

7. 8B0C control supply units - 400W

Warning!

The auxiliary supply modules are components of and may only be used in connection with the ACOPOSmulti drive system.

Information:

Up to five auxiliary supply modules with any power rating can be set up in parallel.

7.1 Order data


| Model number | Short description | Figure |
|--------------------|--|--|
| | Wall mounting |  <p>8B0C0160HC00.001-1</p> |
| 8B0C0160HW00.000-1 | ACOPOSmulti auxiliary supply module 16A, HV, wall mounting | |
| 8B0C0160HW00.001-1 | ACOPOSmulti auxiliary supply module 16A, HV, wall mounting, 24VOut 1x16A, 1x5A | |
| | Cold plate or feed-through mounting | |
| 8B0C0160HC00.000-1 | ACOPOSmulti auxiliary supply module 16A, HV, cold plate or feed-through mounting | |
| 8B0C0160HC00.001-1 | ACOPOSmulti auxiliary supply module 16A, HV, cold plate or feed-through mounting, 24VOut 1x16A, 1x5A | |

Table 24: Order data - 8B0C control supply units 400W

| Required accessories | | | | |
|-------------------------------|--------|---|------------------------|------|
| Model number | Amount | Short description | Comment | Page |
| 8TB2106.2010-00 | 1 | Screw terminal 6 pins, 1 row RM5.08 Label 1: numbered serially | Plug for X1 connection | 286 |
| 8TB2104.2010-00 ¹⁾ | 1 | Screw terminal 4 pins, 1 row RM5.08 Label 1: numbered serially | Plug for X2 connection | 288 |
| 8TB3104.201M-10 ¹⁾ | 1 | Screw terminal 4 pins, 1 row RM7.62 Label 1: numbered serially Coding M: 1011 | Plug for X3 connection | 288 |

Table 25: Required accessories for 8B0C auxiliary supply modules 400W

1) Only for 8B0C0160Hx00.001-1.

Technical data • 8BOC control supply units - 400W

| Optional accessories | | | | |
|----------------------|--------|---|--|------|
| Model number | Amount | Short description | Comment | Page |
| 8BXF001.0000-00 | --- | ACOPOSMulti fan module Replacement fan for ACOPOSMulti modules (8BVP/8BOC/8BVI/8BVE/8B0K) | Replacement fan for ACOPOSMulti modules (8BVP/8BOC/8BVI/8BVE/8B0K) | --- |

Table 26: Optional accessories for auxiliary supply modules 8BOC 400W

7.2 Technical data

| Product ID | 8BOC0160HW00.000-1 8BOC0160HC00.000-1 | 8BOC0160HW00.001-1 8BOC0160HC00.001-1 |
|---|--|--|
| Wall mounting Cold plate or feed-through mounting | | |
| General information | | |
| C-UL-US listed | Yes | |
| Available cooling and mounting methods | | |
| Wall mounting | Yes | |
| Cold plate or feed-through mounting | Yes | |
| Module width | 1 | |
| DC bus connection | | |
| Voltage | 800 VDC | |
| Operating range in continuous operation | 260 - 900 VDC | |
| Full continuous power | 315 - 900 VDC | |
| Continuous power consumption | Max. 470 W | |
| Power loss at max. device power | In preparation | |
| DC bus capacitance | In preparation | |
| Design | ACOPOSMulti backplane | |
| 24 VDC output | | |
| Continuous power ¹⁾ | 400 W | |
| Output voltage | | |
| DC bus voltage 260 ... 315 VDC | 25 VDC * (DC bus voltage / 315) | |
| DC bus voltage 315 ... 900 VDC | 24 VDC ±6% | |
| Continuous current | 16 ADC | |
| Reduction of continuous power according to ambient temperature above 40°C | No reduction | |
| Reduction of continuous power depending on installation altitude | | |
| Starting at 500 m above sea level | 40 W per 1000 m | |
| Reduction of continuous power depending on cooling method | | |
| Wall mounting | In preparation | |
| Cold plate or feed-through mounting | In preparation | |
| Startup delay | Max. 1 sec. | |
| Startup time | Approx. 5 - 20 ms | |
| Residual ripple | Typ. 50 mV _{SS} | |

Table 27: Technical data for 8BOC control supply units 400W

Technical data • 8B0C control supply units - 400W

| Product ID | | |
|--|--|--|
| Wall mounting Cold plate or feed-through mounting | 8B0C0160HW00.000-1 8B0C0160HC00.000-1 | 8B0C0160HW00.001-1 8B0C0160HC00.001-1 |
| 24 VDC internal system supply voltage | | |
| Output voltage | 25 VDC ±1.6% | |
| Peak current (< 4 s) DC bus voltage (UDC): 350 ... 900 VDC | 21 ADC | |
| Protective measures | | |
| Open circuit protection | Yes | |
| Overload protection | Yes | |
| Short circuit protection | Yes | |
| Feedback protection | Max. 26 VDC (also when turned off) | |
| Over-temperature protection | Yes | |
| Dielectric strength to ground | ±50 VDC | |
| Output / input isolation | SELV / PELV requirements | |
| Design | ACOPOSMulti backplane | |
| 24 VDC Out | | |
| Output voltage | | |
| DC bus voltage 260 ... 315 VDC | --- | 25 VDC * (DC bus voltage / 315) |
| DC bus voltage 315 ... 900 VDC | --- | 24 VDC ±6% |
| Peak current (< 4 s) over the total operating range of the DC bus voltage. | --- | --- |
| Protection of 24 VDC Out 1 output | --- | 16 A (slow-blow) electronic, automatic reset |
| Protection of 24 VDC Out 2 output | --- | 5 A (slow-blow) electronic, automatic reset |
| Protective measures | | |
| Open circuit protection | --- | Yes |
| Overload protection | --- | Yes |
| Short circuit protection | --- | Yes |
| Feedback protection | --- | Max. 35 VDC (also when turned off) |
| Over-temperature protection | --- | Yes |
| Dielectric strength to ground | --- | ±50 VDC |
| Output / input isolation | --- | SELV / PELV requirements |
| Design | | |
| 24 VDC, COM | --- | Connectors |
| Terminal connection cross section of 24 VDC Out 1 output | | |
| Flexible and fine wire lines with wire tip sleeves | --- | 0.5 - 6 mm ² |
| Approbation data UL/C-UL-US | --- | 22 - 10 |
| CSA | --- | 22 - 10 |
| Terminal connection cross section of 24 VDC Out 2 output | | |
| Flexible and fine wire lines with wire tip sleeves | --- | 0.2 - 2.5 mm ² |
| Approbation data UL/C-UL-US | --- | 22 - 12 |
| CSA | --- | 22 - 12 |

Table 27: Technical data for 8B0C control supply units 400W (Forts.)

Technical data • 8B0C control supply units - 400W

| Product ID | 8B0C0160HW00.000-1 8B0C0160HC00.000-1 | 8B0C0160HW00.001-1 8B0C0160HC00.001-1 |
|--|--|---|
| Wall mounting Cold plate or feed-through mounting | | |
| 24 VDC Out 1 controller input | | |
| Wiring | --- | Sink |
| Electrical isolation Input - 24 VDC | --- | Yes |
| Modulation compared to ground potential | --- | Max. ±50 V |
| Input voltage Rated Maximum | --- --- | 24 VDC 30 VDC |
| Switching threshold LOW (24 VDC Out 1 is switched on) HIGH (24 VDC Out 1 is switched off) | --- --- | <5 V >15 V |
| Input current at rated voltage | --- | Approx. 10 mA |
| Switching delay ON (24 VDC Out 1 is switched on) OFF (24 VDC Out 1 is switched off) ²⁾ | --- --- | Max. 25 ms Max. 0.25 ms |
| Design | --- | Connectors |
| Terminal connection cross section of the 24 VDC Out 1 control input Flexible and fine wire lines with wire tip sleeves Approval data UL/C-UL-US CSA | --- --- --- | 0.2 - 2.5 mm ² 30 - 12 22 - 12 |
| Operational conditions | | |
| Ambient temperature during operation Max. ambient temperature | | 5 to 40°C +55°C |
| Relative humidity during operation | | 5 to 85%, non-condensing |
| Installation at altitudes above sea level Maximum installation altitude ³⁾ | | 0 to 500 m 4000 m |
| Degree of pollution according to EN 60664-1 | | 2 (non-conductive material) |
| Overvoltage cat. according to IEC 60364-4-443:1999 | | III |
| EN 60529 protection | | IP20 |
| Storage and transport conditions | | |
| Storage temperature | | -25 to +55°C |
| Relative humidity during storage | | 5 to 95%, non-condensing |
| Transport temperature | | -25 to +70°C |
| Relative humidity during transport | | 95% at +40°C |

Table 27: Technical data for 8B0C control supply units 400W (Forts.)

Technical data • 8B0C control supply units - 400W

| Product ID | 8B0C0160HW00.000-1 8B0C0160HC00.000-1 | 8B0C0160HW00.001-1 8B0C0160HC00.001-1 |
|--|--|--|
| Wall mounting Cold plate or feed-through mounting | | |
| Mechanical characteristics | | |
| Dimensions ⁴⁾ | | |
| Width | | 53 mm |
| Height | | 317 mm |
| Depth | | |
| Wall mounting | | 263 mm |
| Cold-plate | | 212 mm |
| Feed-through mounting | | 209 mm |
| Weight | | |
| Wall mounting | | In preparation |
| Cold-plate | | Approx. 2.6 kg |
| Feed-through mounting | | Approx. 2.6 kg |

Table 27: Technical data for 8B0C control supply units 400W (Forts.)

- 1) Valid in the following conditions: 55°C ambient temperature, installation altitude < 500 m above sea level.
- 2) The output and any connected loads are not actively discharged when switching off.
- 3) Continuous operation of ACOPOSmulti control supply units at altitudes ranging from 500 m to 4000 m above sea level is possible (taking the continuous power reductions listed into consideration). Additional requirements are to be arranged with B&R.
- 4) The dimensions define the true device dimensions including the respective mounting plate. Make sure to leave additional space above and below the device for mounting, connections and air circulation (see section 2 "Dimension diagrams and installation dimensions" on page 143).

8B0C0160HW00.001-1, 8B0C0320HW00.002-1

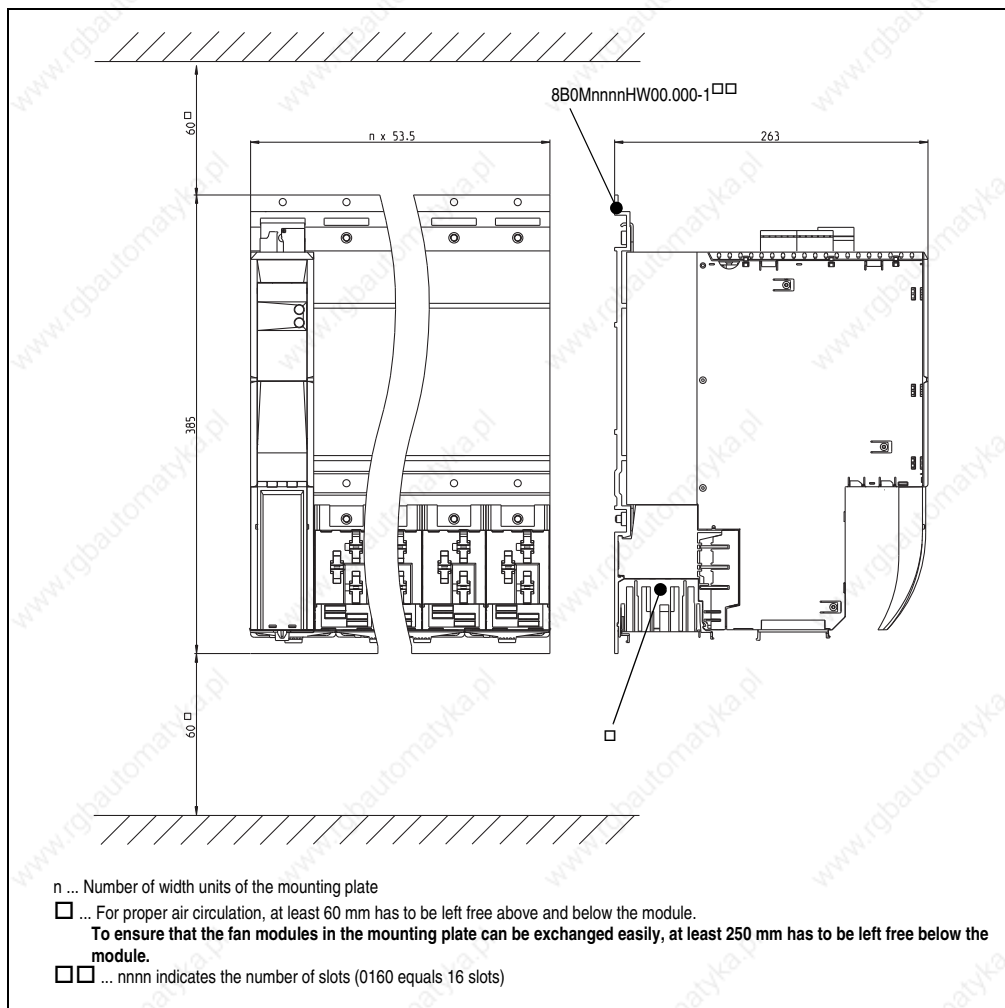


Figure 26: Dimensional diagram and installation dimensions for 8B0C0160HW00.001-1, 8B0C0320HW00.002-1

5.2 8B0C0160Hx00.001-1, 8B0C0320Hx00.002-1

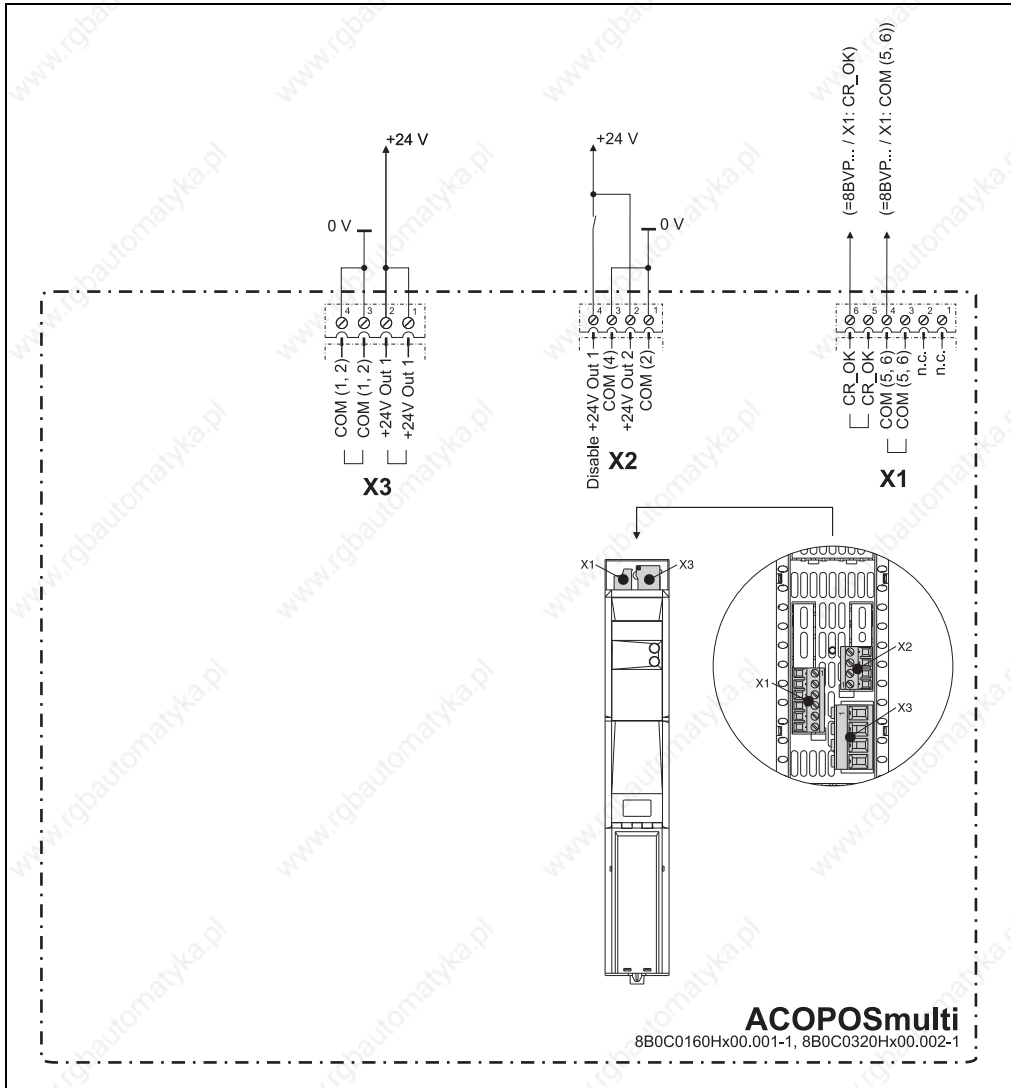


Figure 98: Overview of pin assignments - 8B0C0160Hx00.001-1, 8B0C0320Hx00.002-1

5.2.1 Pin assignments - X1 plug

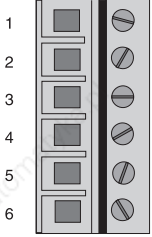
| X1 | | Pin | Name | Function |
|---|---|------------|------------------|----------|
|  | 1 | --- | --- | --- |
| | 2 | --- | --- | --- |
| | 3 | COM (5, 6) | DC bus ready 0 V | |
| | 4 | COM (5, 6) | DC bus ready 0 V | |
| | 5 | CR_OK | DC bus ready | |
| | 6 | CR_OK | DC bus ready | |

Table 124: Pin assignments for plug X1 8B0C0160Hx00.001-1, 8B0C0320Hx00.002-1

5.2.2 Pin assignments - X2 plug

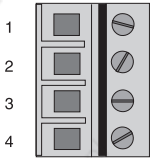
| X2 | | Pin | Name | Function |
|---|---|--------------------|----------------------------|----------|
|  | 1 | COM (2) | +24 V output 2 0 V | |
| | 2 | +24V Out 2 | +24 V output 2 | |
| | 3 | COM (4) | Disable +24 V output 1 0 V | |
| | 4 | Disable +24V Out 1 | Disable +24 V output 1 | |

Table 125: Pin assignments for plug X2 8B0C0160Hx00.001-1, 8B0C0320Hx00.002-1

5.2.3 Pin assignments - X3 plug

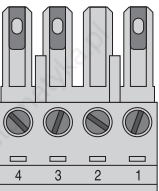
| X3 | | Pin | Name | Function |
|---|---|------------|--------------------|----------|
|  | 1 | +24V Out 1 | +24 V output 1 | |
| | 2 | +24V Out 1 | +24 V output 1 | |
| | 3 | COM (1, 2) | +24 V output 1 0 V | |
| | 4 | COM (1, 2) | +24 V output 1 0 V | |

Table 126: Pin assignments for plug X3 8B0C0160Hx00.001-1, 8B0C0320Hx00.002-1

5.2.4 Input/output circuit diagram

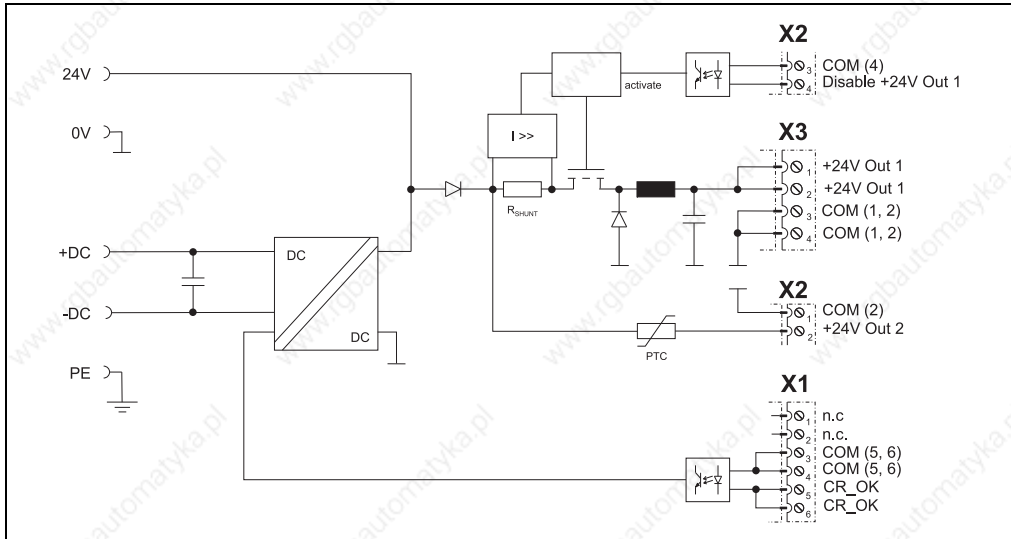


Figure 99: Input/output circuit diagram 8B0C0160Hx00.001-1, 8B0C0320Hx00.002-1

5.2.5 Parallel connection of multiple 8B0C auxiliary supply modules

Warning!

When the external 24V outputs (24V Out 1, 24 V Out 2) are connected in parallel, the corresponding COM connections must also be connected in parallel!