

DATA SHEET

## TU830V1

## ABB Ability™ System 800xA® hardware selector



The TU830V1 MTU can have up to 16 I/O channels and two process voltage connections. Each channel has two I/O connections and one ZP connection. 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 process voltage can be connected to two individually isolated groups. Each group has a 6.3 A fuse. The maximum rated voltage is 50 V and maximum rated current is 2 A per channel. The MTU distributes the ModuleBus to the I/O module end 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

- Complete installation of I/O modules using 3-wire connections, fuses and field power distribution.
- 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	3BSE013234R1	
Туре	Extended	
Connection	Terminal block	
Channels	16	
Voltage	50 V	
Mounting	Both directions	
Mounting detail	55 °C (131 °F)	
Use with I/O	Al810, Al815, Al820, Al830, Al830A, Al835A, Al843, Al845, AO810, AO810V2, AO815, AO820, AO845A, D0815, D1811, D1814, D1818, D1830, D1831, D1840, D1880, D1885, DO810, DO814, DO815, DO818, DO840, DO880, DP820 and DP840	
Process connections	56	
Single/redundant I/O	Single	

Detailed data		
Maximum current per I/O channel	2 A	
Maximum current process connection	5 A	
Acceptable wire sizes	Solid: 0.2 - 4 mm <sup>2</sup> Stranded: 0.2 - 2.5 mm <sup>2</sup> , 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	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	0.28 kg (0.6 lbs)	



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