



**NH fuse-switch 3p flange connection M8 max. 95 mm²; busbar 60 mm;
light fuse monitoring; NH000 & NH00**

Part no. XNH00-FCL-S160
Article no. 183036

Delivery programme

| | | | |
|--|-------|------|--|
| Basic function | | | Fuse control - light |
| Number of poles | | | 3 pole |
| Mounting type | | | Busbars of 60 mm |
| Size | | | 00 |
| Type of connection | | | Flat connection |
| Rated operational current | I_e | A | 160 |
| 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

| | | | |
|--|-----------|------|----------------------------|
| 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 | 160 |
| 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 | 14 |
| Heat dissipation at 80% (without fuses) | P_v | W | 9 |
| 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 | 160 |
| Utilization category AC22B | | | |
| Rated operating voltage | U_e | V AC | 500 |
| Rated operating current | I_e | A | 160 |
| Utilization category AC-21B | | | |
| Rated operating voltage | U_e | V AC | 690 |
| Rated operating current | I_e | A | 160 |
| Utilization category DC-22B | | | |
| Rated operating voltage | U_e | V DC | 250 |
| Rated operating current | I_e | A | 160 |
| Utilization category DC21B | | | |
| Rated operating voltage | U_e | V DC | 440 |
| Rated operating current | I_e | A | 160 |
| Rated conditional short-circuit current | | kA | 120 (500 V) 100 (690 V) |
| Rated short-time withstand current | I_{cw} | kA | 7 |

| | | | |
|---|----------------|---|----------|
| Max. fuse | | | |
| Size according to DIN VDE 0636-2 | | | 000 / 00 |
| Max. permitted power loss per fuse link | P _v | 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 ² | 1,5 - 95 Cu |
| Copper strip | Number of segments x width x thickness | mm | 9 x 9 x 0,8 |
| Box terminal | | | |
| Stranded | | mm ² | 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 ² | 10 - 70 Cu/Al |
| Double clamp-type terminal | | | |
| Stranded | | mm ² | - |

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 | | $U_i = 800 \text{ V AC}$ |
| 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 (ecl@ss8.1-27-37-14-01 [AKF058010]) | | |
| Version as main switch | | Yes |
| Version as safety switch | | Yes |
| Max. rated operation voltage $U_e \text{ AC}$ | V | 690 |
| Rated permanent current I_u | A | 160 |
| Rated operation power at AC-23, 400 V | kW | 64 |
| Conditioned rated short-circuit current I_q | kA | 120 |
| Rated short-time withstand current I_{cw} | kA | 7 |
| Suitable for fuses | | NH00 |
| Number of poles | | 3 |
| With error protection | | Yes |
| Type of electrical connection of main circuit | | Bolt connection |
| 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 |

