

CI853

ABB Ability™ System 800xA® hardware selector



CI853 RS-232 module protocols:

COMLI can be used on the built-in COM3 port and optionally on the CI853 ports. The cable length can be extended considerably (to several km) using a fiber optic converter. RS-232C is the standard communication interface used for serial communication with COMLI. The CI853 supports Hot Swap. COMLI is an ABB protocol for data transmission between controllers. It is designed for asynchronous master/slave communication in half-duplex. COMLI protocol supports dial-up modem controlled from the application. CI853 supports both Master/Slave mode in COMLI.

MODBUS RTU is a standard protocol widely spread because of its ease of use and reliability. Modbus RTU is an open, serial (RS-232 or RS-485) protocol derived from the Master/Slave architecture exchanging information in half duplex mode. The Modbus functionality can be configured both on the COM ports of AC 800M and CI853. Module Redundancy is not available in MODBUS RTU. CI853 supports only Master mode in MODBUS RTU.

Features and benefits

- COMLI can be used on the built-in COM3 port and optionally on the CI853 ports. RS-232C is the standard communication interface used for serial communication with COMLI. The CI853 supports Hot Swap. COMLI is an ABB protocol for data transmission between controllers.
- MODBUS RTU is an open, serial (RS-232 or RS-485) protocol derived from the Master/Slave architecture exchanging information in half duplex mode. The Modbus functionality can be configured both on the COM ports of AC 800M and CI853.
- Siemens 3964R can be used on the built-in COM3 port and optionally on the CI853 ports. A standard RS-232C/485 communication channel is required.
- Self-defined Serial Communication can be used on the built-in COM3 port (on an AC 800M Controller) and optionally on the CI853 ports.
- The CI853 module also supports Hot Swap.

General info

| | |
|----------------------------------|-------------------------|
| Article number | 3BSE018103R1 (CI853K01) |
| Communication protocol | COMLI and MODBUS RTU |
| Master or slave | Master/Slave |
| Number of channels | 2 |
| Transmission speed | 75 - 19 200 b/s |
| Line redundancy | No |
| Module redundancy | No |
| Hot Swap | Yes |
| Used together with HI Controller | Yes |

Detailed data

| | |
|-----------------------|----------------------|
| Max units on CEX bus | 12 |
| Connector | RJ-45 female (8-pin) |
| 24 V consumption typ. | 100 mA |

Environment and certification

| | |
|------------------------|--------------------------------------|
| Temperature, Operating | +5 to +55 °C (+41 to +131 °F) |
| Temperature, Storage | -40 to +70 °C (-40 to +158 °F) |
| 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) |

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