GETRIEBEBAU NORD
Member of the NORD DRIVESYSTEMS Group

SK BRE4-1-FA 2XXE size 2

Part number: 275 273 092

Mounting kit for external brake resistor for direct mounting to decentralised frequency inverters

Only qualified electricians are allowed to install and commission the module. An electrician is a person who, because of their technical training and experience, has sufficient knowledge with regard to

- switching on, switching off, isolating, earthing and marking power circuits and devices,
- proper maintenance and use of protective devices in accordance with defined safety standards.

DANGER! — **Danger of electric shock**

The frequency inverter continues to carry hazardous voltages for up to 5 minutes after it was switched off.

- Work must not be carried out unless the device has been disconnected from the voltage and at least 5 minutes have elapsed since the mains was switched off!

CAUTION — **Danger of burns**

The module and all other metal components can heat up to temperatures above 70 °C.

Sufficient cooling time must be allowed for when working on the components in order to avoid injuries (local burns) to parts of the body coming into contact with the components.

In order to avoid damage to neighbouring objects, sufficient clearance must be maintained during installation.

NOTICE — **Validity of this document**

This document is only valid in combination with the operating instructions for the relevant frequency inverter. Safe commissioning of this module and the frequency inverter depends on the availability of this information.

Scope of supply

Module		
2 x	**Mounting bracket**	BRE-FA
4 x	**Fastening screw**	M4x6

Field of use

Dynamic braking (frequency lowering) of a three-phase motor via a frequency inverter results in generator braking energy that – depending on the application case – is dissipated by a braking resistor. This superfluous energy is transformed into heat.

The mounting kit is used for installing a brake resistor on the front side and is intended for the NORDAC *BASE* SK 180E and NORDAC *FLEX* SK 200E series of units.

Similar to illustration

Technical Data

General

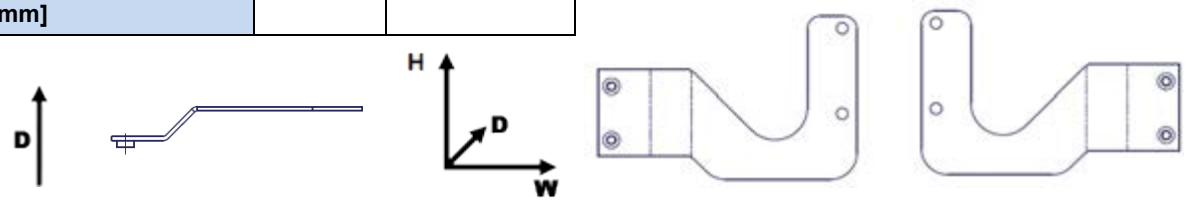
Tightening torque		
Screws	Nm	0.6 – 1.2
Weight	kg	0.088

Mounting [1]	
Mounting bracket	4 x M4 x 6 (size 7)

[1] included in the scope of supply

Dimensions

Envelope dimensions [mm]	W x H x D	92 x 57 x 11



Frequency inverter assignment

Information — **Overview in the manual**

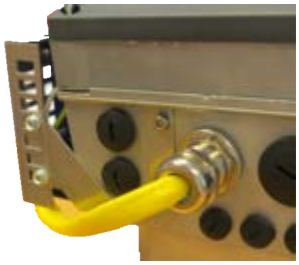
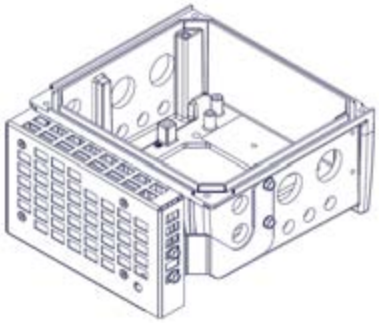
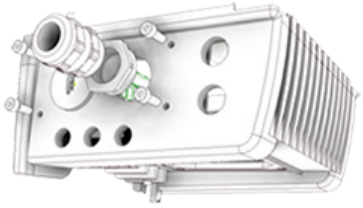
The braking resistors provided by the NORD DRIVESYSTEMS Group are directly tailored to the individual frequency inverters. However, when external braking resistors are being used, it is usually possible to select between 2 or 3 alternatives.

For detailed information, please refer to chapter 🕮 Electric data for brake resistors of the respective frequency inverter manual "Further documentation and software: www.nord.com".

Installation

Installation location	Direct installation on a decentralised, motor-mounted frequency inverter: • Front side of the frequency inverter
Installation orientation	Installation on the front side of the frequency inverter
Fastening	With screws (fastening material is included)

Installation steps

1.	Installing the frequency inverter The frequency inverter is not yet installed on the SK TI4 connection unit.	
2.	Installing the external brake resistor Replace the mounting bracket of the external **SK BRE4** brake resistor with the BSK BRE4-1-FA 2XXE size x. • Remove the standard bracket from the brake resistor • Mount the front mounting bracket on the side of the brake resistor with two of the 4 enclosed M4 mounting screws. The brake resistor is then attached to the sides of the frequency inverter (option slot 3R or 3L) with 2x M4 mounting screws, each attached to the SK BRE4 braking resistor. • Insert the M4 fixing screws to the left and to the right of the SK TI4 connection unit of the SK 2xxE	
3.	Route the connecting cable into the frequency inverter through one of the M25 openings. • **Caution:** Replace the clamping seal of the cable gland with the black sealing insert • Fit the M25/M20 cable gland reduction (preferably option slot 3R, alternatively 3L) • Insert the connecting cable through the M20 cable gland • Route the three leads of the cable through the black sealing insert • Then route the leads into the terminal box/housing of the frequency inverter • Screw an M20 cable gland into the M25/M20 reduction (option slot 3R, alternatively 3L) Make sure the gland is tight and tighten it to the specified torque (see 🕮 Technical Data – General).	 
4.	Connect the connecting cable to the respective terminal strip or the terminals of the frequency inverter. • Yellow lead ⇔ PE • White lead ⇔ B- • Grey lead ⇔ B+ Connect the PE lead to the PE lug of frequency inverter inside the terminal box or at the housing. Please heed the specified tightening torques; refer to 🕮 Technical Data – Connections.	

Further documentation and software: www.nord.com

Document	Name
BU 0180	SK 180E – SK 190E frequency inverter manual

Document	Name
BU 0200	SK 200E frequency inverter manual

Material No.	Name	Option / Component
275273105	SK BRE4-2-100-200	External 100 Ω brake resistor for direct mounting
275273108	SK BRE4-2-200-200	External 200 Ω brake resistor for direct mounting