

BSQ-4225P-1U Series

Quad Output Active P.F.C Function



198 x 97 x 38 mm
7.8 x 3.82 x 1.50 inch



Features:

- * Universal AC input with active power factor correction, P.F.>0.95
- * Altitude during operation up to 13123ft (4000m)
- * High efficiency and high reliability
- * Built-in EMI filter, low ripple noise
- * CE approved , CB standard
- * 3 years warranty

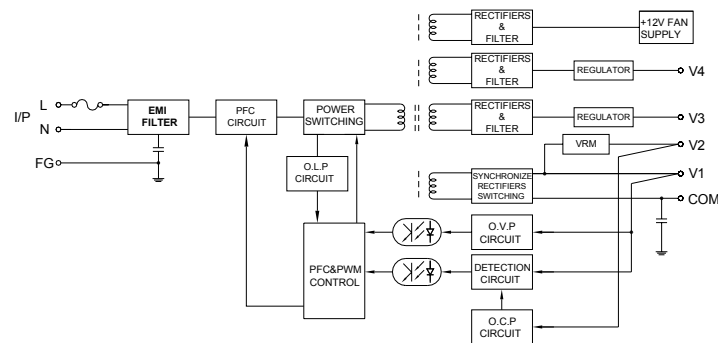
Specification:

INPUT	Voltage	88V ~ 264VAC universal full range or 125V ~ 375VDC.											
	Frequency	47 ----- 63 Hz											
	Current	<3.2A@100VAC input, full load condition											
	Inrush Current	<35A@115V , <70A@230V AC input. Cold start at 25℃ ambient											
	Leakage Current	<1.5mA@264V AC input											
	Power Factor	PF > 0.95											
OUTPUT	MODEL No.	BSQ-4225P-1U-1				BSQ-4225P-1U-2				BSQ-4225P-1U-3			
	Voltage	V1	V2	V3	V4	V1	V2	V3	V4	V1	V2	V3	V4
		12V	5V	-12V	-5V	15V	5V	-15V	-5V	12V	5V	-12V	24V
	Min Load	0.5A or 1A		0A	0A	0.5A or 1A		0A	0A	0.5A or 1A		0A	0A
	Max Load	15A	15A/20A	1A	1A	12A	15A/20A	1A	1A	15A	15A/20A	1A	4A
	Output Tolerance ②	±3%	±3%	±5%	±5%	±3%	±3%	±5%	±5%	±3%	±3%	±5%	+5/-10%
	Ripple Noise MAX. ③	120mV	70mV	150mV	100mV	150mV	70mV	150mV	100mV	120mV	70mV	150mV	250mV
	Efficiency (TYP.)	84%				84%				85%			
	Output MAX.	225W											
	Natural cooling	Output max 160W ※ V2 5V 15A max											
Forced air flow cooling	Output max 225W												
PROTECTION	Over Voltage	BSQ-4225P-1U-1/3 V1 : 13.3 ~ 16.8V BSQ-4225P-1U-2 V1 : 16.6V ~ 21V Shutdown and latch off, recover after re-start up.											
	Over Load & Short Circuit	When power supply over 105%~ 150 max load or short circuit acted, power supply will go into hiccup mode and recover automatically after the fault is removed. V2.V3.V4 OCP Auto Recovery.											
	Over Temperature	Shutdown and latch off, recover after re-start up.											
ELEC. CHAR.	Rise time	<20mS											
	Hold up time	>20mS@230V , at <200watts output											
	Setup time	<3.0S@115VAC , <1.5S@230VAC											
ENVIRONMENT	Temperature ④	Operating: -20 ~ +70℃ ; De-rating: 50 ~ 70℃: 2.5%/℃ ; Storage: -40 ~ +85℃											
	Humidity	Operating: 20% ~ 90% RH (non condensing) ; Storage: 10% ~ 95% RH (non condensing)											
SAFETY	Withstand voltage	I/P-O/P:3KVAC, I/P-PE:1.8KVAC, O/P-PE:0.5KVAC, 1minute											
	Isolation resistance	I/P-O/P, I/P-PE, O/P-PE > 100MΩ/500VDC at 25℃/ 70% RH											
	Safety standard	EN 62368-1 : 2018											
EMC	EMI	EN 55032 CLASS B, FCC CFR 47 PART 15 CLASS B , EN 61000-3-2 CLASS D, EN 61000-3-3											
	EMS	EN 55035 : 2017 EN 61000-4-2,3,4,5,6,8,11											
OTHERS	Cooling	Natural cooling, When output exceed 160W, a 15 CFM(min) DC fan is required											
	M.T.B.F.	116.1K hours											
	Packing	N.W.: 0.88 Kg / 1pc; 18 pcs / 1.38 CUFT / 1 CTN											
NOTE	① All measurements which not mentioned are based on 230VAC input, output max. at ambient 25℃ / 70%RH												
	② Output tolerance included set up voltage, line regulation and load regulation. The regulation is measured at the condition : when any of output is with 20% ~ 100% max load and the rest of each outputs are with 60% max load , Each output could work within max load but must under total output max .												
	③ Ripple & noise are measured at 100V~254Vac input with 10~50℃ condition and 20MHz of bandwidth by using a 10" ~ 15" twisted pair-wire terminated with a 0.1uF & a 47uF parallel capacitor.												
	④ The operating temperature shall follow the de-rating curve in spec The output load may be requested for decreasing as de-rating curve in spec when low input voltage is under 100VAC												
	⑤ The power supply is considered a component of end-equipment. The end-equipment must be re-confirmed whether comply with EMC directives.												

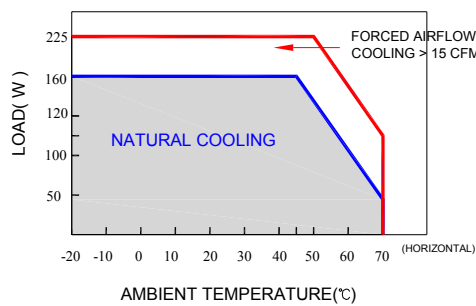


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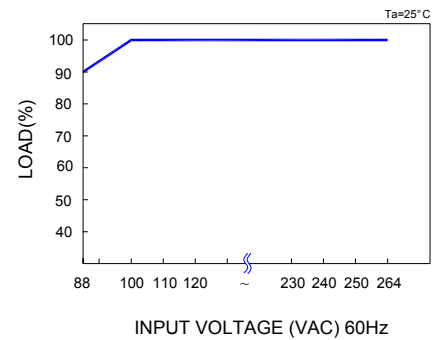
Block Diagram :



De-rating Curve :

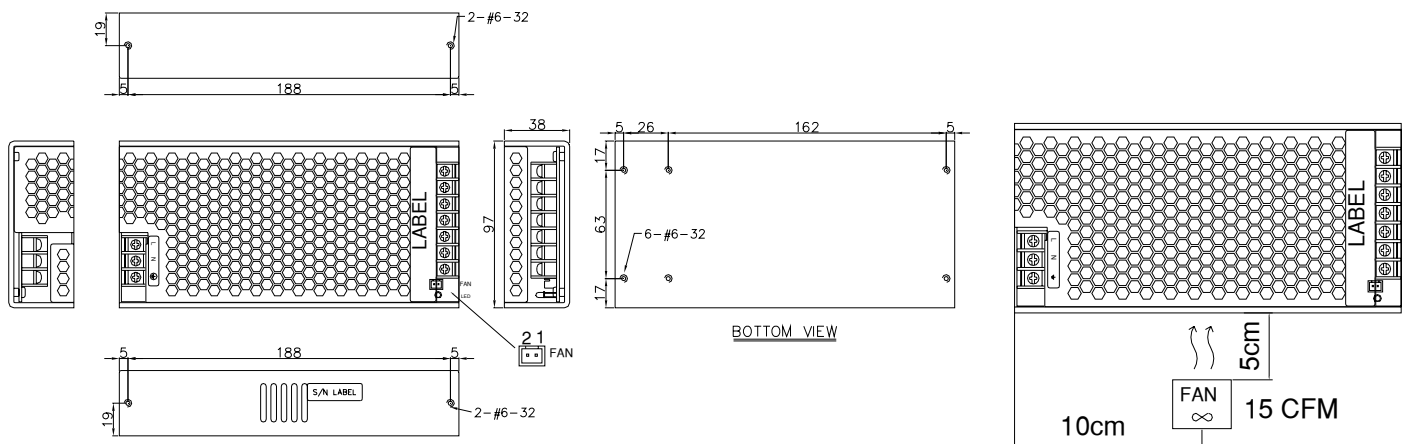


Output De-rating Vs Input Voltage :



Dimension:

(Unit: mm)



NOTES:

TERMINAL BLOCK: I/P=3P, P=9.5mm

PIN NO	1	2	3
INPUT	L	N	FG

TERMINAL BLOCK: O/P:7P, P=9.5mm

PIN NO	1	2	3	4	5	6	7
OUTPUT	V2	V2	GND	GND	V1	V3	V4

FAN CONNECTOR : 2P ,P=2.5mm ,JST B2B-XH-A OR COMPATIBLE

PIN NO	1	2
FUNCTION	DC COM	+12V



Nippon Beta Power Co., Ltd