

### NH fuse-switch 3p box terminal 95 - 300 $\mathrm{mm^2}$ ; busbar 60 $\mathrm{mm}$ ; NH2

Powering Business Worldwide

Part no. XNH2-S400-BT Article no. 183066

### **Delivery programme**

Basic function			Basic device
Number of poles			3 pole
Mounting type			Busbars of 60 mm
Size			2
Type of connection			Box terminal
Rated operational current	l <sub>e</sub>	Α	400
Front degree of protection (XNH installed)			IP20 (Operating status) IP2XC (Contact protection) IP10 (Handle cover open)
Rated operational voltage	U <sub>e</sub>	V AC	690
Rated operational voltage	U <sub>e</sub>	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

## Technical data

#### **Electrica**

Electrical			
Standards			IEC/EN 60947-3
Rated operational voltage	U <sub>e</sub>	V AC	690
Rated operational voltage	U <sub>e</sub>	V DC	440
Rated operational current	I <sub>e</sub>	Α	400
Rated frequency	f	Hz	40 - 60
Rated insulation voltage	Ui	V AC	800
Total heat dissipation at I <sub>th</sub> (without fuses)	$P_{v}$	W	36
Heat dissipation at 80% (without fuses)	$P_{v}$	W	22.9
Rated impulse withstand voltage	U <sub>imp</sub>	kV	8
Utilization category AC-23B			
Rated operating voltage	U <sub>e</sub>	V AC	400
Rated operating current	I <sub>e</sub>	Α	400
Utilization category AC22B			
Rated operating voltage	U <sub>e</sub>	V AC	500
Rated operating current	I <sub>e</sub>	Α	400
Utilization category AC-21B			
Rated operating voltage	U <sub>e</sub>	V AC	690
Rated operating current	I <sub>e</sub>	Α	400
Utilization category DC-22B			
Rated operating voltage	U <sub>e</sub>	V DC	DC values on request
Rated operating current	I <sub>e</sub>	Α	DC values on request
Utilization category DC21B			
Rated operating voltage	U <sub>e</sub>	V DC	DC values on request
Rated operating current	I <sub>e</sub>	Α	DC values on request
Rated conditional short-circuit current		kA	120 (500 V) 100 (690 V)
Rated short-time withstand current	I <sub>cw</sub>	kA	10
Max. fuse			
Size according to DIN VDE 0636-2			2

Max. permitted power loss per fuse link	$P_{v}$	W	34
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		800
Track resistance			CTI 600
Heat deflection temperature		?C	125
Terminal capacity			
Flange connection			
Bolt diameter			M10
Cable lug max. width		mm	48
Flat busbar		mm	40 x 10
Box terminal			
Stranded		$\mathrm{mm}^2$	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 <sup>2</sup>	25 - 240 Cu
Copper band	Number of segments x width x thickness	mm	10 x 16 x 0,8
Clamp-type terminal			
Stranded		mm <sup>2</sup>	120 - 240 Cu/Al
Double clamp-type terminal			
Stranded		mm <sup>2</sup>	2x (120 - 150) Cu/Al

# Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	400
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.
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 <sub>i</sub> = 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.

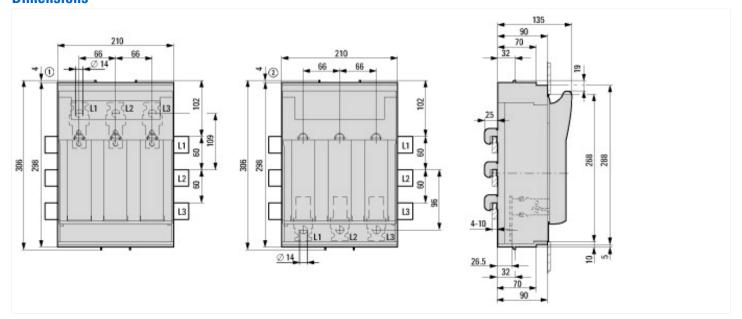
### **Technical data ETIM 6.0**

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

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Version as main switch		Yes
Version as safety switch		Yes
Max. rated operation voltage Ue AC	V	690
Rated permanent current lu	Α	400
Rated operation power at AC-23, 400 V	kW	160
Conditioned rated short-circuit current Iq	kA	120
Rated short-time withstand current lcw	kA	10
Suitable for fuses		NH2
Number of poles		3
With error protection		No
Type of electrical connection of main circuit		Frame clamp
Suitable for ground mounting		No
Suitable for front mounting 4-hole		Yes
Suitable for busbar mounting		Yes
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

### **Dimensions**



### **Additional product information (links)**

IL0131112ZU Fuse switch-disconnector XNH

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ftp://ftp.moeller.net/DOCUMENTATION/AWA\_INSTRUCTIONS/IL0131112ZU2015\_11.pdf