Specyfikacje



Eaton 111997

Eaton Moeller series Power Defense - Molded Case Circuit Breaker. Switch-disconnector, 3 p, 160A, frame size 1

Specyfikacje ogólne	
PRODUCT NAME	Eaton Moeller series Power Defense molded case switch-disconnector
CATALOG NUMBER	111997
EAN	4015081115457
PRODUCT LENGTH/DEPTH	88 mm
PRODUCT HEIGHT	145 mm
PRODUCT WIDTH	90 mm
PRODUCT WEIGHT	0.926 kg
COMPLIANCES	RoHS conform
CERTIFICATIONS	IEC
MODEL CODE	LN1-160-I

Powering Business Worldwide

Dodatkowe informacje

FUNCTIONS	Disconnectors/main switches Voltage release optional Interlockable

Dostawy

AMPERAGE RATING	160 A
APPLICATION	Use in unearthed supply systems at 690 V
CIRCUIT BREAKER FRAME TYPE	LN1
FEATURES	Version as maintenance-/service switch Motor drive optional Version as emergency stop installation Version as main switch
NUMBER OF POLES	Three-pole
SPECIAL FEATURES	Main switch characteristics including positive drive to IEC/EN 60204 and VDE 0113. Isolating characteristics to IEC/EN 60947-3 and VDE 0660. Busbar tag shroud to VDE 0160 Part 100. Rated current = rated uninterrupted current: 160 A
TYPE	Switch-disconnector

Weryfikacja projektu zgodnie z normą IEC/EN 61439

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	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.

Weryfikacja projektu zgodnie z IEC/EN 61439 - dane techniczne

EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT	29.18 W
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	160 A

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.

Technical data - electrical

AMPERAGE RATING	160 A
ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Frame clamp
HANDLE TYPE	Rocker lever
LIFESPAN, ELECTRICAL	10000 operations at 415 V AC-1 7500 operations at 400 V AC-3 7500 operations at 690 V AC-1 10000 operations at 400 V AC-1 5000 operations at 690 V AC-3 7500 operations at 415 V AC-3
NUMBER OF OPERATIONS PER HOUR - MAX	120
OVERVOLTAGE CATEGORY	III
POLLUTION DEGREE	3
RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ)	100 kA
RATED CONDITIONAL SHORT-CIRCUIT CURRENT WITH BACK-UP FUSE	100 kA at 400/415 V PN1(N1)-63...125: 125 AgGgL; PN1(N1)-160: 160 AgGgL 80 kA at 690 V
RATED CONDITIONAL SHORT-CIRCUIT CURRENT WITH DOWNSTREAM FUSE	100 kA at 400/415 V 10 kA at 690 V PN1(N1)-63...125: 125 AgGgL; PN1(N1)-160: 160 AgGgL
RATED IMPULSE WITHSTAND VOLTAGE (UIMP) AT AUXILIARY CONTACTS	6000 V
RATED IMPULSE WITHSTAND VOLTAGE (UIMP) AT MAIN CONTACTS	6000 V
RATED INSULATION VOLTAGE (UI)	690 V
RATED OPERATING FREQUENCY	50 Hz
RATED OPERATING POWER AT AC-23, 400 V	90 kW
RATED OPERATING POWER AT AC-3, 400 V	0 kW

Technical data - mechanical

DEGREE OF PROTECTION (IP), FRONT SIDE	IP20
HANDLE COLOR	Gray
LIFESPAN, MECHANICAL	20000 operations
MOUNTING METHOD	Ground mounting Built-in device fixed built-in technique Fixed Distribution board installation Intermediate mounting
NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS)	0
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	0
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	0
SPECIAL FEATURES	Main switch characteristics including positive drive to IEC/EN 60204 and VDE 0113. Isolating characteristics to IEC/EN 60947-3 and VDE 0660. Busbar tag shroud to VDE 0160 Part 100. Rated current = rated uninterrupted current: 160 A
SWITCH POSITIONS	I, +, 0

RATED OPERATING VOLTAGE (UE) AT AC - MAX	400 V
RATED OPERATIONAL CURRENT	160 A (690 V AC-22/23A, making and breaking capacity) 160 A (415 V AC-1, making and breaking capacity) 160 A (690 V AC-1, making and breaking capacity) 160 A (415 V AC-22/23A, making and breaking capacity)
RATED PERMANENT CURRENT AT AC-21, 400 V	0 A
RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 690 V, 50/60 HZ	2.8 kA
RATED SHORT-TIME WITHSTAND CURRENT (ICW)	2 kA
RATED SHORT-TIME WITHSTAND CURRENT (T = 0.3 S)	2 kA
RATED SHORT-TIME WITHSTAND CURRENT (T = 1 S)	2 kA
SHORT-CIRCUIT PROTECTIVE DEVICE FUSES - MAX	160 A gL
SHORT-CIRCUIT TOTAL BREAKTIME	< 10 ms
SWITCHING POWER AT 400 V	0 kW
VOLTAGE RATING	690 V - 690 V

Technical data - mechanical - terminals

STANDARD TERMINALS	Box terminal
TERMINAL CAPACITY (ALUMINUM SOLID CONDUCTOR/CABLE)	16 mm² (1x) at tunnel terminal
TERMINAL CAPACITY (ALUMINUM STRANDED CONDUCTOR/CABLE)	25 mm² - 95 mm² (1x) at tunnel terminal
TERMINAL CAPACITY (CONTROL CABLE)	0.75 mm² - 1.5 mm² (2x) 0.75 mm² - 2.5 mm² (1x)
TERMINAL CAPACITY (COPPER BUSBAR)	Max. 16 mm x 5 mm direct at switch rear-side connection Min. 12 mm x 5 mm direct at switch rear-side connection M6 at rear-side screw connection
TERMINAL CAPACITY (COPPER SOLID CONDUCTOR/CABLE)	10 mm² - 16 mm² (1x) at box terminal 16 mm² (1x) at tunnel terminal 6 mm² - 16 mm² (2x) at box terminal 6 mm² - 16 mm² (2x) direct at switch rear-side connection 10 mm² - 16 mm² (1x) direct at switch rear-side connection
TERMINAL CAPACITY (COPPER STRANDED CONDUCTOR/CABLE)	25 mm² - 70 mm² (1x) direct at switch rear-side connection 25 mm² - 70 mm² (1x) at box terminal 25 mm² (2x) at box terminal 25 mm² (2x) direct at switch rear-side connection 25 mm² - 95 mm² (1x) at tunnel terminal
TERMINAL CAPACITY (COPPER STRIP)	Max. 9 segments of 9 mm x 0.8 mm at box terminal Min. 2 segments of 9 mm x 0.8 mm at box terminal

Do pobrania

DEKLARACJE ZGODNOŚCI	eaton-molded-case-switch-disconnector-declaration-of-conformity-eu250137en.pdf
INSTRUKCJE MONTAŻU	eaton-circuit-breaker-basic-unit-lzm1-instruction-leaflet-il01203007z.pdf
MODELE MCAD	eaton-molded-case-switches-mcad-3d-models-nzm1-3p.stp DA-CS-nzm1_3p eaton-molded-case-switches-mcad-drawings-nzm1-3p.dwg DA-CD-nzm1_3p
RYSUNKI	eaton-circuit-breaker-switch-nzm-mccb-dimensions-014.eps eaton-circuit-breaker-nzm-mccb-dimensions-017.eps

NAZWA PROJEKTU:	
NUMER PROJEKTU:	
PRZYGOTOWANE PRZEZ:	
DATA:	

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