DATASHEET - DX-SIN3-061

Sine filter, three-phase, 500 V + 0% (50/60 Hz) V AC, 61 A, For use with: DA1, SVX, SPX

Powering Business Worldwide™

Part no.	**DX-SIN3-061**
Catalog No.	**271599**
Alternate Catalog No.	**DX-SIN3-061**

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	61
Inductance	L	mH	1
Maximum heat dissipation	P_v	W	280

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	35

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	61
Inductance	L	mH	1
Maximum heat dissipation	P_v	W	280
Voltage sag	U_k	%	8.3

Connection

Terminations			✓
PE stud			✓
Terminal		mm^2	1,5 - 35
Terminal		AWG	16 - 1/0
Tightening torque		Nm	1,5 - 1,8

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I_n	A	61
Heat dissipation per pole, current-dependent	P_{vid}	W	0
Equipment heat dissipation, current-dependent	P_{vid}	W	280
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.

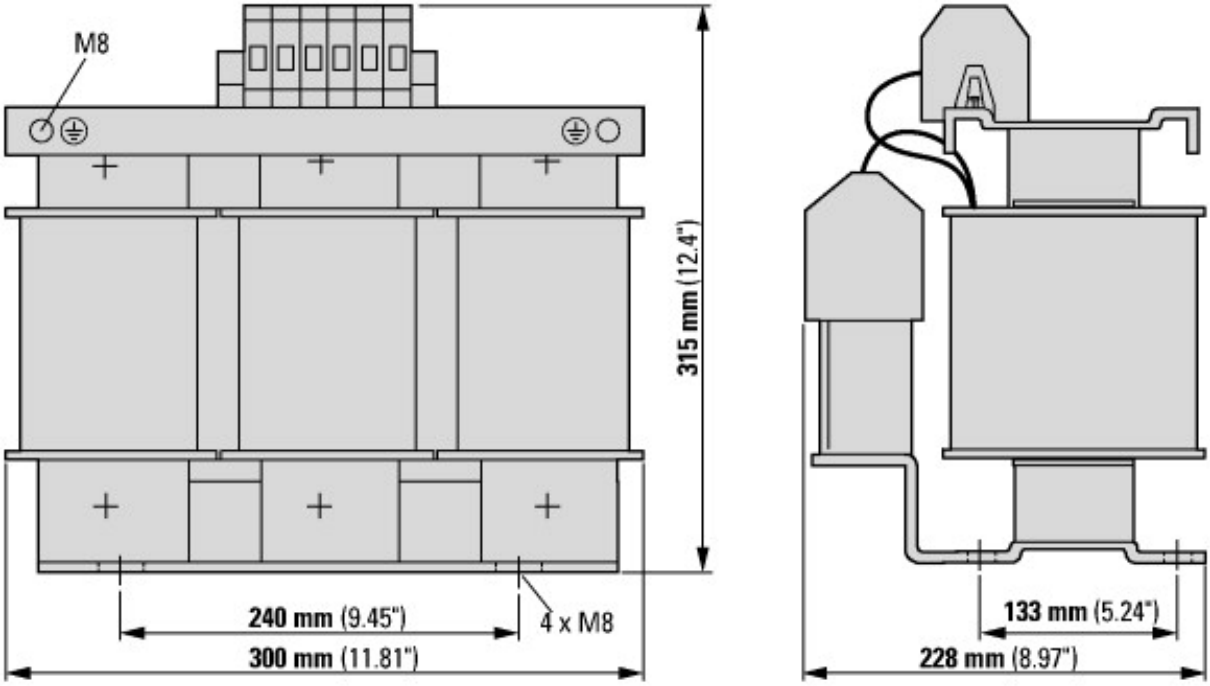
Technical data ETIM 7.0

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



Additional product information (links)

IL00906001Z Sine filter	
IL00906001Z Sine filter	https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL00906001Z2020_07.pdf
MN04020003Z DC1 variable frequency drives, Installation manual	
MN04020003Z Frequenzumrichter DC1, Installationshandbuch - Deutsch	https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN04020003Z_DE.pdf
MN04020003Z DC1 variable frequency drives, Installation manual - English	https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN04020003Z_EN.pdf
MN04020003Z Frekvenční měnič DC1, manuál Instalace - čeština	https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN04020003Z_CZ.pdf
MN04020003Z Convertitore di frequenza DC1, manuale Installazione - italiano	https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN04020003Z_IT.pdf
MN04020005Z DA1 variable frequency drives, Installation manual	
MN04020005Z Frequenzumrichter DA1, Installationshandbuch - Deutsch	https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN04020005Z_DE.pdf
MN04020005Z DA1 variable frequency drives, Installation manual - English	https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN04020005Z_EN.pdf
MN04020005Z Convertitore di frequenza DA1, manuale Installazione - italiano	https://es-assets.eaton.com/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