

DATA SHEET

TU835V1 ABB Ability™ System 800xA® hardware selector



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.

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 |
| Туре | Extended |
| Connection | Terminal block |
| Channels | 8 |
| Voltage | 50 V |
| Mounting | Both directions |
| Mounting detail | 55 °C (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 mm ² Stranded: 0.2 - 2.5 mm ² , 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) | |



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