

ABB TU812V1 Manual

Brand	ABB
Product Series	ABB
Product Type	Compact

Description

The TU812V1 is a 50 V compact module termination unit (MTU) for the S800 I/O system with 16 signal connections. The MTU is a passive unit used for connection of the field wiring. It also contains a part of the ModuleBus.

The MTU distributes the ModuleBus to the I/O module and to the next MTU. It also generates the correct address to the I/O module by shifting the outgoing position signals to the next MTU.

Two mechanical keys are used to configure the MTU for different types of I/O modules. This is only a mechanical configuration and it does not affect the functionality of the MTU or the I/O module. Each key has six positions, which gives a total number of 36 different configurations.

Features and benefits

Compact installation of I/O modules using D-sub connector.

Connections to ModuleBus and I/O modules.

Mechanical keying prevents insertion of the wrong I/O module.

Latching device to DIN rail for grounding.

DIN rail mounting.

General info

Article number 3BSE013232R1

Type Compact

Connection 25 pin D-sub

Channels 16

Voltage 50 V

Mounting Both directions

Mounting detail Horizontal 55 °C (131 °F)

Vertical 40 °C (104 °F)

Use with I/O AI810, AI815, AI820, AI830, AI830A, AI835, AI835A, AI845, AO810, AO810V2, AO815, AO820, AO845, AO845A, DI810, DI811, DI814, DI830, DI831, DI840, DI880, DI885, DO810, DO814, DO840, DO880, DP820 and DP840

Process connections 25 pin (male) D-Sub connector

up to 16 I/O signals

Single/redundant I/O Single

Detailed data

Maximum current per I/O channel 2 A

Maximum current process connection 5 A

Dielectric test voltage 500 V a.c.

Environment and certification

CE mark 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 certification 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 IEC 60529

Mechanical operating conditions IEC/EN 61131-2

EMC EN 61000-6-4, EN 61000-6-2

Overvoltage categories IEC/EN 60664-1, EN 50178

Equipment class Class I according to IEC 61140; (earth protected)

RoHS compliance EN 50581:2012

WEEE compliance DIRECTIVE/2012/19/EU

Dimensions

Width 64 mm (2.52 in.) including connector, 58.5 mm (2.3 in.) edge to edge installed

Depth 64 mm (2.52 in.), including terminals

Height 170 mm (6.7 in.), including latch

Weight 0.17 kg (0.37 lbs)

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