



NH fuse-switch 3p flange connection M10 max. 240 mm²; mounting plate; electronic fuse monitoring; NH2

Part no. XNH2-FCE-A400
Article no. 183061

Delivery program

| | | | |
|--|-------|------|---|
| Basic function | | | Fuse control - electronic |
| Number of poles | | | 3 pole |
| Mounting type | | | DIN rails Mounting plate |
| Size | | | 2 |
| Type of connection | | | Flat connection |
| Rated operational current | I_e | A | 400 |
| 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 electronic monitoring of 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 | 400 |
| 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 | 28 |
| Heat dissipation at 80% (without fuses) | P_v | W | 17.8 |
| 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 | 400 |
| Utilization category AC22B | | | |
| Rated operating voltage | U_e | V AC | 500 |
| Rated operating current | I_e | A | 400 |
| Utilization category AC-21B | | | |
| Rated operating voltage | U_e | V AC | 690 |
| Rated operating current | I_e | A | 400 |
| 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 | | | 2 |

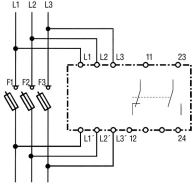
| | | | |
|---|----------------|----|---|
| Max. permitted power loss per fuse link | P _v | W | 34 |
| Lifespan, electrical | Operations | | 200 |
| Mechanical | | | |
| Front degree of protection (XNH installed) | | | IP20 (Operating status) IP2XC (Contact protection) IP10 (Handle cover open) |
| Ambient 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 |
| 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 | | 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 | 25 - 240 Cu |
| Copper band | Number of segments x width x thickness | mm | 10 x 16 x 0,8 |
| Clamp-type terminal | | | |
| Stranded | | mm ² | 120 - 240 Cu/Al |
| Double clamp-type terminal | | | |
| Stranded | | mm ² | 2x (120 - 150) Cu/Al |

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

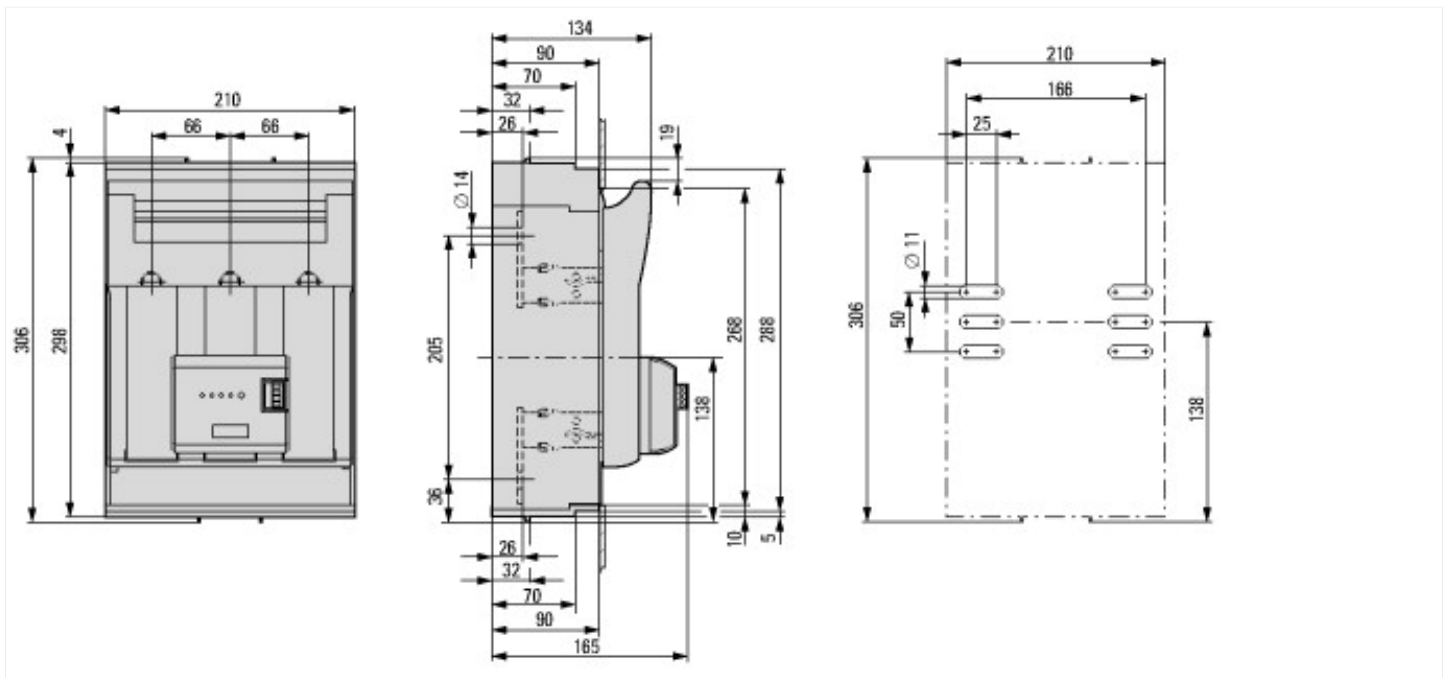
| | | | |
|--|-----------|---|--|
| Technical data for design verification | | | |
| Rated operational current for specified heat dissipation | I_n | A | 400 |
| Heat dissipation per pole, current-dependent | P_{vid} | W | 7.3 |
| Equipment heat dissipation, current-dependent | P_{vid} | W | 22 |
| IEC/EN 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 | | | $U_i = 800$ 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 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 (ec1@ss8.1-27-37-14-01 [AKF058010]) | | | |
| Version as main switch | | | Yes |
| Version as safety switch | | | Yes |

| | | |
|---|----|-----------------|
| Max. rated operation voltage Ue AC | V | 690 |
| Rated permanent current Iu | A | 400 |
| Rated operation power at AC-23, 400 V | kW | 160 |
| Conditioned rated short-circuit current Iq | kA | 120 |
| Rated short-time withstand current Icw | kA | 10 |
| Suitable for fuses | | NH2 |
| Number of poles | | 3 |
| With error protection | | Yes |
| Type of electrical connection of main circuit | | Bolt connection |
| 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 |

Dimensions



Additional product information (links)

IL0131110ZU Fuse switch-disconnector XNH

IL0131110ZU Fuse switch-disconnector XNH ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL0131110ZU2015_11.pdf

IL0131114ZU Fuse switch-disconnector XNH

IL0131114ZU Fuse switch-disconnector XNH ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL0131114ZU2015_11.pdf