ABB ABB Series Service Manual

TB820V2

1. Description

ABB TB820V2 Cluster Modem I/O Module 3BSE013208R1

3. Product Information

ABB TB820V2 Cluster Modem I/O Module 3BSE013208R1

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 TB820V2 ModuleBus Modem is a fiber optic interface to the ModuleBus. The ModuleBus Modem has an electric and an optical 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 12I/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

TB820/TB820V2 has a rotary switch that selects its cluster number, 1 to 7, on the optical ModuleBus

General info

Article number 3BSE013208R1

Communication protocol Modulebus

Master or slave Slave

Line redundancy No

Module redundancy No

Hot Swap No

Used together with HI Controller No

Detailed data

24 V consumption typ. 100 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 58 mm (2.39 in.)

Height 170 mm (6.7 in.) including latch

Depth 122 mm (4.8 in.)

Weight 0.3 kg (0.66 lbs)