ABB ABB Series Service Manual

CI854A

1. Description

CI854A PROFIBUS-DP/V1 Interface Module - ABB

3. Product Information

CI854A PROFIBUS-DP/V1 Interface Module - ABB

PROFIBUS DP is a high speed multipurpose bus protocol (up to 12Mbit/s) for interconnecting field devices, like remote I/O, drives, lowvoltage electrical equipment, and controllers. PROFIBUS DP can be connected to the AC 800Mvia the CI854A communication interface. The Classic CI854A includes two PROFIBUS ports to realize line redundancy and it also supports PROFIBUS master redundancy. The CI854B is the newPROFIBUS-DP master thatreplaces CI854A in newinstallations.

Master redundancyis supported in PROFIBUS-DP communication by using two CI854A communication interface modules. The master redundancy can be combinedwith 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 atthe two outermost nodes. This is usually done by using connectors with built-in termination. To guarantee a correctworking termination the connector has to be plugged and power supplied.

Features and benefits

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

Possible to connect PROFIBUS PA to the CI854A/ CI854B via the PROFIBUS linking device LD 800P

The CI854A and newer CI854B can be setredundant

General info

Protocol PROFIBUS DP-V1

Article number 3BSE030220R1 (CI854AK01)

Life cycle status Classic

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)

24V consumption typ. 190mA

Environmental and certification

Temperature, Operating +5 to +55 °C (+41 to +131 °F)

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

Relative humidity 5 to 95 %, non-condensing

Protection class IP20 according to EN60529, IEC 529

CE-marking Yes

Marine certificates BV, DNV-GL, LR, RS, CCS

RoHS compliance -

WEEE compliance DIRECTIVE/2012/19/EU

Dimensions

Height 185 mm (7.3 in.)

Width 59 mm (2.3 in.)

Depth 127.5 mm (5.0 in.)

Weight (including base) 700 g (1.5 lbs)