

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 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	24V	
Mounting	Horizontal	
Mounting detail	55 º (131 °F)	
Use with I/O	Al890, Al893, Al895, AO890, AO895, Dl890, DO890	
Process connections	27 blue terminals	
Single/redundant I/O	Single	

Detailed data		
Maximum current per I/O channel	2 A	
	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	
Acceptable wire sizes		
	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		
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.)	



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