DATA SHEET

SD853
Freelance hardware selector

The SD85x Power supply units are designed for high efficiency, electronic inrush current limitation, wide operating temperature range, and extraordinarily small size. The lowest power losses and high lifetime expectancy deliver the lowest cost of ownership.

The SD85x series complies for use in potentially explosive atmospheres (IECEx Zone 2, ATEX Zone 2, and Class I Div 2). The SD85x series has a built-in power reserve and can easy breaking fuses due to high overload peak current capability.

Features and benefits

- DIN-rail mounting, Width 39 mm
- Efficiency up to 95.2 %
- 20% Output Power Reserves
- Easy Fuse Breaking due to High Overload Peak Current
- Active Power Factor Correction (PFC)
- Minimal Inrush Current Surge
- Temperature range -25°C and +70°C (derating 6W / °C between 60°C - 70°C)
- DC-OK Relay Contact
- Class I Div 2, IECEx Zone 2 and ATEX Zone 2

General info	
Article number	3BSE088188R1
Type	Power supply
Rated output current	10 A
Rated output power	240 W
Rated output voltage	24 V d.c.
Mains/input voltage, nominal	100-240 V a.c. 110-150 V d.c.
Applications	SELV and PELV
Efficiency	93.6/95.2 % @ 120/230 V a.c.

Detailed data	
Mains frequency	50 - 60 HZ +/- 6%
Load sharing	Parallel connection
Supervision relay	Yes
Power Factor (at rated output power)	0.99/0.97
Heat dissipation	16.4 W / 12.1 W, 120/230 V a.c.
Output voltage regulation at max. current	max 50 mV 0 - 12 A
Maximum ambient temperature	70 °C
Primary: Recommended external fuse	10-20 A
Secondary: Short circuit	Hiccup (2s on 18s off)
Output over voltage protection	Max 32 V DC
AC input current	2.15 / 1.13 A
AC inrush current	6 A / 9 A peak

Environment and certification	
CE mark	Yes
Electrical safety	IEC 60950-1
ATEX Zone 2	Yes
IECEx Zone 2	Yes
Hazardous Location, Class 1 Div 2	Yes
Hazardous Location	ATEX Zone 2: EN 60079-0, EN60079-15; IECEx Zone 2: IEC 60079-0, IEC 60079-15; CSA Class I Div 2, Groups A, B, C D T4: ANSI/ISA 12.12.01-2015, C22.2 No. 213-M1987
Marine certification	DNV-GL, ABS
Protection rating	IP20 according to IEC 60529
Corrosive atmosphere ISA-S71.04	G3
Pollution degree	Degree 2, IEC 62477-1
Mechanical operating conditions	IEC 61131-2
EMC	EN 61000-6-4 and EN 61000-6-2
Overvoltage Categories	Category III (IEC 62477-1 for altitudes up to 2000 m)
Equipment class	I PE (Protection Earth) connection required
Max ambient temperature	-25 °C (-13 °F) to +70 °C (158 °F), derating 6W / °C between 60 °C - 70 °C
RoHS compliance	DIRECTIVE/2011/65/EU (EN 50581:2012)
WEEE compliance	DIRECTIVE/2012/19/EU

Dimensions	
Width	39 mm (1.53")
Depth	117 mm (4.60")
Height	124 mm (4.88")
Weight (lbs.)	600 g (1.32 lbs.)
Mounting spacing W mm	15 mm (0.59")
Mounting spacing H mm	40 mm (1.57")

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