DATA SHEET

TB840A

ABB Ability™ System 800xA® 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 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	DIRECTIVE/2011/65/EU (EN 50581:2012)
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)

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