# 8B0M0020HC00.000-1

# **1** General information

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

## 2 Order data

Model number	Short description	Figure
	Cold-plate mounting	
8B0M0020HC00.000-1	ACOPOSmulti mounting plate with backplane, 2 slots, HV, cold	
	plate mounting, 75 mm <sup>2</sup> and 22 mm <sup>2</sup> , complete	
	Optional accessories	
	Accessory sets	
8BXW000.0000-00	ACOPOSmulti accessory set: 2x fitting for mounting plate 8B0MxxxxHCxx.xxx-x and 8EMCxxxx000.0000-1, angled	
8BXW001.0000-00	ACOPOSmulti accessory set: 2x fitting for mounting plate 8B0MxxxxHCxx.xxx-x and 8EMCxxxx000.0000-1, straight	

Table 1: 8B0M0020HC00.000-1 - Order data

# 3 Technical data

Model number	8B0M0020HC00.000-1	
General information		
Number of slots	2	
Cooling and mounting method	Cold plate mounting	
Certifications		
CE	Yes	
UL	cULus E225616	
	Power conversion equipment	
DC bus connection		
Voltage		
Nominal	750 VDC	
Continuous power <sup>1)</sup>	200 kW	
Reduction of continuous power depending on in- stallation elevation		
Starting at 500 m above sea level	20 kW per 1000 m	
Cross section		
DC+, DC-	72 mm²	
PE	72 mm²	
24 VDC auxiliary supply		
Voltage	25 VDC ±1.6%	
Continuous power 1)	1500 W	

Table 2: 8B0M0020HC00.000-1 - Technical data

#### 8B0M0020HC00.000-1

Model number	8B0M0020HC00.000-1
Reduction of continuous power depending on in- stallation elevation	
Starting at 500 m above sea level	150 W per 1000 m
Cross section	
24 VDC, COM	21.3 mm <sup>2</sup>
Operating conditions	
Permissible mounting orientations	
Hanging vertically	Yes
Lying horizontally	Yes
Standing horizontally	No
Installation at elevations 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	
Evenness of mounting surface	Evenness of 1 mm over the entire mounting surface
Flow volume	
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 4)	5 bar
Max. permissible return temperature	60°C
Degree of protection per EN 60529	IP20
Environmental 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 characteristics	
Dimensions <sup>6)</sup>	
Width	147.5 mm
Height	378 mm
Depth	17 mm
Weight	1.9 kg

#### Table 2: 8B0M0020HC00.000-1 - Technical data

- 1) Valid for 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 taking the specified reduction of continuous power into account. Requirements that go beyond this must be arranged with B&R.
- 3) 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!
- 4) The requirements of the complete system (tubing, heat exchangers, recooling systems, etc.) as well as any necessary application-specific requirements must be taken into consideration.
- 5) Continuous operation of ACOPOSmulti mounting plates at ambient temperatures ranging from 40°C to max. 55°C is possible (taking the specified continuous power reductions into consideration).
- 6) The dimensions define the size of the mounting plate. Make sure to leave additional space above and below the backplanes for mounting, connections and air circulation.

#### 4 Dimension diagram and installation dimensions

### Information:

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

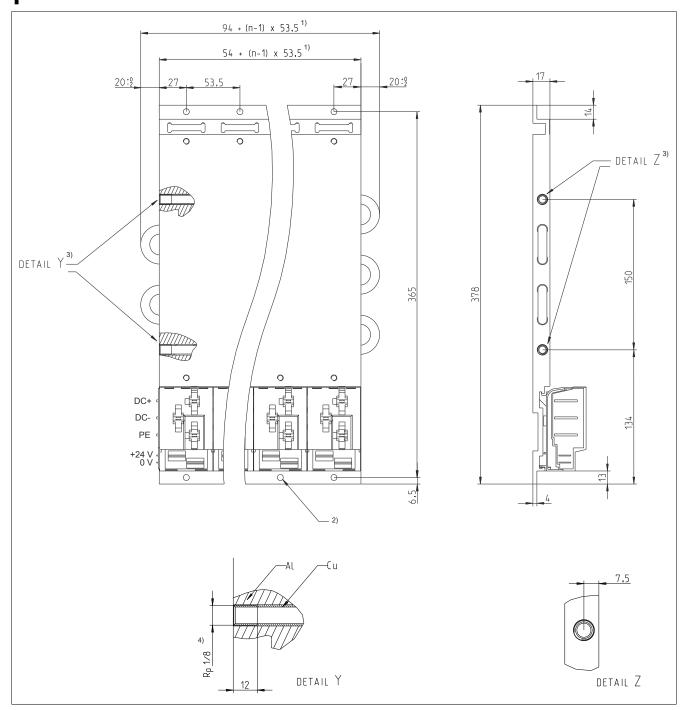


Figure 1: Dimension diagram and installation dimensions

1) n... Number of width units on the mounting plate

2) 2x n mounting holes ø 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.