

TU813

Freelance hardware selector



The TU813 is a 8 channel 250 V compact module termination unit (MTU) for the S800 I/O. The TU813 has three rows of crimp snap-in connectors for field signals and process power connections.

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 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.

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

- Compact installation of I/O modules.
- Up to 8 isolated channels of field signal connections with crimped snap-in connectors.
- 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	3BSE036714R1
Type	Compact
Connection	Crimp Snap-in connector
Channels	8
Voltage	250 V
Mounting	Both directions
Mounting detail	Horizontal 55 °C (131 °F) Vertical 40 °C (104 °F)
Use with I/O	DI820, DI821, DI825, DO820, DO821 and AI825
Process connections	16
Single/redundant I/O	Single

Detailed data

Maximum current per I/O channel	3 A
Acceptable wire sizes	Stranded: 0.2 - 0.5 mm ² , 24 - 20 AWG 0.5 - 1.0 mm ² , 20 - 18 AWG 1.5 - 2.5 mm ² , 16 - 14 AWG

Environment and certification

CE mark	Yes
Electrical safety	EN 61010-1, UL 61010-1, EN 61010-2-201, UL 61010-2-201
Hazardous Location	ATEX Zone 2
Marine certification	-
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), for vertical mounting 40 °C (104 °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	64 mm (2.52 in.) including connector, 58.5 mm (2.3 in.) edge to edge installed
Depth	64 mm (2.52 in.), including terminals
Height	170 mm (6.7 in.) including latch
Weight	0.17 kg (0.37 lbs)

—
solutions.abb/freelance
solutions.abb/controlsystems

—
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© 2025 ABB All rights reserved