

# 8B0M0040HC00.000-1

## 1 General information

- Pioneering power distribution system
- Integrated distribution of power and auxiliary power supply
- Shockproof
- Option slots possible

## 2 Order data


Order number	Short description	Figure
	<b>Cold-plate mounting</b>	
8B0M0040HC00.000-1	ACOPOSmulti mounting plate with backplane, 4 slots, AS, cold plate mounting, 75 mm <sup>2</sup> and 22 mm <sup>2</sup> , complete	
	<b>Optional accessories</b>	
	<b>Accessory sets</b>	
8BXW000.0000-00	Accessory set: 2x fitting for mounting plate 8B0MxxxxHCxx.xxx-x and 8EMCxxx000.0000-1, angled	
8BXW001.0000-00	Accessory set: 2x fitting for mounting plate 8B0MxxxxHCxx.xxx-x and 8EMCxxx000.0000-1, straight	

Table 1: 8B0M0040HC00.000-1 - Order data

## 3 Technical data

Order number	8B0M0040HC00.000-1
<b>General information</b>	
Number of slots	4
Cooling and mounting type	Cold plate mounting
Certifications	
CE	Yes
UKCA	Yes
UL	cULus E225616 Power conversion equipment
<b>DC bus connection</b>	
Voltage	
Nominal	750 VDC
Continuous power <sup>1)</sup>	200 kW
Reduction of continuous power depending on installation elevation	
Starting at 500 m above sea level	20 kW per 1000 m
Cross section	
DC+, DC-	72 mm <sup>2</sup>
PE	72 mm <sup>2</sup>
<b>24 VDC auxiliary supply</b>	
Voltage	25 VDC ±1.6%
Continuous power <sup>1)</sup>	1500 W

Table 2: 8B0M0040HC00.000-1 - Technical data

Order number	8B0M0040HC00.000-1
Reduction of continuous power depending on installation elevation	
Starting at 500 m above sea level	150 W per 1000 m
Cross section	
24 VDC, COM	21.3 mm <sup>2</sup>
<b>Operating conditions</b>	
Permissible mounting orientations	
Hanging vertically	Yes
Horizontal, face up	Yes
Standing horizontally	No
Installation elevation above sea level	
Nominal	0 to 500 m
Maximum <sup>2)</sup>	4000 m
Pollution degree per EN 61800-5-1	2 (non-conductive pollution)
Overvoltage category per EN 61800-5-1	III
Evenness of mounting surface	Evenness of 1 mm over the entire mounting surface
Flow rate	
Minimum	3 l/min <sup>3)</sup>
Maximum	6 l/min <sup>3)</sup>
Pressure drop depending on flow volume	
3 l/min	Typ. 0.3 bar
6 l/min	Typ. 0.7 bar
Test pressure	10 bar for 1 minute, air inside, water outside
Max. continuous pressure <sup>4)</sup>	5 bar
Max. permissible return temperature	60°C
Degree of protection per EN 60529	IP20
<b>Ambient conditions</b>	
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
<b>Mechanical properties</b>	
Dimensions <sup>6)</sup>	
Width	254.5 mm
Height	378 mm
Depth	17 mm
Weight	3.8 kg

Table 2: 8B0M0040HC00.000-1 - Technical data

- Valid under the following conditions: 40°C ambient temperature, installation elevation <500 m above sea level.
- Continuous operation at an installation elevation of 500 m to 4,000 m above sea level is possible when taking the specified reduction of continuous power into account. Requirements that go beyond this must be arranged with B&R.
- Valid under the following conditions: Mounting plate with max. 27 slots and tap water as coolant. Values vary depending on the coolant and/or connection fitting being used!
- The requirements of the complete system (tubing, heat exchangers, recooling systems, etc.) as well as any necessary application-specific requirements must be taken into account.
- Continuous operation of ACOPOSmulti mounting plates at ambient temperatures from 40°C to max. 55°C is possible when taking the specified continuous power reductions into account.
- The dimensions define the size of the mounting plate. Additional spacing above and below the backplanes must be taken into account for mounting, connections and air circulation.

## 4 Dimension diagram and installation dimensions

### Information:

nnnn indicates the number of slots (0160 equals 16 slots).

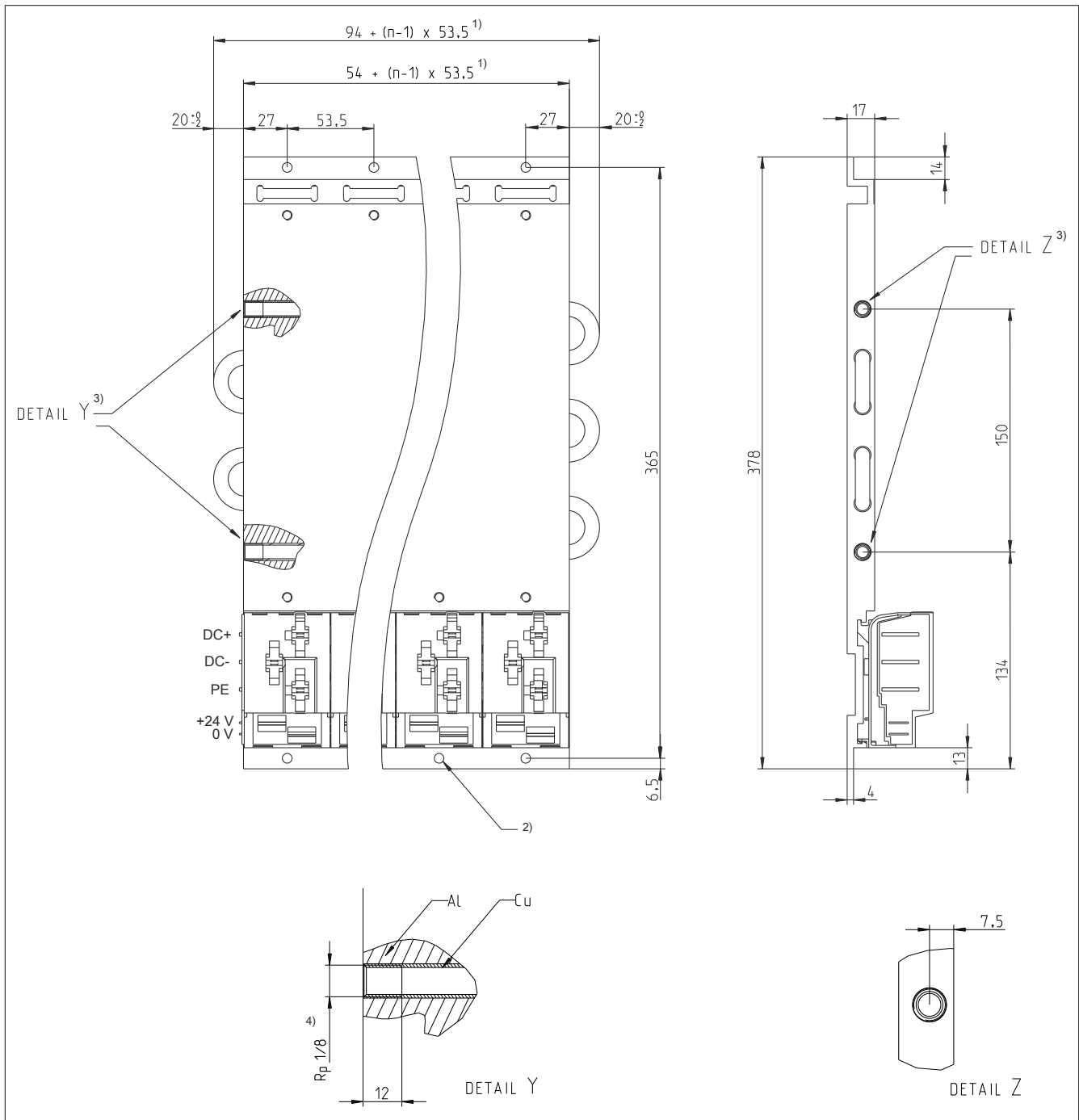


Figure 1: Dimension diagram and installation dimensions

- 1) n... Number of width units on the mounting plate
- 2) 2x n mounting holes  $\varnothing 6$  mm  
The heads of the fastening screws are not permitted to exceed a height of 6 mm.
- 3) The maximum tightening torque is 10 Nm.
- 4) A  $1/8$  Rp thread is cut into the copper tube at the factory. Due to the mechanical construction (copper tube pressed in aluminum), the finished threads have a form similar to Rc  $1/8$  per EN 10226-2.

### Information:

Valves in cooling systems must in principle be thread-sealed with respect to the coolant. This must preferably be done using suitable liquid-sealing agents or metal-sealing functions. Suitable sealing agents are Teflon tape or LOCTITE 5331, for example.

**Information:**

B&R recommends using ACOPOSmulti 8B0MnnnnHC00.000-1 mounting plates with ACOPOSmulti 8BXW accessory sets (fittings with tapered R 1/8 Whitworth male pipe thread per EN 10226-1) for the water connections for inlet flow and return flow.

**Caution!**

B&R has tested and approved the production of the water connection for inlet flow and return flow of 8B0MnnnnHC00.000-1 mounting plates with fittings with tapered R 1/8 Whitworth male pipe thread per EN 10226-1.

The use of other fittings (e.g. with cylindrical external pipe thread) can result in increased effort in sealing the water connections and is therefore the responsibility of the user.