

Part no. **XNH00-1-A160-BT**  
Article no. **183032**

## Delivery programme

|  |       |      |   |
|--|-------|------|---|
| Basic function                             |       |      | Basic device  |
| Number of poles                            |       |      | 1 pole  |
| Mounting type                              |       |      | DIN rails<br>Mounting plate   |
| Size                                       |       |      | 00  |
| Type of connection                         |       |      | Box terminal  |
| Rated operational current                  | $I_e$ | A    | 160   |
| 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                               |
| Successor to                               |       |      | 263120  |

## 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    | 9                          |
| Heat dissipation at 80% (without fuses)            | $P_v$     | 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                            | $I_e$     | 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)<br>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 <sub>v</sub> | W  | 12  |
| Lifespan, electrical  | Operations     |    | 300   |
| <b>Mechanical</b>   |                |    |   |
| 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     |    | 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<br>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<br>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> | -             |

### Design verification as per IEC/EN 61439

|  |                  |   |  |
|--|------------------|---|--|
| Technical data for design verification                                     |                  |   |  |
| Rated operational current for specified heat dissipation                   | I <sub>n</sub>   | A | 160  |
| Heat dissipation per pole, current-dependent                               | P <sub>vid</sub> | W | 3  |
| Equipment heat dissipation, current-dependent                              | P <sub>vid</sub> | W | 9  |
| IEC/EN 61439 design verification   |                  |   |  |
| 10.2 Strength of materials and parts                                       |                  |   |  |
| 10.2.2 Corrosion resistance  |                  |   |  |
| 10.2.2.1 Verification of thermal stability of enclosures                   |                  |   |  |
| 10.2.2.2 Verification of resistance of insulating materials to normal heat |                  |   |  |
|  |                  |   | Meets the product standard's requirements. |
|  |                  |   | Meets the product standard's requirements. |
|  |                  |   | 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.                         |

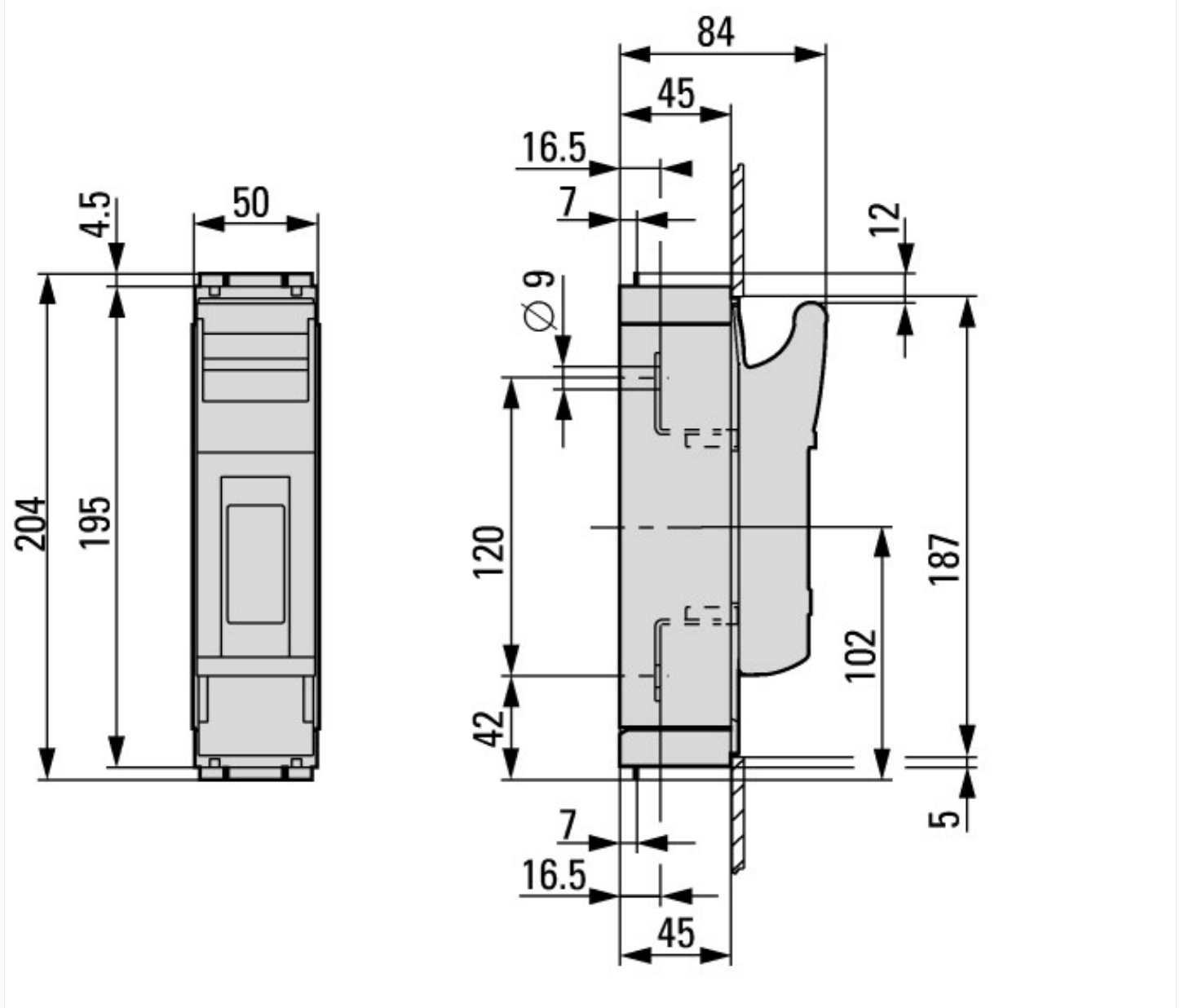
## Technical data ETIM 6.0

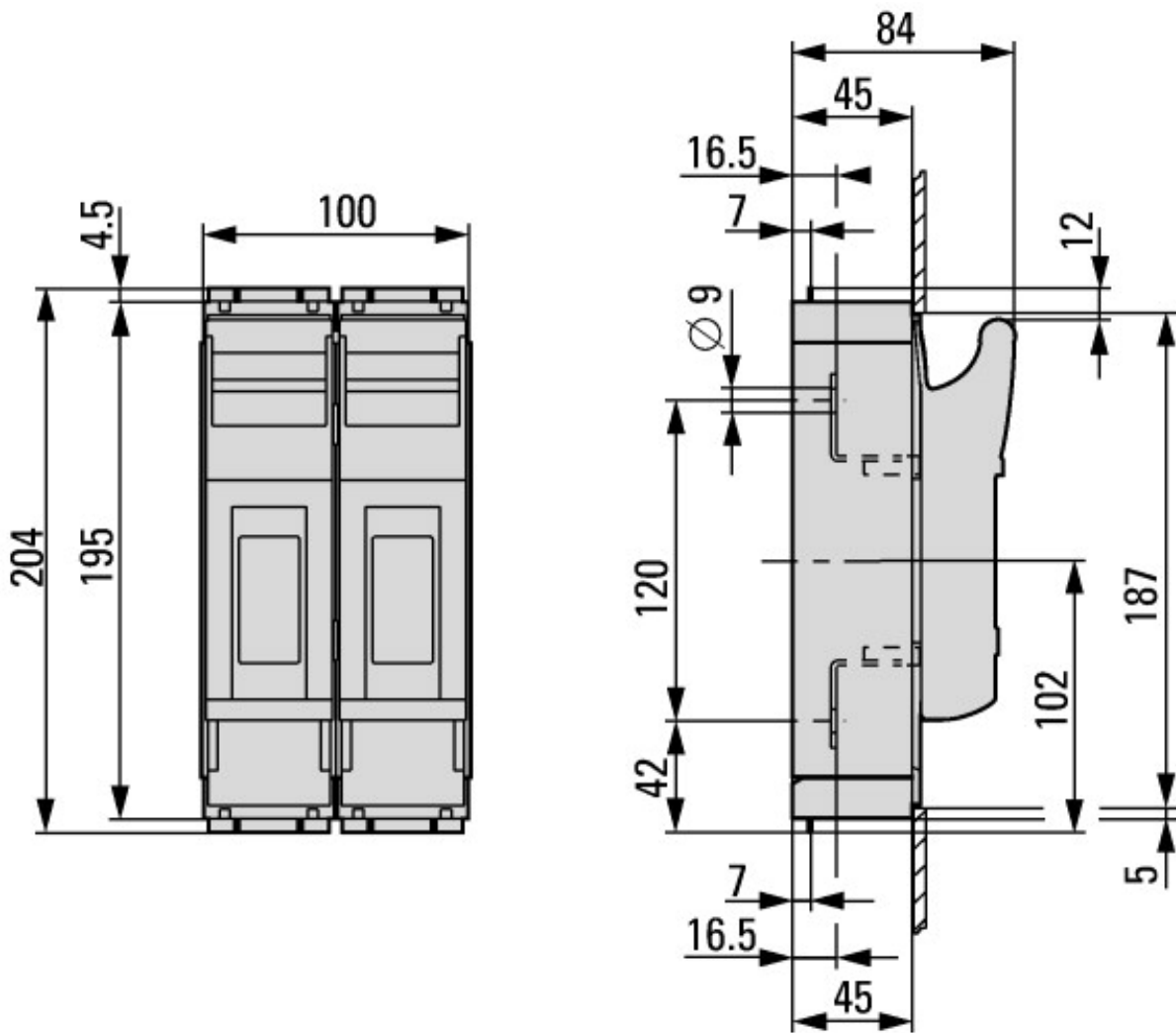
Low-voltage industrial components (EG000017) / Fuse switch disconnecter (EC001040)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Fuse switch disconnecter (ecI@ss8.1-27-37-14-01 [AKF058010])

|   |    |             |
|---|----|-------------|
| Version as main switch                        |    | Yes         |
| Version as safety switch                      |    | Yes         |
| Max. rated operation voltage $U_e$ 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                               |    | 1           |
| With error protection                         |    | No          |
| Type of electrical connection of main circuit |    | Frame clamp |
| 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





2x XNH00-1-A160

### Additional product information (links)

**IL0131113ZU Fuse switch-disconnector XNH**

IL0131113ZU Fuse switch-disconnector XNH [ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL0131113ZU2015\\_11.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL0131113ZU2015_11.pdf)