## 8B0W0045H000.001-1

#### 1 General information

8B0W external braking resistors can be used to dissipate braking energy with B&R drive systems.

- · Compact design
- · High peak load capacity
- · Intrinsically safe
- IP65 protection
- · Optimally suited for B&R drive systems

#### 2 Order data

Order number	Short description	Figure
	Braking resistors	
8B0W0045H000.001-1	Braking resistor, 450 W, 50 R, IP65, terminals	

Table 1: 8B0W0045H000.001-1 - Order data

#### 3 Technical data

Order number	8B0W0045H000.001-1
General information	
RoHS-compliant	Yes
Cooling and mounting type	Wall mounting
Certifications	
CE	Yes
UKCA	Yes
KC	Yes
Braking resistor	
Continuous power depending on mounting orientation	
Standing horizontally	388 W
Hanging vertically	424 W
Reduction of continuous power depending on ambient temperature	7.5 W/K (starting at 40°C)
Ohmic resistance	50 Ω ±10%
Max. operating voltage	850 VDC
Insulation voltage type test	4,000 VAC
Intrinsically safe	Yes (for operating voltages ≥500 VDC)
Variant	
RB1, RB2	Terminals with tension spring technology
PE	M4 threaded bolt
Shield connection	Yes, on the connection box via high-strength cable gland
Terminal connection cross section	
Flexible and fine-stranded wires	
With wire end sleeves	1.5 to 10 mm <sup>2</sup>
Approbation data	
UL/C-UL-US	24 to 6 AWG
CSA	22 to 6 AWG
Terminal cable outer cross section dimension of attachment cable	9 to 16.6 mm

Table 2: 8B0W0045H000.001-1 - Technical data

#### 8B0W0045H000.001-1

Order number	8B0W0045H000.001-1	
Temperature model data		
Thermal resistance between braking resistor and		
environment depending on mounting orientation		
Standing horizontally	1.657 K/W	
Hanging vertically	1.517 K/W	
Thermal capacity	30.88 Ws/K	
Max. permissible overtemperature	683°C	
Operating conditions		
Permissible mounting orientations		
Standing horizontally	Yes	
Hanging vertically		
Connection box, bottom	Yes	
Connection box, top	No	
Degree of protection per EN 60529		
Standing horizontally	IP65	
Hanging vertically		
Connection box, bottom	IP65	
Connection box, top	•	
Ambient conditions		
Temperature		
Operation	-40 to 90°C	
Relative humidity		
Operation	5 to 95%	
Mechanical properties		
Dimensions		
Width	124 mm	
Height	118 mm	
Depth	355 mm	
Weight	2.4 kg	

Table 2: 8B0W0045H000.001-1 - Technical data

# 4 8B0W00xxH000.001-1 Rev. C0 - Dimension diagram and installation dimensions

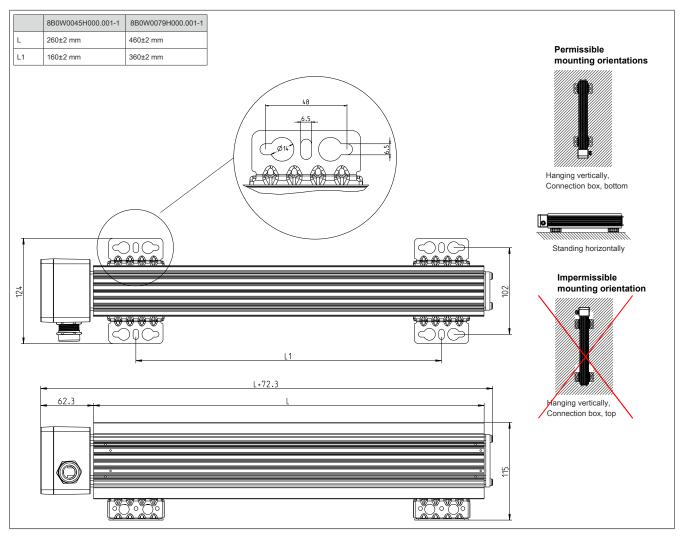


Figure 1: Dimension diagram and installation dimensions

## Warning!

External braking resistors 8B0W can have very high surface temperatures both during operation and after being switched off!

## 5 Dimension diagram and installation dimensions starting with Rev.D0

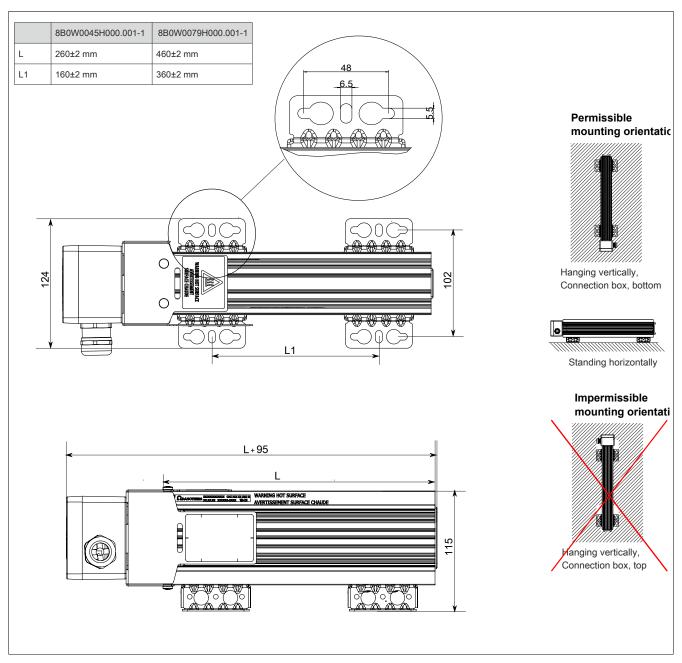


Figure 2: Dimension diagram and installation dimensions

## Warning!

External braking resistors 8B0W can have very high surface temperatures both during operation and after being switched off!

## 6 Wiring

#### 6.1 8B0W00xxH.000.001-1 - Pinout overview

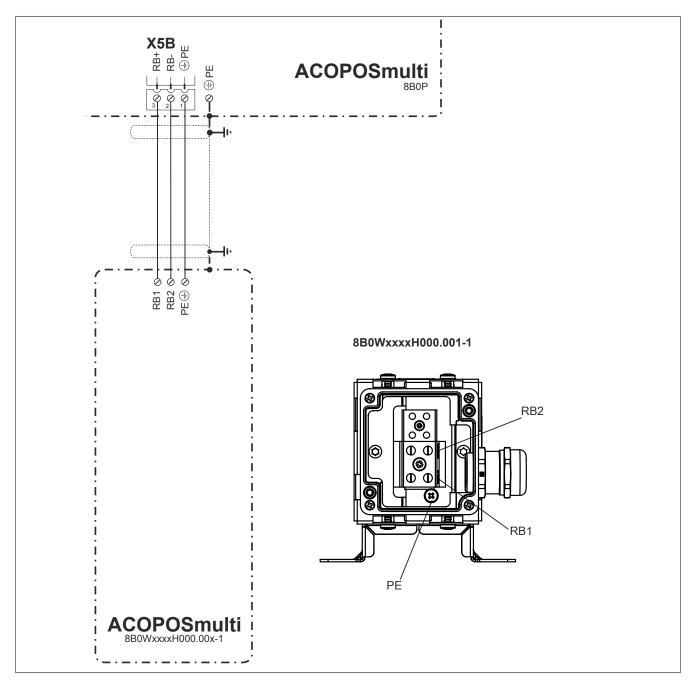


Figure 3: Pinout overview

## Information:

8B0W external braking resistors must be wired with connection cables that are suitable for maximum line temperatures  $>90^{\circ}$ C.

Wiring must be carried out with a shielded cable!