

DATA SHEET

SS855

ABB Ability™ System 800xA® hardware selector



The SS855 is a voting unit for building redundant power supply systems. It is equipped with two input channels and one output. The two inputs are decoupled by MOSFET technology.

SS855 can be used directly for loads up to 20 A (two 20 A power supplies and one SS855).

With dual SS855 it is possible to vote redundant 40 A (two 40 A power supplies and two SS855). The inputs are located at the bottom of the SS855 and the output is located at the top of SS855. SS855 does not have any power OK signals, instead use power OK signals on SD834, SD853, or SD854.

Features and benefits

- Simple DIN-rail mounting
- Accepted for SELV and PELV applications

General info		
Article number	2PAA125624R1	
Туре	Voter	
Rated input current	2 x 20 A	
Rated output current	40 A	
Input voltage range	2* 8.436.4 V	

Detailed data		
Load sharing	Two in parallel for voting 40A	
Supervision relay	No	
Power Factor (at rated output power)	-	
Heat dissipation	2 x 10 A: 1.7 W 2 x 20 A: 5.9 W	
Maximum output current	65 A (up to 5 seconds)	
Maximum ambient temperature	70 °C	
Secondary: Short circuit	Max 26 A RMS	

Environment and certification		
CE mark	Yes	
Electrical safety	UL508	
ATEX Zone 2	Yes	
IECEx Zone 2	Yes	
Hazardous Location, Class 1 Div 2	Yes	
Hazardous Location	ATEX Zone 2: EN 60079-0, EN 60079-7 IECEx Zone 2: IEC 60079-0, IEC 60079-7 CSA Class I Div 2, Groups A, B, C D T4: ANSI/ISA 12.12.01-2016, C22.2 No. 213-16	
Marine certification	ABS (pending), DNV-GL (pending)	
Protection rating	IP20 according to IEC 60529	
Corrosive atmosphere ISA-S71.04	G3	
Pollution degree	Degree 2, IEC 62103, EN 50178,	
Mechanical operating conditions	IEC 61131-2	
EMC	EN 61000-6-4 and EN 61000-6-2	
Overvoltage Categories	-	
Equipment class	III PE (Protective Earth) or chassis connection not required	
Max ambient temperature	- 40 °C to +70 °C (linear derating between 60 °C and 70 °C, 40 A to 30 A)	
RoHS compliance	DIRECTIVE/2011/65/EU (EN 50581:2012)	
WEEE compliance	DIRECTIVE/2012/19/EU	

Dimensions		
Width	36 mm	
Depth	127 mm	
Height	124 mm	
Weight (lbs.)	280 g	
Mounting spacing W mm	5 mm	
Mounting spacing H mm	top 40 mm, bottom 20 mm	



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