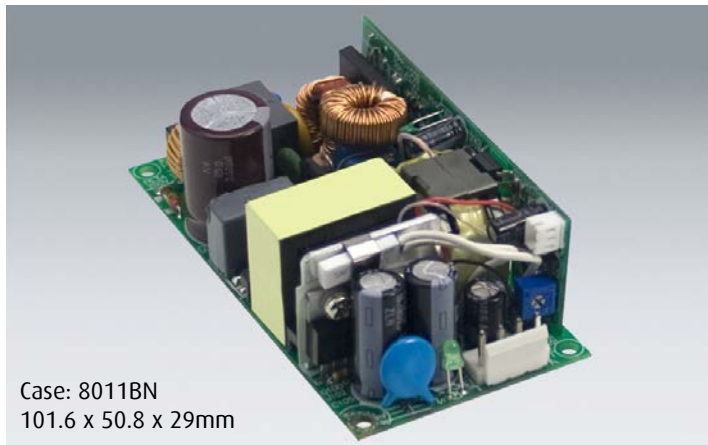


EPP-100 Series

100W Single Output with PFC Function Power Supply



Case: 8011BN
101.6 x 50.8 x 29mm

Features

- 4 x 2" Compact size
- Universal AC input / Full range
- Built-in active PFC function
- High Efficiency up to 92.5%
- Protections: Short Circuit / Over Load/ Over voltage / Over temperature
- 75W free air convection, 100W with 20CFM forced air
- LED indicator for power on
- No load power consumption <0.5W
- Built-in 12V/0.3A auxiliary output
- 3 years warranty



Specification

INPUT	Voltage	90 ~ 264VAC 127 ~ 370VAC				
	Frequency	47 ~ 63 Hz				
	Power Factor (Typ.)	PF >0.95/230VAC PF >0.98/115VAC at full load				
	AC current	1.4A/115VAC 0.7A/230VAC				
	Inrush Current (Typ.)	Cold start 70A/230VAC				
	Leakage current	<2mA/240VAC				
OUTPUT	MODEL No.	EPP-100-12	EPP-100-15	EPP-100-24	EPP-100-27	EPP-100-48
	DC Voltage	12V	15V	24V	27V	48V
	Rated current (convection)	6.3A	5A	3.2A	2.8A	1.6A
	Rated current (20CFM Fan)	8.5A	6.67A	4.2A	3.71A	2.1A
	Current Range (convection)	0 ~ 6.3A	0 ~ 5A	0 ~ 3.2A	0 ~ 2.8A	0 ~ 1.6A
	Current Range (20CFM Fan)	0 ~ 8.5A	0 ~ 6.67A	0 ~ 4.2A	0 ~ 3.71A	0 ~ 2.1A
	Rated Power (convection)	75.6W	75W	76.8W	75.6W	76.8W
	Rated Power (20CFM Fan)	102W	100.5W	100.8W	100.17W	100.8W
	R&N	120mVp-p	150mVp-p	240mVp-p	240mVp-p	300mVp-p
	Efficiency	91%	91%	92%	92.5%	92.5%
	Voltage Adjustment Range	11.76 ~ 12.6V	14.7 ~ 15.75V	23.52 ~ 25.2V	26.46 ~ 28.35V	47.04 ~ 50.4V
	Voltage Tolerance	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%
	Line Regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Load Regulation	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	Set up, Rise Time	1000ms, 30ms/230VAC 2000ms, 30ms/115VAC at full load				
Hold Up Time	16ms/230VAC 16ms/115VAC at full load					
PROTECTION	Overload	105 ~ 145% rated output power Protection type: Hiccup mode, recovers automatically after fault condition is removed				
	Over Voltage	13.2 ~ 15.6V	16.83 ~ 19.5V	27.7 ~ 31.5V	30.2 ~ 34.05V	51.3 ~ 62.7V
	Over Temperature	110°C ±10°C (RTH2), 110°C ±5°C (TSW2) Protection type: Shut down o/p voltage, re-power on to recover				
ENVIRONMENT	Auxiliary Power (AUX)	12V at 0.3A for driving fan, tolerance ±10% at main output 100% load				
	Working Temperature	-30 ~ +70°C (Please refer to 'Derating Curve' section)				
	Working Humidity	20 ~ 90% RH non-condensing				
	Storage Temp., Humidity	-40 ~ +85°C, 10 ~ 95% RH				
	Operating Altitude	2000 metres				
	Temp Coefficient	±0.0.3%/°C (0 ~ 45°C)				
	Vibration	10 ~ 500Hz, 2G 10 min./1cycle, period for 60 min. each along X, Y, Z axes				
SAFETY & EMC	Safety Standards	UL62368-1, TUV EN62368-1, EAC TP TC 004 approved				
	Withstand voltage	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC				
	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 500VDC / 25°C / 70% RH				
	EMC Emission	Compliance to EN55032 (CISPR32) Class B, EN61000-3-2,-3, EAC TP TC 020				
OTHERS	EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8, 11, heavy industry level, criteria A, EAC TP TC 020				
	M.T.B.F.	249.6Khrs min. MIL-HDBK-217F (25°C)				
	Packing	0.2Kg; 72pcs/15.4Kg/0.82CUFT				

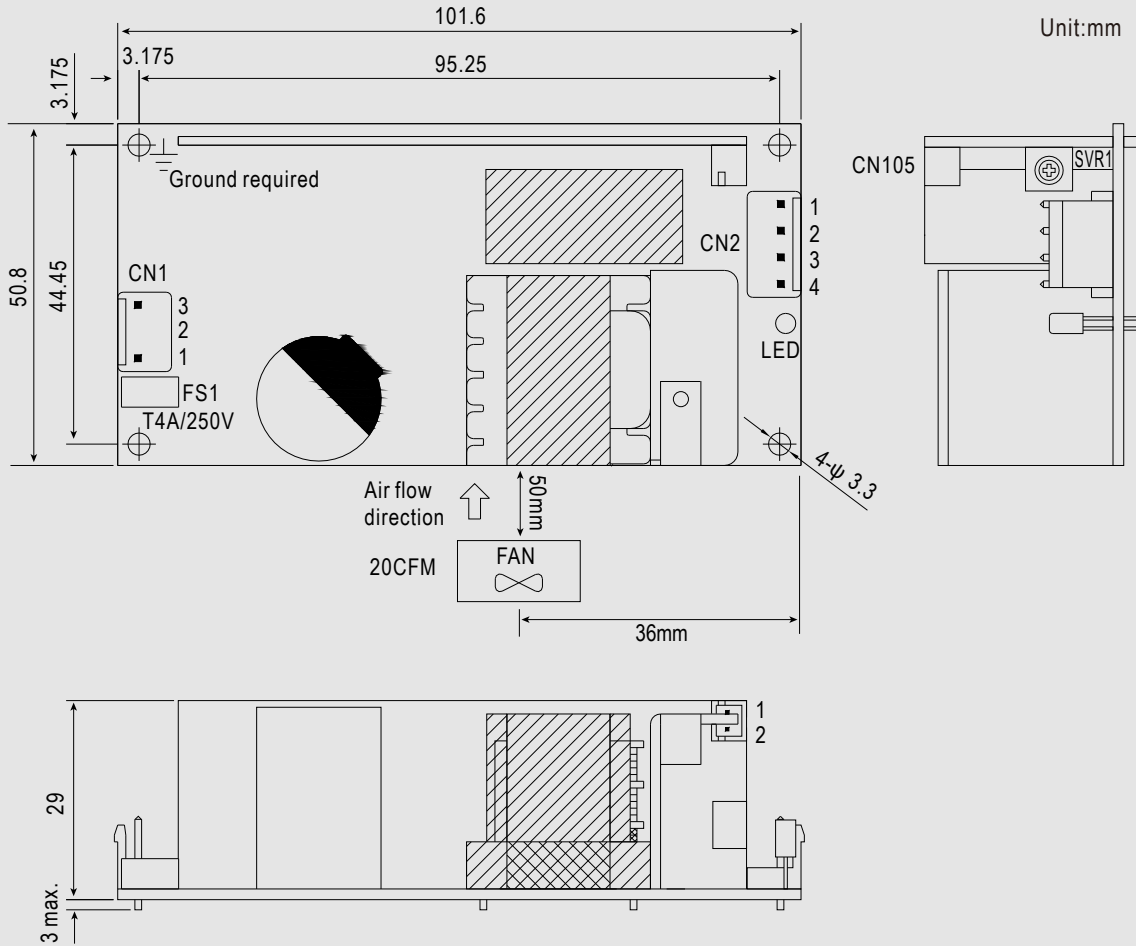
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple and Noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with 0.1uf & 2.2uf parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation and load regulation.
4. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.
5. Derating maybe needed under low input voltages. Please check the derating curve for more details.
6. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models is needed for operating altitude greater than 2000m (6500ft).

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Mechanical Diagram



AC Input Connector (CN1) : JST B3P-VH or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	AC/L	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
2	No Pin		
3	AC/N		

⊕ : Grounding required

DC Output Connector (CN2) : JST B4P-VH or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1,2	DC COM	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
3,4	+V		

FAN Connector(CN105) : JST B2B-PH-K-S or equivalent

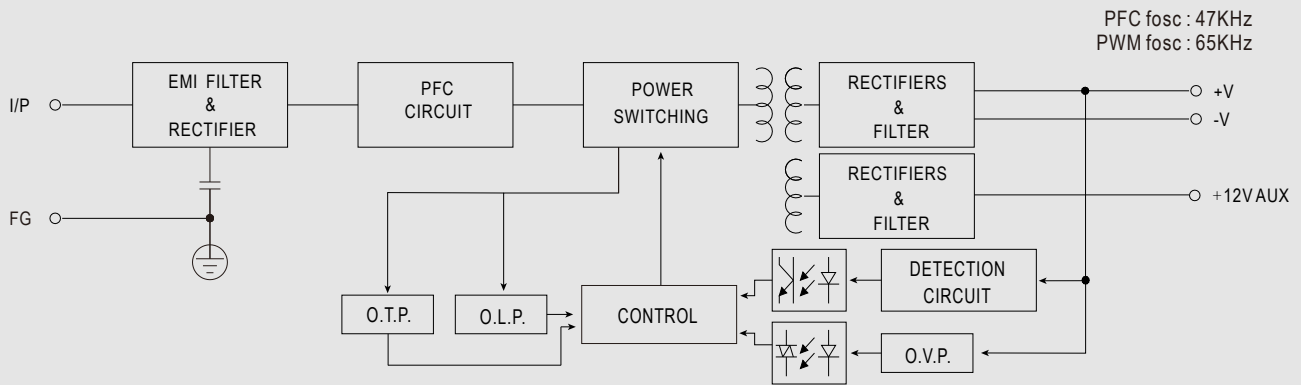
Pin No.	Assignment	Mating Housing	Terminal
1	+12V	JST PHR-2 or equivalent	JST SPH-002T-P0.5S or equivalent
2	DC COM		

EPP-100 Series

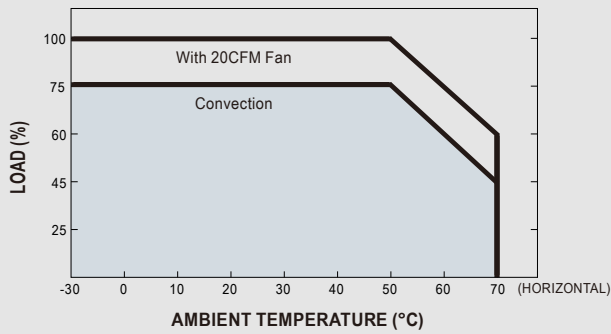
100W Single Output with PFC Function Power Supply



Block Diagram



Output Derating



Output Derating VS Input Voltage

