

Assembly instructions | EN

# AX2090-L80x

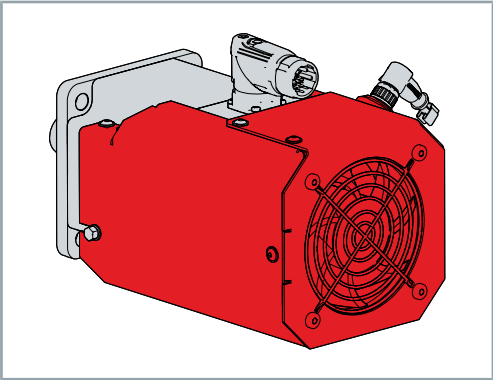
Fan cover for synchronous servo motors AM8000 and AM8500





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Fan cover

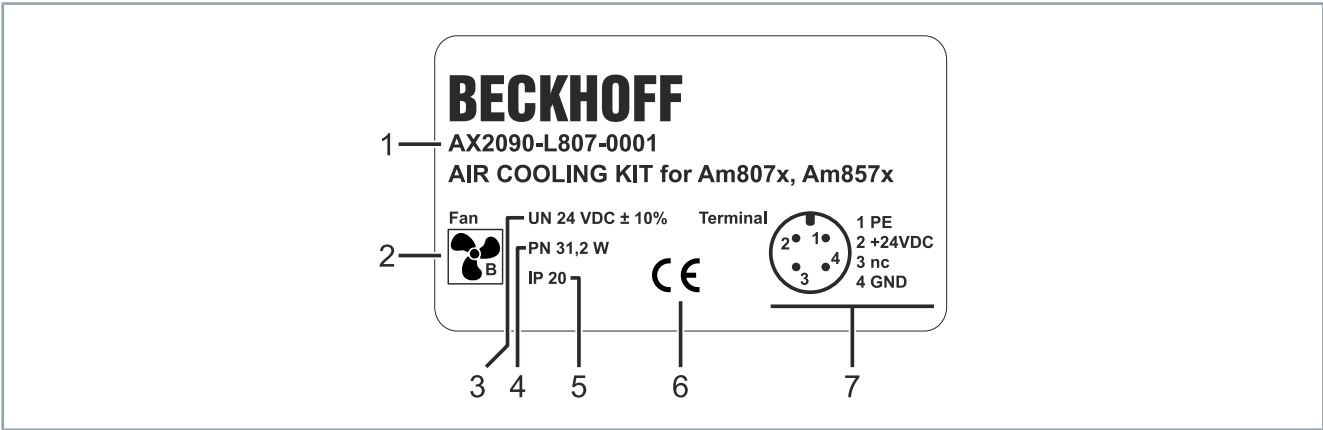


The purpose of the fan cover is the external cooling of the motors. It therefore increases the performance data of the motor.

This ordering option is available for motors of the following series:

- AM8x5x and AM8x5x-xxxx-9000; flange compatible with AM3x5x
- AM8x6x and
- AM807x

Name plate



Number	Explanation
1	Serial number
2	Air flow direction B = Blowing
3	Supply voltage
4	Electrical power
5	Protection class
6	CE conformity
7	Pin Assignment of the Connector Plug

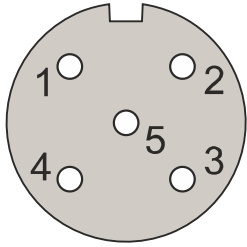
## Performance data of the external fan

The table below shows the electrical and mechanical specifications of the external fan:

Technical data	AM8x5x	AM8x6x	AM8x7x
Supply voltage $U_{LA}$ [V <sub>DC</sub> ]	24		
Electrical power $P_{LA}$ [W]	4.6	9.8	31.2
Current $I$ [A]	0.19	0.41	1.3
Weight [kg]	1,10	2,15	3,40
Protection class	IP20		

## Assignment plan of the power connector

The following table shows the assignment of the power connector of the external fan:

Socket configuration	Contact in the connector	Assignment on the cable
	1	PE: Green/yellow
	2	+24 V <sub>DC</sub> : Brown
	3	Not used
	4	GND: Blue
	5	Not used



### Documentation on the control cable ZK4054-6400-0xxx

The data sheet of the control cable can be found under:  
[www.beckhoff.com](http://www.beckhoff.com) → Download → Data sheets → Cables and wires

**Check the scope of supply for missing or damaged parts**

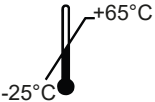



Check your delivery for completeness. If any parts are missing or became damaged during transport, contact the carrier, vendor or our service department immediately.

Check the shipment for the following contents:

- Fan cover with fittings
- Mounting instruction, this documentation

## Packaging

Instructions for handling are printed on the packaging:

Symbol	Explanation
	These are the permitted maximum and minimum temperatures at which the device may be stored and transported.
	This is the correct position for the packaging.
	Protect the packaging against wetness.
	The contents are fragile.

## Fan cover

A motor is cooled by an external device using forced ventilation. This facilitates higher performance. The air flow passes through the fan cover over the motor housing.

## Mounting

### ⚠ WARNING

#### Mount the fan cover only when the motor is completely stopped

Only mount the fan cover when the motor has come to a complete stop.

*Rotating motors can cause serious injury when the fan cover is mounted.*

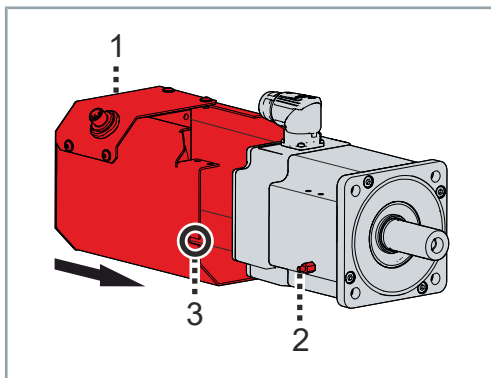


#### Clean the working environment

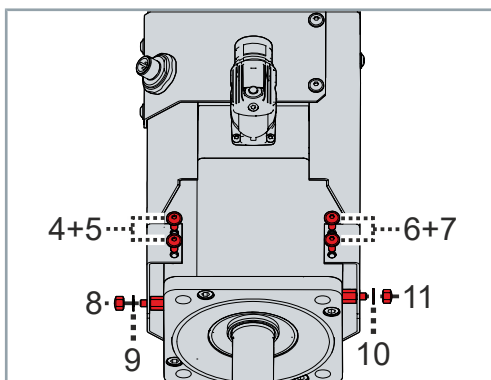
Workplaces and their immediate surroundings must be tidy and dust-free. Avoid dirt in tapped holes.

*Non-observance can result in damage and malfunction of the components.*

- Attach the motor to the machine
- For AM807x series: release and remove the eyebolts on the motor housing



- Push the fan cover [1] onto the housing up to the mechanical stop
- Make sure that on both sides of the motor the elongated holes [3] are aligned with the screw connection devices [2]

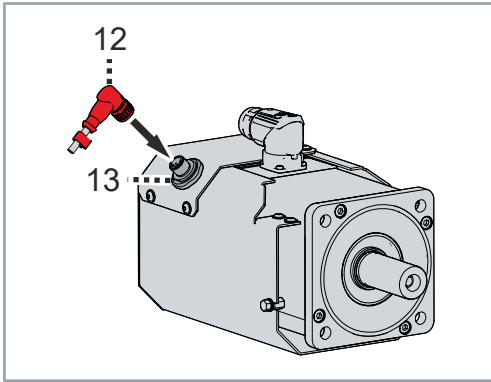


- Fit screws [4] to [7]
- Fit nuts [8] and [11] with washers [9] and [10]
- Observe tightening torques:

Screws	Nuts
3 Nm size 2.5	2.5 Nm, size 7

#### Use Beckhoff control cable

Use the pre-assembled control cable ZK4054-6400-0xxx to connect the fan cover



- ▶ Plug the power connector [12] into the power box [13] of the motor
- ▶ Hand-tighten power connector [12] and check for tight fit





## Exemplary commissioning

The procedure for commissioning is described as an example. A different method may be appropriate or necessary, depending on the application of the components.

### Before commissioning

Pay attention to the following points before commissioning:

- Check connection and function
- Fan must rotate freely, pay attention to grinding noises
- Check the direction of rotation of the fan
- Check air inlets for dirt
- Check tight fit of motor and fan cover
- Tighten screw connections correctly

### During commissioning

Pay attention to the following points during commissioning:

- Check direction of rotation of the fan
- Check attachments for function and adjustment
- Check protective measures against moving and live parts
- Observe atypical noise developments
- Observe unusual smoke development

Disassembly may only be carried out by qualified and trained personnel.

Read the chapter Documentation notes.

When disposing of electronic waste, make sure that you dispose of it in accordance with the regulations applicable in your country. Read and follow the instructions for proper disposal.

## Disposal

Depending on your application and the products used, ensure the professional disposal of the respective components:

### **Cast iron and metal**

Dispose of cast and metal parts as scrap metal for recycling.

### **Cardboard, wood and foam polystyrene**

Dispose of packaging materials made of cardboard, wood or foam polystyrene in accordance with the regulations.

### **Plastics and hard plastics**

You can recycle parts made of plastic and hard plastic via the recycling depot or re-use them depending on the component designations and markings.

### **Oils and lubricants**

Dispose of oils and lubricants in separate containers. Hand over the containers at the used oil collection station.

### **Batteries and rechargeable batteries**

Batteries and rechargeable batteries may also be marked with the crossed-out trash can symbol. You must separate these components from the waste and are legally obliged to return used batteries and rechargeable batteries within the EU. Observe the relevant provisions outside the area of validity of the EU Directive 2006/66/EC.



### **Electronic components**

Products marked with a crossed-out waste bin must not be disposed of with general waste. Electronic components and equipment must be disposed of properly. The national regulations for the disposal of electrical and electronic equipment must be observed.

## Returning to the vendor

In accordance with the WEEE-2012/19/EU directives, you can return used devices and accessories for professional disposal. The transport costs are borne by the sender.

Send the used devices with the note "For disposal" to:

Beckhoff Automation GmbH & Co. KG  
"Service" Building  
Stahlstrasse 31  
D-33415 Verl

In addition, you have the option to contact a local certified specialist company for the disposal of used electrical and electronic appliances. Dispose of the old components in accordance with the regulations applicable in your country.

## Test centers



The fan cover do not fall within the scope of the Machinery Directive.  
However, Beckhoff products are designed and evaluated in full compliance with all relevant regulations for personal safety and use in a machine or system.

## EU conformity



### Provision

Beckhoff Automation GmbH & Co KG will be pleased to provide you with EU declarations of conformity and manufacturer's declarations for all products on request.

Please send your request to: [info@beckhoff.com](mailto:info@beckhoff.com)



More Information:  
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