

Motor choke, three-phase, 750 V + 0% (0 - 400 Hz), V AC, 50 A, 0.6 mH

Part no. DX-LM3-050
Catalog No. 269544
Alternate Catalog No. DX-LM3-050

Delivery program

| | | | |
|--|-------|------|-------------------------|
| Product range | | | Accessories |
| Accessories | | | Motor chokes |
| Description | | | three-phase |
| For use with | | | DC1, DA1, DG1, SVX, SPX |
| Max. permissible connection voltage | | V AC | 750 V + 0% (0 - 400 Hz) |
| Rated operational current | I_e | A | 50 |
| Inductance | L | mH | 0.6 |
| max. heat dissipation (pulse frequency) | | | |
| (12 kHz) | P_v | W | 168 |

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 | θ | °C | -25 - +85 |
| Mechanical shock resistance | | g | 11 ms ² /15 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 | 12.3 |

Electrical data

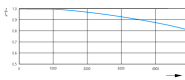
| | | | |
|---|-------|------|-------------------------|
| Rated operational voltage | | | 3 AC 400 V |
| Max. supply voltage | | V AC | 750 V + 0% (0 - 400 Hz) |
| Operating frequency | f | Hz | 0...200 |
| Insulation class | | | B |
| Rated operational current | I_e | A | 50 |
| Inductance | L | mH | 0.6 |
| max. heat dissipation (pulse frequency) | | | |
| (3 kHz) | P_v | W | 110 |
| (5 kHz) | P_v | W | 157 |
| (12 kHz) | P_v | W | 168 |

Connection

| | | | |
|-------------------|--|-----------------|--------|
| Terminations | | | ✓ |
| PE stud | | | ✓ |
| Terminal | | mm ² | 10 |
| Terminal | | AWG | 20 - 6 |
| Tightening torque | | Nm | 1.5 |

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 | 50 |
| Heat dissipation per pole, current-dependent | P_{vid} | W | 0 |
| Equipment heat dissipation, current-dependent | P_{vid} | W | 110 |
| 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

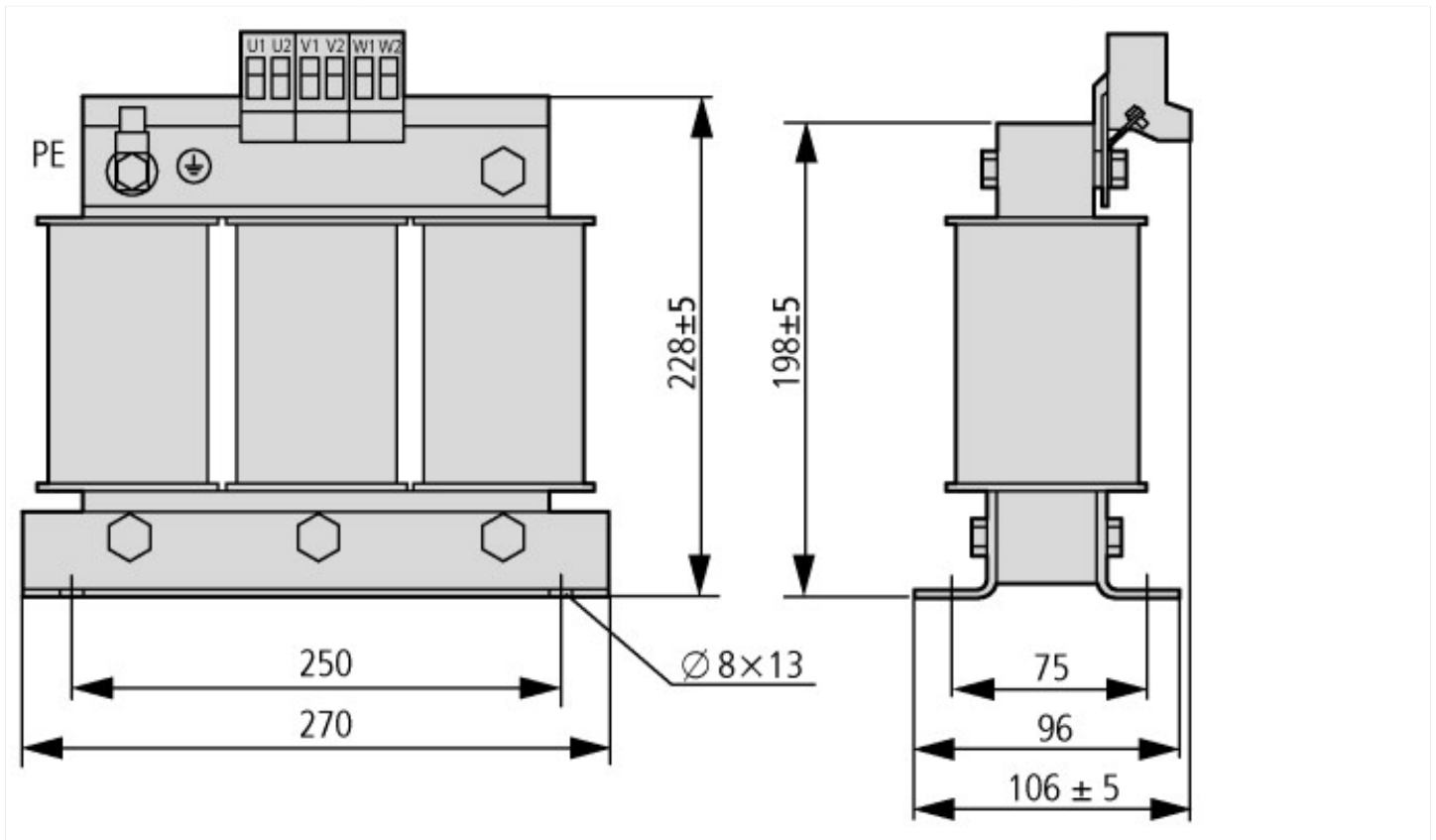
| Low-voltage industrial components (EG000017) / Coil for low-voltage (EC002563) | | | |
|---|--|-----|---------|
| Electric engineering, automation, process control engineering / Electronic coil and filter / Electronic choke coil / Electronic choke coil (unspecified) (ecl@ss10.0.1-27-42-01-90 [ADJ199007]) | | | |
| Suitable as interference suppression reactance coil | | | No |
| Suitable as net reactance coil | | | No |
| Suitable as commutation reactance coil | | | No |
| Suitable as ripple filter choke | | | Yes |
| Suitable as output reactance coil | | | No |
| Number of poles, primary side | | | 3 |
| Rated clock frequency | | kHz | 0 |
| Rated operation frequency | | Hz | 0 - 200 |
| Max. rated operation voltage U_e | | V | 750 |
| Rated current at AC | | A | 50 - 50 |
| Max. rated current (I_{th}) at rated voltage DC | | A | 50 |

| | | |
|--------------------------------|----|-------|
| Rated inductance | mH | 0.6 |
| Degree of protection (IP) | | IP20 |
| 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: IP20 |

Dimensions



¹⁾ 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

MN04020003Z DC1 variable frequency drives, Installation manual

| | |
|---|---|
| MN04020003Z Frequenzumrichter DC1, Installationshandbuch - Deutsch | 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 |
| MN04020003Z Frekvenční měnič DC1, manuál Instalace - čeština | 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 |
| MN04020005Z DA1 variable frequency drives, Installation manual | |
| MN04020005Z Frequenzumrichter DA1, Installationshandbuch - Deutsch | 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 |
| MN04020005Z Convertitore di frequenza DA1, manuale Installazione - italiano | 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 |