

PSB3/33/12/2.
75



connectwell
THE RIGHT CONNECTION

2.75A ,Single Phase Din Rail Mountable Step Type Switching Power Supplies

- Full Range Input selection from 90 to 264VAC
- Typical efficiency of 83%
- Compact design with a width of only 53mm
- Two years product warranty

GENERAL SPECIFICATION

Switching Frequency (typ.)	65 KHz
Min. Isolation Voltage -AC (Input-Output)	3000 VAC
Min. Isolation Voltage -DC (Input-Output)	4242 VDC
Isolation Resistance (Input-Output @500VDC)	100 MΩ
Ambient Temperature Range (Operational at Vi norm)	-25 to +71 deg.C
Derating from +61°C to +71°C (see derating curve)	2.5% per °C
Ambient Temperature Range (Storage)	-25 to +85 deg.C
Relative Humidity Range	20 - 95 % RH
Temperature Coefficient Range	+/- 0.03 % / Degree celcius
MTBF (Bellcore Issue 6 @40°C, GB)	697000 hr
Altitude During Operation (IEC 60068-2-13)	3000 m
Dimension	L91 x W53 x D56.5 mm
Cooling	Free Air Convection
Pollution Degree	2

ORDERING INFORMATION

Cat. No.	PSB3/33/12/2.75
Output Voltage	12 VDC
Output Current	2.75 A
Output Wattage	33 W
Efficiency (min.)	80%
Efficiency (typ.)	83%
Input Voltage Range	90 - 264 VAC
Standard Packing Qty	1

PHYSICAL SPECIFICATIONS

Dimensions (H x W x D)	91 x 53 x 56.5 mm
Weight	190 g
Case Material	Plastic
Packing	0.25kg ; 64 pcs / 17kg / 2.28 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 Recognized ISA 12.12.01(Class 1, Division 2, Groups A, B, C and D)
TUV	EN 60950-1, CB scheme
CE	EN 61000-6-3, EN 55022 Class B, EN 61000-3-2, EN 61000-3-3 EN 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
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)

INPUT SPECIFICATIONS

Input Phase	Single
AC Input Voltage Range	90 to 264
DC Input Voltage Range	120 to 375

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INPUT SPECIFICATIONS

Rated Max. Input Voltage	240 VAC
Rated Min. Input Voltage	100 VAC
Line Frequency-Max.	63 Hz
Line Frequency-Min.	47 Hz
Max. Inrush Current (Vi: 115 VAC)	25 A
Max. Inrush Current (Vi: 230 VAC)	50 A
Rated Input Current -Typ. (Vi : 115 VAC)	680 mA
Rated Input Current -Max. (Vi : 115 VAC)	900 mA
Power Dissipation (Vi: 230 VAC, Io norm)	7.3 W
Leakage Current (Input-Output)	0.25 mA

OUTPUT SPECIFICATIONS

Output Voltage	12 VDC
Output Current	2.75 A
Output Voltage Accuracy (Adjusted before shipment)	+ 1 %
Minimum Load	0 %
Line Regulation	+/-1 %
Load Regulation	+/- 1 %
Output Voltage Trim Range	12- 14 VDC
Rated Continuous Loading	2.75A @ 12VDC / 2.3A @ 14VDC
Hold Up Time (Vi: 115VAC)	20 msec
Hold Up Time (Vi: 230VAC)	100 msec
Turn On Time	1000 ms
Turn On Time With 3500 μ F	1500 msec
Rise Time	150 ms
Rise Time With 3500 μ F	500 ms
Transient Recovery Time	2 ms
Ripple and Noise (BW = 20MHz)	50 mV
Power Back Immunity	18 VDC
Capacitor Load	3500 μ F
DC On Indicator	Green
DC ON Indicator Threshold at start up (Green LED)	9-10.8VDC
DC LOW Indicator Threshold after start up (Red LED)	9-10.8VDC
Efficiency	84%

CONTROL AND PROTECTION SPECIFICATIONS

Input fuse	T2A / 250VAC internal
Internal surge voltage protection: IEC61000-4-5	Varistor
Rated over load protection	110-150%
Over voltage protection	15 - 16.5 VDC
Output short circuit	Fold forward
Degree of protection	IP20

PIN CONFIGURATION

PIN NO	POSITION	DESIGNATION	DESCRIPTION
1	OUT	-	Negative output terminal
2	OUT	-	Negative output terminal
3	OUT	+	Positive output terminal
4	OUT	+	Positive output terminal
5	IN	L	Input terminals (phase conductor, no polarity at DC input)
6	IN	N	Input terminals (neutral conductor, no polarity at DC input)
	OTHER	DC ON	Operation indicator LED
	OTHER	DC LO	DC LOW indicator LED
	OTHER	Vout ADJ.	Trimmer-potentiometer for Vout adjustment

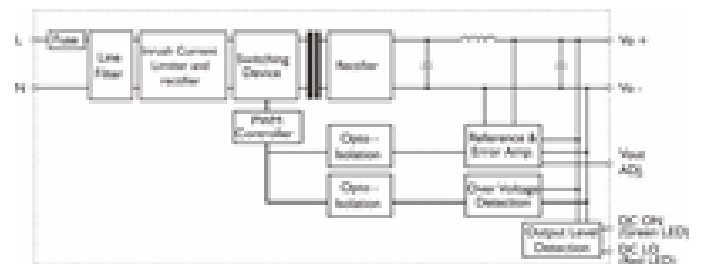
CONNECTION DETAILS

AWG24-12 (0.2~2mm²) flexible / solid cable, 7 m/m stripping at cable end recommends 0 Use copper conductors only, 60 / 70 C - Connector can withstand torque at maximum 6 pound-inches.

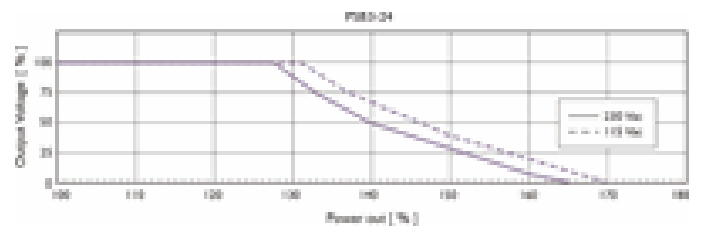
INSTALLATION DETAILS

Ventilation / Cooling Normal convection All sides 25mm free space For cooling recommended Connector size range

CIRCUIT SCHEMATIC



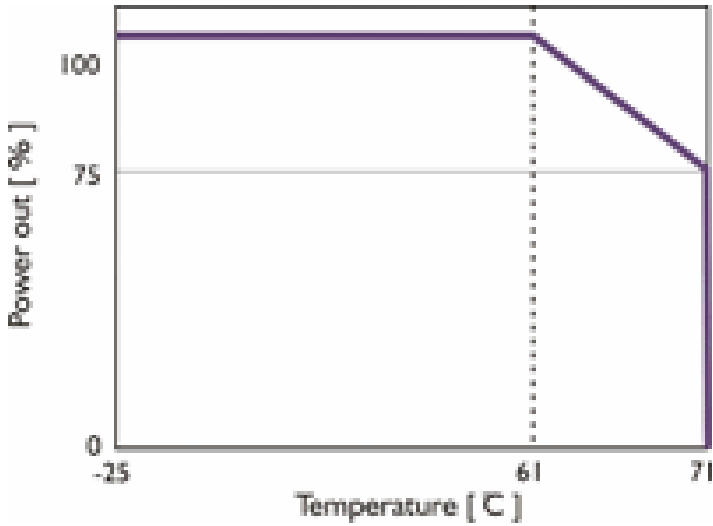
CURRENT LIMITED CURVE



PSB3/33/12/2.
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DERATING CURVE



DIMENSIONAL DIAGRAM



EFFICIENCY CURVE

