

PSS120/48/2. 5



2.5A, 120W Single Phase Din Rail Mountable Switching Power Supplies

- Full Range Input selection from 115/230 VAC Auto select
- Typical efficiency of 87%
- Compact design with a width of only 64mm
- Parallel function available (Switch)
- Two years product warranty

GENERAL SPECIFICATION

Switching Frequency (typ.)	55 KHz
Min. Isolation Voltage -AC (Input-FG)	1500 VAC
Min. Isolation Voltage -AC (Input-Output)	3000 VAC
Min. Isolation Voltage -DC (Input-FG)	2121 VDC
Min. Isolation Voltage -DC (Input-Output)	4242 VDC
Isolation Resistance (Input-Output @500VDC)	100 MΩ
Ambient Temperature Range (Operational at Vi norm)	-35 to +71 deg.C
Derating from +61°C to +71°C (see derating curve)	2.5%/ °C
Ambient Temperature Range (Storage)	-40 to +85 deg.C
Relative Humidity Range	20 to 95 %RH
Temperature Coefficient Range	+/- 0.03 % per deg. C
MTBF (Bellcore Issue 6 @40°C, GB)	482000 hr
Altitude During Operation (IEC 60068-2-13)	4850 m
Dimension	Screw terminal type L124.5 X W64 X D123.6 mm
Cooling	Free Air Convection
Pollution Degree	2

ORDERING INFORMATION

Cat. No.	PSS120/48/2.5
Output Voltage	48 V
Output Current	2.5 A
Output Wattage	120 W
Efficiency (min.)	85%
Efficiency (typ.)	87%
Input Voltage Range	115~230 VAC
Standard Packing Qnty	1

PHYSICAL SPECIFICATIONS

Dimensions (H x W x D)	124.5 X 64 X 123.6 mm
Weight	920 g
Case Material	Metal
Packing	1.02kg ; 20 pcs / 21.5 kg / 2.01 CUFT

APPROVALS



ACCESSORIES

IMAGES	CAT. NO.	DESCRIPTION	STD. PACK
	CA501-1M	Din 32 Rail unslotted 1 meter	50
	CA501-1M-S	Din 32 Rail slotted 1 meter	50
	CA501-2M	Din 32 Rail unslotted 2 meter	50
	CA501-2M-S	Din 32 Rail slotted 2 meter	50
	CA701-1M	Din 35 Rail unslotted 1 meter	50
	CA701-2M	Din 35 Rail unslotted 2 meter	50
	CA701-2M-S	Din 35 Rail slotted 2 meter	50
	CA701-1M-S	Din 35 Rail slotted 1 meter	50
	CA701-15-1M	Din 35 Rail 15 deep unslotted 1 meter	50
	CA701-15-1M-S	Din 35 Rail 15 deep slotted 1 meter	50
	CA701-15-2M	Din 35 Rail 15 deep unslotted 2 meter	50
	CA701-15-2M-S	Din 35 Rail 15 deep slotted 2 meter	50
	CA202	End Clamp in Polyamide suitable for Din 35 / Din 35-15 Rails	25
	CA702	End Clamp in Polyamide 66 suitable for Din 32 / Din 35 / Din 35-15 Rails	50
	SCPH1	Phillips Screwdriver for Phillips Recess screws	10

STANDARD USED FOR TESTING

UL/cUL	UL 508 Listed UL 60950-1, UL 1310 Class 2 Power (24V/E Models only) Recognized ISA 12.12.01 (Class I, Division 2, Groups A, B, C, and D)
TUV	EN 60950-1, CB scheme , EN 61558-1, EN 61558-2-17 (meet EN 60204)
CE	EN 61000-6-3, EN 55022 Class B, EN 61000-3-2, EN 61000-3-3 E N 61000-6-2, EN 55024, EN 61000-4-2 Level 4, EN 61000-4-3 Level 3 EN 61000-4-4 Level 4, EN 61000-4-5 L-N Level 3, L / N-FG Level 4 EN 61000-4-6 Level 3, EN 61000-4-8
CCC	GB4943, GB9254, GB17625.1
Vibration Resistance	meet IEC 60068-2-6 (Mounting by rail : 10-500 Hz, 2G, along X, Y, Z each Axis, 60 min for each Axis)
Shock Resistance	meet IEC 60068-2-27 (15G, 11ms, 3 Axis, 6 Faces, 3 times for each Face)

PSS120/48/2.
5



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THE RIGHT CONNECTION

INPUT SPECIFICATIONS		PIN CONFIGURATION			
Input Phase	Single	PIN NO	POSITION	DESIGNATION	DESCRIPTION
Rated Input Voltage	115 /230 VAC (auto select)	1		RDY	A normal open relaycontact for DC ON level control
DC Input Voltage Range	210 to 375	2			(never connect except 24V/E model)
Input Voltage Range (115VAC Selected)	90 to 132 VAC	3,4		V+	Positive output terminal
Input Voltage Range (230VAC Selected)	180 to 264 VAC	5,6		V-	Negative output terminal
Line Frequency-Max.	63 Hz	7		Ground	Ground this terminal to minimize high frequency emissions
Line Frequency-Min.	47 Hz	8		L	Input terminals (phase conductor,no polarity at DC input)
Max. Inrush Current (Vi: 115 VAC)	24 A	9		N	Input terminals (neutral conductor,no polarity at DC input)
Max. Inrush Current (Vi: 230 VAC)	48 A			DC ON	Operation indicator LED
Rated Input Current -Typ. (Vi : 115 VAC)	2.2 A			DC LO	DC LOW voltage indicator LED
Rated Input Current -Typ. (Vi : 230 VAC)	0.83 A			Vout ADJ.	Trimmer-potentiometer for Vout adjustment
Rated Input Current -Max. (Vi : 115 VAC)	2.8 A			S/P	Single / Parallel select switch
Rated Input Current -Max. (Vi : 230 VAC)	1.4 A				
Power Dissipation (Vi: 230 VAC, Io norm)	19 W				
Leakage Current (Input-Output)	0.25 mA				
P.F.C.	0.7 typ.				
OUTPUT SPECIFICATIONS					
Output Voltage	48 VDC				
Output Current	2.5 A				
Output Voltage Accuracy (Adjusted before shipment)	0 to +1 %				
Minimum Load	0 %				
Line Regulation	+/- 0.5 %				
Load Regulation: Single Mode	+/- 1 %				
Load Regulation: Parallel Mode	+/- 5 %				
Output Voltage Trim Range	45 to 55 VDC				
Rated Continuous Loading	2.5A @48Vdc / 2.1A @55Vdc				
Hold Up Time (Vi: 115VAC)	25 msec				
Hold Up Time (Vi: 230VAC)	30 msec				
Turn On Time	1000 ms				
Turn On Time With 3500 µF	1500 msec				
Rise Time	150 ms				
Rise Time With 3500 µF	500 ms				
Fall Time	150 msec				
Transient Recovery Time	2 ms				
Ripple and Noise (BW = 20MHz)	50 mV				
Power Back Immunity	63 VDC				
Capacitor Load	3500 µF				
DC ON Indicator Threshold at start up (Green LED)	37.0 to 43.0 VDC				
DC LOW Indicator Threshold after start up (Red LED)	37.0 to 43.0 VDC				
Parallel Operation	3 unit				
Efficiency	87%				