TU850
Compact Product Suite hardware selector

The TU850 MTU can have up to 16 I/O channels. The maximum rated voltage is 50 V and maximum rated current is 15mA per I/O channel (digital input) or 25mA per two I/O channels (analog input).

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.

The MTU can be mounted on a standard DIN rail. It has a mechanical latch that locks the MTU to the DIN rail. 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

- Complete 2-wire connections for up to 16 channels.
- Each channel has one current limited sensor/transmitter power outlet terminal and one signal terminal.
- Current limitation in sensor/transmitter supply is implemented with disconnectable PTC fuse.
- Process voltage can be connected to 2 individually isolated groups, if the I/O module supports it.
- 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	3BSE050930R1
Type	Extended
Connection	Terminal block
Channels	16
Voltage	50 V
Mounting	Both directions
Mounting detail	55 º (131 °F)
Use with I/O	AI810, DI810, DI811,DI830, DI831
Process connections	40 up to 16 I/O channels 16 current limited sensor/transmitter power outlets D-sub connectors 25 pin (male)
Single/redundant I/O	Single

Detailed data

Maximum current per I/O channel	2A
Acceptable wire sizes	Solid: 0.2 - 4 mm² Stranded: 0.2 - 2.5 mm², 24 - 12 AWG Recommended torque: 0.5 - 0.6 Nm Stripping length: 7 mm
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	-
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)
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	126 mm (5 in.) including connector, 120.5 mm (4.74 in.) edge to edge installed
Depth	64 mm (2.52 in.) including terminals
Height	110 mm (4.3 in.)
Weight	0.26 kg (0.57 lbs)

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