

DATA SHEET

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© 2024 ABB All rights reserved