# 8BVR0440H000.100-1

## 1 General information

- · Connection for temperature sensor
- · Optimally suited for ACOPOSmulti 8BVP power supply modules

## 2 Order data

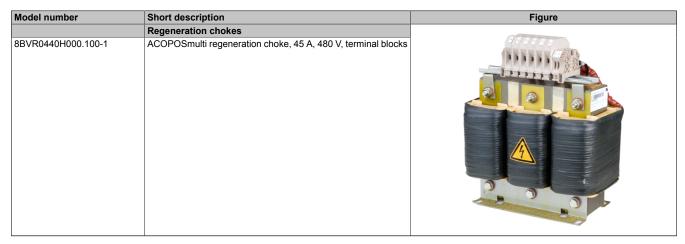


Table 1: 8BVR0440H000.100-1 - Order data

## 3 Technical data

| Model number  | 8BVR0440H000.100-1                             |
|---|--|
| General information   |  |
| Cooling and mounting type   | Wall mounting                                  |
| Certifications  |  |
| CE  | Yes  |
| UL  | cULus E225616                                  |
|   | Power conversion equipment                     |
| KC  | Yes  |
| Mains connection  |  |
| Mains input voltage   | 3x 220 to 3x 480 VAC ±10%                      |
| Frequency   | 50 / 60 Hz ±4%                                 |
| Allocation to power supply module                                   | 8BVP0440HC00.000-1                             |
|   | 8BVP0440HW00.000-1                             |
| Continuous current 1)   | 45 A <sub>eff</sub>                            |
| Peak current <10 s  | 90 A <sub>eff</sub>                            |
| Reduction of continuous current depending on ambient temperature    |  |
| Face-up mounting orientation  |  |
| Vertical mounting orientation                                       | 0.4 A <sub>eff</sub> per °C (starting at 40°C) |
| Reduction of continuous current depending on installation elevation |  |
| Starting at 1000 m above sea level                                  | 3.6 A <sub>eff</sub> per 1,000 m               |
| Power dissipation at nominal current                                | 330 W  |
| Variant   |  |
| U1, V1, W1  | Terminals                                      |
| U2, V2, W2  | Terminals                                      |
| Shield connection 2)  |  |
| On mains  | No   |
| On device   | No   |

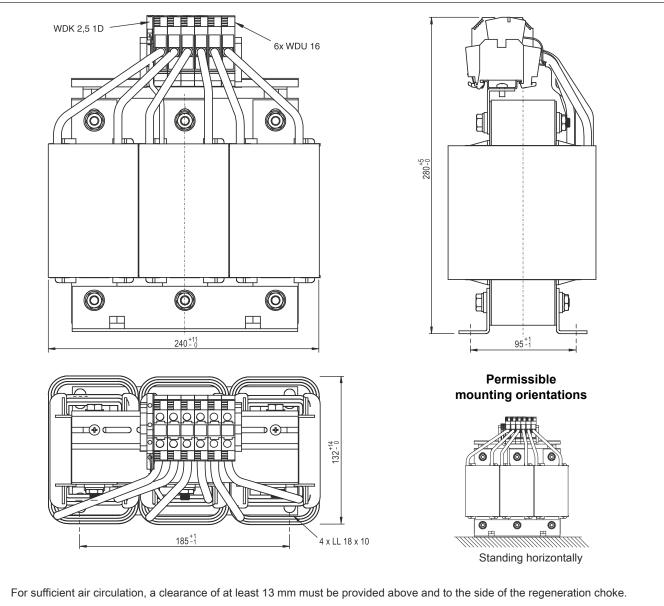
Table 2: 8BVR0440H000.100-1 - Technical data

| Model number                           | 8BVR0440H000.100-1            |
|--|-------------------------------|
| Terminal connection cross section      |                               |
| Solid core / Multiple-conductor lines  | 1.5 to 25 mm <sup>2</sup>     |
| Flexible and fine-stranded wires       |                               |
| With wire end sleeves                  | 1.5 to 16 mm <sup>2</sup>     |
| Approbation data                       |                               |
| UL/C-UL-US                             | 18 to 4 AWG                   |
| CSA                                    | 18 to 4 AWG                   |
| Inductance                             | 1 mH                          |
| Temperature sensor connection          |                               |
| Variant                                |                               |
| T+, T-                                 | Terminals                     |
| Terminal connection cross section      |                               |
| Flexible and fine-stranded wires       |                               |
| With wire end sleeves                  | 0.5 to 2.5 mm <sup>2</sup>    |
| Approbation data                       | 3.5 to 2.5 min                |
| UL/C-UL-US                             | 30 to 12 AWG                  |
| CSA                                    | 26 to 12 AWG                  |
| Operating conditions                   | 2010 1271110                  |
| Permissible mounting orientations      |                               |
| Hanging vertically                     | No                            |
| Horizontal, face up                    | No No                         |
| Standing horizontally                  | Yes                           |
| Installation elevation above sea level | 160                           |
| Nominal                                | 0 to 500 m                    |
| Maximum <sup>3)</sup>                  | 4000 m                        |
| Pollution degree per EN 61800-5-1      | 2 (non-conductive pollution)  |
| Overvoltage category per EN 61800-5-1  | 2 (non-conductive politation) |
| Degree of protection per EN 60529      | IP20                          |
| Ambient conditions                     | IF 20                         |
| Temperature                            |                               |
| Operation                              |                               |
| Nominal                                | 5 to 40°C                     |
| Maximum 4)                             | 55°C                          |
| Storage                                | -25 to 55°C                   |
| Transport                              | -25 to 70°C                   |
| Relative humidity                      | -20 10 10 0                   |
| Operation                              | 5 to 85%                      |
| Storage                                | 5 to 95%                      |
| Transport                              | Max. 95% at 40°C              |
| Mechanical properties                  | IVIAX. 35 /0 at 40 G          |
| Dimensions                             |                               |
| Width                                  | 251 mm                        |
| Height                                 | 285 mm                        |
| Depth                                  | 146 mm                        |
| Weight                                 | 24.1 kg                       |
| Weight                                 | 24.1 kg                       |

Table 2: 8BVR0440H000.100-1 - Technical data

- Valid under the following conditions: Mounting orientation "Standing horizontally", 40°C ambient temperature, installation elevation <500 m above sea level. Cables do not have to be shielded up to a total wiring length of 3 m between the line filter, regeneration choke and power supply module. Consult B&R 2) when using cable lengths >3 m.
- 3) Continuous operation at an installation elevation of 500 m to 4,000 m above sea level is possible taking the specified reduction of continuous current into account. Requirements that go beyond this must be arranged with B&R.
- Continuous operation at an ambient temperature of 40°C to max. 55°C is possible taking the specified reduction of continuous torque into account, but this 4) results in premature aging.

## 4 Dimension diagram and installation dimensions



## Warning!

When installing ACOPOSmulti regeneration chokes make sure that the windings and connection wires are strongly insulated from the neighboring electrically conductive components (e.g. control cabinet wall).

Figure 1: Dimension diagram and installation dimensions

If this reinforced insulation is implemented solely through the use of an air gap, a minimum distance to adjacent conductive parts of 8 mm (or 12.7 mm per cULus) is required.

#### Caution!

Depending on the mounting orientation, the warning labels on the regeneration choke may not be clearly visible. Therefore, two additional warning labels are included in the delivery for the user to place in a clearly visible location on the regeneration choke. These warning labels are attached to the regeneration choke by a cable tie and must be removed before initial startup because the backing film for the warning label is not sufficiently heat-resistant!

## 5 Wiring

## 5.1 8BVR0440H000.100-1 - Pinout overview

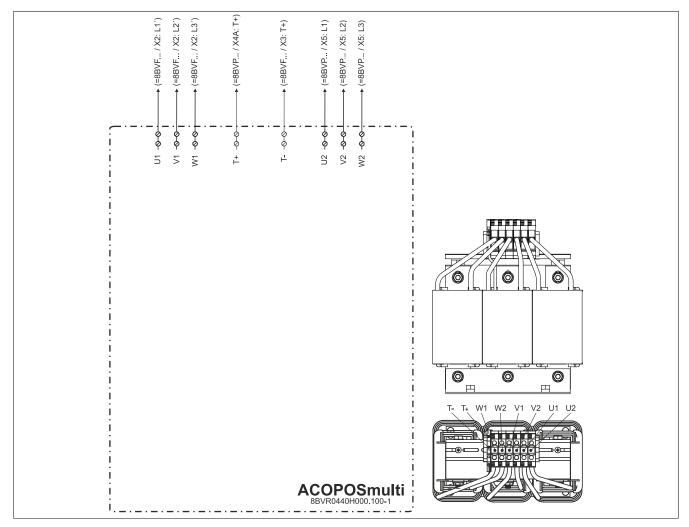


Figure 2: 8BVR0440H000.100-1 - Pinout overview

#### 5.2 Input/Output circuit diagram

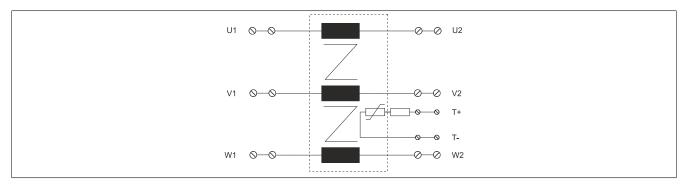


Figure 3: 8BVR0440H000.100-x - Input/Output circuit diagram

#### Information:

ACOPOSmulti 8BVR regeneration chokes do not contain a protective ground connection because all exposed electrically conductive parts are isolated from the active parts using reinforced insulation.

## Warning!

When installing ACOPOSmulti regeneration chokes make sure that the windings and connection wires are strongly insulated from the neighboring electrically conductive components (e.g. control cabinet wall).

If this reinforced insulation is implemented solely through the use of an air gap, a minimum distance to adjacent conductive parts of 8 mm (or 12.7 mm per cULus) is required.