

CI867A

ABB Ability™ System 800xA® hardware selector



MODBUS TCP is an open industry standard widely spread due to its ease of use. It is a request-response protocol and offers services specified by function codes.

MODBUS TCP combines the MODBUS RTU with standard Ethernet and the universal networking standard TCP. It is an application-layer messaging protocol, positioned at level 7 of the OSI model. The CI867A/TP867 is used for connection between an AC 800M controller and external Ethernet devices using Modbus TCP protocol.

The CI867 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 CI867A only uses one Ethernet port (100 Mbit/s) compared with the earlier CI867, where two Ethernet ports could be used (100 Mbit/s and 10 Mbit/s). The CI867A module will only work with System 800xA 6.0.3.3, 6.1.1, and subsequent versions.

Features and benefits

- The CI867A can be set redundant and supports hot swap.
- CI867A is a single channel Ethernet unit; Ch1 supports full duplex with 100 Mbps speed. Both master and slave functionality are supported.
- A maximum of 70 slave and 8 master units per CI867A can be used.

General info	
Article number	3BSE092689R1
Communication protocol	MODBUS TCP
Master or slave	Master/Slave
Number of channels	1 channel
Transmission speed	10/100 Mbit/s (Ch1)
Line redundancy	No
Module redundancy	Yes
Hot Swap	Yes
Used together with HI Controller	Yes

Detailed data	
Max units on CEX bus	12
Connector	RJ-45 female (8-pin)

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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