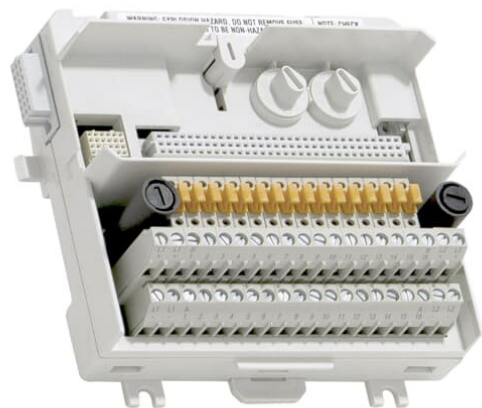


# TU850

## Freelance hardware selector



The TU850 MTU can have up to 16 I/O channels. The maximum rated voltage is 50 V and maximum rated current is 15mA per I/O channel (digital input) or 25mA per two I/O channels (analog input).

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. 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

- Complete 2-wire connections for up to 16 channels.
- Each channel has one current limited sensor/transmitter power outlet terminal and one signal terminal.
- Current limitation in sensor/transmitter supply is implemented with disconnectable PTC fuse.
- Process voltage can be connected to 2 individually isolated groups, if the I/O module supports it.
- 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       | 3BSE050930R1  |
| Type                 | Extended  |
| Connection           | Terminal block  |
| Channels             | 16  |
| Voltage              | 50 V  |
| Mounting             | Both directions   |
| Mounting detail      | 55 ° (131 °F)   |
| Use with I/O         | AI810, DI810, DI811,DI830, DI831  |
| Process connections  | 40 up to 16 I/O channels<br>16 current limited sensor/transmitter power outlets<br>D-sub connectors 25 pin (male) |
| Single/redundant I/O | Single  |

| Detailed data                   |   |
|---------------------------------|---|
| Maximum current per I/O channel | 2A  |
| Acceptable wire sizes           | Solid: 0.2 - 4 mm <sup>2</sup>                    |
|                                 | Stranded: 0.2 - 2.5 mm <sup>2</sup> , 24 - 12 AWG |
|                                 | Recommended torque: 0.5 - 0.6 Nm                  |
| Dielectric test voltage         | Stripping length: 7 mm                            |
|                                 | 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            | -   |
| 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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