

SK DCL-950/120-C

Link circuit choke

Part number: 276 997 120

# **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-950/120-C
1 x	Enclosed package for creating protection against contact (not IP20)	Shrink tube d = 19 mm, L approx: 300 mm
4 x	Ring cable lug (for connection to FI and choke)	50 mm², M8
2 x	Ring cable lug (for connection to PE)	35 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-452-340-A		SK 5xxE-552-340-A	8	45 kW / 55 kW

#### **Technical data**

Temperature range	-10 50°C
Protection class	IP00
Weight	13.2 kg

Temperature class	F (VDE) / Class 155 (UL)
Fastening	4 x M6
Certifications	EN 61558, CE
	UL (cRU <sub>US</sub> ) E219022

Technical Information / Datasheet	SK DC	L-950/12	20-C	
Link circuit choke	TI 276997120	V 1.5	4115	EN

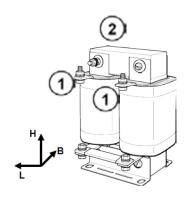


Housing dimensions	LxWxH[mm]	146 x 147 x 230
Fastening	L x W [mm]	100 x 95

#### Connections

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

<sup>\*</sup> Connection cross-section 50 mm<sup>2</sup>



#### Electrical data

Number of phases		1
Rated voltage	V =	950
Rated current	A =	120
Ripple current (at 300 Hz)	A ~	30 A

Inductance	mΗ	0.5 ± 10%
Resistance of windings	mΩ	4.46
Power dissipation	W	110

#### Installation



#### **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

# A

# **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 inerter. 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.

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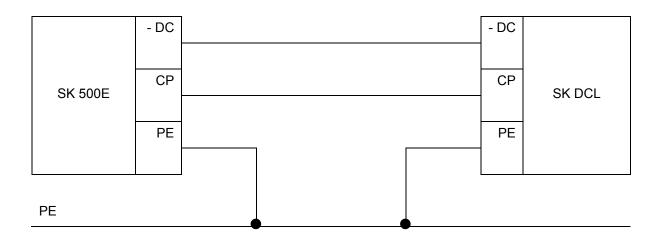
- 1. Install the device near to the frequency inverter on a flat surface (rear wall / floor of the control cabinet) with 4 matching screws, using the fastening holes provided.
- 2. Connect the link circuit of the frequency inverter (-DC, CP) to the -DC and CP terminals.

**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	I

Document	Meaning
BU 0505	SK 54xE frequency inverter manual

TI 276997120 - 4115



# SK DCL-950/200-C

Link circuit choke

Part number: 276 997 200

# **NOTICE**

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# Scope of delivery

1 x	Module	SK DCL-950/200-C
1 x	Enclosed package for creating protection against contact (not IP20)	Shrink tube d = 19 mm, L approx: 300 mm
4 x	Ring cable lug (for connection to FI and choke)	90 mm², M8
2 x	Ring cable lug (for connection to PE)	50 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-752-340-A		SK 5xxE-902-340-A	9	75 kW / 90 kW

#### **Technical data**

Temperature range	-10 50°C
Protection class	IP00
Weight	18.5 kg

Temperature class	F (VDE) / Class 155 (UL)
Fastening	4 x M8
Certifications	EN 61558, CE
	UL (cRU <sub>US</sub> ) E219022

Technical Information / Datasheet SK DCL-950/20		00-C		
Link circuit choke	TI 276997200	V 1.5	4115	EN

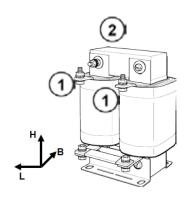


Housing dimensions	LxWxH[mm]	170 x 153 x 260
Fastening	L x W [mm]	112 x 90

#### Connections

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

<sup>\*</sup> Connection cross-section 75 mm²



#### Electrical data

Number of phases		1
Rated voltage	V =	950
Rated current	A =	200
Ripple current (at 300 Hz)	A ~	50 A

Inductance	mΗ	0.3 ± 10%
Resistance of windings	mΩ	2.14
Power dissipation	W	180

#### Installation



#### **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

# A

# **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 inerter. 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

# 1 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.

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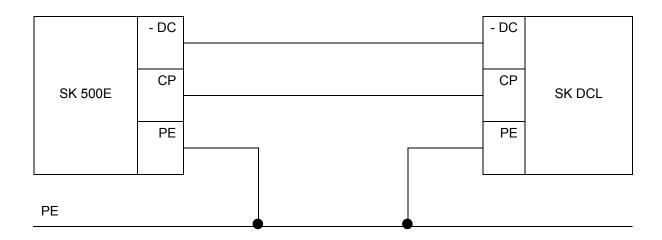
- 1. Install the device near to the frequency inverter on a flat surface (rear wall / floor of the control cabinet) with 4 matching screws, using the fastening holes provided.
- 2. Connect the link circuit of the frequency inverter (-DC, CP) to the -DC and CP terminals.

**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)

Docume	ent	Name
BU 050	00	SK 500E - SK 535E frequency inverter manual

Document	Meaning
BU 0505	SK 54xE frequency inverter manual

TI 276997200 - 4115



# SK DCL-950/260-C

Link circuit choke

Part number: 276 997 260

# **NOTICE**

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# Scope of delivery

1 x	Module	SK DCL-950/260-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)	120 mm², M8
2 x	Ring cable lug (for connection to choke)	120 mm², M10
2 x	Ring cable lug (for connection to PE)	90 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-113-340-A	10	110 kW

# **Technical data**

Temperature range	-10 50°C
Protection class	IP00
Weight	22.3 kg

Temperature class	F (VDE) / Class 155 (UL)
Fastening	4 x M8
Certifications	EN 61558, CE
	UL (cRU <sub>US</sub> ) E219022

Technical Information / Datasheet	SK DCL-950/260-C			
Link circuit choke	TI 276997260	V 1.2	4115	EN

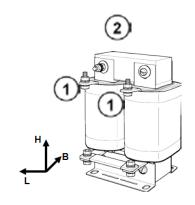


Housing dimensions	LxWxH[mm]	180 x 174 x 284
Fastening	L x W [mm]	124 x 119

#### Connections

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

<sup>\*</sup> Connection cross-section 150 mm² at laying of individual wires in the cabinet. In other routing the cross section for 310 A is to be chosen.



#### Electrical data

Number of phases		1
Rated voltage	V =	950
Rated current	A =	260
Ripple current (at 300 Hz)	A ~	50 A

Inductance	mΗ	0.25 ± 10%
Resistance of windings	mΩ	1.495
Power dissipation	W	203

#### 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

# A

# 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 inerter. 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

# 1 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.

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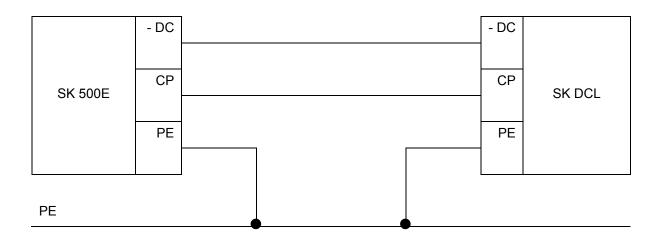
- 1. Install the device near to the frequency inverter on a flat surface (rear wall / floor of the control cabinet) with 4 matching screws, using the fastening holes provided.
- 2. Connect the link circuit of the frequency inverter (-DC, CP) to the -DC and CP terminals.

**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

TI 276997260 - 4115



SK DCL-950/320-C

Link circuit choke

Part number: 276 997 320

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# Scope of delivery

1 x	Module	SK DCL-950/320-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)	120 mm², M8	
2 x	Ring cable lug (for connection to choke)	120 mm², M10	
2 x	Ring cable lug (for connection to PE)	90 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-133-340-A	10	132 kW

#### **Technical data**

Temperature range	-10 50°C
Protection class	IP00
Weight	26,3 kg

Temperature class	F (VDE) / Class 155 (UL)
Fastening	4 x M8
Certifications	EN 61558, CE
	UL (cRU <sub>US</sub> ) E219022

Technical Information / Datasheet SK DCL-950/320-0		20-C		
Link circuit choke	TI 276997320	V 1.2	4115	EN

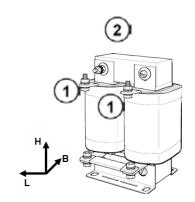


Housing dimensions	LxWxH[mm]	180 x 189 x 282
Fastening	L x W [mm]	124 x 134

#### Connections

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

<sup>\*</sup> Connection cross-section 150 mm² at laying of individual wires in the cabinet. In other routing the cross section for 380 A is to be chosen.



#### Electrical data

Number of phases		1
Rated voltage	V =	950
Rated current	A =	320
Ripple current (at 300 Hz)	A ~	60 A

Inductance	mΗ	0.2 ± 10%
Resistance of windings	mΩ	0.84
Power dissipation	W	204

#### 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

# A

# **CAUTION**

# Danger of burns

When in operation, the surface temperature of the device may reach temperatures of approx.  $105\,^{\circ}$ 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 inerter. 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

# 1 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.

2 / 3 TI 276997320 - 4115



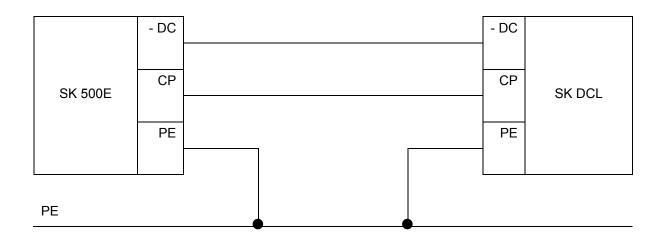
- 1. Install the device near to the frequency inverter on a flat surface (rear wall / floor of the control cabinet) with 4 matching screws, using the fastening holes provided.
- 2. Connect the link circuit of the frequency inverter (-DC, CP) to the -DC and CP terminals.

**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	Doc
BU 0500	SK 500E - SK 535E frequency inverter manual	BL

Document	Meaning
BU 0505	SK 54xE frequency inverter manual

TI 276997320 - 4115

# **GETRIEBEBAU NORD**





# SK DCL-950/380-C

Link circuit choke

# **NOTICE**

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# 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



Part number: 276 997 380

### 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**

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 <sub>US</sub> ) E219022

Technical Information / Datasheet	SK DC	L-950/38	30-C	
Link circuit choke	TI 276997380	V 1.2	4115	EN

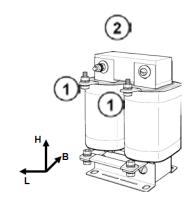


Housing dimensions	LxWxH[mm]	180 x 189 x 282
Fastening	L x W [mm]	124 x 134

#### Connections

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

<sup>\*</sup> 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	mΗ	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

# A

# 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 inerter. 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

# 1 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.

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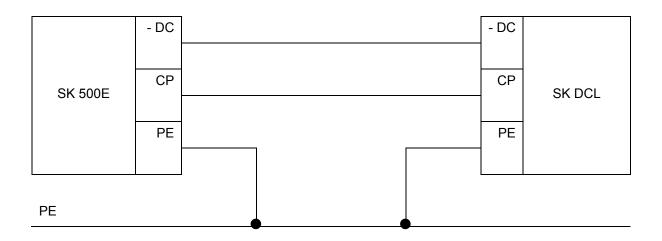
- 1. Install the device near to the frequency inverter on a flat surface (rear wall / floor of the control cabinet) with 4 matching screws, using the fastening holes provided.
- 2. Connect the link circuit of the frequency inverter (-DC, CP) to the -DC and CP terminals.

**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

TI 276997380 - 4115