



Main choke, Single-phase, 260 V + 0% (50/60 Hz), V AC, 24 A, 1.22 mH

Part no. **DX-LN1-024**  
 Catalog No. **269498**  
 Alternate Catalog No. **DX-LN1-024**

### Delivery program

|                                     |       |      |                       |
|-------------------------------------|-------|------|-----------------------|
| Product range                       |       |      | Accessories           |
| Accessories                         |       |      | Mains chokes          |
| Description                         |       |      | Single-phase          |
| For use with                        |       |      | DE1, DE11, DC1, DA1   |
| Max. permissible connection voltage |       | V AC | 260 V + 0% (50/60 Hz) |
| Rated operational current           | $I_e$ | A    | 24                    |
| Inductance                          | L     | mH   | 1.22                  |
| Maximum heat dissipation            | $P_v$ | W    | 20                    |

### Technical data

#### General

|                             |          |      |   |
|-----------------------------|----------|------|---|
| Standards                   |          |      | IEC/EN 61558-2-20-2000, VDE 0570 Part 2-20/2001-04, UL, CSA             |
| Operating temperature       |          | °C   | -25 to +40, up to 70 with current derating (see the note)               |
| Storage temperature         | $\theta$ | °C   | -25 - +85   |
| Mechanical shock resistance |          | g    | 11 ms <sup>2</sup> /15<br>3 shocks                                      |
| Vibration resistance        |          | g    | 1 (0 - 150 Hz)  |
| Vibration                   |          |      | 0.35 mm at 10 - 55 Hz   |
| Altitude                    |          | m    | 0 – 1000 above sea level, up to 5000 with current reduction (see notes) |
| Mounting position           |          |      | Standing vertically, suspended horizontally                             |
| Free surrounding areas      |          | MM   | < 50  |
| Degree of Protection        |          |      | IP20 (terminal)   |
| Rated duty factor           |          | % DF | 100   |
| Weight                      |          | kg   | 2   |

#### Electrical data

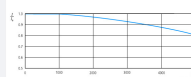
|                           |       |      |                       |
|---------------------------|-------|------|-----------------------|
| Rated operational voltage |       |      | 1 AC 230 V            |
| Max. supply voltage       |       | V AC | 260 V + 0% (50/60 Hz) |
| Operating frequency       | f     | Hz   | 50/60                 |
| Insulation class          |       |      | B                     |
| Rated operational current | $I_e$ | A    | 24                    |
| Inductance                | L     | mH   | 1.22                  |
| Maximum heat dissipation  | $P_v$ | W    | 20                    |
| Voltage sag               | $U_k$ | %    | 4                     |

#### Connection

|                   |  |                 |         |
|-------------------|--|-----------------|---------|
| Terminations      |  |                 | ✓       |
| PE stud           |  |                 | ✓       |
| Terminal          |  | mm <sup>2</sup> | 4       |
| Terminal          |  | AWG             | 20 - 10 |
| Tightening torque |  | Nm              | 0.8     |

#### Notes

The following applies for the installation altitude: Derating with respect to the rated operational current  $I_e$ :



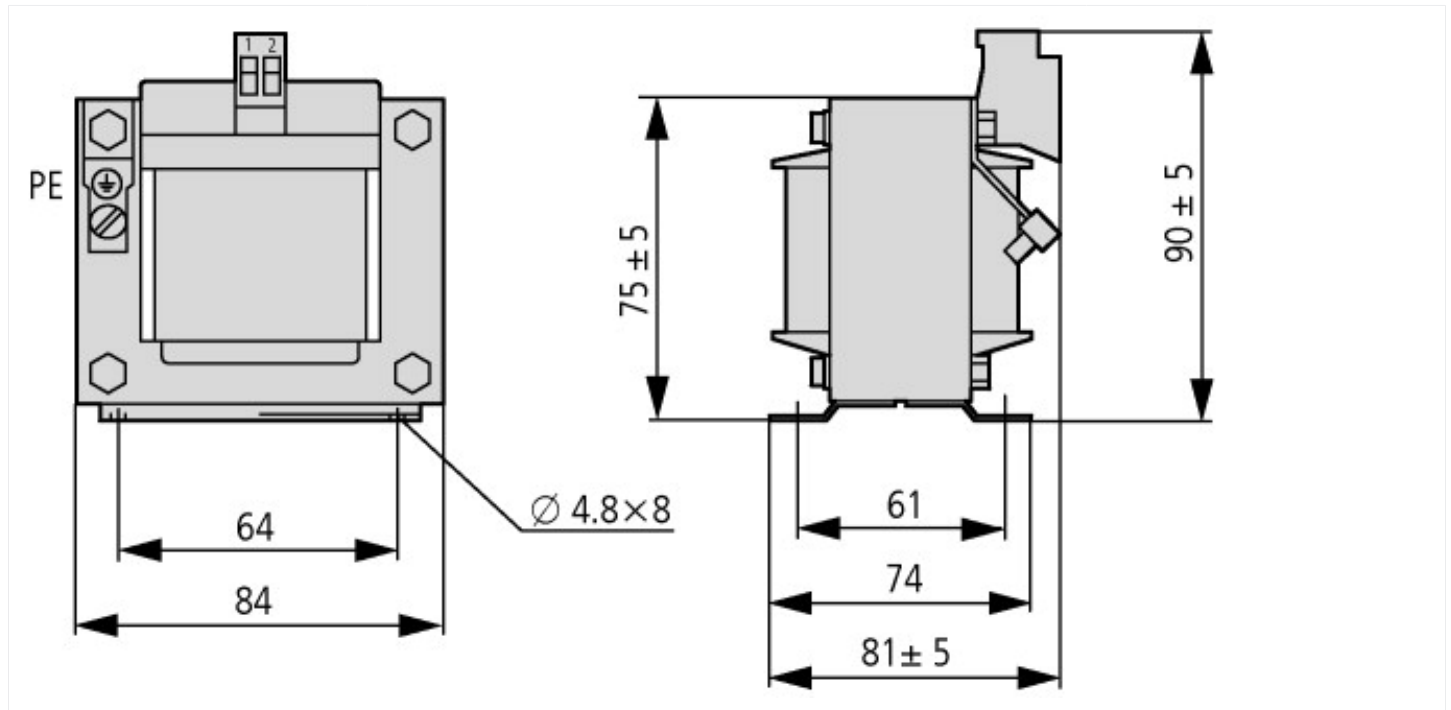
## Design verification as per IEC/EN 61439

| Technical data for design verification   |            |    |  |
|--|------------|----|--|
| Rated operational current for specified heat dissipation   | $I_n$      | A  | 24   |
| Heat dissipation per pole, current-dependent   | $P_{vid}$  | W  | 0  |
| Equipment heat dissipation, current-dependent  | $P_{vid}$  | W  | 20   |
| Static heat dissipation, non-current-dependent   | $P_{vs}$   | W  | 0  |
| Heat dissipation capacity  | $P_{diss}$ | W  | 0  |
| Operating ambient temperature min.   |            | °C | -25  |
| Operating ambient temperature max.   |            | °C | 40   |
| 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   |            |    |  |
|  |            |    | Meets the product standard's requirements.   |
| 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   |            |    |  |
|  |            |    | Is the panel builder's responsibility.   |
| 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) / Coil for low-voltage (EC002563)  |  |     |         |
|---|--|-----|---------|
| Electric engineering, automation, process control engineering / Electronic coil and filter / Electronic choke coil / Electronic choke coil (unspecified) (ecl@ss10.0.1-27-42-01-90 [ADJ199007]) |  |     |         |
| Suitable as interference suppression reactance coil   |  |     | No      |
| Suitable as net reactance coil  |  |     | Yes     |
| Suitable as commutation reactance coil  |  |     | No      |
| Suitable as ripple filter choke   |  |     | No      |
| Suitable as output reactance coil   |  |     | No      |
| Number of poles, primary side   |  |     | 1       |
| Rated clock frequency   |  | kHz | 0       |
| Rated operation frequency   |  | Hz  | 50 - 60 |
| Max. rated operation voltage $U_e$  |  | V   | 260     |
| Rated current at AC   |  | A   | 24 - 24 |
| Max. rated current ( $I_{th}$ ) at rated voltage DC   |  | A   | 24      |
| Rated inductance  |  | mH  | 1.22    |
| Degree of protection (IP)   |  |     | IP20    |
| Relative short circuit voltage  |  | %   | 4       |
| Resonance frequency   |  | Hz  | 0       |

## Dimensions



## Assets (links)

### Declaration of CE Conformity

00002799

### Instruction Leaflets

IL00906003Z2018\_05

### Manuals

MN04020003Z\_EN (English)

MN04020005Z\_EN (English)

## Additional product information (links)

### IL00906003Z Mains chokes, motor chokes

IL00906003Z Mains chokes, motor chokes [ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL00906003Z2018\\_05.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL00906003Z2018_05.pdf)

### MN04020003Z DC1 variable frequency drives, Installation manual

MN04020003Z Frequenzumrichter DC1, Installationshandbuch - Deutsch [ftp://ftp.moeller.net/DOCUMENTATION/AWB\\_MANUALS/MN04020003Z\\_DE.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN04020003Z_DE.pdf)

MN04020003Z DC1 variable frequency drives, Installation manual - English [ftp://ftp.moeller.net/DOCUMENTATION/AWB\\_MANUALS/MN04020003Z\\_EN.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN04020003Z_EN.pdf)

MN04020003Z Frekvenční měnič DC1, manuál Instalace - čeština [ftp://ftp.moeller.net/DOCUMENTATION/AWB\\_MANUALS/MN04020003Z\\_CZ.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN04020003Z_CZ.pdf)

MN04020003Z Convertitore di frequenza DC1, manuale Installazione - italiano [ftp://ftp.moeller.net/DOCUMENTATION/AWB\\_MANUALS/MN04020003Z\\_IT.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN04020003Z_IT.pdf)

### MN04020005Z DA1 variable frequency drives, Installation manual

MN04020005Z Frequenzumrichter DA1, Installationshandbuch - Deutsch [ftp://ftp.moeller.net/DOCUMENTATION/AWB\\_MANUALS/MN04020005Z\\_DE.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN04020005Z_DE.pdf)

MN04020005Z DA1 variable frequency drives, Installation manual - English [ftp://ftp.moeller.net/DOCUMENTATION/AWB\\_MANUALS/MN04020005Z\\_EN.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN04020005Z_EN.pdf)

MN04020005Z Convertitore di frequenza DA1, manuale Installazione - italiano [ftp://ftp.moeller.net/DOCUMENTATION/AWB\\_MANUALS/MN04020005Z\\_IT.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN04020005Z_IT.pdf)

CA04020001Z-EN Product Range Catalog: Efficient Engineering for Starting and Controlling Motors [http://www.eaton.eu/DE/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct\\_1095238.pdf](http://www.eaton.eu/DE/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_1095238.pdf)