

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

ABB

TB820V2 3BSE013208R1

MODULEBUS OPTICAL MODEM

Used with the applicable Modulebus optical modem configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: ABB TB820V2 official data sheet

TB820V2

Compact Product Suite hardware selector



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 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
- 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	DIRECTIVE/2011/65/EU (EN 50581:2012)
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)