DATASHEET - DX-LN3-450

Main choke, three-phase, 550 V + 0% (50/60 Hz), V AC, 450 A, 0.04 mH

Part no. **DX-LN3-450**
169145

General specifications	
Product name	Eaton DX Mains choke
Part no.	DX-LN3-450
EAN	4015081656233
Product Length/Depth	400 millimetre
Product height	500 millimetre
Product width	600 millimetre
Product weight	33.8 kilogram
Certifications	Certified by UL for use in Canada IEC/EN61800-3 CSA UL 508C VDE 0570 Part 2-20/2001-04 CSA-C22.2 No. 14 UL UL report applies to both US and Canada UL File No.: E167225 CE IEC/EN 61558-2-20-2000 IEC/EN61800-5 UL Category Control No.: XPTQ2, XPTQ8
Product Tradename	DX
Product Type	Accessory
Product Sub Type	Mains choke
Features & Functions	
Fitted with:	PE stud Connection lugs
Number of phases	3
Number of poles	Three-pole
General information	
Bore diameter	14 mm
Degree of protection	NEMA Other IP00
Duty factor	100 %
Insulation class	B
Product Category	Accessories
Suitable as	Net reactance coil
Suitable for	Branch circuits, (UL/CSA)
Switching frequency	3 kHz
Used with	DA1
Ambient conditions, mechanical	
Mounting position	Free surrounding areas > 50 mm Suspended horizontally Standing vertically
Shock resistance	Shock duration: 11 ms 3 shocks
Vibration resistance	10 - 55 Hz, 0.35 mm 0 - 150 Hz, 1 g
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		
Tightening torque		15.5 Nm, Screw terminals
Connection		
Connection lug		Cu 40 x 10 mm^2
Electrical rating		
Permissible connection voltage		Max. 550 V AC (50/60 Hz)
Rated current (Ith) at rated voltage DC - max		0 A
Rated frequency - min		50 Hz
Rated frequency - max		60 Hz
Rated inductance		0.04 mH
Rated operational current (Ie) - min		450 A
Rated operational current (Ie) - max		450 A
Rated operational voltage (Ue) - max		550 V
Relative short-circuit voltage		0 %
Voltage rating - max		480 V
Voltage sag Uk		2.5 %
Design verification		
Heat dissipation capacity Pdiss		0 W
Rated operational current for specified heat dissipation (In)		450 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 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	3
Rated operating frequency	Hz	50 - 60

Max. rated operation voltage Ue		V	550
Rated current AC		A	450 - 450
Max. rated current (Ith) at rated voltage DC		A	0
Rated inductance		mH	0.04
Degree of protection (IP)			IP00
Relative short circuit voltage		%	0
Resonance frequency		Hz	0
Degree of protection (NEMA)			Other

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