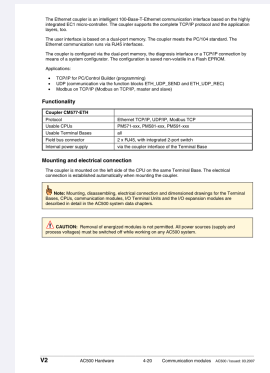


FIELD INSTALLATION QUICK GUIDE

Installation Instructions

ABB CM577-ETH

Ethernet TCP/IP Communication Module



PRODUCT	CM577-ETH
FAMILY	AC500 communications
FUNCTION	Ethernet TCP/IP Communication Module
STATUS	Verify exact configuration

Prepared by Amikon Limited from ABB AC500 Hardware V2, 03.2007, CM577-ETH pp.117-120. This guide does not replace the complete manufacturer manual, site procedure, hazardous-area drawing, or approval document.

01 CONFIRM THE ORDERED CONFIGURATION

Ethernet link rates	10 or 100 Mbit/s
Physical connectors	Two RJ45 sockets
Integrated switching	Internal two-port Ethernet switch
Supported protocols	TCP/IP, UDP/IP and Modbus TCP
Modbus TCP roles	Master and slave
Documented CPU families	PM571-xxx, PM581-xxx and PM591-xxx
CPU data interface	8 kByte dual-port memory

02 MOUNTING AND CONNECTION

- Switch off all supply and process voltages before working on the AC500 station; energized module removal is prohibited.
- Match CM577-ETH and order 1SAP170700R0001 to the supported CPU and terminal base.
- Mount the coupler to the left of the CPU; its power and CPU data connection are provided through the base.
- Connect the engineered Ethernet links to the two RJ45 sockets, observing the documented cable shield and pin assignment.
- Restore the approved configuration using the supported system configurator; distinguish TCP/IP engineering, UDP messaging and Modbus TCP settings.

OFFICIAL INSTALLATION REFERENCE

The Ethernet coupler is an intelligent 100-Base-T-Ethernet communication interface based on the highly integrated EC1 micro-controller. The coupler supports the complete TCP/IP protocol and the application layers, too.

The user interface is based on a dual-port memory. The coupler meets the PC/104 standard. The Ethernet communication runs via RJ45 interfaces.

The coupler is configured via the dual-port memory, the diagnosis interface or a TCP/IP connection by means of a system configurator. The configuration is saved non-volatile in a Flash EPROM.

Applications:

- TCP/IP for PC/Control Builder (programming)
- UDP (communication via the function blocks ETH_UDP_SEND and ETH_UDP_REC)
- Modbus on TCP/IP (Modbus on TCP/IP, master and slave)

Functionality

Coupler CM577-ETH	
Protocol	Ethernet TCP/IP, UDP/IP, Modbus TCP
Usable CPUs	PM571-xxx, PM581-xxx, PM591-xxx
Usable Terminal Bases	all
Field bus connector	2 x RJ45, with integrated 2-port switch
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.

Official manufacturer reference reproduced from ABB AC500 Hardware V2, 03.2007, CM577-ETH pp.117-120. Use the current source document and all referenced drawings and notes for installation.

04

CABLE ROUTING AND CONNECTION

- Match CM577-ETH and order 1SAP170700R0001 to the supported CPU and terminal base.
- Mount the coupler to the left of the CPU; its power and CPU data connection are provided through the base.
- Connect the engineered Ethernet links to the two RJ45 sockets, observing the documented cable shield and pin assignment.
- Restore the approved configuration using the supported system configurator; distinguish TCP/IP engineering, UDP messaging and Modbus TCP settings.
- Check power, ready, running and Ethernet activity indications, then test the intended communication task before process release.

05

INITIAL SYSTEM CHECKS

- Confirm model identity and compatible system components before energizing.
- Verify wiring, grounding, enclosure, and applicable hazardous-area requirements.
- Test the intended TCP/IP, UDP or Modbus TCP transaction after restoring the configuration.
- Record the installed order number and baseline operating condition.

06

CONTROLLED DOCUMENTS

Official source	ABB AC500 Hardware V2, 03.2007, CM577-ETH pp.117-120
Product record	CM577-ETH
Manufacturer	ABB
Support	INFO@AMIKON.CN