# DATASHEET - XNH32-1-A630-BT

**NH fuse-switch 1p box terminal 95 - 300 mm²; mounting plate; size NH3; also for NH2**

Powering Business Worldwide™

| | |
|---|---|
| **Part no.** | **XNH32-1-A630-BT** |
| **Catalog No.** | **183064** |
| **EL-Nummer (Norway)** | **1624039** |

## Delivery program

| | | | |
|---|---|---|---|
| Basic function | | | Basic device |
| Number of poles | | | 1 pole |
| Mounting type | | | DIN rails<br>Mounting plate |
| Size | | | 3 |
| Type of connection | | | Box terminal |
| Rated operational current | $I_e$ | A | 630 |
| Front degree of protection (XNH installed) | | | IP20 (Operating status)<br>IP2XC (Contact protection)<br>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)<br>100 (690 V) |
| Flammability characteristics | | | Self-extinguishing as per UL 94 |
| Description | | | Current paths of electrolytic copper, silver-plated |

## 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 | 630 |
| 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 | 51 |
| Heat dissipation at 80% (without fuses) | $P_v$ | W | 32.5 |
| 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 | 630 |
| Utilization category AC22B | | | |
| Rated operating voltage | $U_e$ | V AC | 500 |
| Rated operating current | $I_e$ | A | 630 |
| Utilization category AC-21B | | | |
| Rated operating voltage | $U_e$ | V AC | 690 |
| Rated operating current | $I_e$ | A | 630 |
| 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)<br>100 (690 V) |
| Rated short-time withstand current | $I_{cw}$ | kA | 10 |
| Max. fuse | | | |
| Size according to DIN VDE 0636-2 | | | 3 / 2 |
| Max. permitted power loss per fuse link | $P_v$ | W | 48 |
| Lifespan, electrical | Operations | | 200 |

## Mechanical

| | | | |
|---|---|---|---|
| Front degree of protection (XNH installed) | | | IP20 (Operating status)<br>IP2XC (Contact protection)<br>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 | 56 |
| Flat busbar | | mm | 50 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 | | $mm^2$ | auf Anfrage |
| Copper band | Number of segments x width x thickness | mm | 11 x 21 x 1 |
| Clamp-type terminal | | | |
| Stranded | | $mm^2$ | 120 - 300 Cu/Al |
| Double clamp-type terminal | | | |
| Stranded | | $mm^2$ | 2x (120 - 240) Cu/Al |

# Design verification as per IEC/EN 61439

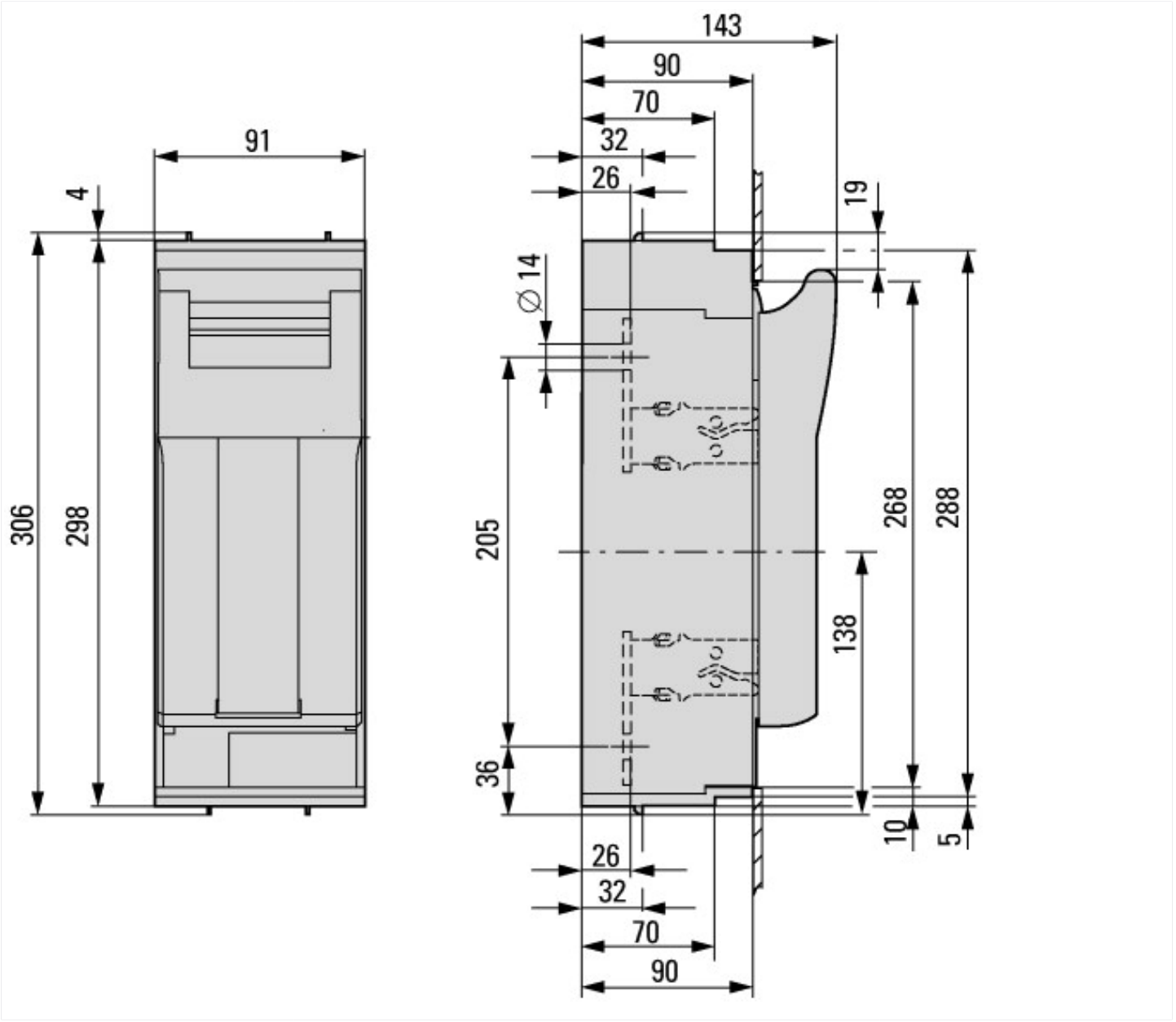
| | | | |
|---|---|---|---|
| Technical data for design verification | | | |
| Rated operational current for specified heat dissipation | $I_n$ | A | 630 |
| Heat dissipation per pole, current-dependent | $P_{vid}$ | W | 7.3 |
| Equipment heat dissipation, current-dependent | $P_{vid}$ | W | 22 |

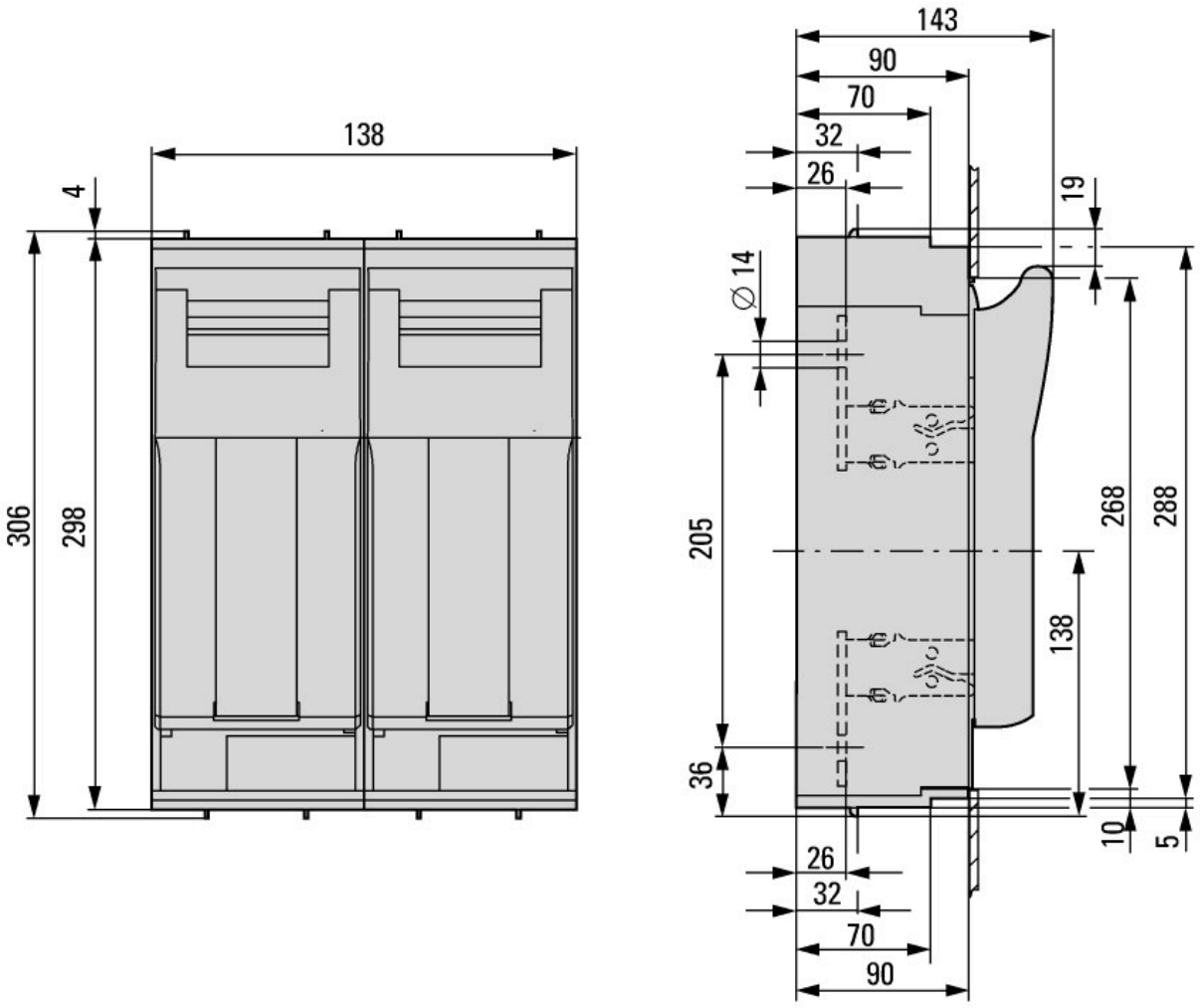
| | | |
|---|---|---|
| IEC/EN 61439 design verification | | |
| 10.2 Strength of materials and parts | | |
| 10.2.2 Corrosion resistance | | Meets the product standard's requirements. |
| 10.2.3.1 Verification of thermal stability of enclosures | | Meets the product standard's requirements. |
| 10.2.3.2 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 7.0

| | | |
|---|---|---|
| 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 (ecl@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 | 690 |
| Rated permanent current Iu | A | 630 |
| 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 | 3 |
| Suitable for fuses | | NH3 |
| Number of poles | | 1 |
| With error protection | | No |
| Type of electrical connection of main circuit | | Frame clamp |
| Cable entry | | Other |
| Equipped with connectors | | No |
| Suitable for ground mounting | | Yes |
| Suitable for front mounting 4-hole | | No |
| 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 | | Other |

## Dimensions



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## Additional product information (links)

| **IL0131119ZU Fuse switch-disconnector XNH** | |
|---|---|
| IL0131119ZU Fuse switch-disconnector XNH | ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL0131119ZU2017_02.pdf |