

TU890

Compact Product Suite hardware selector



The TU891 is a compact MTU for the S800 I/O. The MTU is a passive unit used for connection of the field wiring and power supply to the I/O modules. It also contains a part of the ModuleBus. The TU891 MTU has gray terminals for field signals and process voltage connections. The maximum rated voltage is 50 V and maximum rated current is 2 A per channel, but these are primarily constrained to specific values by the design of the I/O modules for their certified application.

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.

Features and benefits

- Intrinsic safety applications - use with AI890, AI893, AI895, AO890, AO895, DI890 and DO890
- Compact installations of I/O modules
- Field signals and process power connections
- Connections to ModuleBus and I/O modules
- Mechanical keying prevents insertion of the wrong module
- Latching device to DIN rail
- DIN rail mounting

| General info | |
|----------------------|---|
| Article number | 3BSC690075R1 |
| Type | Compact |
| Connection | Terminal block |
| Channels | 8 |
| Voltage | 24 V |
| Mounting | Horizontal |
| Mounting detail | 55 ° (131 °F) |
| Use with I/O | AI890, AI893, AI895, AO890, AO895, DI890, DO890 |
| Process connections | 27 blue terminals |
| Single/redundant I/O | Single |

Detailed data

| | |
|---------------------------------|--|
| Maximum current per I/O channel | 2 A |
| Acceptable wire sizes | Process Connector: Solid 0.2 - 4 mm ² Stranded 0.2 - 2.5 mm ² , 24 - 12 AWG Recommended torque 0.5 - 0.6 Nm Power supply connector: 0.25 - 2.5 mm ² , 24 - 14 AWG Recommended torque 0.5 - 0.6 Nm |
| Dielectric test voltage | 500 V a.c. |

Environment and certification

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|---------------------------------|--|
| CE mark | Yes |
| Electrical safety | IEC 61131-2, FM |
| Hazardous Location | ATEX Zone 2 interfacing to Zone 0. Mounting: Ex II 3G Ex nA II T4; Interface: Ex II (1)G [EEx ia] IIC; FM NI/I/2/ABCD/T4 and NI/I/2/IIC/T4 |
| Marine certification | ABS, BV, DNV-GL, LR, RS, CCS |
| Protection rating | IP20 according to IEC 60529 |
| Corrosive atmosphere ISA-S71.04 | G3 |
| Climatic operating conditions | 0 to +55 °C (Storage -40 to +70 °C), RH=5 to 95 % no condensation, IEC/EN 61131-2 |
| Pollution degree | Degree 2, IEC 60664-1 |
| 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

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|--------|--|
| Width | 64 mm (1.77 in.) including connector, 58.5 mm (2.3 in.) edge to edge installed |
| Depth | 58 mm (2.28 in.), 106 mm (4.2 in.) including terminals |
| Height | 194 mm (7.6 in.) including latch |
| Weight | 0.17 kg (0.37 lbs.) |

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