

DATA SHEET

## **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
Туре	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, 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	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 mm², 24 -12 AWG Stranded: 0.2 - 2.5 mm², 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

ding connector, 120.5 mm (4.74 in.) edge to edge installed
luding terminals
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