

CI854B

ABB Ability™ System 800xA® hardware selector



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.

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	+5 to +55 °C (+41 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	DIRECTIVE/2011/65/EU (EN 50581:2012)
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)

—
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© 2025 ABB All rights reserved