

# 8BVR1650H000.100-1

## 1 General information

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

## 2 Order data

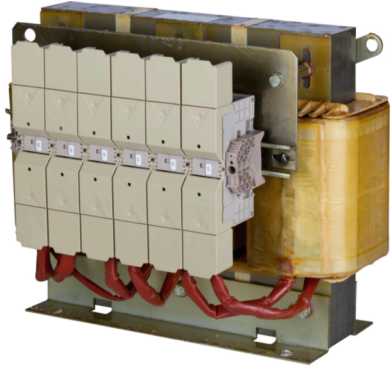
Model number	Short description	Figure
	<b>Regeneration chokes</b>	
8BVR1650H000.100-1	ACOPOSmulti regeneration choke, 180 A, 480 V, connection via M10 threaded bolt	

Table 1: 8BVR1650H000.100-1 - Order data

## 3 Technical data

Model number	8BVR1650H000.100-1
<b>General information</b>	
Cooling and mounting type	Wall mounting
Certifications	
CE	Yes
UL	cULus E225616
	Power conversion equipment
KC	Yes
<b>Mains connection</b>	
Mains input voltage	3x 220 to 3x 480 VAC $\pm 10\%$
Frequency	50 / 60 Hz $\pm 4\%$
Allocation to power supply module	8BVP1650HC00.00x-1 8BVP1650HW00.00x-1
Continuous current <sup>1)</sup>	180 A <sub>eff</sub>
Peak current <10 s	360 A <sub>eff</sub>
Reduction of continuous current depending on ambient temperature	
Vertical mounting orientation	In preparation
Reduction of continuous current depending on installation elevation	
Starting at 1000 m above sea level	14.4 A <sub>eff</sub> per 1,000 m
Power dissipation at nominal current	750 W
Variant	
U1, V1, W1	M10 threaded bolt
U2, V2, W2	M10 threaded bolt
Shield connection <sup>2)</sup>	
On mains	No
On device	No
Terminal connection cross section	
Flexible and fine-stranded wires	
With wire end sleeves	6 to 120 mm <sup>2</sup> <sup>3)</sup>
Approbation data	
UL/C-UL-US	10 AWG to 250 kcmil
CSA	10 AWG to 250 kcmil
Inductance	0.5 mH

Table 2: 8BVR1650H000.100-1 - Technical data

Model number	8BVR1650H000.100-1
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>
Approval data	
UL/C-UL-US	30 to 12 AWG
CSA	26 to 12 AWG
Operating conditions	
Permissible mounting orientations	
Hanging vertically	No
Horizontal, face up	No
Standing horizontally	Yes
Installation elevation above sea level	
Nominal	0 to 500 m
Maximum <sup>4)</sup>	4000 m
Pollution degree per EN 61800-5-1	2 (non-conductive pollution)
Overvoltage category per EN 61800-5-1	III
Degree of protection per EN 60529	IP10
Ambient conditions	
Temperature	
Operation	
Nominal	5 to 40°C
Maximum <sup>5)</sup>	55°C
Storage	-25 to 55°C
Transport	-25 to 70°C
Relative humidity	
Operation	5 to 85%
Storage	5 to 95%
Transport	Max. 95% at 40°C
Mechanical properties	
Dimensions	
Width	475 mm
Height	360 mm
Depth	330 mm
Weight	Approx. 79 kg

Table 2: 8BVR1650H000.100-1 - Technical data

- 1) Valid under the following conditions: Mounting orientation "Standing horizontally", 40°C ambient temperature, installation elevation <500 m above sea level.
- 2) 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 when using cable lengths >3 m.
- 3) The connection is made with cable lugs.
- 4) 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.
- 5) 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 results in premature aging.

## 4 Dimension diagrams and installation dimensions

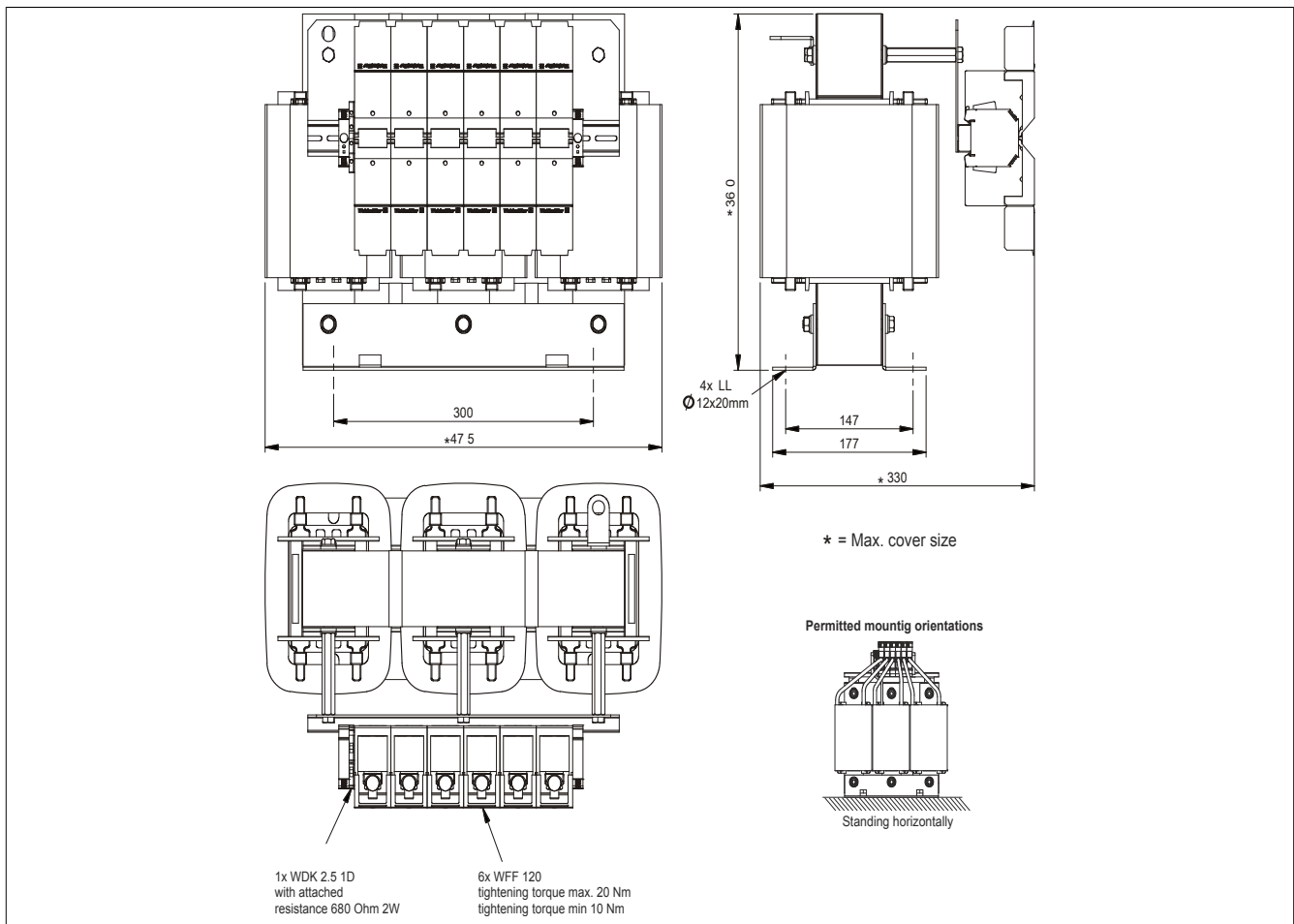


Figure 1: 8BVR1650H000.100-1 - Dimension diagram and installation dimensions

### 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).

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 8BVR1650H000.100-1 - Pinout overview

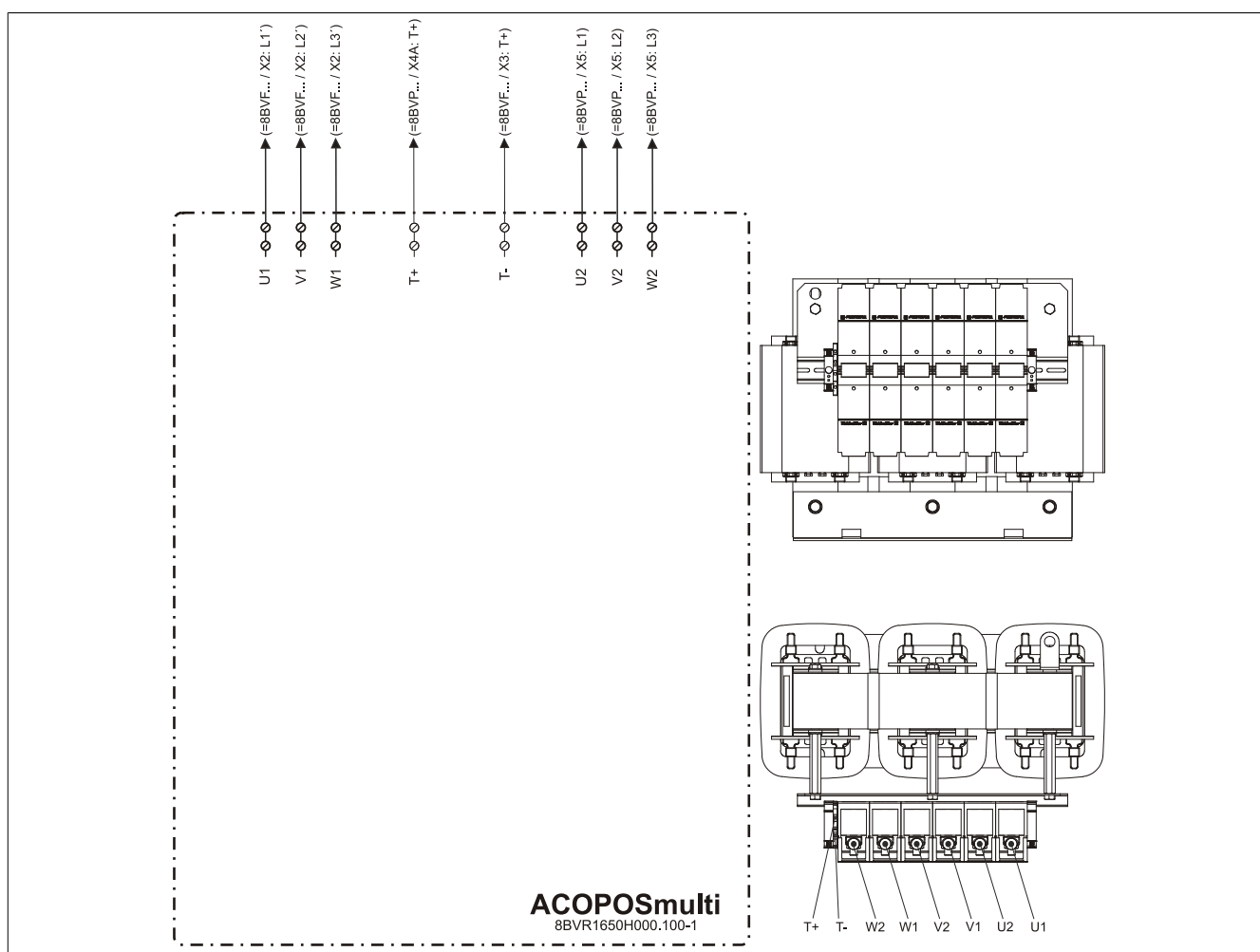


Figure 2: 8BVR1650H000.100-1 - Pinout overview

## 5.2 Input/Output circuit diagram

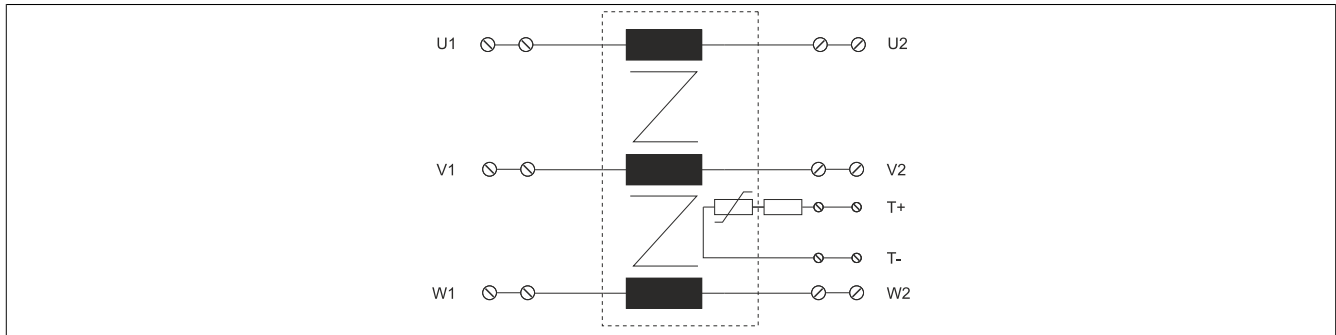


Figure 3: 8BVR1650H000.100-1 - Input/Output circuit diagram

### 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.