



Sine filter, three-phase, 500 V + 0% (50/60 Hz) V AC, 90 A, For use with: DA1, DL1, DG1, SVX, SPX

Part no. DX-SIN3-090
Catalog No. 271601
Alternate Catalog No. DX-SIN3-090

Delivery program

Product range			Accessories
Accessories			Sine filter
Description			three-phase
For use with			DA1, DG1, SVX, SPX
Max. permissible connection voltage		V AC	500 V + 0% (50/60 Hz)
Rated operational current	I_e	A	90
Inductance	L	mH	0.8
Maximum heat dissipation	P_v	W	290

Technical data

General

Operating temperature		°C	-10 - +45
Storage	θ	°C	-25 - +85
Altitude		m	0 - 1000 a.s.l., up to 4000 with current reduction
Mounting position			Standing vertically, suspended horizontally
Free surrounding areas		MM	> 100
Degree of Protection			IP00
Rated duty factor		% DF	100
Weight		kg	53.3

Electrical data

Rated operational voltage			3 AC 230 V 3 AC 400 V
Max. permissible connection voltage		V AC	500 V + 0% (50/60 Hz)
Rated frequency	f	Hz	0 - 120
Insulation class			H
Rated operational current	I_e	A	90
Inductance	L	mH	0.8
Maximum heat dissipation	P_v	W	290
Voltage sag	U_k	%	10

Connection

Terminations			✓
PE stud			✓
Terminal		mm ²	16 - 50
Terminal		AWG	6 - 2/0
Tightening torque		Nm	3,2 - 3,7

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I_n	A	90
Heat dissipation per pole, current-dependent	P_{vid}	W	0
Equipment heat dissipation, current-dependent	P_{vid}	W	290
Static heat dissipation, non-current-dependent	P_{vs}	W	0
Heat dissipation capacity	P_{diss}	W	0
Operating ambient temperature min.		°C	-10
Operating ambient temperature max.		°C	45

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.

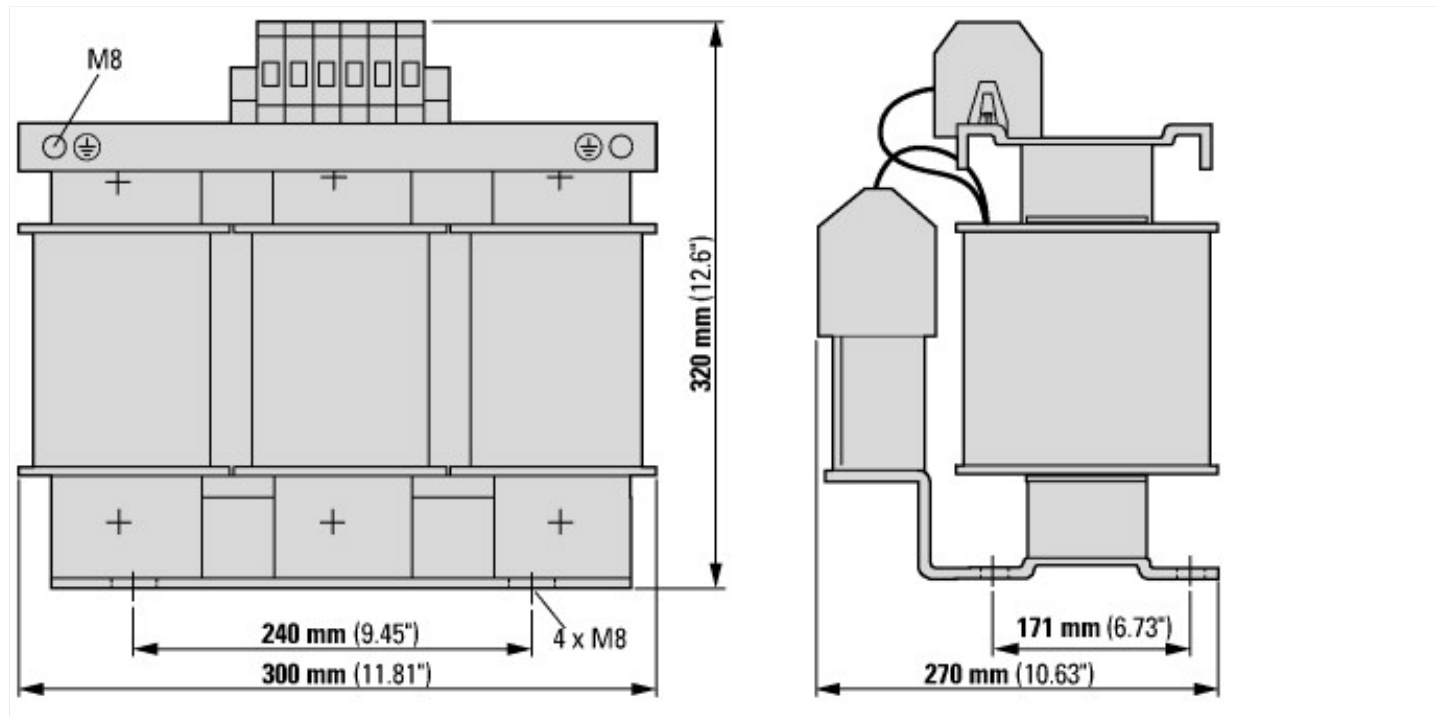
Technical data ETIM 7.0

Low-voltage industrial components (EG000017) / Accessories for frequency controller (EC002025)			
Electric engineering, automation, process control engineering / Electrical drive / Static frequency converter / Static frequency converter (accessory) (ecl@ss10.0.1-27-02-31-92 [AFR303003])			
Type of accessory			Filter

Approvals

Product Standards			UL 508C; CSA-C22.2 No. 14; IEC/EN61800-3; IEC/EN61800-5; CE marking
UL File No.			E300273
UL Category Control No.			NMTR2, NMTR8
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



Assets (links)

Declaration of CE Conformity

00002789

Instruction Leaflets

IL00906001Z2018_05

Manuals

MN04020003Z_EN (English)

MN04020005Z_EN (English)

Additional product information (links)

IL00906001Z Sine filter	
IL00906001Z Sine filter	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL00906001Z2018_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