# ABB ABB Series Service Manual

TU840

## 1. Description

3BSE020846R1

## 3. Product Information

3BSE020846R1 | ABB | TU840 Termination Unit

The TU840 is a module termination unit (MTU) for redundant configuration of Optical ModuleBus Modem TB840/TB840A.

The MTU is a passive unit having connections for power supply, double electrical ModuleBus, two TB840/TB840A and a rotary switch for cluster address (1 to 7) setting.

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. The configurations can be changed with a screwdriver.

Termination Unit TU840 connects TB840/TB840A to redundant I/O. Termination Unit TU841 connects TB840/TB840A to non-redundant I/O.

Features and benefits

• A rotary switch for cluster address setting

• Mechanical keying prevents insertion of wrong module type

• Double ModuleBus connection

• Latching device to DIN rail for locking and grounding

• DIN rail mounted

General info

Article number 3BSE020846R1

Communication protocol Modulebus

Master or slave N/A

Line redundancy Yes

Module redundancy Yes

Hot Swap No

Type Redundant TB840/TB840A, Redundant I/O, Single Power

Power input 24 V d.c (19.2 -30 V)

Mounting Vertical or Horizontal

Detailed data

Connector N/A

24 V consumption typ. N/A

ModuleBus current distribution Maximum 5 V 1.5 A

24 V 1.5 A

Mechanical Keys 36 different combinations

Acceptable wire sizes Solid: 0.2 - 2.5 mm²

Stranded: 0.2 -2.5 mm², 24 -12 AWG

Recomended torque: 0.5 Nm

Rated insulation voltage 50 V

Dialectic test voltage 500 V a.c

Power dissipation 2.0 W

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 Class 1 Zone 2, 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)

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 IEC 60536; (earth protected)

Ingress protection IP20 according to IEC 60529

RoHS compliance EU RoHS, UAE RoHS, CN RoHS

WEEE compliance DIRECTIVE/2012/19/EU

Dimensions

Width 124 mm (4.88 in.)

Height 186 mm (7.32 in.) including latch

Depth 47 mm (1.85 in.)

Weight 0.45 kg (0.99 lbs.)