



Main choke, three-phase, 550 V + 0% (50/60 Hz), V AC, 250 A, 0.07 mH

Part no. **DX-LN3-250**  
 Catalog No. **269513**  
 Alternate Catalog No. **DX-LN3-250**

### Delivery program

|                                     |       |      |                       |
|-------------------------------------|-------|------|-----------------------|
| Product range                       |       |      | Accessories           |
| Accessories                         |       |      | Mains chokes          |
| Description                         |       |      | three-phase           |
| For use with                        |       |      | DA1, SVX, SPX         |
| Max. permissible connection voltage |       | V AC | 550 V + 0% (50/60 Hz) |
| Rated operational current           | $I_e$ | A    | 250                   |
| Inductance                          | L     | mH   | 0.07                  |
| Maximum heat dissipation            | $P_v$ | W    | 155                   |

### 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        |          |      | IP00 (connection lugs)  |
| Rated duty factor           |          | % DF | 100   |
| Weight                      |          | kg   | 20.6  |

#### Electrical data

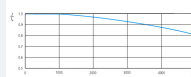
|                           |       |      |                       |
|---------------------------|-------|------|-----------------------|
| Rated operational voltage |       |      | 3 AC 400 V            |
| Max. supply voltage       |       | V AC | 550 V + 0% (50/60 Hz) |
| Operating frequency       | f     | Hz   | 50/60                 |
| Insulation class          |       |      | B                     |
| Rated operational current | $I_e$ | A    | 250                   |
| Inductance                | L     | mH   | 0.07                  |
| Maximum heat dissipation  | $P_v$ | W    | 155                   |
| Voltage sag               | $U_k$ | %    | 2.5                   |

#### Connection

|                   |  |                 |           |
|-------------------|--|-----------------|-----------|
| Connection lugs   |  |                 | ✓         |
| PE stud           |  |                 | ✓         |
| Connection lug    |  | mm <sup>2</sup> | Cu 40 x 5 |
| Drilling          |  | mm              | 14        |
| Tightening torque |  | Nm              | 15.5      |

#### 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  | 250  |
| Heat dissipation per pole, current-dependent   | $P_{vid}$  | W  | 0  |
| Equipment heat dissipation, current-dependent  | $P_{vid}$  | W  | 155  |
| 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

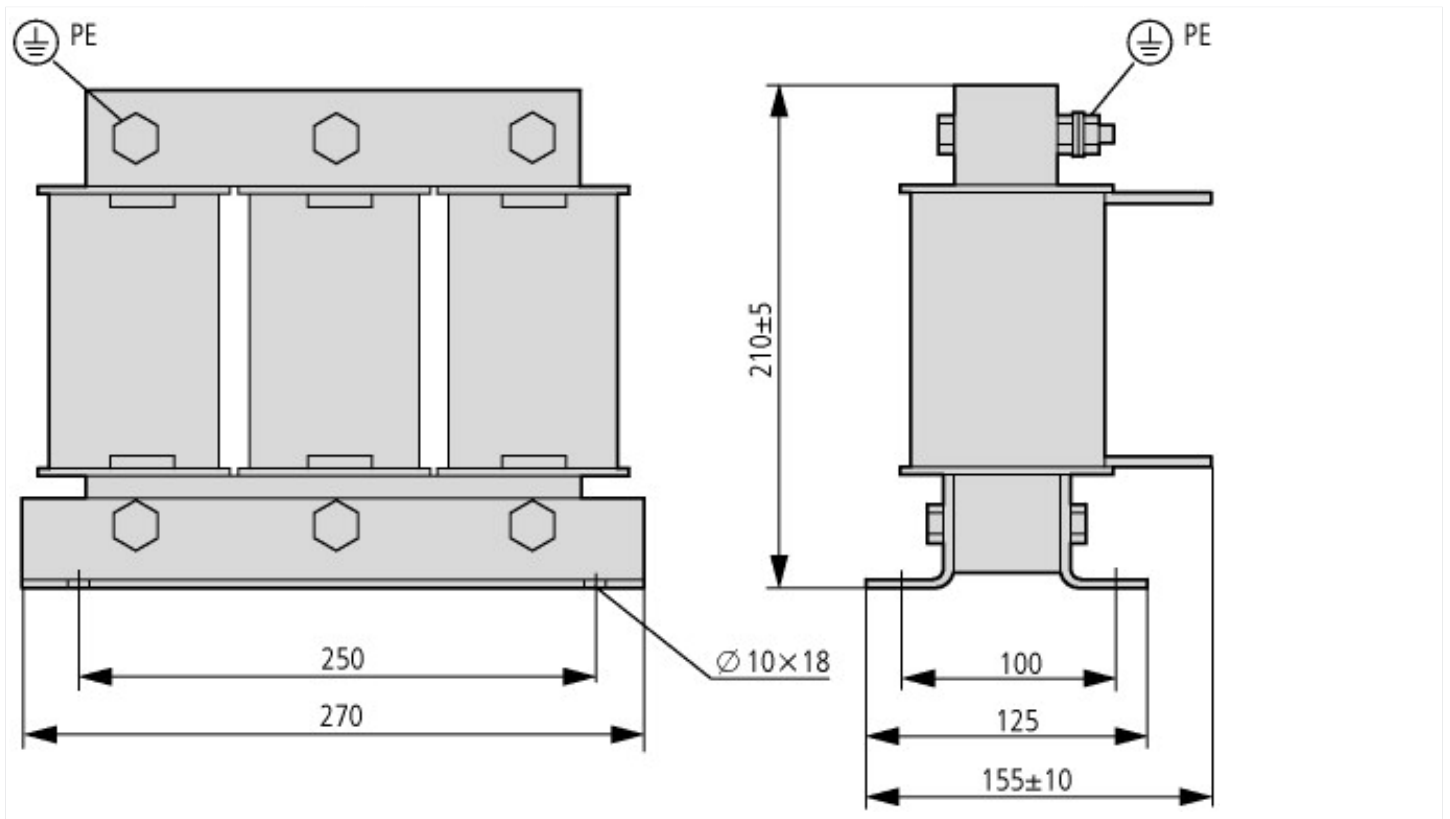
| Low-voltage industrial components (EG000017) / Coil for low-voltage (EC002563)  |  |     |           |
|---|--|-----|-----------|
| Electric engineering, automation, process control engineering / Electronic coil and filter / Electronic choke coil / Electronic choke coil (unspecified) (ecl@ss10.0.1-27-42-01-90 [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   |  |     | 3         |
| Rated clock frequency   |  | kHz | 0         |
| Rated operation frequency   |  | Hz  | 50 - 60   |
| Max. rated operation voltage $U_e$  |  | V   | 550       |
| Rated current at AC   |  | A   | 250 - 250 |
| Max. rated current ( $I_{th}$ ) at rated voltage DC   |  | A   | 250       |
| Rated inductance  |  | mH  | 0.07      |
| Degree of protection (IP)   |  |     | IP00      |
| Relative short circuit voltage  |  | %   | 0         |
| Resonance frequency   |  | Hz  | 0         |

|                             |  |       |
|-----------------------------|--|-------|
| Degree of protection (NEMA) |  | Other |
|-----------------------------|--|-------|

## Approvals

|                                      |  |  |
|--------------------------------------|--|--|
| Product Standards                    |  | UL 508C; CSA-C22.2 No. 14; IEC/EN61800-3; IEC/EN61800-5; CE marking  |
| UL File No.                          |  | E167225  |
| UL Category Control No.              |  | XPTQ2, XPTQ8   |
| CSA File No.                         |  | UL report applies to both US and Canada  |
| North America Certification          |  | UL listed, certified by UL for use in Canada   |
| Specially designed for North America |  | No   |
| Suitable for                         |  | Branch circuits  |
| Max. Voltage Rating                  |  | 1~ 240 V AC IEC: TN-S UL/CSA: "Y" (Solidly Grounded Wey), 3~ 240 V AC IEC: TN-S UL/CSA: "Y" (Solidly Grounded Wey), 3~ 480 V AC IEC: TN-S UL/CSA: "Y" (Solidly Grounded Wey) |
| Degree of Protection                 |  | IEC: IP00  |

## Dimensions



Height tolerance depends on gap  
The position of connection lugs U2-V2-W2 depends on the coil material and can deviate from the position illustrated here.

<sup>1)</sup> Toleranz in Abhängigkeit vom Luftspalt.  
The position of connection lugs U2-V2-W2 depends on the coil material and can deviate from the position illustrated here.

## 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                                    | <a href="ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN04020003Z_CZ.pdf">ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN04020003Z_CZ.pdf</a>   |
| MN04020003Z Convertitore di frequenza DC1, manuale Installazione - italiano                     | <a href="ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN04020003Z_IT.pdf">ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN04020003Z_IT.pdf</a>   |
| <b>MN04020005Z DA1 variable frequency drives, Installation manual</b>                           |   |
| MN04020005Z Frequenzumrichter DA1, Installationshandbuch - Deutsch                              | <a href="ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN04020005Z_DE.pdf">ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN04020005Z_DE.pdf</a>   |
| MN04020005Z DA1 variable frequency drives, Installation manual - English                        | <a href="ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN04020005Z_EN.pdf">ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN04020005Z_EN.pdf</a>   |
| MN04020005Z Convertitore di frequenza DA1, manuale Installazione - italiano                     | <a href="ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN04020005Z_IT.pdf">ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN04020005Z_IT.pdf</a>   |
| CA04020001Z-EN Product Range Catalog: Efficient Engineering for Starting and Controlling Motors | <a href="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</a> |