

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 modems controlled from the application. CI853 supports both Master/Slave modes 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) 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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