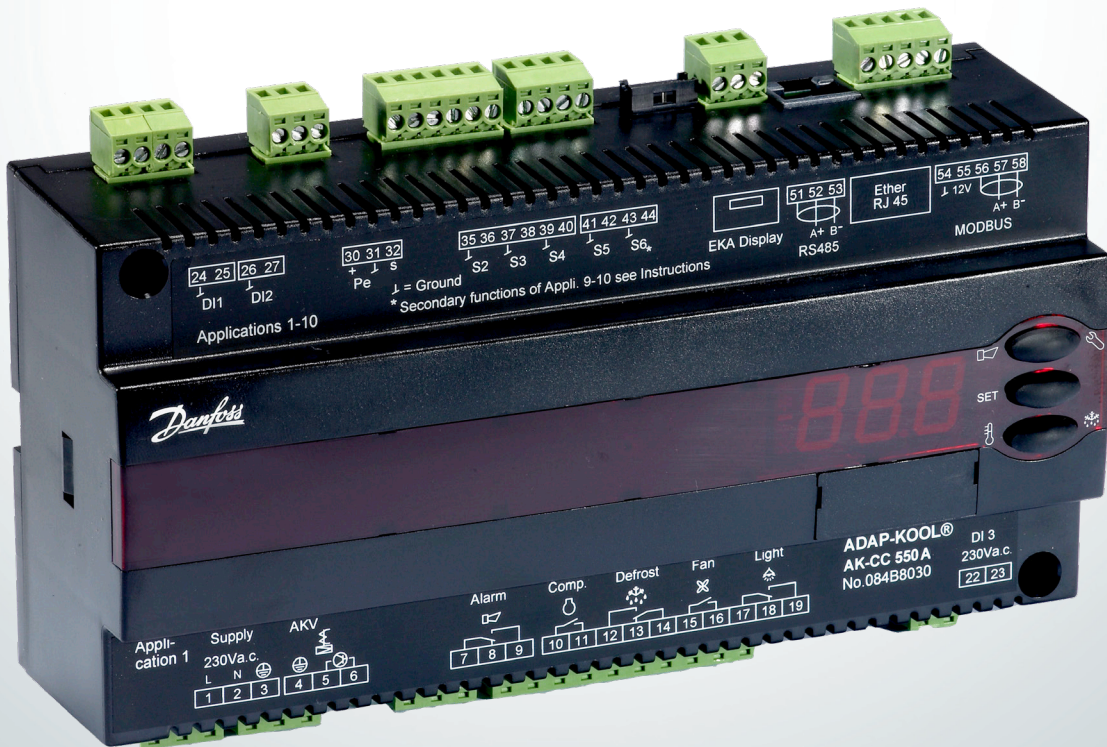


Service Guide

Troubleshooting Guidelines

AK-CC 550A

ADAP-KOOL® Refrigeration Control System



The following troubleshooting guidelines detail the process of verifying proper setup of an AK-CC 550A when encountering communication/offline issues with an AK-SM 800 series controller.

System Manager Programming

- Complete Rescan
 - On Network Nodes screen, select 'Press for complete rescan'
 - *Also complete rescan if any of the items below required adjustment*
- Ensure proper channel enabled on Network Nodes screen of system manager
 - 'Channel LONWORKS' for LON RS485 comm loop
 - 'Channel MODBUS-RS485' for Modbus comm loop
- Verify no Duplicates in System Manager
 - Check under Network Nodes->Duplicates
 - If duplicates exist, identify case controller with mistaken address, and update
- Verify address has been assigned to case controller in program
 - Verify under Configuration->Control->Refrigeration->Addresses

AK-CC 550A Hardware

- Verify part # of AK-CC 550A. This will be printed on front of controller below display
 - For 084B8030, verify 230Vac to terminals 1&2
 - For 084B8036, verify 115Vac to terminals 1&2

AK-CC 550A Programming

- Ensure address is set correctly, via parameter o03.
- Ensure application is set correctly, via parameter o61.

Comm Loop Wiring

- Verify intended form of communication to be used (Modbus or LON RS485)
 - For Modbus communication:
 - Ensure comm wires are landed on terminals 57&58.
 - Modbus loop is polarity sensitive, ensure polarity is consistent throughout loop
 - Ensure any other Modbus devices on the loop use 38400 baud rate
 - For LON RS485 communication:
 - Ensure comm wires are landed on terminals 52&53
 - Ensure EKA 175 comm card is installed in port below display.
 - EOL resistor
 - For 1 loop from system manager, ensure 120 ohm resistor at end of loop and switch above comm plug in 'On' position
 - For 2 loops from system manager, ensure 120 ohm resistor at end of each loop and switch above comm plug in 'Off' position
- For either comm type, max distance is 4000'. Beyond this distance, a repeater is needed
- For either comm type, max # of case controllers is 120 per system manager
- For either comm type, an EIA 485 rated cable should be used