



NH fuse-switch 3p box terminal 95 - 300 mm²; mounting plate; light fuse monitoring; NH3

Part no. XNH3-FCL-A630-BT
Article no. 183074

Delivery programme

Basic function			Fuse control - light
Number of poles			3 pole
Mounting type			DIN rails Mounting plate
Size			3
Type of connection			Box terminal
Rated operational current	I_e	A	630
Front degree of protection (XNH installed)			IP20 (Operating status) IP2XC (Contact protection) IP10 (Handle cover open)
Rated operational voltage	U_e	V AC	690
Rated operational voltage	U_e	V DC	440
Rated conditional short-circuit current		kA	120 (500 V) 100 (690 V)
Flammability characteristics			Self-extinguishing as per UL 94
Description			Current paths of electrolytic copper, silver-plated With optical signalling of triggered fuse-links

Technical data

Electrical

Standards			IEC/EN 60947-3
Rated operational voltage	U_e	V AC	690
Rated operational voltage	U_e	V DC	440
Rated operational current	I_e	A	630
Rated frequency	f	Hz	40 - 60
Rated insulation voltage	U_i	V AC	800
Total heat dissipation at I_{th} (without fuses)	P_v	W	51
Heat dissipation at 80% (without fuses)	P_v	W	32.5
Rated impulse withstand voltage	U_{imp}	kV	8
Utilization category AC-23B			
Rated operating voltage	U_e	V AC	400
Rated operating current	I_e	A	630
Utilization category AC22B			
Rated operating voltage	U_e	V AC	500
Rated operating current	I_e	A	630
Utilization category AC-21B			
Rated operating voltage	U_e	V AC	690
Rated operating current	I_e	A	630
Utilization category DC-22B			
Rated operating voltage	U_e	V DC	DC values on request
Rated operating current	I_e	A	DC values on request
Utilization category DC21B			
Rated operating voltage	U_e	V DC	DC values on request
Rated operating current	I_e	A	DC values on request
Rated conditional short-circuit current		kA	120 (500 V) 100 (690 V)
Rated short-time withstand current	I_{cw}	kA	10
Max. fuse			
Size according to DIN VDE 0636-2			3 / 2

Max. permitted power loss per fuse link	P _v	W	48
Lifespan, electrical	Operations		200
Mechanical			
Front degree of protection (XNH installed)			IP20 (Operating status) IP2XC (Contact protection) IP10 (Handle cover open)
Ambient temperature		°C	-25 - +55
Rated operating mode			Permanent operation
Activation			Dependent manual activation
Mounting position			Vertical, horizontal
Altitude		m	Max. 2000
Overvoltage category/pollution degree			III/3
RoHS (in accordance with Directive 2002/95/EC of the European Parliament and Council)			Yes
Direction of incoming supply			as required
Lockable			Yes, optional
Sealable			Yes, Standard
Material characteristics			
Material			Polyamide
Colour			Grey
Flammability characteristics			Self-extinguishing as per UL 94
Halogen-free			Yes
Voltage test			Yes, sliding inspection windows
Lifespan, mechanical	Operations		800
Track resistance			CTI 600
Heat deflection temperature		°C	125

Terminal capacity

Flange connection			
Bolt diameter			M10
Cable lug max. width		mm	56
Flat busbar		mm	50 x 10
Box terminal			
Stranded		mm ²	95 - 300 Cu/Al
Copper strip	Number of segments x width x thickness	mm	6 x 16 x 0,8 - 10 x 32 x 1
Box terminal			
Stranded		mm ²	auf Anfrage
Copper band	Number of segments x width x thickness	mm	11 x 21 x 1
Clamp-type terminal			
Stranded		mm ²	120 - 300 Cu/Al
Double clamp-type terminal			
Stranded		mm ²	2x (120 - 240) Cu/Al

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I _n	A	630
Heat dissipation per pole, current-dependent	P _{vid}	W	7.3
Equipment heat dissipation, current-dependent	P _{vid}	W	22
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			
10.2.3.1 Verification of thermal stability of enclosures			
10.2.3.2 Verification of resistance of insulating materials to normal heat			
			Meets the product standard's requirements.
			Meets the product standard's requirements.
			Meets the product standard's requirements.

10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric 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 Insulation properties		
10.9.2 Power-frequency electric strength		$U_i = 800 \text{ V AC}$
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.

Technical data ETIM 6.0

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@ss8.1-27-37-14-01 [AKF058010])

Version as main switch		Yes
Version as safety switch		Yes
Max. rated operation voltage U_e AC	V	690
Rated permanent current I_u	A	630
Rated operation power at AC-23, 400 V	kW	252
Conditioned rated short-circuit current I_q	kA	120
Rated short-time withstand current I_{cw}	kA	10
Suitable for fuses		NH3
Number of poles		3
With error protection		Yes
Type of electrical connection of main circuit		Frame clamp
Suitable for ground mounting		Yes
Suitable for front mounting 4-hole		Yes
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		IP2X

