ABB ABB Series Service Manual

TB840A

1. Description

TB840A

3. Product Information

TB840A | ABB Modulebus Cluster Modem

S800 I/O is a comprehensive, distributed and modular process I/O system that communicates with parent controllers and PLCs over industry-standard field buses. The TB840 ModuleBus Modem is a fiber optic interface to the Optical ModuleBus. TB840A is used in redundancy configurations where each module is connected to different optical ModuleBus lines, but connected to the same electrical ModuleBus.

The ModuleBus Modem has an electrical and an optical Modulebus interface which are logically the same bus. A maximum of 12 I/O modules can be connected to the electrical ModuleBus and up to seven clusters can be connected to the fiber optic ModuleBus. The fiber optic interface is intended for local distribution of I/O clusters and where more than 12 I/O modules are required in an I/O station.

Features and benefits

2 fiber optic ports to optical ModuleBus

ModuleBus (electrical) to the I/O Modules

Supervisory functions of I/O ModuleBus and power supply

Isolated power supply to I/O modules

TU840, MTU for redundant TB840/TB840A, dual ModuleBus

TU841, MTU for redundant TB840/TB840A, single ModuleBus

Input power fused

General info

Article number 3BSE037760R1

Communication protocol Modulebus

Master or slave Slave

Line redundancy Yes

Module redundancy Yes

Hot Swap Yes

Used together with HI Controller Yes

Detailed data

24 V consumption typ. 120 mA

Environment and certification

CE- marking Yes

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

Hazardous location C1 Div 2 cULus, C1 Zone 2 cULus, 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)

Pollution degree Degree 2, IEC 60664-1

Corrosion protection ISA-S71.04: G3

Relative humidity 5 to 95 %, non-condensing

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

Protection class IP20 according to EN60529, IEC 529

RoHS compliance EU RoHS, UAE RoHS, CN RoHS

WEEE compliance DIRECTIVE/2012/19/EU

Dimensions

Width 54 mm (2.13 in.)

Height 119 mm (4.69 in.)

Depth 96 mm (3.78 in.)

Weight 0.2 kg (0.44 lbs)