

DATA SHEET

TU850

System 800xA hardware selector



The TU850 MTU can have up to 16 I/O channels. The maximum rated voltage is 50 V and maximum rated current is 15mA per I/O channel (digital input) or 25mA per two I/O channels (analog input).

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

- Complete 2-wire connections for up to 16 channels.
- Each channel has one current limited sensor/transmitter power outlet terminal and one signal terminal.
- Current limitation in sensor/transmitter supply is implemented with disconnectable PTC fuse.
- Process voltage can be connected to 2 individually isolated groups, if the I/O module supports it.
- 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	3BSE050930R1	
Туре	Extended	
Connection	Terminal block	
Channels	16	
Voltage	50 V	
Mounting	Both directions	
Mounting detail	55 º (131 °F)	
Use with I/O	Al810, Dl810, Dl811, Dl830, Dl831	
Process connections	40 up to 16 I/O channels 16 current limited sensor/transmitter power outlets D-sub connectors 25 pin (male)	
Single/redundant I/O	Single	

Detailed data		
Maximum current per I/O channel	2A	
Acceptable wire sizes	Solid: 0.2 -4 mm2 Stranded: 0.2 -2.5 mm2, 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	IEC 61131-2, UL 508	
Hazardous Location	C1 Div 2 cULus, C1 Zone 2 cULus, ATEX Zone 2	
Marine certification	-	
Protection rating	IP20 according to IEC 60529	
Corrosive atmosphere ISA-S71.04	G3	
Climatic operating conditions	0 to +55 °C (Storage -40 to +70 °C), RH=5 to 95 % no condensation, IEC/EN 61131-2	
Pollution degree	Degree 2, IEC 606641	
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	
Height	110 mm (4.3 in.)
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
Weight	0.26 kg (0.57 lbs)



www.abb.com/800xA www.abb.com/controlsystems 800xA is a registered or pending trademark of ABB. All rights to other trademarks reside with their respective owners.

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© 2019 ABB All rights reserved