DATA SHEET

TU810V1
Freelance hardware selector

The TU810/TU810V1 is a 16 channel 50 V compact module termination unit (MTU) for the S800 I/O. The MTU is a passive unit used for connection of the field wiring to the I/O modules. It also contains a part of the ModuleBus.

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/O modules. This is only a mechanical configuration and it does not affect the functionality of the MTU or the I/O module. Each key has six positions, which gives a total number of 36 different configurations.

Features and benefits

- Compact installation of I/O modules using one-wire connections.
- Up to 16 channels of field signals and process power connections.
- Connections to ModuleBus and I/O modules.
- Mechanical keying prevents insertion of the wrong I/O module.
- Latching device to DIN rail for grounding.
- DIN rail mounting.

General info	
Article number	3BSE013230R1
Type	Compact
Connection	Terminal block
Channels	16
Voltage	50 V
Mounting	Both directions
Mounting detail	Horizontal 55 ºC (131 °F) Vertical 40 ºC (104 °F)
Use with I/O	AI810, AI815, AI820, AI830, AI830A, AI835, AI835A, AI845, AO810, AO810V2, AO815, AO820, AO845, AO845A, DI810, DI811, DI814, DI830, DI831, DI840, DI880, DI885, DO810, DO814, DO815, DO840, DO880, DP820, DP840
Process connections	2 x 2 Process power, 5 x 2 Process power (0 V)
Single/redundant I/O	Single

Detailed data	
Maximum current per I/O channel	2A
Maximum current process connection	5A
Acceptable wire sizes	Solid: 0.2 - 4 mm² Stranded: 0.2 - 2.5 mm², 24 - 12 AWG
Dielectric test voltage	500 V a.c.

Environment and certification	
CE mark	Yes
Electrical safety	EN 61010-1, UL 61010-1, EN 61010-2-201, UL 61010-2-201
Hazardous Location	C1 Div 2 cULus, C1 Zone 2 cULus, ATEX Zone 2
Marine certification	ABS, BV, DNV-GL, LR
Temperature, Operating	0 to +55 °C (+32 to +131 °F), approvals are issued for +5 to +55 °C
Temperature, Storage	-40 to + 70 °C (-40 to +158 °F)
Pollution degree	Degree 2, IEC 60664-1
Corrosion protection	ISA-S71.04: G3
Relative humidity	5 to 95 %, non-condensing
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 (2.52 in.) including connector, 58.5 mm (2.3 in.) edge to edge installed
Depth	64 mm (2.52 in.) including terminals
Height	170 mm (6.7 in.) including latch
Weight	0.17 kg (0.37 lbs)

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