

NH fuse-switch 3p flange connection M10 max. 150 $\rm mm^2$; busbar 60 mm; light fuse monitoring; NH1

Powering Business Worldwide*

Part no. XNH1-FCL-S250 Article no. 183053

Delivery program

Basic function			Fuse control - light
Number of poles			3 pole
Mounting type			Busbars of 60 mm
Size			1
Type of connection			Flat connection
Rated operational current	I _e	Α	250
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 Cable connection optionally at the top or bottom With optical signalling of triggered fuse-links

Technical data

Electrical

Rated operational voltage Ue V AC 690 Rated operational voltage Ue V DC 440 Rated operational current Ie A 259 Rated operational current If Hz 40-60 Rated frequency If V AC 800 Total heat dissipation at la, fivithout fuses) Pv V D 22 Heat dissipation at 80% (without fuses) Pv W D 14.1 Rested impulses withstand voltage Pv W D 400 Rated operating voltage Ue V AC 400 Rated operating current Ie A 259 Rated operating voltage Ue V AC 500 Rated operating current Ie A 250 Rated operating voltage Ie V AC 500 Rated operating current Ie V AC 600 Rated operating voltage Ie V AC 500 Rated operating voltage Ie V AC 500 Rated operating vo	Electrical			
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Rated operational current I ₀ A 250 Rated frequency f Hz 40 - 60 Rated insulation voltage U ₁ V AC 800 Total heat dissipation at low (without fuses) P _V W 22 Rated insulation voltage U ₁₀₀ V W 14.1 Rated operating voltage U ₁₀₀ V W 8 Rated operating voltage U ₂ V AC 400 Rated operating voltage U ₂ V AC 500 Rated operating voltage U ₂ V AC 500 Rated operating voltage U ₂ V AC 500 Rated operating voltage U ₂ V AC 690 Rated operating current U ₂ V AC 690 Utilization category DC-22B A 250 Rated operating voltage U ₂ V AC 690 Rated operating voltage U ₃ V D 00 values on request Rated operating voltage U ₃ V D 00 values on request <td>Rated operational voltage</td> <td>U_e</td> <td>V AC</td> <td>690</td>	Rated operational voltage	U _e	V AC	690
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Rated operating voltage Rated operating current Rated conditional short-circuit current Rated short-time withstand current Ue V DC DC values on request A DC values on request kA 120 (500 V) 100 (690 V) Rated short-time withstand current I cw kA 10	Rated operating current	l _e	Α	DC values on request
Rated operating current Rated conditional short-circuit current kA 120 (500 V) 100 (690 V) Rated short-time withstand current I cw kA 10	Utilization category DC21B			
Rated conditional short-circuit current kA 120 (500 V) 100 (690 V) Rated short-time withstand current I _{CW} kA 10	Rated operating voltage	U _e	V DC	DC values on request
Rated short-time withstand current I _{cw} kA 10	Rated operating current	l _e	Α	DC values on request
CW CW	Rated conditional short-circuit current		kA	
Max. fuse	Rated short-time withstand current	I _{cw}	kA	10
	Max. fuse			

Size according to DIN VDE 0636-2			1
Max. permitted power loss per fuse link	P_{v}	W	23
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 (FLEX System)
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		1400
Track resistance			CTI 600
Heat deflection temperature		?C	125
Terminal capacity			
Flange connection			
Bolt diameter			M10
Cable lug max. width		mm	37
Flat busbar		mm	30 x 10
Box terminal			
Stranded		mm^2	35 - 150 Cu/AI
Copper strip	Number of segments x width x thickness	mm	10 x 16 x 0,8
Box terminal			
Stranded		mm ²	25 - 150 Cu
Copper band	Number of segments x width x thickness	mm	6 x 16 x 0,8
Clamp-type terminal			
Stranded		mm ²	10 - 150 Cu/Al
Double clamp-type terminal			
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Design verification as per IEC/EN 61439

Stranded

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	250
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			Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures			Meets the product standard's requirements.

2x (70 - 95) Cu/Al

10.2.3.2 Verification of resistance of insulating materials to normal heat	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 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 observed.
10.12 Electromagnetic compatibility	Is the panel builder's responsibility. The specifications for the switchgear must observed.
10.13 Mechanical function	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

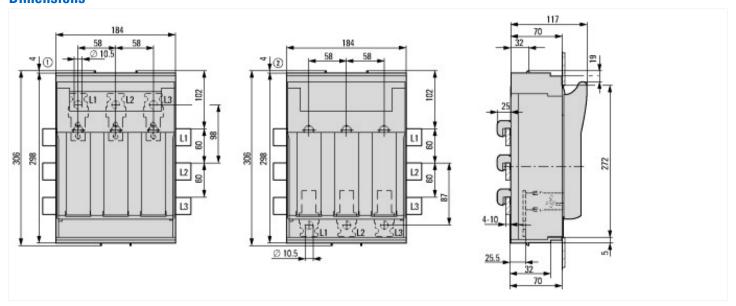
Technical data ETIM 6.0

Low-voltage industrial components (EG000017) / Fuse switch disconnector (EC001040)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Fuse switch disconnector

Version as safety switch Yes Max. rated operation voltage Ue AC V 690 Rated permanent current Iu A 250 Rated operation power at AC-23, 400 V kW 100 Conditioned rated short-circuit current Iq kA 120 Rated short-time withstand current Icw kA 10 Suitable for fuses NH1 NH1 Number of poles 3 Yes With error protection Yes Bolt connection Suitable for ground mounting No Yes Suitable for front mounting 4-hole Yes Yes Suitable for busbar mounting Yes Yes Type of control element Cover grip Cover grip Position control element Front side Front side Motor drive optional No No Motor drive integrated No No Version as emergency stop installation No No	(ecl@ss8.1-27-37-14-01 [AKF058010])		
Max. rated operation voltage Ue AC V 690 Rated permanent current Iu A 250 Rated operation power at AC-23, 400 V kW 100 Conditioned rated short-circuit current Iq kA 120 Rated short-time withstand current Icw kA 10 Suitable for fuses NH1 NH1 Number of poles 3 Yes With error protection Yes Bolt connection Suitable for ground mounting No Yes Suitable for front mounting 4-hole Yes Cover grip Suitable for busbar mounting Yes Cover grip Position control element Yes Cover grip Motor drive optional No No Motor drive integrated No No Version as emergency stop installation No No	Version as main switch		Yes
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Rated operation power at AC-23, 400 V Conditioned rated short-circuit current Iq Rated short-time withstand current Icw Rated short-circuit current Iq Rated short	Max. rated operation voltage Ue AC	V	690
Conditioned rated short-circuit current Iq kA 120 Rated short-time withstand current Icw kA 10 Suitable for fuses NH1 Number of poles 3 With error protection Yes Type of electrical connection of main circuit Suitable for ground mounting Number of poles No Suitable for ground mounting 4-hole Yes Suitable for front mounting 4-hole Yes Type of control element Yes Type of control element Position control element No Motor drive optional Motor drive integrated No Wersion as emergency stop installation No No No No No No No No No No No No No	Rated permanent current lu	Α	250
Rated short-time withstand current Icw Suitable for fuses Number of poles With error protection Type of electrical connection of main circuit Suitable for ground mounting Suitable for ground mounting 4-hole Suitable for front mounting 4-hole Suitable for busbar mounting Yes Type of control element Position control element Motor drive optional Motor drive integrated Version as emergency stop installation	Rated operation power at AC-23, 400 V	kW	100
Suitable for fuses Number of poles 3 With error protection Yes Type of electrical connection of main circuit Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting 4-hole Suitable for busbar mounting Yes Type of control element Type of control element Position control element Motor drive optional Motor drive integrated Version as emergency stop installation NH1 All All All All All All All A	Conditioned rated short-circuit current Iq	kA	120
Number of poles With error protection Yes Type of electrical connection of main circuit Suitable for ground mounting Suitable for front mounting 4-hole Suitable for busbar mounting Type of control element Position control element Motor drive optional Motor drive integrated Version as emergency stop installation Jess Against Agains	Rated short-time withstand current lcw	kA	10
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Suitable for ground mounting Suitable for front mounting 4-hole Yes Suitable for busbar mounting Type of control element Cover grip Position control element Motor drive optional Motor drive integrated Version as emergency stop installation No	With error protection		Yes
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Type of control element Position control element Motor drive optional Motor drive integrated Version as emergency stop installation Cover grip Front side No No No	Suitable for front mounting 4-hole		Yes
Position control element Motor drive optional Motor drive integrated Version as emergency stop installation Front side No No No	Suitable for busbar mounting		Yes
Motor drive optional No Motor drive integrated No Version as emergency stop installation No	Type of control element		Cover grip
Motor drive integrated No Version as emergency stop installation No	Position control element		Front side
Version as emergency stop installation No	Motor drive optional		No
	Motor drive integrated		No
Degree of protection (IP), front side	Version as emergency stop installation		No
	Degree of protection (IP), front side		IP2X

Dimensions



Additional product information (links)

IL0131112ZU Fuse switch-disconnector XNH

IL0131112ZU Fuse switch-disconnector XNH

ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL0131112ZU2015_11.pdf