

DATA SHEET

TU890

ABB Ability™ System 800xA® 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 Al890, Al893, Al895, AO890, AO895, Dl890 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
Туре	Compact
Connection	Terminal block
Channels	8
Voltage	24 V
Mounting	Horizontal
Mounting detail	55 º (131 °F)
Use with I/O	A1890, A1893, A1895, AO890, AO895, D1890, 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

64 (477))
64 mm (1.77 in.) including connector, 58.5 mm (2.3 in.) edge to edge installed
58 mm (2.28 in.), 106 mm (4.2 in.) including terminals
194 mm (7.6 in.) including latch
0.17 kg (0.37 lbs.)



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