

CI855

ABB Ability™ System 800xA® hardware selector



The MasterBus 300 (MB300) communication protocol used in communication between controllers, and operator stations in installations based on Advant OCS with Master software is also implemented in the System 800xA controller AC 800M. MB 300 communication is realized in AC 800M by communication interface CI855, which is connected to the CEX-Bus through a baseplate.

The baseplate, TP853, houses RJ45 connectors for two Ethernet ports, for network redundancy and provides a simple DIN-rail mounting.

A key benefit of the CI855 interface is the possibility of having peer-to-peer communication between new plant sections with System 800xA using the AC 800M controller and existing sections with MB 300-based controllers like Advant Controller 410, Advant Controller 450, and MasterPiece 200/1.

Features and benefits

- MB 300 network redundancy
- Clock synchronization
- DataSet communication
- Hot swap
- Per to peer communication

General info	
Article number	3BSE018106R1
Communication protocol	ABB's MasterBus 300
Master or slave	Master
Transmission speed	10 Mbit/s, 200 Datasets/s
Line redundancy	Yes
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.	typ 150 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	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