8EXF500.0000-00

1 General information

The fan module is used to cool ACOPOS P3 drive systems and can be installed on 8EMFxxx000.0000-1 mounting plates.

Information:

ACOPOS P3 mounting plate 8EMF00x0000.0000-1 can only be used together with fan modules 8EXF400.0000-00 and 8EXF500.0000-00!

For optimal availability of the ACOPOS P3 drive system, fan modules 8EXF400.0000-00 and 8EXF500.0000-00 must be switched on at all times.

2 Order data

Order number	Short description	Figure
	Fan modules	
8EXF500.0000-00	ACOPOS P3 fan module for mounting plate 8EMFxxx0000.0000-1 single-width	
	Optional accessories	
	I/O supply cable	
X67CA0P00.0002	Power connection cable, 4-pin, straight, 0.25 m	
X67CA0P10.0002	Power connection cable, 4-pin, angled, 0.25 m	
X67CA0P20.0010	Power attachment cable, 4-pin, straight, 1.0 m	
X67CA0P20.0020	Power attachment cable, 2.0 m	
X67CA0P20.0050	Power attachment cable, 4-pin, straight, 5 m	
X67CA0P20.0100	Power attachment cable, 4-pin, straight, 10 m	

Table 1: 8EXF500.0000-00 - Order data

Mounting plate	Fan modules
8EMF0010000.0000-1	1x 8EXF500.0000-00
8EMF0020000.0000-1	1x 8EXF400.0000-00
8EMF0040000.0000-1	2x 8EXF400.0000-00
8EMF0060000.0000-1	3x 8EXF400.0000-00

Table 2: Recommended number of fan modules depending on the 8EMF mounting plate

Information:

X67CA0P10 and X67CA0P20/X67CA0P30 I/O power supply cables can be used for wiring 8EXF500.0000-00 fan modules. For details, see section "Wiring".

3 Technical data

Order number	8EXF500.0000-00
General information	
Short description	ACOPOS P3 fan module for mounting plate 8EMFxxx0000.0000-1
Certifications	
CE	Yes
UKCA	Yes
UL	cULus E225616 Power conversion equipment
24 VDC power supply	
Input voltage	24 VDC +10% / -25%
Connection	1x 4-pin female M8 connector 1x 4-pin male M8 connector
Power consumption	9 W
Operating conditions	
Degree of protection per EN 60529	IP54 when connected
Ambient conditions	
Temperature	
Operation	
Nominal	5 to 40°C
Maximum	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 properties	
Volumetric flow rate	85 m^3/h @ 0 Pa 242 Pa @ 0 m^3/h
Operating noise	54.5 dB(A)
Service life	
At 40°C	70,000 h
Dimensions	
Width	71 mm
Height	200 mm
Depth	92 mm
Weight	0.3 kg

Table 3: 8EXF500.0000-00 - Technical data

4 Wiring

4.1 8EXF500.0000-00 - Pinout overview

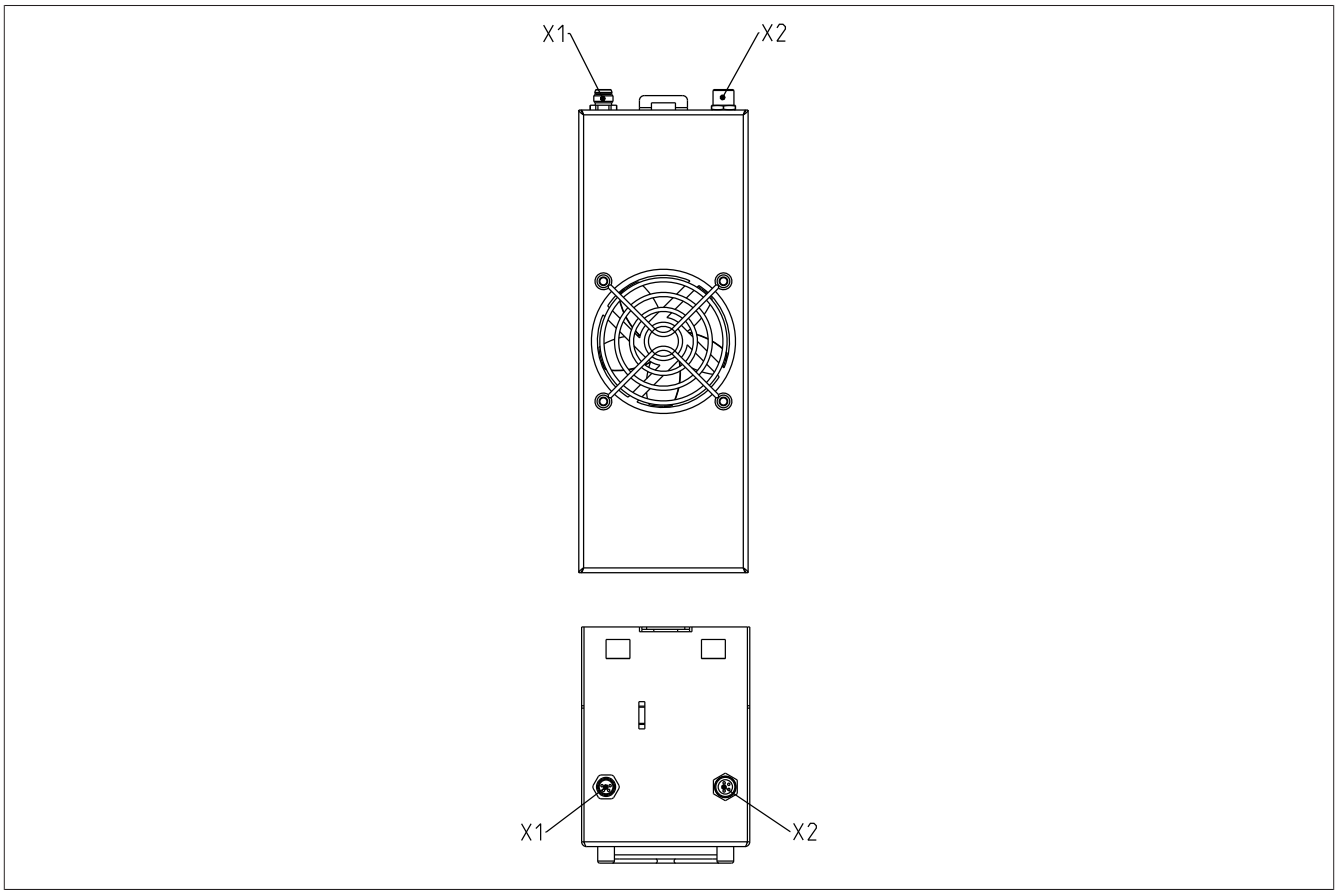


Figure 1: 8EXF500.0000-00 - Pinout overview

4.2 Connector X1 - Pinout

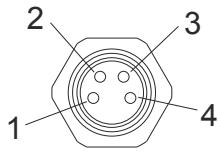
X1	Pin	Description	Function
	1	24 V	Fan power supply +24 VDC
	2	24 V	Fan power supply +24 VDC
	3	GND	Fan power supply GND
	4	GND	Fan power supply GND

Table 4: Connector X1 - Pinout

4.3 Connector X2 - Pinout

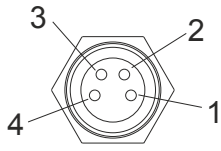
X2	Pin	Description	Function
	1	24 V	Fan power supply +24 VDC
	2	24 V	Fan power supply +24 VDC
	3	GND	Fan power supply GND
	4	GND	Fan power supply GND

Table 5: Connector X2 - Pinout

4.4 8EXF500 - Wiring example

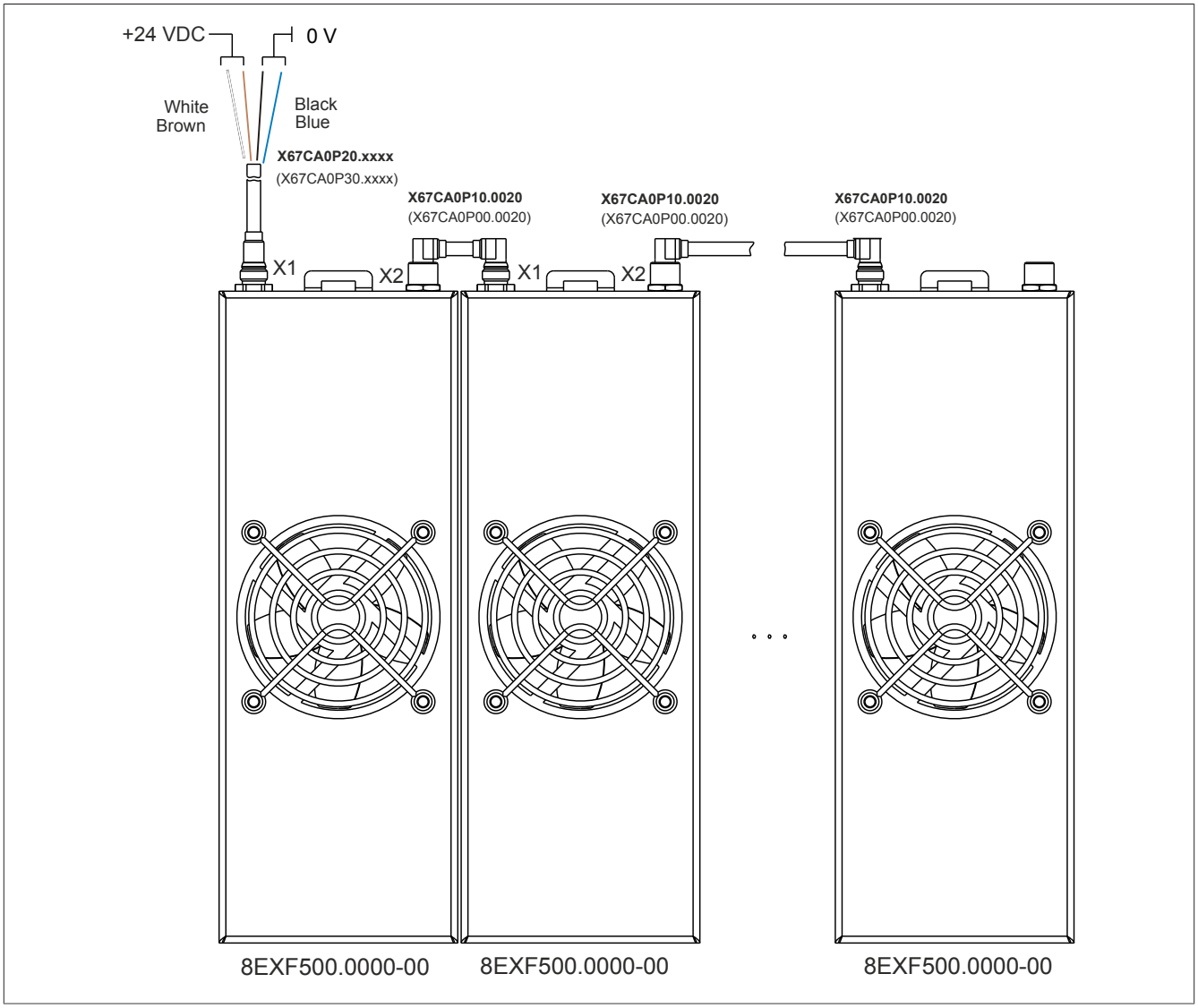


Figure 2: 8EXF500.0000-00 - Wiring example

Note:

Fan module 8EXF is only permitted to be supplied with 24 V when installed!

Information:

Up to 15 8EXF500.0000-00 fan modules are permitted to be connected in parallel.

Information:

The 24 VDC power supply for 8EXF500.0000-00 fan modules can be supplied via connector X3 on an 8B0C ACOPOSmulti auxiliary supply module.

Information:

Within the scope of UL, the 24 VDC power supply of the fan modules must be protected. The nominal current of the fuse used is not permitted to exceed 4 A.

5 Installing fan module 8EXF500.0000-00

Procedure:

1. Disconnect the ACOPOS P3 drive system from the power system and secure it against being switched on again.

   Danger!

   Before starting work, disconnect the power supply and wait 5 minutes to ensure that the DC bus of the ACOPOS P3 drive system has discharged. Observe regulations!

2. Slide the bottom of the fan module at position (❶) between the first two plates on the heat sink of mounting plate 8EMFxxx000.0000-1 and then insert the top as shown in (❷) until the snap-fit connectors click into place.

3. Repeat step 2 until all fan modules have been installed. The following fan modules must be placed between the next available plates on mounting plate 8EMFxxx000.0000-1.
4. Cable all fan modules (see section 8EXF500 - Wiring example).

6 Replacing fan module 8EXF500.0000-00

Procedure:

Required tools: Flat-blade screwdriver

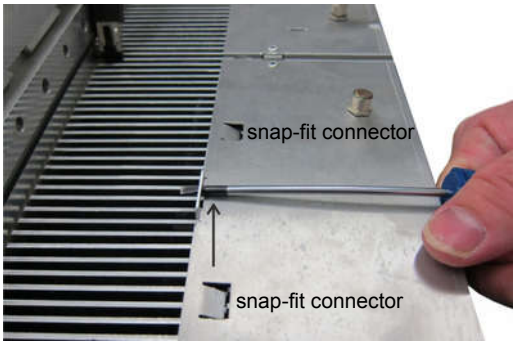
1. Disconnect the ACOPOS P3 drive system from the power system and secure it against being switched on again.



Danger!

Before starting work, disconnect the power supply and wait 5 minutes to ensure that the DC bus of the ACOPOS P3 drive system has discharged. Observe regulations!

2. Disconnect the connectors from the X1 and X2 connectors on the fan module.
3. The fan module is snapped into mounting plate 8EMFxxx000.0000-1 using two snap-fit connectors. Use a flat-blade screwdriver to push up the clip marked with the error to loosen the snap-fit connectors. While doing so, carefully tip the fan module backwards and remove from the mounting plate's heat sink.





4. Slide the bottom of the new fan module at position (❶) between the plates on the heat sink of mounting plate 8EMFxxx000.0000-1 and then insert the top on the mounting plate's heat sink as shown in (❷) until the snap-fit connectors click into place.



5. Repeat steps 2 to 4 for all other fan modules that need to be replaced.
6. Cable all replaced fan modules (see section 8EXF500 - Wiring example).

Information:

8EXF500.0000-00 fan modules have an average service life of approx. 70,000 h. B&R recommends replacing all fan modules on mounting plate 8EMFxxx000.0000-1 at the same time.