

TU846

ABB Ability™ System 800xA® hardware selector



The TU846 is a module termination unit (MTU) for redundant configuration of the field communication interface CI840/CI840A and redundant I/O. The MTU is a passive unit having connections for power supply, two electrical ModuleBuses, two CI840/CI840A and two rotary switches for station address (0 to 99) settings.

A ModuleBus Optical Port TB842 can be connected to TU846 via TB846. Four mechanical keys, two for each position, are used to configure the MTU for the right types of modules. Each key has six positions, which gives a total number of 36 different configurations.

Module Termination Unit for dual CI840/CI840A, redundant I/O. TU846 are used with redundant I/O modules and TU847 with single I/O modules. The maximum ModuleBus length from the TU846 to the ModuleBus terminator is 2.5 meters. TU846/TU847 needs space to the left in order to be removed. Cannot be replaced with power applied.

Features and benefits

- Power supply connection.
- Two PROFIBUS connections.
- Two service tool connections.
- Two rotary switch for station address setting.
- Connection for two ModuleBuses.
- Connector for ModuleBus Optical Port.
- Mechanical keying prevents insertion of the wrong module type.
- Latching device to DIN rail for locking and grounding.
- DIN rail mounted.

General info

| | |
|------------------------|---------------------------------------|
| Article number | 3BSE022460R1 |
| Communication protocol | PROFIBUS DP-V1 |
| Master or slave | N/A |
| Line redundancy | Yes |
| Module redundancy | Yes |
| Hot Swap | No |
| Type | Redundant CI840/CI840A, Redundant I/O |
| Power input | 24 V d.c. (19.2 - 30 V) |
| Mounting | Vertical or Horizontal |

Detailed data

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|--------------------------------|---|
| Connector | PROFIBUS: DSUB9 connector Service ports: RJ45 connector |
| ModuleBus current distribution | Maximum 5 V 1.5 A Maximum 24 v 1.5 A |
| Mechanical Keys | 36 different combinations |
| Acceptable wire sizes | 0.25 - 2.5mm ² , 24 - 14 AWG Recommended torque: 0.5 - 0.6 Nm Stripping length: 6-7.5 mm, 0.24-0.30 in |
| Rated insulation voltage | 50 V |
| Dialectic test voltage | 500 V a.c |

Environment and certification

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|-------------------------|---|
| CE- marking | Yes |
| Electrical Safety | EN 61010-1, UL 61010-1, EN 61010-2-201, UL 61010-2-201 |
| Hazardous location | cULus Hazardous Location Class1 Zone 2, ATEX Zone 2 |
| 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) |
| Relative humidity | 5 to 95 %, non-condensing |
| Max ambient temperature | 55 °C (131 °F), for vertical mounting 40 °C (104 °F) |
| Equipment class | Class I according to IEC60536; (earth protected) |
| Ingress protection | IP20 according to IEC 529, (IEC 144) |
| RoHS compliance | DIRECTIVE/2011/65/EU (EN 50581:2012) |
| WEEE compliance | DIRECTIVE/2012/19/EU |

Dimensions

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|--------|--------------------------------|
| Width | 124 mm (4.88") |
| Height | 186 mm (7.32") including latch |
| Depth | 47 mm (1.85") |
| Weight | 0.5 kg (1.1 lbs.) |

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