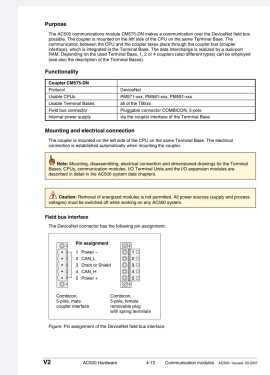


FIELD INSTALLATION QUICK GUIDE

Installation Instructions

ABB CM575-DN

DeviceNet Master Communication Module



PRODUCT	CM575-DN
FAMILY	AC500 communications
FUNCTION	DeviceNet Master Communication Module
STATUS	Verify exact configuration

Prepared by Amikon Limited from ABB AC500 Hardware V2, 03.2007, CM575-DN section 4-12 to 4-18. This guide does not replace the complete manufacturer manual, site procedure, hazardous-area drawing, or approval document.

01 CONFIRM THE ORDERED CONFIGURATION

Network topology	Linear trunk and drop lines; power and signals share the network cable
Supported transmission rates	125, 250 or 500 kbit/s
Field connector	Removable five-pole COMBICON connector with spring terminals
Documented CPU families	PM571-xxx, PM581-xxx and PM591-xxx
Terminal-base interface	Integrated coupler bus; dual-port data exchange
Dual-port memory	8 kByte
Internal RAM	256 kByte

02 MOUNTING AND CONNECTION

- Switch off all supply and process voltages before working on the AC500 system; energized module removal is not permitted.
- Fit the coupler on the left side of the CPU in a supported terminal-base slot.
- Connect pin 1 Power-, pin 2 CAN_L, pin 3 drain/shield, pin 4 CAN_H and pin 5 Power+.
- Provide the required DeviceNet network power; the fieldbus drivers are not powered by signal wiring alone.
- Fit 120-ohm termination at the data-line ends and verify trunk and cumulative drop lengths for the chosen rate.

OFFICIAL INSTALLATION REFERENCE

Purpose

The AC500 communications module CM575-DN makes a communication over the DeviceNet field bus possible. The coupler is mounted on the left side of the CPU on the same Terminal Base. The communication between the CPU and the coupler takes place through the coupler bus (coupler interface), which is integrated in the Terminal Base. The data interchange is realized by a dual-port RAM. Depending on the used Terminal Base, 1, 2 or 4 couplers (also different types) can be employed (see also the description of the Terminal Bases).

Functionality

Coupler CM575-DN	
Protocol	DeviceNet
Usable CPUs	PM571-xxx, PM581-xxx, PM591-xxx
Usable Terminal Bases	all of the TB5xx
Field bus connector	Pluggable connector COMBICON, 5-pole
Internal power supply	via the coupler interface of the Terminal Base

Mounting and electrical connection

The coupler is mounted on the left side of the CPU on the same Terminal Base. The electrical connection is established automatically when mounting the coupler.



Note: Mounting, disassembling, electrical connection and dimensioned drawings for the Terminal Bases, CPUs, communication modules, I/O Terminal Units and the I/O expansion modules are described in detail in the AC500 system data chapters.



Caution: Removal of energized modules is not permitted. All power sources (supply and process voltages) must be switched off while working on any AC500 system.

Field bus interface

The DeviceNet connector has the following pin assignment:

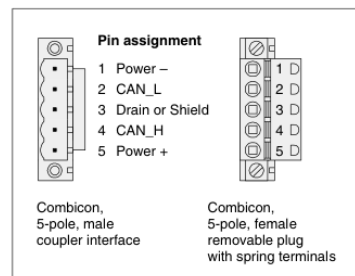


Figure: Pin assignment of the DeviceNet field bus interface

04

CABLE ROUTING AND CONNECTION

- Fit the coupler on the left side of the CPU in a supported terminal-base slot.
- Connect pin 1 Power-, pin 2 CAN_L, pin 3 drain/shield, pin 4 CAN_H and pin 5 Power+.
- Provide the required DeviceNet network power; the fieldbus drivers are not powered by signal wiring alone.
- Fit 120-ohm termination at the data-line ends and verify trunk and cumulative drop lengths for the chosen rate.
- Download the validated network configuration and check RUN and NET/MOD indications before operational release.

05

INITIAL SYSTEM CHECKS

- Confirm model identity and compatible system components before energizing.
- Verify wiring, grounding, enclosure, and applicable hazardous-area requirements.
- Check the loaded DeviceNet configuration and established field connections before operating connected equipment.
- Record the installed order number and baseline operating condition.

06

CONTROLLED DOCUMENTS

Official source	ABB AC500 Hardware V2, 03.2007, CM575-DN section 4-12 to 4-18
Product record	CM575-DN
Manufacturer	ABB
Support	INFO@AMIKON.CN