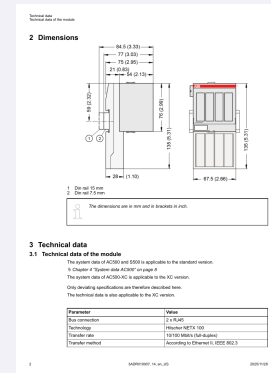


FIELD INSTALLATION QUICK GUIDE

Installation Instructions

ABB CI511-ETHCAT

EtherCAT Mixed I/O Interface



PRODUCT	CI511-ETHCAT
FAMILY	AC500 / S500 I/O
FUNCTION	EtherCAT Mixed I/O Interface
STATUS	Verify exact configuration

Prepared by Amikon Limited from ABB 3ADR010007 rev.14, 2025-11-28; CI511 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 signal allocation	8 digital inputs, 8 digital outputs, 4 analog inputs and 2 analog outputs
EtherCAT physical interface	Two RJ45 connections; 10/100 Mbit/s full-duplex
Cyclic process data	18 input bytes and 18 output bytes
S500 expansion condition	Up to 10 modules at device index C0 or above; unavailable below C0
Acyclic transfer service	SDO; maximum 1500 bytes
Process supply rating	24 V DC UP/UP3; 10 A fast protection fuse
Normal UP consumption	0.2 A

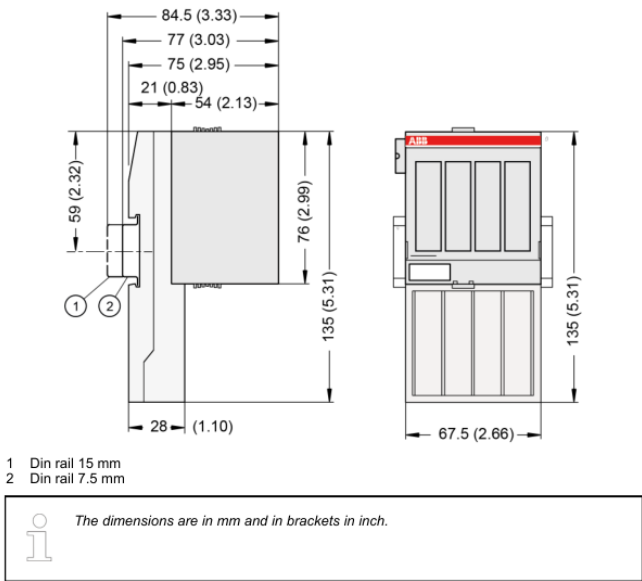
02 MOUNTING AND CONNECTION

- Qualified personnel must switch off all supply and process voltages before mounting, replacing or disconnecting the module.
- Seat CI511-ETHCAT on TU507-ETH or TU508-ETH until locked; preserve natural convection and the permitted mounting orientation.
- 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.
- Match each analog circuit to its documented reference: AI- for voltage/RTD input, AO- for voltage output, and ZP for current circuits.
- Do not connect analog current inputs in series. Apply the documented sensor isolation, shielding and equipotential bonding.

03
OFFICIAL INSTALLATION REFERENCE

Technical data
Technical data of the module

2 Dimensions



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

Official manufacturer reference reproduced from ABB 3ADR010007 rev.14, 2025-11-28; CI511 connections; 2CDC124092L0201. Use the current source document and all referenced drawings and notes for installation.

04

CABLE ROUTING AND CONNECTION

- Seat CI511-ETHCAT on TU507-ETH or TU508-ETH until locked; preserve natural convection and the permitted mounting orientation.
- 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.
- Match each analog circuit to its documented reference: AI- for voltage/RTD input, AO- for voltage output, and ZP for current circuits.
- Do not connect analog current inputs in series. Apply the documented sensor isolation, shielding and equipotential bonding.
- Restore the correct device description and channel/cam configuration; safely check measurements, commands, timing and diagnostics.

05

INITIAL SYSTEM CHECKS

- Confirm model identity and compatible system components before energizing.
- Verify wiring, grounding, enclosure, and applicable hazardous-area requirements.
- Check analog values, digital commands, cam timing and EtherCAT diagnostics under safe conditions.
- Record the installed order number and baseline operating condition.

06

CONTROLLED DOCUMENTS

Official source	ABB 3ADR010007 rev.14, 2025-11-28; CI511 connections; 2CDC124092L0201
Product record	CI511-ETHCAT
Manufacturer	ABB
Support	INFO@AMIKON.CN