

DATA SHEET

TU836V1

ABB Ability™ System 800xA® hardware selector



The TU836V1 MTU can have up to 8 I/O channels. The maximum rated voltage is 250 V and maximum rated current is 3 A per channel. 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

- Two groups with 4 channels of field signals and process power connections.
- Each channel has one fused load power terminal and one signal return connection.
- Process voltage can be connected to 2 individually isolated groups.
- 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	3BSE013237R1
Туре	Extended
Connection	Terminal block
Channels	8
Voltage	250 V
Mounting	Both directions
Mounting detail	55 °C (131 °F)
Use with I/O	DO820, and DO821
Process connections	16 up to 8 I/O channels (2 terminals per channel) 4 Process power 4 Process power (0V)
Single/redundant I/O	Single

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	2000 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	-	
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	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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