

TU891

Freelance hardware selector



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.

Two mechanical keys are used to configure the MTU for different types of I.S. I/O modules. This is only a mechanical configuration and it does not affect the functionality of the MTU or the I/O module. The keys used on the TU891 are of the opposite gender to those on any other type of MTU and will mate only with IS I/O modules.

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 | 3BSC840157R1 |
| Type | Compact |
| Connection | Terminal block |
| Channels | 8 |
| Voltage | 24 V |
| Mounting | Horizontal |
| Mounting detail | 55 °C (131 °F) |
| Use with I/O | AI890, AI893, AI895, AO890, AO895, DI890, DO890 |
| Process connections | 27 gray terminals |
| Single/redundant I/O | Single |

Detailed data

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|---------------------------------|--|
| 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-EN 61010-1, EN 61010-2-201 |
| Hazardous Location | - |
| Marine certification | ABS, BV, DNV-GL, LR |
| Temperature, Operating | 0 to +55 °C (+32 to +131 °F) (Storage -40 to +70 °C) (-40 to +158 °F), RH=5 to 95 % non-condensing |
| Pollution degree | Degree 2, IEC 60664-1 |
| Corrosion protection | ISA-S71.04: G3 |
| 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

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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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