

TU851

Compact Product Suite hardware selector



The TU851 MTU can have up to 16 I/O channels. The maximum rated voltage is 250 V and maximum rated current is 3 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.

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 16 isolated channels of field signals.
- 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 | 3BSE068782R1 |
| Type | Extended |
| Connection | Terminal block |
| Channels | 16 |
| Voltage | 250 V |
| Mounting | Both directions |
| Mounting detail | 55 ° (131 °F) |
| Use with I/O | DI820, DI821, DI825, DI828, DO820, DO821, and DO828 |
| Process connections | 32 up to 16 I/O channels |
| Single/redundant I/O | Single |

| Detailed data | |
|---------------------------------|--|
| Maximum current per I/O channel | 3 A |
| Acceptable wire sizes | Solid: 0.2 - 4mm ² Stranded: 0.2 - 4 mm ² , 24 - 10 AWG |
| Dielectric test voltage | 2000 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 | - |
| 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 | 0.22 kg (0.48 lbs) |

**solutions.abb/compactproductsuite
solutions.abb/controlsystems**

We reserve the right to make technical changes to the products or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not assume any responsibility for any errors or incomplete information in this document.

We reserve all rights to this document and the items and images it contains. The reproduction, disclosure to third parties or the use of the content of this document – including parts thereof – are prohibited without ABB's prior written permission.

Copyright© 2026 ABB All rights reserved