

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 | 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) |

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