

NH fuse-switch 1p flange connection M10 max. 150 mm²; mounting plate;
NH1



Powering Business Worldwide™

Part no. XNH1-1-A250

General specifications		
Product name		Eaton xEffect XNH device for mounting plate
Part no.		XNH1-1-A250
EAN		4015081779765
Product Length/Depth		306 millimetre
Product height		117 millimetre
Product width		69 millimetre
Product weight		0.996 kilogram
Compliances		RoHS conform
Certifications		IEC/EN 60947-3
Product Tradename		xEffect
Product Type		XNH device for mounting plate
Product Sub Type		None
Delivery program		
Type		Basic device
Color		Gray
Number of poles		Single-pole
Actuator type		Cover grip
Technical Data - Electrical		
Voltage test		Yes, sliding inspection windows
Voltage rating at AC		400 V (AC-23B) 500 V (AC-22B) 690 V (AC-21B)
Voltage rating at DC		250 V (DC-22B) 440 V (DC-21B)
Rated operating voltage (Ue) at AC - max		690 V
Rated insulation voltage (Ui)		800 V AC
Rated impulse withstand voltage (Uimp)		8 kV
Rated uninterrupted current (Iu)		250 A
Rated conditional short-circuit current (Iq)		120 kA
Rated operation current (Ie)		250 A
Rated operational current		250 A (AC-23B) 250 A (AC-22B) 250 A (AC-21B) 250 A (DC-21B) 250 A (DC-22B)
Rated short-time withstand current (Icw)		6 kA
Rated conditional short-circuit rating		100 kA (690 V) 120 kA (500 V)
Conditioned rated short-circuit current Iq		120 kA
Frequency rating		40 Hz - 60 Hz
Frequency rating of contacts		40 Hz - 60 Hz
Creepage resistance		CTI 600
Power rating at AC-23, 400 V		0 kW
Rated operation power at AC-23, 400 V		0 kW
Permitted power loss per fuse link - max		23 W
Electrical connection type of main circuit		Screw connection
Operating altitude without derating - max		2000 mm
Overvoltage category		III
Pollution degree		3

Direction of incoming supply		As required
Lifespan, electrical		200 operations
Technical Data - Mechanical		
Activation type		Dependent manual activation
Actuator position		Front side
Size		NH1 fuse
Mounting method		Mounting plate DIN rail
Mounting position		Vertical or horizontal
Material		Polyamide
Degree of protection		IP20 (operating status, XNH installed) IP10 (handle cover open, XNH installed) IP2XC (contact protection, XNH installed)
Degree of protection (front side)		Other
Connection type		Flat connection
Terminal capacity (copper band)		6 mm x 16 mm x 0.8 mm (6x) at box terminal
Terminal capacity (copper busbar)		Max. 37 mm cable lug width at flange connection Bolt diameter at flange connection: M10 30 mm x 10 mm
Terminal capacity (copper strip)		16 mm x 0.8 mm (10x) at box terminal
Terminal capacity (stranded cable)		70 mm ² - 95 mm ² (2x) at double clamp-type terminal 10 mm ² - 150 mm ² at clamp-type terminal 35 mm ² - 150 mm ² at box terminal 25 mm ² - 150 mm ² at box terminal
Cable entry type		Other
Locking facility		Yes, optional
Suitable for fuses		NH1
Lifespan, mechanical		1400 operations
Design verification as per IEC/EN 61439 - technical data		
Rated operational current for specified heat dissipation (In)		250 A
Equipment heat dissipation, current-dependent		16 W
Heat dissipation per pole, current-dependent		5.3 W
Heat dissipation at 80% without fuses		14.1 W
Ambient operating temperature details		Ambient temperature range: -25 °C - 55 °C
Heat deflection temperature		125 °C
Design verification as per IEC/EN 61439		
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		Is the panel builder's 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.
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.
Additional information		
Features		Standard sealable Halogen free
Flammability characteristics (UL)		Self-extinguishing (UL 94)
Special features		Current paths of electrolytic copper, silver-plated Permanent operation (rated operating mode)
Suitable for		Ground mounting

Technical data ETIM 9.0

Low-voltage industrial components (EG000017) / Fuse switch disconnecter (EC001040)		
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Fuse switch disconnecter (ecI@ss13-27-37-14-01 [AKF058018])		
Version as main switch		No
Version as safety switch		No
Max. rated operation voltage Ue AC	V	690
Rated permanent current Iu	A	250
Rated operation power at AC-23, 400 V	kW	0
Conditioned rated short-circuit current Iq	kA	120
Rated short-time withstand current Icw	kA	6
Suitable for fuses		NH1
Number of poles		1
With error protection		No
Type of electrical connection of main circuit		Screw connection
Cable entry		Other
Equipped with connectors		No
Suitable for floor mounting		Yes
Suitable for front mounting		No
Suitable for busbar mounting		No
Type of control element		Cover grip
Position control element		Front side
Motor drive optional		No
Motor drive integrated		No
Version as emergency stop installation		No
Degree of protection (IP), front side		Other

