ABB ABB Series Service Manual

TU835V1

1. Description

The TU835V1 MTU can have up to 8 I/O channels. The maximum rated voltage is 50V and maximum rated current is 2 A per channel. 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.

3. Product Information

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The MTU can be mounted on a standard DIN rail. It has a mechanical latch that locks the MTU to the DIN rail. The latch can be released with a screwdriver.

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

Up to 8 channels of field signals and process power connections.

Each channel has one fused transducer power terminal and one signal connection.

Process voltage can be connected to 2 individually isolated groups.

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 3BSE013236R1

Type Extended

Connection Terminal block

Channels 8

Voltage 50 V

Mounting Both directions

Mounting detail 55 ºC (131 °F)

Use with I/O AI810, AI815 and AI845

Process connections 16

up to 8 I/O channels

(2 terminals per channel)

4 Process power

4 Process power (0V)

Single/redundant I/O Single

Detailed data

Maximum current per I/O channel 2 A

Maximum current process connection 8 A

Acceptable wire sizes Solid: 0.2 - 4 mm²

Stranded: 0.2 - 2.5 mm², 24 - 12 AWG

Recommended torque: 0.5 - 0.6 Nm

Stripping length: 7 mm

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)

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 126 mm (5 in.) including connector, 120.5 mm (4.74 in.) edge to edge installed

Depth 64 mm (2.52 in.) including terminals

Height 110 mm (4.3 in.)

Weight 0.26 kg (0.57 lbs)