



Danfoss AK-OB55 Modbus TCP IP Communication Module Installation Guide

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Danfoss AK-OB55 Modbus TCP IP Communication Module



Product Information

Specifications

- **Product Name:** Danfoss 84B8263
- **Communication Module:** AK-OB55 Modbus TCP/IP
- **Coil Options:** AK-CC55 Single Coil / AK-CC55 Multi Coil
- **Coil Type:** AK-CC55 Single Coil UI

Product Usage Instructions

• Installation Guide

The AK-OB55 Modbus TCP/IP Communication module should be installed according to the following instructions:

- Mount the module using the provided assembly instructions.
- Ensure proper wiring connections and follow the specified network configuration.
- Connect the Modbus TCP/IP network to the Eth1 port of the AK-SM 800A System Manager for system security.
- Use a DHCP server for IP address assignment of the case controllers.

• Network Configuration

The network configuration between the AK-CC55 controller and the AK-SM 800A System Manager should follow the below drawing:

- [Network Configuration Diagram](#)

- Network Configuration Diagram

- **Cable Requirements**

When connecting in industrial environments, it is recommended to use shielded twisted pair (S/STP) cables. The maximum cable length should not exceed 100 meters.

- **Recommended cable specifications:**

- Cable Type: Cat 5e or higher, UTP (Unshielded Twisted Pair) Straight-through
- Industrial Environment: Shielded Twisted Pair (S/STP)

- **Declarations, Certifications, and Approvals**

The Danfoss 84B8263 product has the following certifications and approvals:

- EMC/LVD/RoHS Certification (CE Mark)
- UKCA Certification
- WEEE Directive Compliance (WEEE Logo)
- UL Recognized
- cURs (UL) Certification
- Countries: EU, Great Britain, EU NAM (US and Canada)

Frequently Asked Questions (FAQ)

1. **Q: What is the maximum cable length for the AK-OB55 Modbus TCP/IP Communication module?**

A: The maximum cable length should not exceed 100 meters.

2. **Q: What type of cables should be used in industrial environments?**

A: It is recommended to use shielded twisted pair (S/STP) cables in industrial environments.

3. **Q: What certifications does the Danfoss 84B8263 product have?**

A: The product is EMC/LVD/RoHS certified (CE Mark), UKCA certified, WEEE directive compliant, UL recognized, and cURs (UL) certified.

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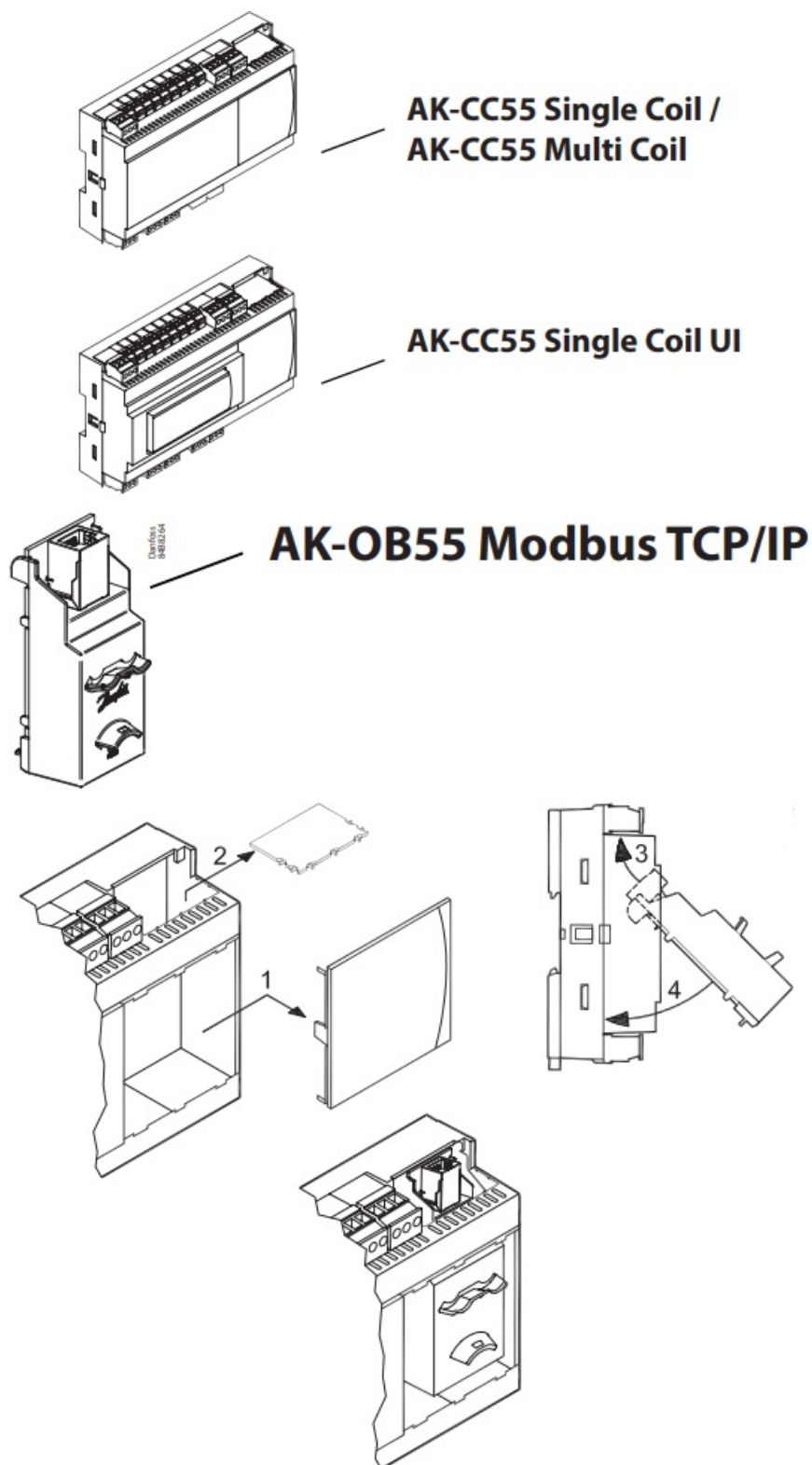


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Installation Guide

AK-OB55 Modbus TCP/IP Communication module

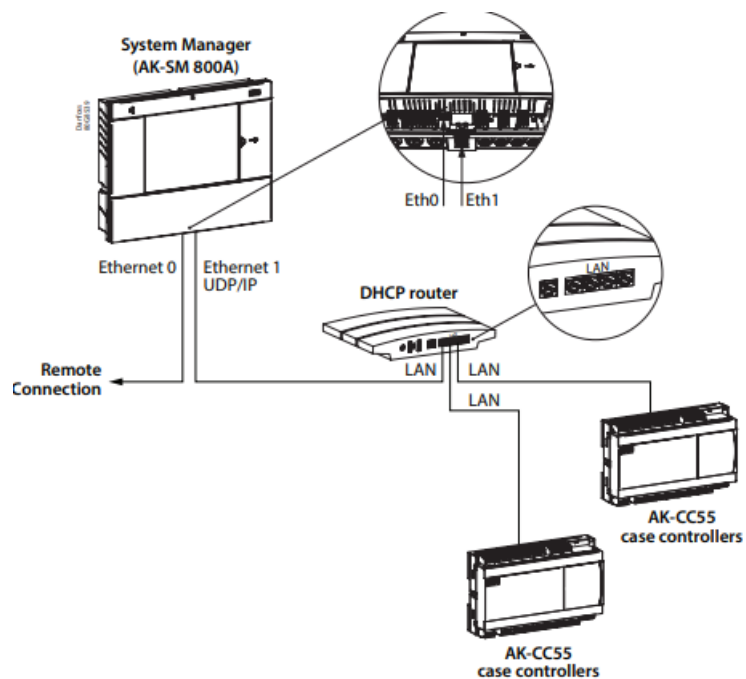
Montage



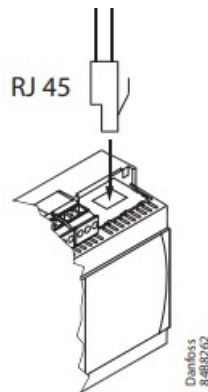
Mounting and removal must always be performed when there is no voltage.

Principle

The network configuration between the AK-CC 55 controller and the AK-SM 800A System Manager as per below drawing. Modbus TCP/IP network must be connected to Eth1 port of AK-SM 800A in order to maintain separation of northbound and southbound communications and ensure system security. It will be needed to use a DHCP server for IP address assignment of the case controllers.



Connection



Cable type

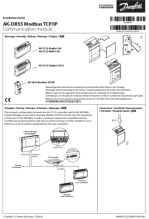
- Cat 5e, Category 5e or higher, UTP, Unshielded twisted pair, Straight-through
- When used in industrial environments, it is recommended to use shielded twisted pair, (S)STP.
- **Cable length max:** 100 m

Declarations, certifications and approvals

Certification	Mark	Logo	Country
EMC/LVD/RoHS	CE	CE	EU
EMC/LVD/RoHS	UKCA	UKCA	Great Britain
Weee directive	WEEE		EU
UL recognized	cURs (UL)	cULus	NAM (US and Canada)

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Documents / Resources

	<p>Danfoss AK-OB55 Modbus TCP IP Communication Module [pdf] Installation Guide AK-OB55 Modbus TCP IP Communication Module, AK-OB55, Modbus TCP IP Communication Module, TCP IP Communication Module, IP Communication Module, Communication Module, Module</p>
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References

- [User Manual](#)