DATASHEET - XNH00-A160-BT



NH fuse-switch 3p box terminal 1,5 - 95 $\mathrm{mm^2}$; mounting plate; NH000 & NH00



Part no. XNH00-A160-BT Catalog No. 183026

EL-Nummer 1624001

(Norway)

| Delivery program | | | |
|--|----------------|------|---|
| Basic function | | | Basic device |
| Number of poles | | | 3 pole |
| Mounting type | | | DIN rails Mounting plate |
| Size | | | 00 |
| Type of connection | | | Box terminal |
| Rated operational current | I _e | Α | 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 |
| | | | |

095558

Technical data

Successor to

| 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 | l _e | Α | 160 |
| Rated frequency | f | Hz | 40 - 60 |
| Rated insulation voltage | Ui | V AC | 800 |
| Total heat dissipation at I _{th} (without fuses) | P_{v} | W | 9 |
| Heat dissipation at 80% (without fuses) | P_{ν} | W | 5.8 |
| Rated impulse withstand voltage | U _{imp} | kV | 8 |
| Utilization category AC-23B | | | |
| Rated operating voltage | U _e | V AC | 400 |
| Rated operating current | l _e | Α | 160 |
| Utilization category AC22B | | | |
| Rated operating voltage | U _e | V AC | 500 |
| Rated operating current | I _e | Α | 160 |
| Utilization category AC-21B | | | |
| Rated operating voltage | U _e | V AC | 690 |
| Rated operating current | l _e | Α | 160 |
| Utilization category DC-22B | | | |
| Rated operating voltage | U _e | V DC | 250 |
| Rated operating current | I _e | Α | 160 |
| Utilization category DC21B | | | |
| Rated operating voltage | U _e | V DC | 440 |
| Rated operating current | I _e | Α | 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 |
| 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 | mm | 9 x 9 x 0,8 |
| | segments x width x thickness | | |
| 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 | In | Α | 160 |
| Heat dissipation per pole, current-dependent | P _{vid} | W | 3 |
| Equipment heat dissipation, current-dependent | P _{vid} | W | 9 |
| 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 to observed. |
| 10.12 Electromagnetic compatibility | Is the panel builder's responsibility. The specifications for the switchgear must to 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 safety switch No Max. rated operation voltage Ue AC V 690 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 NH00 Number of poles No Same clamp Vith error protection No Frame clamp Cable entry Other No Equipped with connectors No No Suitable for ground mounting Yes No Suitable for front mounting 4-hole No No Suitable for busbar mounting No Cover grip Position control element Font side Motor drive optional No No Motor drive integrated No No Version as emergency stop installation No No | (ecl@ss10.0.1-27-37-14-01 [AKF058013]) | 377 | |
|--|---|-----|-------------|
| Max. rated operation voltage Ue AC V 699 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 MH00 MH00 Vibre error protection No 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 | Version as main switch | | No |
| Rated permanent current lu Rated operation power at AC-23, 400 V Conditioned rated short-circuit current Iq Rated short-time withstand current Icw Rated short-time withstand current Icw Suitable for fuses Number of poles With error protection Type of electrical connection of main circuit Cable entry Equipped with connectors Suitable for front mounting 4-hole Suitable for front mounting 4-hole Suitable for fort mounting 4-hole Suitable for busbar mounting Type of control element Position control element Motor drive optional Motor drive integrated Wersion as emergency stop installation | Version as safety switch | | No |
| Rated operation power at AC-23, 400 V Conditioned rated short-circuit current Iq Rated short-time withstand current Icw Suitable for fuses Number of poles With error protection Type of electrical connection of main circuit Cable entry Equipped with connectors Suitable for front mounting Suitable for front mounting Suitable for front mounting Suitable for front mounting 4-hole Suitable for front mounting Suitable for busbar mounting Type of control element Motor drive optional Motor drive integrated Version as emergency stop installation | Max. rated operation voltage Ue AC | V | 690 |
| Conditioned rated short-circuit current Iq Rated short-time withstand current Icw Rumber of poles Number of poles Nith error protection Type of electrical connection of main circuit Cable entry Equipped with connectors Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting 4-hole Suitable for front mounting Type of control element Cobrol control element No Cover grip Motor drive optional Motor drive integrated Version as emergency stop installation | Rated permanent current lu | А | 160 |
| Rated short-time withstand current low Suitable for fuses Number of poles Number of poles With error protection Type of electrical connection of main circuit Cable entry Equipped with connectors Suitable for ground mounting Suitable for ground mounting Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting 4-hole Suitable for front mounting Suitable for busbar mounting Suitable for busbar mounting Type of control element Position control element Notor drive optional Motor drive integrated Version as emergency stop installation No No No No No No No No No | Rated operation power at AC-23, 400 V | kW | 0 |
| Suitable for fuses Number of poles Suitable for fuses Number of poles Suitable for fuses Number of poles Suitable for protection Type of electrical connection of main circuit Cable entry Cable entry Cipe of electrical connections Suitable for ground mounting Suitable for ground mounting Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting 4-hole Suitable for busbar mounting Type of control element Cover grip Position control element Motor drive optional Motor drive integrated Version as emergency stop installation | Conditioned rated short-circuit current Iq | kA | 120 |
| Number of poles With error protection Type of electrical connection of main circuit Cable entry Equipped with connectors Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting 4-hole Suitable for busbar mounting Type of control element Position control element Motor drive optional Motor drive integrated Ves No Suitable for busbar mounting No Suitable for busbar mounting No Suitable for busbar mounting No No No No No No No No No N | Rated short-time withstand current lcw | kA | 7 |
| With error protection Type of electrical connection of main circuit Cable entry Equipped with connectors Suitable for ground mounting Suitable for front mounting 4-hole Suitable for busbar mounting Type of control element Position control element Motor drive optional Motor drive integrated Version as emergency stop installation | Suitable for fuses | | NH00 |
| Type of electrical connection of main circuit Cable entry Equipped with connectors Suitable for ground mounting Suitable for ground mounting 4-hole Suitable for busbar mounting Type of control element Position control element Motor drive optional Motor drive integrated Version as emergency stop installation Frame clamp Other Chapped Chappe | Number of poles | | 3 |
| Cable entry Equipped with connectors No Suitable for ground mounting Suitable for front mounting 4-hole Suitable for busbar mounting Type of control element Position control element Motor drive optional Motor drive integrated Version as emergency stop installation Total Cable Dother Other Other Other Other Other Ano Version as emergency stop installation Other Other Other Other Ano No No No Other No No Other No No Other No No No No No No No No No N | With error protection | | No |
| Equipped with connectors Suitable for ground mounting Suitable for front mounting 4-hole Suitable for busbar mounting Type of control element Position control element Motor drive optional Motor drive integrated Version as emergency stop installation No No No No No No No No No | Type of electrical connection of main circuit | | Frame clamp |
| Suitable for ground mounting Suitable for front mounting 4-hole Suitable for busbar mounting Suitable for ground mounting suitable | Cable entry | | Other |
| Suitable for front mounting 4-hole Suitable for busbar mounting No Type of control element Cover grip Position control element Motor drive optional Motor drive integrated Version as emergency stop installation No | Equipped with connectors | | No |
| Suitable for busbar mounting No Type of control element Position control element Motor drive optional Motor drive integrated Version as emergency stop installation No No No No No No No No No | Suitable for ground mounting | | Yes |
| Type of control element Position control element Motor drive optional Motor drive integrated Version as emergency stop installation Cover grip Front side No No No | Suitable for front mounting 4-hole | | No |
| Position control element Motor drive optional Motor drive integrated Version as emergency stop installation Front side No No No | Suitable for busbar mounting | | No |
| Motor drive optional No Motor drive integrated No Version as emergency stop installation No | Type of control element | | Cover grip |
| Motor drive integrated No Version as emergency stop installation No | Position control element | | Front side |
| Version as emergency stop installation No | Motor drive optional | | No |
| | Motor drive integrated | | No |
| Degree of protection (IP), front side Other | Version as emergency stop installation | | No |
| | Degree of protection (IP), front side | | Other |

Dimensions

