ABB ABB Series Service Manual

TB842

1. Description

ABB TB842 3BSE022464R1 ModuleBus Optical Port

3. Product Information

ABB TB842 3BSE022464R1 ModuleBus Optical Port

TB842 ModuleBus Optical Port is a communication interface between the CI801 or CI840/CI840A FCI and the TB820/TB820V2/TB840/TB840A ModuleBus modem of an I/O cluster or ABB drives units via the Optical ModuleBus. TB842 connects to CI801 via TB806 and to CI840/CI840A via TU847 and TB806 for single I/O or via TU846 and TB846 for redundant I/O. TB842 can be used in both a simplex optical configuration as well as in a duplex optical configuration. In a simplex configuration, the optical ModuleBus nodes are connected in a ring. In a duplex configuration, the optical ModuleBus nodes are connected in a row. TB842 has a connector for fiber optic connections and a connection to the communication interface module.

The module is equipped with a Transmitter/Receiver for up to 10 Mbit/s. Both plastic and HCS (Hard Clad Silica) optic fiber with connectors (Agilent’s, former Hewlett-Packard, Versatile Link) can be used with the TB842. A Modulebus must have the same type of transmitter/receiver on each node.

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Features and benefits

• 1 fiber optic port for the Optical ModuleBus expansion

• Connection to CI801 and CI840/CI840A

General info

Article number 3BSE022464R1

Communication protocol Modulebus

Master or slave N/A

Line redundancy Yes

Module redundancy Yes

Hot Swap Yes

Used together with HI Controller No

Mounting Vertical or Horizontal

Detailed data

Connector Agilent’s, former Hewlett-Packard, Versatile Link

24 V consumption typ. 20 mA

ModuleBus current distribution Fiber optic interface, one transmit and one receive connection for max. 10 Mbit/s. Wavelength 650 nm

Power dissipation 0.5 W

Environment and certification

CE- marking Yes

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

Hazardous location cULus Hazardous Location Class1 Zone 2, ATEX Zone 2

Marine certificates ABS, BV, DNV-GL, LR

Temperature, Operating 0 to +55 °C (+32 to +131 °F), approvals are issued for +5 to +55 °C

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

Relative humidity 5 to 95 %, non-condensing

Max ambient temperature 55 °C (131 °F), for vertical mounting 40 °C (104 °F)

Equipment class Class I according to IEC 60536; (earth protected)

Ingress protection IP20 according to IEC 60529

RoHS compliance EU RoHS, UAE RoHS, CN RoHS

WEEE compliance DIRECTIVE/2012/19/EU

Dimensions

Width 17.6 mm (0.69”)

Height 56.7 mm (2.23”)

Depth 42.3 mm (1.67”)

Weight 90 g (0.20 lbs.)