

DATA SHEET

TU818 Compact Product Suite hardware selector



The TU818 is a 32 channel 50 V compact module termination unit (MTU) for the S800 I/O. The MTU is a passive unit used for connection of the field wiring to the I/O modules. 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 one-wire or two-wire (depends on I/O module type) connections.
- Up to 32 channels of field signals and process power connections.
- 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 | 3BSE069209R1 | |
| Туре | Compact | |
| Connection | Terminal block | |
| Channels | 32 | |
| Voltage | 50 V | |
| Mounting | Both directions | |
| Mounting detail | Horizontal 55 °C (131 °F) Vertical 40 °C (104 °F) | |
| Use with I/O | AI810, AI815, AI835A, AI843, AI845, AI880A, DI810, DI811, DI818, DI830, DI831, DI840, DI880, DI885, DO818, DP840 | |
| Process connections | 40 pole screw terminal | |
| Single/redundant I/O | Single | |

| Detailed data | | |
|------------------------------------|---|--|
| Maximum current per I/O channel | 2.5 A | |
| Maximum current process connection | L1+ max 8A L2+ max 8A | |
| Acceptable wire sizes | Solid: 0.5 - 2.5 mm² Stranded: 0.5 - 1.5 mm² | |
| 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 | 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) | |



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© 2024 ABB All rights reserved