



Eaton 183078

Eaton xEffect - XNH circuit protection. NH fuse-switch 3p box terminal 95 - 300 mm², busbar 60 mm, NH3

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PRODUCT NAME	Eaton xEffect XNH device for busbar system
CATALOG NUMBER	183078
PRODUCT LENGTH/DEPTH	306 mm
PRODUCT HEIGHT	168 mm
PRODUCT WIDTH	250 mm
PRODUCT WEIGHT	4.474 kg
COMPLIANCES	RoHS conform
CERTIFICATIONS	IEC/EN 60947-3

FEATURES	Standard sealable Halogen free
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	Is the panel builder's

00000	eaton-xeffect-xnh-fuse-switch-disconnector-installation-leaflet-il0131112z.pdf
0000	eaton-xeffect-xnh-fuse-switch-disconnector-brochure-br019002en-en-us.pdf
00	eaton-circuit-breaker-xeffect-xeffect-xnh-circuit-protection-dimensions-014.eps

CREEPAGE DISTANCES	responsibility.
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	Ui = 800 V AC
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.
FREQUENCY RATING	40 Hz - 60 Hz
POLLUTION DEGREE	3
CREEPAGE RESISTANCE	CTI 600
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT	22 W
RATED UNINTERRUPTED CURRENT (IU)	630 A
TOTAL HEAT DISSIPATION WITHOUT FUSES AT ITH	86 W
AMBIENT OPERATING TEMPERATURE DETAILS	Ambient temperature range: -25 °C - 70 °C
VOLTAGE RATING AT AC	• 400 V (AC-23B) • 500 V (AC-22B) • 690 V (AC-21B)
VOLTAGE RATING AT DC	• 440 V (DC-22B) • 250 V (DC-21B)
CONDITIONED RATED SHORT-CIRCUIT CURRENT IQ	120 kA
NUMBER OF POLES	Three-pole
RATED OPERATION POWER AT AC-23, 400 V	0 kW
SIZE	NH3
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	8 kV

COLOR	Gray
CONNECTION TYPE	Box terminal
DEGREE OF PROTECTION	IP20 (operating status, XNH installed) IP10 (handle cover open, XNH installed) IP2XC (contact protection, XNH installed)
RATED SHORT-TIME WITHSTAND CURRENT (ICW)	3 kA
DIRECTION OF INCOMING SUPPLY	As required (FLEX System)
ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Frame clamp
ACTIVATION TYPE	Dependent manual activation
ACTUATOR POSITION	Front side
ACTUATOR TYPE	Cover grip
VOLTAGE TEST	Yes, sliding inspection windows
HEAT DISSIPATION AT 80% WITHOUT FUSES	54.8 W
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT	7.3 W
MOUNTING POSITION	Vertical or horizontal
SUITABLE FOR	Busbar mounting Front mounting
RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ)	120 kA
OVERVOLTAGE CATEGORY	III
SUITABLE FOR FUSES	NH3
MATERIAL	Polyamide
CABLE ENTRY TYPE	Other
FREQUENCY RATING OF CONTACTS	40 Hz - 60 Hz
MOUNTING METHOD	Busbars of 60 mm
RATED OPERATION CURRENT (IE)	630 A
LOCKING FACILITY	Yes, optional
FLAMMABILITY CHARACTERISTICS (UL)	Self-extinguishing (UL 94)
TYPE	Basic device
SPECIAL FEATURES	Permanent

	operation (rated operating mode) • Current paths of electrolytic copper, silver-plated • Cable connection optionally at the top or bottom
DEGREE OF PROTECTION (FRONT SIDE)	Other
HEAT DEFLECTION TEMPERATURE	125 °C
LIFESPAN, ELECTRICAL	200 operations
LIFESPAN, MECHANICAL	800 operations
TERMINAL CAPACITY (COPPER BUSBAR)	Bolt diameter at flange connection: M10 Max. 56 mm cable lug width at flange connection 50 mm x 10 mm
TERMINAL CAPACITY (COPPER BAND)	21 mm x 1 mm (11x) at box terminal
TERMINAL CAPACITY (STRANDED CABLE)	On demand 120 mm ² - 300 mm ² at clamp-type terminal 95 mm ² - 300 mm ² (1x) at box terminal 120 mm ² - 240 mm ² (2x) at double clamp-type terminal
RATED OPERATIONAL CURRENT	630 A (DC-22B) 630 A (AC-21B) 630 A (AC-22B) 630 A (DC-21B) 630 A (AC-23B)
OPERATING ALTITUDE WITHOUT DERATING - MAX	2000 mm
PERMITTED POWER LOSS PER FUSE LINK - MAX	48 W
POWER RATING AT AC-23, 400 V	0 kW
RATED INSULATION VOLTAGE (UI)	800 VAC
RATED OPERATING VOLTAGE (UE) AT AC - MAX	690 V
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	630 A
RATED CONDITIONAL SHORT-CIRCUIT RATING	100 kA (690 V) 120 kA (500 V)

TERMINAL CAPACITY (COPPER STRIP)	16 mm x 0.8 mm (6x) - 32 mm x 1 mm (10x) at box terminal
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