DATA SHEET

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 º (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 mm² Stranded 0.2 - 2.5 mm², 24 - 12 AWG Recommended torque 0.5 - 0.6 Nm Power supply connector: 0.25 - 2.5 mm², 24 - 14 AWG Recommended torque 0.5 - 0.6 Nm
Dielectric test voltage	500 V a.c.

Environment and certification	
CE mark	Yes
Electrical safety	EN 61010-1, EN 61010-2-201
Hazardous Location	ATEX/IECEx Zone 2 with interface to Zone 0, cFMus C1, Div 2/Zone 2 with interface to C1, C2, C3 Div 1/Zone 0
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	
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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