# ABB ABB Series Service Manual

CI857

## 1. Description

INSUM integration into AC 800M supports higher functionality integration, multidrop configurations, time distribution and time stamping in the switchgear, and utilizes standard Ethernet technology for longer communication distances. The speed of this solution is typically 500 ms for one closed loop (indication from one motor until operation of another, assuming 250 ms cycle time in control execution).

## 3. Product Information

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AC 800M controllers access the INSUM functions through function blocks in the INSUM Communication Library. The CI857 is powered by the processor unit, via the CEX-Bus, and therefore does not require any additional external power source.

Features and benefits

Maximum number of MCUs (or other INSUM devices) per AC 800M: – 256 MCUs (or other INSUM devices) per AC 800M with PM864 or PM866. – 128 MCUs (or other INSUM devices) per AC 800M with PM861.

Maximum 6 CI857 per AC 800M.

Maximum 128 MCUs (or other INSUM devices) per CI857.

Maximum 2 INSUM TCP/IP Gateways per CI857.

Maximum 128 INSUM devices per INSUM TCP/IP gateway.

Four LonWorks subnets per INSUM TCP/IP gateway.

Maximum 32 devices per LonWorks subnet.

General info

Article number 3BSE018144R1

Communication protocol ABB's INSUM

Master or slave Master

Transmission speed 10 Mbit/s

Line redundancy No

Module redundancy No

Hot Swap Yes

Used together with HI Controller Yes

Detailed data

Max units on CEX bus 6

Connector RJ-45 female (8-pin)

24 V consumption typ. typ 150 mA

Environment and certification

Temperature, Operating 0 to +55 °C (+32 to +131 °F)

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

Corrosion protection G3 compliant to ISA 71.04

Protection class IP20 according to EN60529, IEC 529

CE- marking Yes

RoHS compliance EU RoHS, UAE RoHS, CN RoHS

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)