

DATA SHEET

TU842

Compact Product Suite hardware selector



The TU842 MTU can have up to 16 I/O channels and 2+2 process voltage connections. Each channel has two I/O connections and one ZP connection. The maximum rated voltage is 50 V and maximum rated current is 3 A per channel.

The MTU distributes the two ModuleBuses to each I/O module and to the next MTU. It also generates the correct address to the I/O modules 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.

Four mechanical keys, two for each I/O module, 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 installation of I/O modules using 3-wire connections and field power distribution.
- Up to 16 channels of field signals and process power connections.
- Connections to two ModuleBuses 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	3BSE020850R1	
Туре	Redundant	
Connection	Terminal block	
Channels	16	
Voltage	50 V	
Mounting	Horizontal	
Mounting detail	55 º (131 °F)	
Use with I/O	AI843, AO845, AO845A, DI840, DI880, DO840, DO880 and DP840	
Process connections	56 up to 16 I/O channels (2 terminals per channel), 4 Process power, 20 Process power (0 V)	
Single/redundant I/O	Redundant	

Detailed data		
Maximum current per I/O channel	3 A	
Maximum current process connection	10 A	
Acceptable wire sizes	Solid: 0.2 - 4 mm ² Stranded: 0.2 - 2.5 mm ² , 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	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)	
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	131 mm (5.16") including connector, 124 mm (4.88") edge to edge installed	
Depth	64 mm (2.52") including terminals	
Height	186.5 mm (7.34") including locking device	
Weight	0.6 kg (1.3 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© 2025 ABB All rights reserved