

# TU833

## ABB Ability™ System 800xA® hardware selector



The TU833 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 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. It is recommended that the fuse rating be chosen to meet the applications needs, see S800 I/O Getting Started chapter Power and Cooling.

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.

### 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.
- Spring-case terminal.

General info	
Article number	3BSE038726R1
Type	Extended
Connection	Crimp Snap-in connector
Channels	16
Voltage	50 V
Mounting	Both directions
Mounting detail	55 °C (131 °F)
Use with I/O	AI810, AI815, AI820, AI830, AI830A, AI835, AI835A, AI843, AI845, AO810, AO810V2, AO815, AO820, AO845, AO845A, DI810, DI811, DI814, DI830, DI831, DI840, DI880, DI885, DO810, DO814, DO815, DO840, DO880, DP820 and DP840
Process connections	56 up to 16 I/O channels (2 terminals per channel) 4 Process power 6.3 A 10 x 2 Process power (0 V)
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 - 2.5 mm <sup>2</sup> , 24 - 12 AWG Stranded: 0.2 - 2.5 mm <sup>2</sup> , 24 - 12 AWG Only one wire per terminal Stripping length: 6 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	DNV-GL, BV, 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	105 mm (4.1 in.)
Weight	0.28 kg (0.6 lbs)

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