GETRIEBEBAU NORD
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SK DCL-950/380-C

Part number: 276 997 380

Link circuit choke

NOTICE

Validity of this document

This document is only valid in combination with the operating instructions of the relevant frequency inverter and under strict compliance with the safety and warning instructions which they contain. All of the information that is relevant for a safe start-up of this module and the frequency inverter is only available under these conditions.

Scope of delivery

1 x	Module	SK DCL-950/380-C
1 x	Enclosed package for creating protection against contact (not IP20)	Shrink tube d = 25.4 mm, L approx: 300 mm
2 x	Ring cable lug (for connection to FI)	150 mm², M8
2 x	Ring cable lug (for connection to choke)	150 mm², M10
2 x	Ring cable lug (for connection to PE)	120 mm², M8



Usage area

Link circuit choke to improve mains quality. Due to its principle of operation, distortions of the mains voltage caused by the frequency inverter are considerably reduced by the use of a link circuit choke. The harmonic component of the current is reduced to approx. 40% and the power factor (lambda) is increased. The module is installed in the immediate vicinity of the frequency inverter.

Frequency inverter assignment

Permissible frequency inverters (FI)	FI size	FI power
SK 5xxE-163-340-A	11	160 kW

Technical data

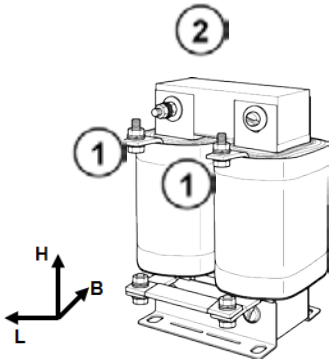
General

Temperature range	-10 … 50°C
Protection class	IP00
Weight	26.1 kg

Temperature class	F (VDE) / Class 155 (UL)
Fastening	4 x M8
Certifications	EN 61558, CE UL (cRU$_{US}$) E219022

Dimensions

Housing dimensions	L x W x H [mm]	180 x 189 x 282
Fastening	L x W [mm]	124 x 134



Connections

No.	Designation	Connection*	Type	Torque
1	Intermediate circuit	-DC, CP	M10	20.0 Nm
2	Earth lead	PE	M8	12.0 Nm

* Connection cross-section 150 mm² at laying of individual wires in the cabinet. In other routing the cross section for 455 A is to be chosen.

Electrical data

Number of phases		1
Rated voltage	V =	950
Rated current	A =	380
Ripple current (at 300 Hz)	A ~	75 A

Inductance	mH	0.2 ± 10%
Resistance of windings	mΩ	0.86
Power dissipation	W	240

Installation

DANGER! **Electric shock**

Do not work on live components (observe the 5 safety rules!)

Failure to comply with this will result in serious or fatal injuries in case of contact.

5 safety rules:

- Disconnect
- Secure against switching on
- Check for no voltage
- Earth and short circuit
- Cover or guard adjacent live components

CAUTION **Danger of burns**

When in operation, the surface temperature of the device may reach temperatures of approx. 105 °C. To avoid injury or damage to adjacent components, an adequate minimum distance must be maintained or appropriate protective devices must be provided.

Installation location	Inside a control cabinet near to the frequency inverter. Note the load bearing capacity of the mounting plate!
Installation orientation	Floor-standing or on the rear wall of the control cabinet.
Fastening	With screw fastenings

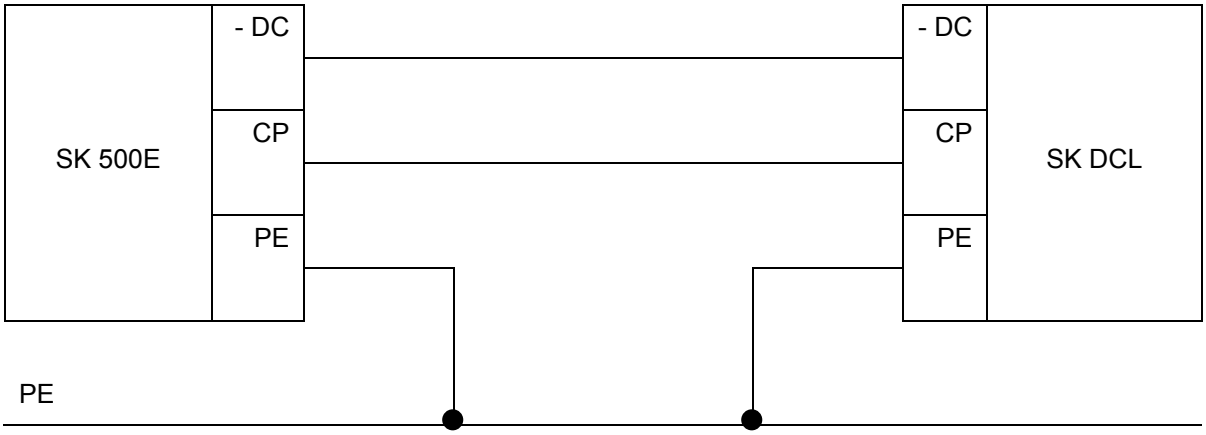
Note **Protection against contact**

Adequate protection against accidental contact must be ensured during installation. This protection can, for example, be by use of the enclosed shrink tube.

Installation steps

1.	Install the device near to the frequency inverter on a flat surface (rear wall / floor of the control cabinet) with 4 matching screws, using the fastening holes provided.
2.	Connect the link circuit of the frequency inverter (-DC, CP) to the -DC and CP terminals. **Note:** The connecting cables must be installed twisted together. 
3.	Earth the choke (connect the PE of the choke to the frequency inverter or the central earthing rail).

Schematic circuit diagram



Additional documentation and software (www.nord.com)

Document	Name
BU 0500	SK 500E - SK 535E frequency inverter manual

Document	Meaning
BU 0505	SK 54xE frequency inverter manual