

# 8B0M0180HC00.000-1

## 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  |
|--------------------|--|---|
|                    | <b>Cold-plate mounting</b>   |  |
| 8B0M0180HC00.000-1 | ACOPOSmulti mounting plate with backplane, 18 slots, HV, 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    | ACOPOSmulti accessory set: 2x fitting for mounting plate 8B0MxxxxHCxx.xxx-x and 8EMCxxx000.0000-1, angled                          |   |
| 8BXW001.0000-00    | ACOPOSmulti accessory set: 2x fitting for mounting plate 8B0MxxxxHCxx.xxx-x and 8EMCxxx000.0000-1, straight                        |   |

Table 1: 8B0M0180HC00.000-1 - Order data

## 3 Technical data

| Model number  | 8B0M0180HC00.000-1                          |
|---|---|
| <b>General information</b>  |   |
| Number of slots   | 18  |
| Cooling and mounting method                                       | Cold plate mounting                         |
| Certifications  |   |
| CE  | Yes   |
| UL  | cULus E225616<br>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: 8B0M0180HC00.000-1 - Technical data

| Model number  | 8B0M0180HC00.000-1                                |
|---|---|
| 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   |
| 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                             | III   |
| 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 <sup>4)</sup>                            | 5 bar   |
| Max. permissible return temperature                               | 60°C  |
| Degree of protection per EN 60529                                 | IP20  |
| <b>Environmental 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 characteristics</b>                                 |   |
| Dimensions <sup>6)</sup>  |   |
| Width   | 1003.5 mm   |
| Height  | 378 mm  |
| Depth   | 17 mm   |
| Weight  | 16.9 kg   |

Table 2: 8B0M0180HC00.000-1 - Technical data

- Valid for the following conditions: 40°C ambient temperature, installation elevation <500 m above sea level.
- Continuous operation of ACOPOSmulti mounting plates at an installation elevation of 500 m to 4000 m above sea level is possible taking the specified reduction in 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 consideration.
- 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).
- 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).

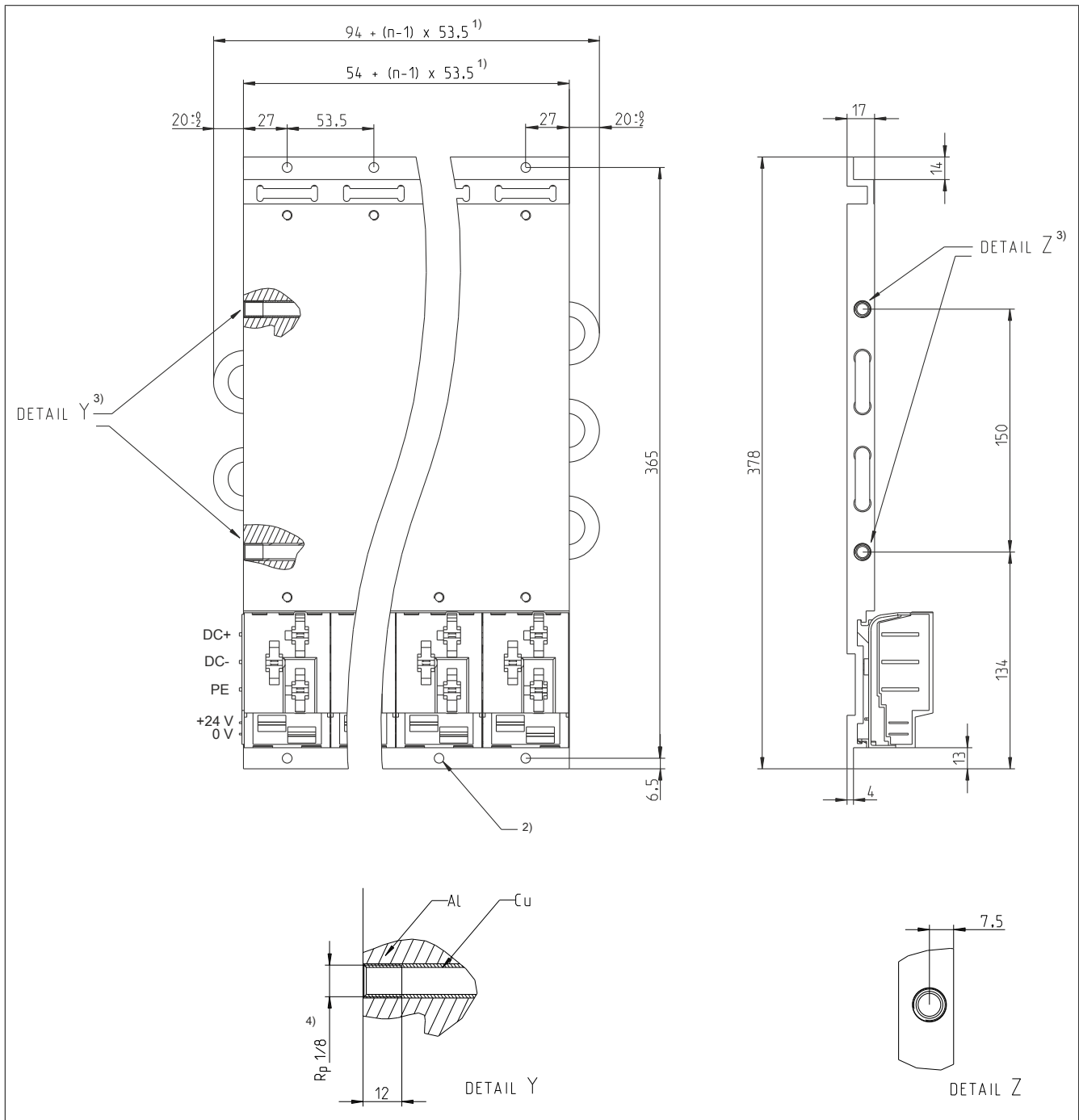


Figure 1: Dimension diagram and installation dimensions

- 1) n... Number of width units on the mounting plate
- 2) 2x n mounting holes  $\varnothing 6$  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.