DATASHEET - DX-LN3-004

Main choke, three-phase, 550 V + 0% (50/60 Hz), V AC, 3.9 A, 7.51 mH



Part no.	DX-LN3-004
	269500

General specifications	
Product name	Eaton DX Mains choke
Part no.	DX-LN3-004
EAN	4015082695002
Product Length/Depth	66 millimetre
Product height	118 millimetre
Product width	115 millimetre
Product weight	1.5 kilogram
Compliances	CE Marked
Certifications	UL 508C IEC 61800-5 EN 61800-3 CSA Std. C22.2 No. 14 VDE CE VDE 0570 Part 2-20/2001-04 Certified by UL for use in Canada CSA-C22.2 No. 14 CSA IEC/EN 61558-2-20-2000 UL UL Category Control No.: XPTQ2, XPTQ8 UL report applies to both US and Canada IEC/EN61800-5 IEC/EN61800-5 IEC/EN61800-3 UL File No.: E167225 UL CSA
Product Tradename	DX
Product Type	Accessory
Product Sub Type	Mains choke
Features & Functions	
Fitted with:	Terminations PE stud
Number of phases	3
Number of poles	Three-pole
General information	
Degree of protection	IP20 NEMA Other
Duty factor	100 %
Frequency rating	50-60 Hz
Insulation class	B
Product Category	Accessories
Suitable as	Net reactance coil
Suitable for	Branch circuits, (UL/CSA)
Switching frequency	0 kHz
Used with	DA1 DE1 DC1 SPX SVX DA1, DB1, DC1, DE1, DE11, DG1, DM1, SPX, SVX
Ambient conditions, mechanical	
Mounting position	Free surrounding areas > 50 mm Standing vertically Suspended horizontally
Shock resistance	3 shocks Shock duration: 11 ms
Vibration resistance	0 - 150 Hz, 1 g 10 - 55 Hz, 0.35 mm

Climatic environmental conditions	
Altitude	Max. 1000 m Max. 5000 m with current reduction
Ambient operating temperature - max	40 °C
Ambient operating temperature - min	-25 °C
Ambient storage temperature - max	85 °C
Ambient storage temperature - min	-25 °C
Operating temperature details	-25 - 40 °C (up to 70 °C with current derating)
Terminal capacities	
Terminal capacity	20 - 10 AWG 4 mm ²
Tightening torque	0.8 Nm, Screw terminals
Electrical rating	
Permissible connection voltage	Max. 550 V AC (50/60 Hz)
Rated current (Ith) at rated voltage DC - max	3.9 A
Rated frequency - min	50 Hz
Rated frequency - max	60 Hz
Rated inductance	7.51 mH
Rated operational current (Ie) - min	3.9 A
Rated operational current (le) - max	3.9 A
Rated operational voltage (Ue) - max	550 V
Relative short-circuit voltage	4 %
Voltage rating - max	480 V
Voltage sag Uk	4 %
Design verification	
Heat dissipation capacity Pdiss	0 W
Rated operational current for specified heat dissipation (In)	3.9 A
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 Resist. of insul. mat. to abnormal heat/fire by internal elect. 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.
10.9.2 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 9.0

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@ss13-27-42-01-90 [ADJ199012])

Suitable as interference suppression reactance coil

No

Suitable as commutation reactance coil Mo Suitable as ripple filter choke No Suitable as output reactance coil Mo Number of poles, primary side No Rated clock frequency KHz Rated clock frequency KHz Max. rated operation voltage Ue So Rated current AC A Max. rated outrent (lth) at rated voltage DC A Rated inductance MI Degree of protection (IP) Me Relative short circuit voltage Max Relative short circuit voltage			
Suitable as ripple filter choke Mo Suitable as output reactance coil Mo Number of poles, primary side Mo Rated clock frequency KHz Rated operating frequency KHz Rated operation voltage Ue So Max. rated operation voltage DC A Rated inductance Max Degree of protection (IP) Max Relative short circuit voltage	Suitable as net reactance coil		Yes
Suitable as output reactance coil No Number of poles, primary side 3 Rated clock frequency KHz 0 Rated operating frequency Hz 0-60 Max. rated operation voltage Ue V 50 Rated current AC A 39-3.9 Max. rated output reactor (Ith) at rated voltage DC MHz 39-3.9 Degree of protection (IP) MHZ 120 Relative short circuit voltage Max 4 Relative short circuit voltage Max 120 Relative	Suitable as commutation reactance coil		No
Number of poles, primary side Image: solution of poles, primary side Rated clock frequency KHz 0 Rated operating frequency L Solo Max. rated operation voltage Ue V Solo Rated current AC A Solo Max. rated current (lth) at rated voltage DC A Solo Degree of protection (IP) Plo Plo Rated short circuit voltage Solo Solo Rated short circuit voltage Max Solo Rated short circuit voltage Max Solo Rated short circuit voltage Solo Solo Rate short circuit voltage Solo Solo	Suitable as ripple filter choke		No
Rated clock frequencyKHz0Rated operating frequencyHz50-60Max. rated operation voltage UeMax50Rated current ACA39-39Max. rated current (lth) at rated voltage DCMHz50Rated inductanceMHz50Degree of protection (IP)MHz1920Relative short circuit voltageMax%Relative short circuit voltageMax%Relative short circuit voltageMax%MaxMax%%MaxMax%MaxMax%MaxMax%MaxMax%MaxMax%MaxMax%MaxMax%MaxMax%Max%%Max <td< td=""><td>Suitable as output reactance coil</td><td></td><td>No</td></td<>	Suitable as output reactance coil		No
Rated operating frequencyHz50-60Max. rated operation voltage UeV50Rated current ACA39-3.9Max. rated current (Ith) at rated voltage DCA39Rated inductanceMH51Degree of protection (IP)Image: Comparison of the sector of t	Number of poles, primary side		3
Max. rated operation voltage UeV550Rated current ACA39 - 3.9Max. rated current (lth) at rated voltage DCA3.9Rated inductanceMH7.51Degree of protection (IP)A920Relative short circuit voltage%4Resonance frequencyHz0	Rated clock frequency	kHz	0
Rated current AC A 3-9-3.9 Max. rated current (lth) at rated voltage DC A 3.9 Rated inductance MH 7.51 Degree of protection (IP) MH 1.90 Relative short circuit voltage MA 4 Resonance frequency MH 1.90	Rated operating frequency	Hz	50 - 60
Max. rated current (lth) at rated voltage DC A 3.9 Rated inductance MH 7.51 Degree of protection (IP) IP0 Relative short circuit voltage % 4 Resonance frequency IR2 0	Max. rated operation voltage Ue	V	550
Rated inductance mH 7.51 Degree of protection (IP) P20 Relative short circuit voltage % 4 Resonance frequency Hz 0	Rated current AC	А	3.9 - 3.9
Degree of protection (IP)IP20Relative short circuit voltage%Resonance frequencyHz	Max. rated current (Ith) at rated voltage DC	А	3.9
Relative short circuit voltage % 4 Resonance frequency Hz 0	Rated inductance	mH	7.51
Resonance frequency Hz 0	Degree of protection (IP)		IP20
	Relative short circuit voltage	%	4
Degree of protection (NEMA) Other	Resonance frequency	Hz	0
	Degree of protection (NEMA)		Other