ABB ABB Series Service Manual

TU846

1. Description

3BSE022460R1

3. Product Information

3BSE022460R1 | ABB | TU846 Module Termination Unit

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 configured 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.

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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

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 - 2.5mm², 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

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 EU RoHS, UAE RoHS, CN RoHS

WEEE compliance DIRECTIVE/2012/19/EU

Dimensions

Width 124 mm (4.88")

Height 186 mm (7.32”) including latch

Depth 47 mm (1.85")

Weight 0.5 kg (1.1 lbs.)