

ABB CI868A Manual

Brand	ABB
Product Series	ABB
Product Type	of unit onto the TP867 Baseplate

Description

The CI868A can be used to connect an AC 800M controller to external Ethernet devices using IEC 61850 – Edition 2 standard. Since this is a standard for Substation Automation, this allows the combination of Process Automation and Electrical Control in the same controller.

The TP868 Baseplate has two RJ45 Ethernet connectors, where CH1 connector can use 10Mbps or 100Mbps (Mega bits/sec.). The baseplate has a code lock that prevents the installation of an incorrect type of unit onto the TP867 Baseplate.

The CI868 expansion unit contains the CEX-Bus logic, a communication unit and a DC/DC converter that supplies appropriate voltages from the +24 V supply via the CEX-Bus. The Ethernet cable must be connected to the main network through an Ethernet switch.

The CI868A module will only work with System 800xA 6.0.3.3, 6.1.1 and subsequent versions

Features and benefits

Allows communication via both protocols defined by IEC 61850 standard: MMS (client) and GOOSE

A maximum of 120 IEDs (GOOSE) and 40 IEDs (MMS) is allowed per CI868A. The combination of both protocols in the same module is allowed. (40 IEDs / CI868A)

Up to 12 modules can be used in one AC 800M Controller

General info

Article number 3BSE092691R1

Communication protocol IEC 61850

Client or server MMS (Client), Goose (Publisher & Subscriber)

Transmission speed 10/100 Mbit/s

Network redundancy No

Module redundancy No

Hot Swap Yes

Used together with HI Controller Yes

Detailed data

Max units on CEX bus 12

Connector RJ-45 female (8-pin)

24 V consumption typ. typ 160 mA

Power dissipation 3.8 W

Environment and certification

Temperature, Operating +5 to +55 °C (+41 to +131 °F)

Temperature, Storage -40 to +70 °C (-40 to +158 °F)

Altitude 2000 m according to IEC/EN 61131-2

Pollution degree Degree 2 according to IEC/EN 61131-2

Corrosion protection G3 compliant to ISA 71.04

Relative humidity 5 to 95 %, non-condensing

Protection class IP20 according to EN60529, IEC 529

CE- marking Yes

Electrical Safety UL 61010-1, UL 61010-2-201

Hazardous location UL 60079-15, cULus Class 1, Zone 2, AEx nA IIC T4, ExnA IIC T4Gc X

Marine certificates DNV-GL, (Pending: ABS, BV, LR)

RoHS compliance DIRECTIVE/2011/65/EU (EN 50581:2012)

WEEE compliance DIRECTIVE/2012/19/EU

Dimensions

Width 59 mm (2.3 in.)

Height 185 mm (7.3 in.)

Depth 127.5 mm (5.0 in.)

Weight (including base) 700 g (1.5 lbs)

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