ABB ABB Series Service Manual

CI854B

1. Description

PROFIBUS DP is a high speed multipurpose bus protocol (up to 12Mbit/s) for interconnecting field devices, like remote I/O, drives, low voltage electrical equipment, and controllers. PROFIBUS DP can be connected to the AC 800M via the CI854B communication interface. The CI854B includes two PROFIBUS ports to realize line redundancy and it also supports PROFIBUS master redundancy.

3. Product Information

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Master redundancy is supported in PROFIBUS-DP communication by using two CI854B communication interface modules. The master redundancy can be combined with CPU redundancy and CEXbus redundancy (BC810). The modules are mounted on a DIN rail and interface directly with the S800 I/O system, and other I/O systems as well, including all PROFIBUS DP/DP-V1 and FOUNDATION Fieldbus proficient systems.

The PROFIBUS DP must be terminated at the two outermost nodes. This is usually done by using connectors with built-in termination. To guarantee a correct working termination the connector has to be plugged and power supplied.

Package including: a CI854BK01 Communication Interface and a TP854 Baseplate.

(Only compatible with System 800xA 6.0.3.2, Compact Control Builder 6.0.0-2 and onwards. Please see Product Update for more information.)

Features and benefits

Used for connecting remote I/O and fieldbus instruments via PROFIBUS DP

Possible to connect PROFIBUS PA to the CI854B via the PROFIBUS linking device LD 800P

The CI854B can be set redundant

General info

Article number 3BSE069449R1 (CI854BK01)

Communication protocol PROFIBUS DP-V1

Master or slave Master

Number of channels 2

Transmission speed 9.6 - 12 000 kbit/s

Line redundancy Yes

Module redundancy Yes

Hot Swap Yes

Used together with HI Controller Yes

Detailed data

Max units on CEX bus 12

Connector DB female (9-pin)

24 V consumption typ. 190 mA

Environment and certification

Temperature, Operating 0 to +55 °C (+32 to +131 °F)

Temperature, Storage -40 to +70 °C (-40 to +158 °F)

Pollution degree Degree 2 according to IEC/EN61131-2

Corrosion protection G3 compliant to ISA 71.04

Protection class IP20 according to EN60529, IEC 529

CE- marking Yes

Marine certificates ABS, BV, DNV-GL, LR

RoHS compliance EU RoHS, UAE RoHS, CN RoHS

WEEE compliance DIRECTIVE/2012/19/EU

Dimensions

Width 59 mm (2.3 in.)

Height 185 mm (7.3 in.)

Depth 127.5 mm (5.0 in.)

Weight (including base) 700 g (1.5 lbs)