

TU846

ABB Ability™ System 800xA® hardware selector



The TU846 is a module termination unit (MTU) for redundant configuration of the field communication interface CI840/CI840A and redundant I/O. The MTU is a passive unit having connections for power supply, two electrical ModuleBuses, two CI840/CI840A and two rotary switches for station address (0 to 99) settings.

A ModuleBus Optical Port TB842 can be connected to TU846 via TB846. Four mechanical keys, two for each position, are used to configured the MTU for the right types of modules. Each key has six positions, which gives a total number of 36 different configurations.

Module Termination Unit for dual CI840/CI840A, redundant I/O. TU846 are used with redundant I/O modules and TU847 with single I/O modules. The maximum ModuleBus length from the TU846 to the ModuleBus terminator is 2.5 meters. TU846/TU847 needs space to the left in order to be removed. Cannot be replaced with power applied.

Features and benefits

- Power supply connection.
- Two PROFIBUS connections.
- Two service tool connections.
- Two rotary switch for station address setting.
- Connection for two ModuleBuses.
- Connector for ModuleBus Optical Port.
- Mechanical keying prevents insertion of the wrong module type.
- Latching device to DIN rail for locking and grounding.
- DIN rail mounted.

General info

Article number	3BSE022460R1
Communication protocol	PROFIBUS DP-V1
Master or slave	N/A
Line redundancy	Yes
Module redundancy	Yes
Hot Swap	No
Type	Redundant CI840/CI840A, Redundant I/O
Power input	24 V d.c. (19.2 - 30 V)
Mounting	Vertical or Horizontal

Detailed data	
Connector	PROFIBUS: DSUB9 connector Service ports: RJ45 connector
ModuleBus current distribution	Maximum 5 V 1.5 A Maximum 24 v 1.5 A
Mechanical Keys	36 different combinations
Acceptable wire sizes	0.25 - 2.5mm², 24 - 14 AWG Recommended torque: 0.5 - 0.6 Nm Stripping length: 6-7.5 mm, 0.24-0.30 in
Rated insulation voltage	50 V
Dialectic test voltage	500 V a.c

Environment and certification	
CE- marking	Yes
Electrical Safety	EN 61010-1, UL 61010-1, EN 61010-2-201, UL 61010-2-201
Hazardous location	cULus Hazardous Location Class1 Zone 2, ATEX Zone 2
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)
Relative humidity	5 to 95 %, non-condensing
Max ambient temperature	55 °C (131 °F), for vertical mounting 40 °C (104 °F)
Equipment class	Class I according to IEC60536; (earth protected)
Ingress protection	IP20 according to IEC 529, (IEC 144)
RoHS compliance	DIRECTIVE/2011/65/EU (EN 50581:2012)
WEEE compliance	DIRECTIVE/2012/19/EU

Dimensions	
Width	124 mm (4.88")
Height	186 mm (7.32") including latch
Depth	47 mm (1.85")
Weight	0.5 kg (1.1 lbs.)

solutions.abb/800xA
solutions.abb/controlsystems

800xA and Symphony Plus is a registered 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© 2024 ABB All rights reserved