



**NH fuse-switch 3p flange connection M8 max. 95 mm<sup>2</sup>; busbar 60 mm; electronic fuse monitoring; NH000 & NH00**



**Part no. XNH00-FCE-S160**  
**Catalog No. 183039**

**EL-Nummer (Norway) 1624014**

**Delivery program**

Basic function			Fuse control - electronic
Number of poles			3 pole
Mounting type			Busbars of 60 mm
Size			00
Type of connection			Flat connection
Rated operational current	I <sub>e</sub>	A	160
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 With electronic monitoring of fuse-links

**Technical data**

**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>	A	160
Rated frequency	f	Hz	40 - 60
Rated insulation voltage	U <sub>i</sub>	V AC	800
Total heat dissipation at I <sub>th</sub> (without fuses)	P <sub>v</sub>	W	14
Heat dissipation at 80% (without fuses)	P <sub>v</sub>	W	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>	A	160
Utilization category AC22B			
Rated operating voltage	U <sub>e</sub>	V AC	500
Rated operating current	I <sub>e</sub>	A	160
Utilization category AC-21B			
Rated operating voltage	U <sub>e</sub>	V AC	690
Rated operating current	I <sub>e</sub>	A	160
Utilization category DC-22B			
Rated operating voltage	U <sub>e</sub>	V DC	250
Rated operating current	I <sub>e</sub>	A	160
Utilization category DC21B			
Rated operating voltage	U <sub>e</sub>	V DC	440
Rated operating current	I <sub>e</sub>	A	160
Rated conditional short-circuit current		kA	120 (500 V) 100 (690 V)

Rated short-time withstand current	I <sub>cw</sub>	kA	7
Max. fuse			
Size according to DIN VDE 0636-2			000 / 00
Max. permitted power loss per fuse link	P <sub>v</sub>	W	12
Lifespan, electrical	Operations		300

### 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			M8
Cable lug max. width		mm	25
Flat busbar		mm	20 x 10
Box terminal			
Stranded		mm <sup>2</sup>	1,5 - 95 Cu
Copper strip	Number of segments x width x thickness	mm	9 x 9 x 0,8
Box terminal			
Stranded		mm <sup>2</sup>	1,5 - 50 Cu
Copper band	Number of segments x width x thickness	mm	6 x 9 x 0,8
Clamp-type terminal			
Stranded		mm <sup>2</sup>	10 - 70 Cu/Al
Double clamp-type terminal			
Stranded		mm <sup>2</sup>	-

### Electronic fuse monitoring

Power supply			Self-supplied
Power consumption		VA	1.5
Overvoltage category			230/400V : III 500V : II
Frequency range			50 - 60
Input resistance		kOhm/V	> 1
Voltage inputs		V AC	400 - 500 (+/-10%)
Temperature range		°C	-5 - +55

Operation indicator			1 LED green
Failure indicator			3 LEDs (F1, F2, F3) red
Degree of protection			IP3X
Function test			Test button for relay + LEDs
EMC (Electromagnetic compatibility)			IEC 61000-4-4 IEC 61000-4-5
Fuse links			NH with live handle straps
Outputs			
Relay output			1 NC 1 NO
Max. voltage		V AC	250
Max. voltage		V DC	24
Max. switching current		A	1
Contact sequence			
Function diagram			

## Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	$I_n$	A	160
Heat dissipation per pole, current-dependent	$P_{vid}$	W	4.7
Equipment heat dissipation, current-dependent	$P_{vid}$	W	14
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			
$U_i = 800$ 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 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.			

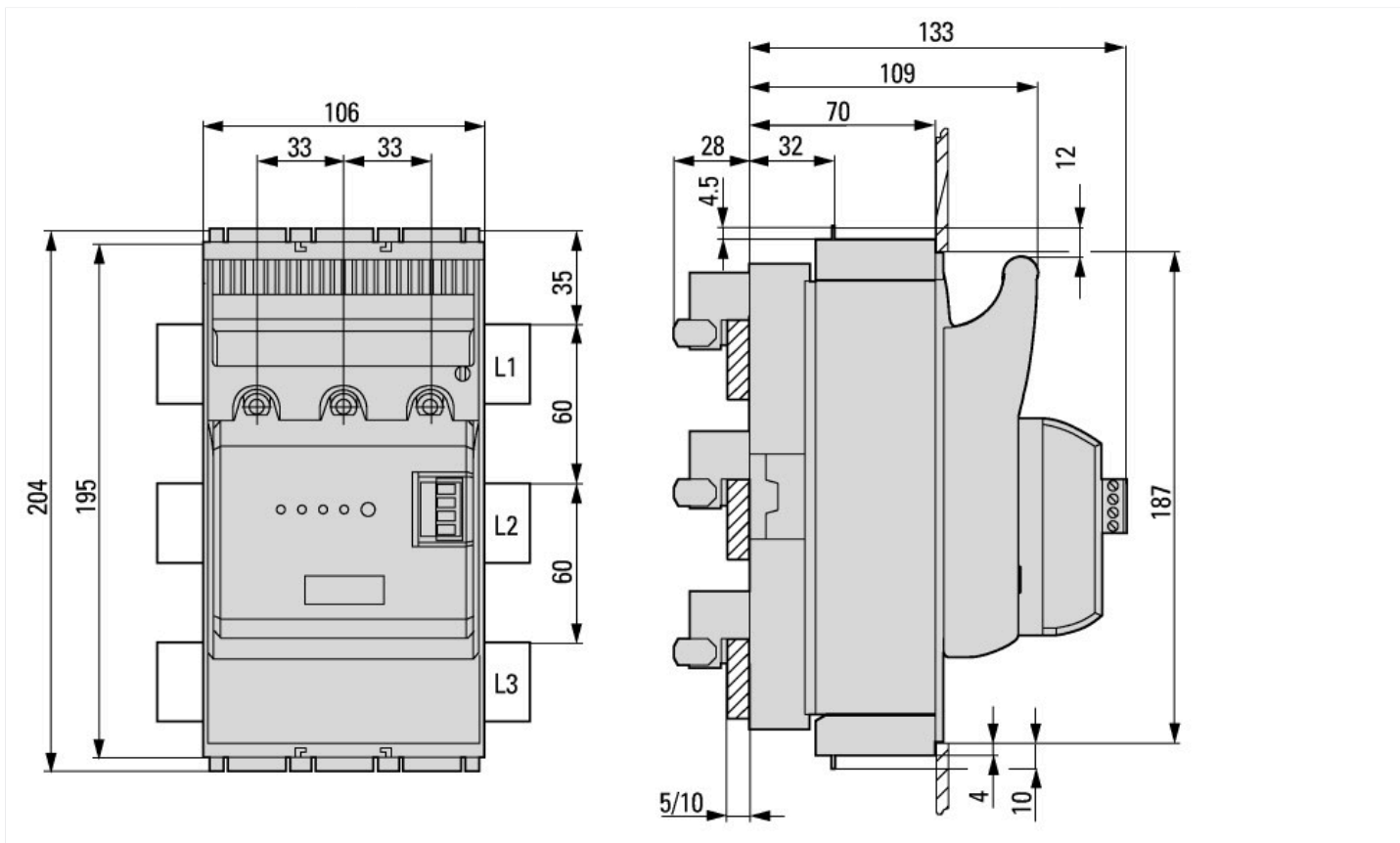
## Technical data ETIM 7.0

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 (ec1@ss10.0.1-27-37-14-01 [AKF058013])

Version as main switch		No
Version as safety switch		No
Max. rated operation voltage Ue AC	V	500
Rated permanent current Iu	A	160
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	7
Suitable for fuses		NH00
Number of poles		3
With error protection		Yes
Type of electrical connection of main circuit		Screw connection
Cable entry		Other
Equipped with connectors		Yes
Suitable for ground mounting		No
Suitable for front mounting 4-hole		No
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		Other

## Dimensions



## Additional product information (links)

**IL0131111ZU Fuse switch-disconnector XNH**

IL0131111ZU Fuse switch-disconnector XNH [https://es-assets.eaton.com/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL0131111ZU2016\\_01.pdf](https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL0131111ZU2016_01.pdf)

**IL0131114ZU Fuse switch-disconnector XNH**

