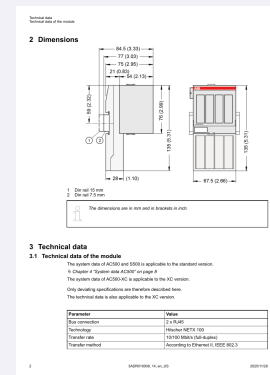


FIELD INSTALLATION QUICK GUIDE

Installation Instructions

ABB CI512-ETHCAT

EtherCAT Digital I/O Interface



PRODUCT	CI512-ETHCAT
FAMILY	AC500 / S500 I/O
FUNCTION	EtherCAT Digital I/O Interface
STATUS	Verify exact configuration

Prepared by Amikon Limited from ABB 3ADR010008 rev.14, 2025-11-28; CI512 connections; 2CDC124092L0201. This guide does not replace the complete manufacturer manual, site procedure, hazardous-area drawing, or approval document.

01 CONFIRM THE ORDERED CONFIGURATION

Onboard digital allocation	8 fixed inputs, 8 fixed outputs and 8 configurable input/output channels
EtherCAT connection	Two RJ45 ports; 10/100 Mbit/s full-duplex
Cyclic process image	10 input bytes and 14 output bytes
S500 expansion availability	Up to 10 modules with device index C0 or above; none below C0
Acyclic service capacity	SDO, maximum 1500 bytes
Process supply voltage	24 V DC at UP and UP3; 10 A fast protection fuse
UP operating current	0.15 A in normal operation

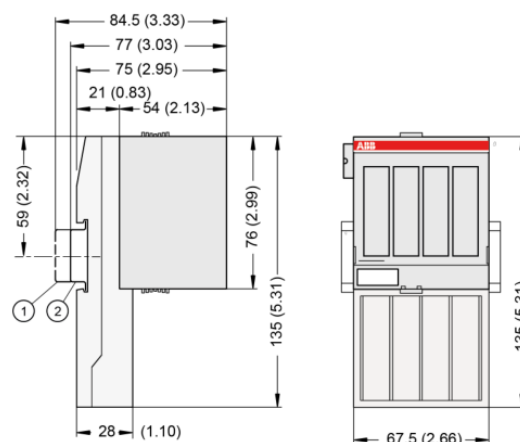
02 MOUNTING AND CONNECTION

- Isolate all supply and process voltages before removing terminals, mounting or replacing CI512-ETHCAT; this device is not hot-pluggable.
- Fit the module to the documented TU507-ETH or TU508-ETH terminal unit and engage the locks; maintain natural convection.
- Provide protected SELV/PELV 24 V DC at UP 1.8/2.8 and UP3 3.8, with ZP returns at 1.9/2.9/3.9.
- Use terminals 2.0-2.7 for fixed inputs, 3.0-3.7 for fixed outputs and 1.0-1.7 for configured DC channels.
- Check channel direction, load current and installation derating; never connect external voltage to a terminal configured as an output.

OFFICIAL INSTALLATION REFERENCE

Technical data
Technical data of the module

2 Dimensions



- 1 Din rail 15 mm
2 Din rail 7.5 mm



The dimensions are in mm and in brackets in inch.

3 Technical data

3.1 Technical data of the module

The system data of AC500 and S500 is applicable to the standard version.

❖ Chapter 4 "System data AC500" on page 8

The system data of AC500-XC is applicable to the XC version.

Only deviating specifications are therefore described here.

The technical data is also applicable to the XC version.

Parameter	Value
Bus connection	2 x RJ45
Technology	Hilscher NETX 100
Transfer rate	10/100 Mbit/s (full-duplex)
Transfer method	According to Ethernet II, IEEE 802.3

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CABLE ROUTING AND CONNECTION

- Fit the module to the documented TU507-ETH or TU508-ETH terminal unit and engage the locks; maintain natural convection.
- Provide protected SELV/PELV 24 V DC at UP 1.8/2.8 and UP3 3.8, with ZP returns at 1.9/2.9/3.9.
- Use terminals 2.0-2.7 for fixed inputs, 3.0-3.7 for fixed outputs and 1.0-1.7 for configured DC channels.
- Check channel direction, load current and installation derating; never connect external voltage to a terminal configured as an output.
- Restore the correct EtherCAT project and device description. Test feedback, output commands, cam events and fault diagnostics safely.

05

INITIAL SYSTEM CHECKS

- Confirm model identity and compatible system components before energizing.
- Verify wiring, grounding, enclosure, and applicable hazardous-area requirements.
- Check digital feedback, configured channel direction, output loads and cam events under safe conditions.
- Record the installed order number and baseline operating condition.

06

CONTROLLED DOCUMENTS

Official source	ABB 3ADR010008 rev.14, 2025-11-28; CI512 connections; 2CDC124092L0201
Product record	CI512-ETHCAT
Manufacturer	ABB
Support	INFO@AMIKON.CN