

# **Bottom brake resistor**

# **Commissioning Instructions**

**Technical data** 

Installation

V 5.6-E or later	
04/2012	en

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# **Notes on Safety**

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## 1 Notes on Safety

The devices may cause risks. For these reasons, comply with the following:

- · The safety notes listed in the following sections and points
- The technical rules and regulations.

In addition, always read the appropriate documentation. STÖBER ANTRIEBSTECHNIK GmbH + Co. KG accepts no liability for damages caused by non-adherence to the instructions or applicable regulations. Subject to technical changes to improve the devices without prior notice. This documentation is purely a product description. It does not represent promised properties in the sense of warranty law.

### **1.1** Component part of the product

The technical documentation is a component part of a product.

- Since the technical documentation contains important information, always keep it handy in the vicinity of the device until the machine is disposed of.
- If the product is sold, disposed of, or rented out, always include the technical documentation with the product.

### **1.2** Operation in accordance with its intended use

The BR 5000 chassis brake resistors are only suitable for use on the POSIDRIVE® MDS 5000, POSIDRIVE® FDS 5000 and POSIDYN® SDS 5000 inverters.

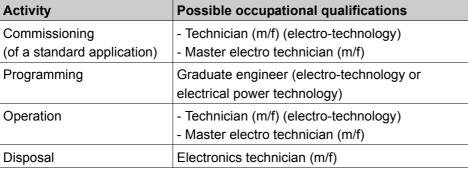
Unintended use includes use on other devices.

### 1.3 Qualified personnel

Since the devices may harbor residual risks, all configuration, transportation, installation and commissioning tasks including operation and disposal may only be performed by trained personnel who are aware of the possible risks.

Personnel must have the qualifications required for the job. The following table lists examples of occupational qualifications for the jobs:

Activity	Possible occupational qualifications
Transportation and storage	Worker skilled in storage logistics or comparable training
Configuration	<ul> <li>Graduate engineer (electro-technology or electrical power technology)</li> <li>Technician (m/f) (electro-technology)</li> </ul>
Installation and connection	Electronics technician (m/f)



Tab. 1-1: examples of occupational qualifications

In addition, the valid regulations, the legal requirements, the reference books, this technical documentation and, in particular, the safety information contained therein must be carefully

- read
- understood and
- complied with

### 1.4 Installation and connection

Installation and connection work are only permitted after the device has been isolated from the power! The accessory installation instructions allow the following actions during the installation of accessories:

- · The housing in the upper slot can be opened
- The housing in the bottom slot can be opened.

Opening the housing in another place or for other purposes is not permitted.

The accessory installation instructions allow the following actions during the installation of accessories:

The housing in the upper slot can be opened.

Opening the housing in another place or for other purposes is not permitted.

Use only copper lines. For the line cross sections to be used, refer to DIN VDE 0298-4 or DIN EN 60204-1 Appendix D and Appendix G.

Protect the device from falling parts (pieces of wire, leads, metal parts, and so on) during installation or other tasks in the switching cabinet. Parts with conductive properties inside the inverter can cause short circuits or device failure.

The motor must have an integrated temperature monitor with basic isolation in acc. with EN 61800-5-1 or external motor overload protection must be used.

The permissible protection class is protective ground. Operation is not permitted unless the protective conductor is connected in accordance with the regulations.

Comply with the applicable instructions for installation and commissioning of motor and brakes.

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### 1.5 Commissioning, operation and service

Remove additional coverings before commissioning so that the device cannot overheat. During installation, provide the free spaces specified in the projecting manuals to prevent the inverter from overheating. The housing of the drive controller must be closed before you turn on the supply voltage. When the supply voltage is on, dangerous voltages can be present on the connection terminals and the cables and motor terminals connected to them. Remember that the device is not necessarily de-energized after all indicators have gone off.

When network voltage is applied, the following are prohibited:

- Opening the housing
- · Connecting or disconnecting the connection terminals
- Installing accessories

Before carrying out any work on the machine, observe all the following five safety regulations in the abovementioned sequence:

- 1. Enable. Ensure that you also activate the auxiliary circuits.
- 2. Secure against switching on.
- 3. Ensure that the parts are de-energized.
- 4. Earth and short-circuit.
- 5. Cover or isolate any live neighboring parts.



#### Information

Please note that the discharge time for the intermediate circuit capacitors is 5 min. You can only ensure that the parts are de-energized after this time.

You can then start your work on the drive controller. Repairs may only be performed by STÖBER ANTRIEBSTECHNIK GmbH + Co. KG. Send defective devices together with a fault description to: STÖBER ANTRIEBSTECHNIK GmbH + Co. KG Department VS-EL Kieselbronner Str.12 75177 Pforzheim GERMANY

### 1.6 Disposal

Please comply with the latest national and regional regulations! Dispose of the individual parts separately depending on their nature and currently valid regulations such as, for example:

- Electronic scrap (PCBs)
- Plastic
- Sheet metal
- Copper
- Aluminum

## **Notes on Safety**

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### 1.7 Presentation of notes on safety

#### NOTICE

#### Notice

1

means that property damage may occur

▶ if the stated precautionary measures are not taken.

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#### Caution

with warning triangle means that minor injury may occur

▶ if the stated precautionary measures are not taken.

#### 🔨 WARNING!

#### Warning

means that there may be a serious danger of death

▶ if the stated precautionary measures are not taken.

#### **DANGER!**

#### Danger

means that serious danger of death exists

if the stated precautionary measures are not taken.



#### Information

indicates important information about the product or a highlighted portion of the documentation which requires special attention.

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# 2 Technical data

See installation on inverter (chapter 4)!

Туре	RB 5022 100 W 22 Ω	RB 5047 60 W 47 Ω	RB 5100 60 W 100 Ω	RB 5200 40 W 200 Ω
Height x width x depth [mm]	300 x 94 x 18	300 x 62 x 18		
Drilling template corresponds to size:	Size 2	Size 1	Size 0 and 1	Size 0
Thermal time constant T [s]		8		6
Weight [g]	approx. 640	40 approx. 460 approx. 440		x. 440
Length of cable [mm]	250			
Maximum torque for studs [Nm]	5			
Protection Rating		IP 40		

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# 3 Assignment

### 3.1 MDS 5xxx

Туре	RB 5022 100 W 22 Ω	RB 5047 60 W 47 Ω	RB 5100 60 W 100 Ω	RB 5200 40 W 200 Ω
ID no.	45618	44966	44965	44964
MDS 5007	—		Х	Х
MDS 5008				х
MDS 5015				Х
MDS 5040			Х	—
MDS 5075		Х		
MDS 5110	Х			
MDS 5150	Х			

### 3.2 MDS 5xxxA

Туре	RB 5022 100 W 22 Ω	RB 5047 60 W 47 Ω	RB 5100 60 W 100 Ω
ID no.	45618	44966	44965
MDS 5007A	—	_	X
MDS 5008A		_	Х
MDS 5015A		_	Х
MDS 5040A		Х	Х
MDS 5075A		Х	_
MDS 5110A	Х	_	—
MDS 5150A	Х	_	—

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### 3.3 FDS 5xxx

Туре	RB 5047 60 W 47 Ω	RB 5100 60 W 100 Ω	RB 5200 40 W 200 Ω
ID no.	44966	44965	44964
FDS 5007		Х	Х
FDS 5004		_	Х
FDS 5008		_	Х
FDS 5015			Х
FDS 5022		Х	—
FDS 5040		Х	_
FDS 5055	Х	Х	—
FDS 5075	Х	_	—

### 3.4 FDS 5xxxA

Туре	RB 5047 60 W 47 Ω	RB 5100 60 W 100 Ω	RB 5200 40 W 200 Ω
ID no.	44966	44965	44964
FDS 5007A	_	X	Х
FDS 5004A	—	Х	X
FDS 5008A	_	Х	Х
FDS 5015A		Х	Х
FDS 5022A	—	Х	_
FDS 5040A	Х	Х	_
FDS 5055A	Х	Х	_
FDS 5075A	Х	_	—

# Assignment

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### 3.5 SDS 5xxx

Туре	RB 5022 100 W 22 Ω	RB 5047 60 W 47 Ω	RB 5100 60 W 100 Ω
ID no.	45618	44966	44965
SDS 5008			Х
SDS 5015			Х
SDS 5040	_	_	Х
SDS 5075		Х	—
SDS 5110	Х		—
SDS 5150	Х		—

### 3.6 SDS 5xxxA

Туре	RB 5022 100 W 22 Ω	RB 5047 60 W 47 Ω	RB 5100 60 W 100 Ω
ID no.	45618	44966	44965
SDS 5008A			Х
SDS 5015A			Х
SDS 5040A		Х	Х
SDS 5075A		Х	_
SDS 5110A	Х		_
SDS 5150A	Х		

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# 4 Installation

WARNING!

#### Danger of injury/death and property damage due to electric shock!

Before installing accessories, turn off all voltage supplies! Then wait 5 minutes for the DC link capacitors to discharge. Never begin with accessory installation until after this!

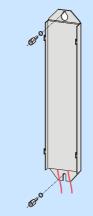
Prerequisites:

• You have bored the holes for threaded bolts (as per chapter 2 Technical data) in the switching cabinet where the inverter is to be installed. The threaded bolts are included with the bottom brake resistor. You will need the following for installation:

- The threaded bolts included with the bottom brake resistor
- The screws and washers included with the bottom brake resistor
- A Phillips screwdriver

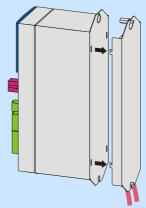
#### Installation of the bottom brake resistor

1 Secure the bottom brake resistor to the mounting panel of the switching cabinet with the threaded bolts:

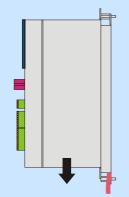




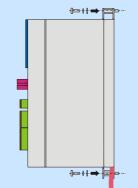
2 Place the inverter on the guide rails:



3 Press the inverter downwards on the guide rails:



4 Secure the inverter to the threaded bolts with the screws and washers:



 $\Rightarrow$  You have now installed the bottom brake resistor.

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#### Address registers

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- Service Network Germany
- Service Network International
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Technische Änderungen vorbehalten Errors and changes excepted ID 441806.03 04/2012

