PER CONTACT PAIR IN SERIES	60 V
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)

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)	2

Actuator

ACTUATOR COLOR	Black
ACTUATOR TYPE	Door coupling rotary drive

Design verification

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	UV resistance only in

ULTRA-VIOLET (UV) RADIATION	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.

Resources

CATALOGUES	P Switch-disconnectors and T Rotary cam switches catalogue CA042001EN
DECLARATIONS OF CONFORMITY	DA-DC-00004894.pdf DA-DC-00004923.pdf
DRAWINGS	eaton-rotary-switches-p3-main-switch-dimensions-011.eps eaton-rotary-switches-t0-main-switch-3d-drawing-002.eps eaton-general-totally-insulated-t0-main-switch-symbol.eps eaton-general-switch-t0-main-switch-symbol.eps eaton-rotary-switches-t0-main-switch-symbol.eps
ECAD MODEL	ETN.197477.edz
INSTALLATION INSTRUCTIONS	IL008055ZU
WIRING DIAGRAMS	eaton-rotary-switches-switch-t0-main-switch-wiring-diagram-002.eps

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
DATE:	

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