



500W Single Output with PFC Function

RSP-500 series



■ Features :

- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Forced air cooling by built-in DC Fan with fan ON-OFF control function
- 1U low profile 40.5mm
- High efficiency up to 90.5%
- Built-in remote ON-OFF control
- Built-in remote sense function
- LED indicator for power on
- 3 years warranty



SPECIFICATION

MODEL	RSP-500-3.3	RSP-500-4	RSP-500-5	RSP-500-12	RSP-500-15	RSP-500-24	RSP-500-27	RSP-500-48	
OUTPUT	DC VOLTAGE	3.3V	4V	5V	12V	15V	24V	27V	48V
	RATED CURRENT	90A	90A	90A	41.7A	33.4A	21A	18.6A	10.5A
	CURRENT RANGE	0 ~ 90A	0 ~ 90A	0 ~ 90A	0 ~ 41.7A	0 ~ 33.4A	0 ~ 21A	0 ~ 18.6A	0 ~ 10.5A
	RATED POWER	297W	360W	450W	500.4W	501W	504W	502.2W	504W
	RIPPLE & NOISE (max.) Note.2	120mVp-p	120mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	2.8 ~ 3.6V	3.6 ~ 4.3V	4.5 ~ 5.5V	10 ~ 13.2V	13.5 ~ 18V	20 ~ 26.4V	26 ~ 30V	41 ~ 56V
	VOLTAGE TOLERANCE Note.3	±2.0%	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.3%	±0.3%	±0.2%	±0.2%	±0.2%
	LOAD REGULATION	±1.0%	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME	1500ms, 80ms/230VAC		3000ms, 80ms/115VAC at full load					
HOLD UP TIME (Typ.)	18ms/230VAC		14ms/115VAC at full load						
INPUT	VOLTAGE RANGE Note.4	85 ~ 264VAC		120 ~ 370VDC					
	FREQUENCY RANGE	47 ~ 63Hz							
	POWER FACTOR (Typ.)	PF>0.95/230VAC		PF>0.98/115VAC at full load					
	EFFICIENCY (Typ.)	81%	83%	83%	89%	88%	89%	89.5%	90.5%
	AC CURRENT (Typ.)	4.2A/115VAC	2.1 A/230VAC	5.3A/115VAC	2.65 A/230VAC				
	INRUSH CURRENT (Typ.)	20A/115VAC		40A/230VAC					
	LEAKAGE CURRENT	<2mA / 240VAC							
PROTECTION	OVERLOAD	105 ~ 130% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed							
	OVER VOLTAGE	3.8 ~ 4.5V	4.5 ~ 5.3V	5.75 ~ 6.75V	13.8 ~ 16.2V	18.8 ~ 21.8V	27.6 ~ 32.4V	32.9 ~ 38.3V	58.4 ~ 68V
	OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after temperature goes down							
FUNCTION	REMOTE CONTROL	POWER ON: open or 0~0.8VDC between RC+(Pin 4)&RC-(Pin3) on CN100 POWER OFF: 4~10VDC between RC+(Pin 4)&RC-(Pin3) on CN100							
	REMOTE SENSE	Compensate voltage drop on the load wiring up to 0.3V							
	FAN CONTROL (Typ.)	RTH2 ≥ 50°C ± 10°C Fan on ; RTH2 ≤ 40°C ± 10°C Fan off							
ENVIRONMENT	WORKING TEMP.	-30 ~ +70°C (Refer to "Derating Curve")							
	WORKING HUMIDITY	20 ~ 90% RH non-condensing							
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH							
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)							
SAFETY & EMC (Note 4)	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes							
	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 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 / 25°C / 70% RH							
	EMC EMISSION	Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3							
OTHERS	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2, EN61204-3 heavy industry level, criteria A							
	MTBF	187.7K hrs min.		MIL-HDBK-217F (25°C)					
	DIMENSION	230*127*40.5mm (L*W*H)							
NOTE	PACKING	1.3Kg; 9pcs/12.7Kg/0.7CUFT							
		<ol style="list-style-type: none"> All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Tolerance : includes set up tolerance, line regulation and load regulation. Derating may be needed under low input voltages. Please check the derating curve for more details. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com) 							

File Name:RSP-500-SPEC 2013-11-19



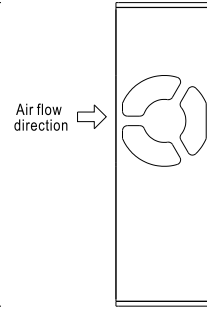
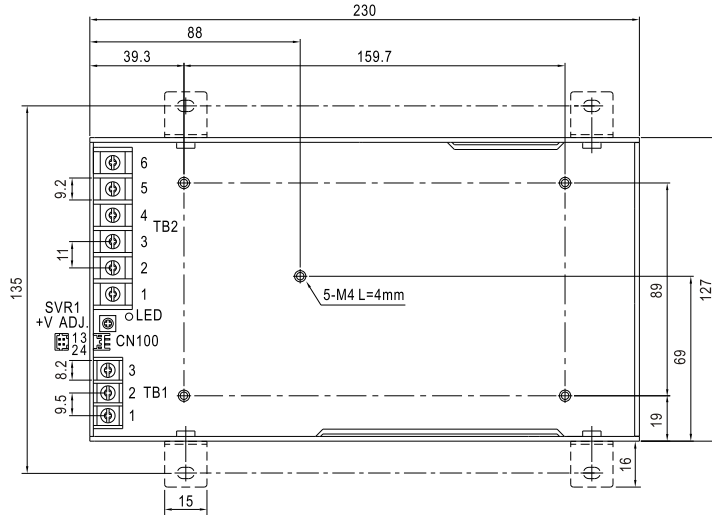


500W Single Output with PFC Function

RSP-500 series

Mechanical Specification

Case No.226A Unit:mm

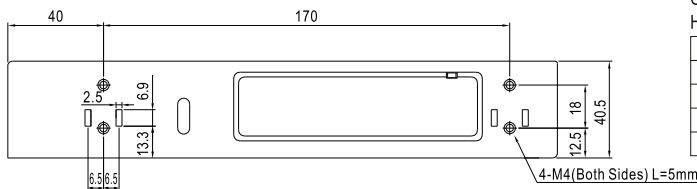


AC Input Terminal
Pin No. Assignment (TB1)

Pin No.	Assignment
1	AC/L
2	AC/N
3	FG \perp

DC Output Terminal
Pin No. Assignment (TB2)

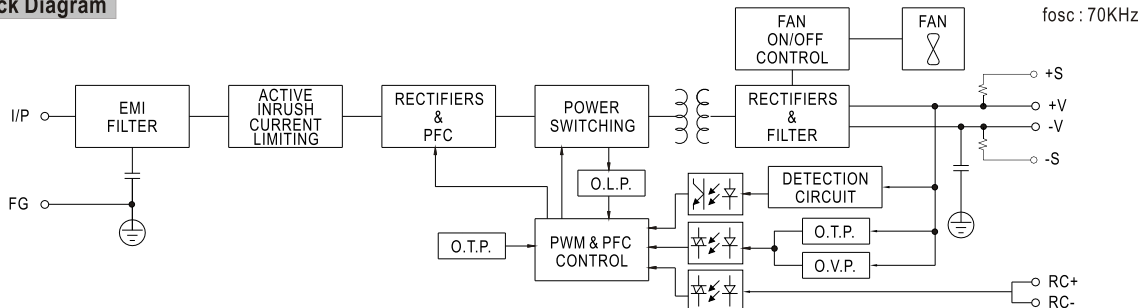
Pin No.	Assignment
1-3	DC OUTPUT -V
4-6	DC OUTPUT +V



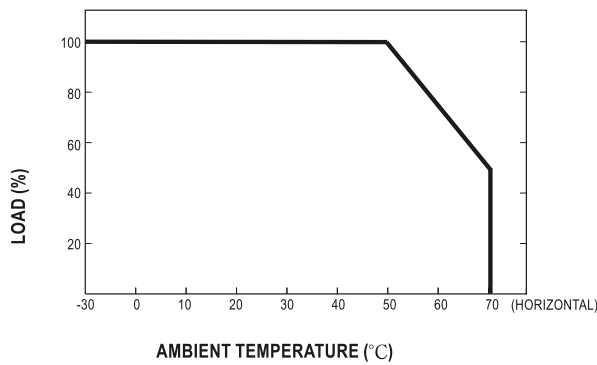
Connector Pin No. Assignment (CN100) :
HRS DF11-04DP-2DS or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	-S	HRS DF11-4DS or equivalent	HRS DF11-**SC or equivalent
2	+S		
3	RC-		
4	RC+		

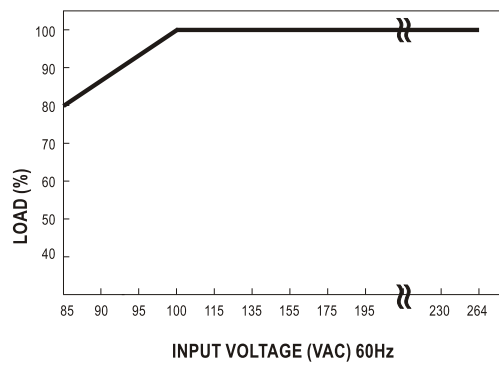
Block Diagram



Derating Curve



Static Characteristics



File Name:RSP-500-SPEC 2013-11-19





500W Single Output with PFC Function

RSP-500 series

Function Description of CN100

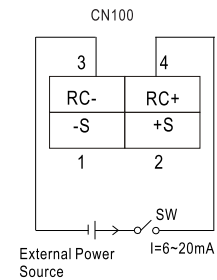
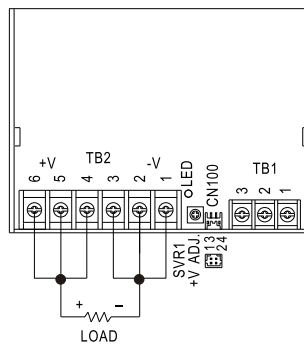
Pin No.	Function	Description
1	-S	Negative sensing. The -S signal should be connected to the negative terminal of the load. The -S and +S leads should be twisted in pair to minimize noise pick-up effect. The maximum line drop compensation is 0.3V.
2	+S	Positive sensing. The +S signal should be connected to the positive terminal of the load. The +S and -S leads should be twisted in pair to minimize noise pick-up effect. The maximum line drop compensation is 0.3V.
3	RC-	Return for RC+ signal input.
4	RC+	Turns the output on and off by electrical or dry contact between pin 4 (RC+) and pin 3 (RC-). 0~0.8VDC or open: Power ON, 4~10VDC: Power OFF.

Function Manual

1. Remote Control

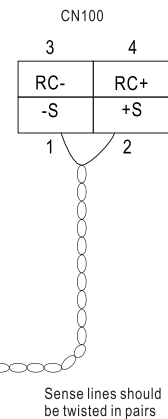
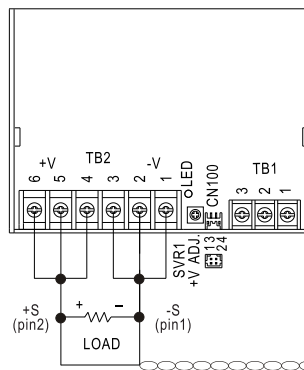
The PSU can be turned ON/OFF by using the "Remote Control" function.

Between RC- (pin3) and RC+ (pin4) on CN100	PSU Status
SW OFF (0 ~ 0.8VDC) or open	ON
SW ON (4 ~ 10V)	OFF



2. Remote Sense

The remote sensing compensates voltage drop on the load wiring up to 0.3V



Sense lines should be twisted in pairs



Wir sind für Sie da. Adressen und Kontakte

Verkauf Schweiz & Liechtenstein

Matthias Rüegg
Ruhbergstrasse 32
CH-9230 Flawil

Tel. +41 44 877 35 18
Mobil +41 76 491 66 66
Fax +41 44 877 35 19

matthias.rueegg@pewatron.com

Verkauf International Key Accounts

Peter Felder
Thurgauerstrasse 66
CH-8052 Zürich

Tel. +41 44 877 35 05
Mobil +41 79 406 49 83
Fax +41 44 877 35 25

peter.felder@pewatron.com

Verkauf Deutschland

PLZ 60000–79999

Dieter Hirthe
Mühlweg 23
D-71554 Weissach i.T.

Tel. +49 719 149 60 58
Mobil +49 163 762 74 30
Fax +49 719 193 31 88

dieter.hirthe@pewatron.com

PLZ 10000–59999
PLZ 80000–99999

Kurt Stritzelberger
Neumarkter Str. 86a
D-81673 München

Tel. +49 89 260 38 47
Mobil +49 171 803 41 35
Fax +49 89 43 10 91 91

kurt.stritzelberger@pewatron.com

Key Accounts
Aerospace and Defence

Claus Wübbena
Vogelkamp 26
D-26655 Westerstede

Tel. +49 4488 5204 614
Mobil +49 173 9700 691
Fax +49 4488 5204 616

claus.wuebbena@pewatron.com

Verkauf Österreich

Kurt Stritzelberger
Neumarkter Str. 86a
D-81673 München

Tel. +49 89 260 38 47
Mobil +49 17 18 03 41 35
Fax +49 89 43 10 91 91

kurt.stritzelberger@pewatron.com

Verkauf andere Länder / Product Management

Sensoren

Physikalische Sensoren
Datenerfassung

Thomas Clausen
Tel. +41 44 877 35 13
thomas.clausen@pewatron.com

Geometrische Sensoren

Eric Letsch
Tel. +41 44 877 35 14
eric.letsch@pewatron.com

Stromversorgungen

DC-DC Wandler
Schaltnetzgeräte
DC-AC Inverter

Sebastiano Leggio
Tel. +41 44 877 35 06
sebastiano.leggio@pewatron.com

E-Komponenten

Stromwandler
Mensch-Maschine-Schnittstelle
Messsonden

Sebastiano Leggio
Tel. +41 44 877 35 06
sebastiano.leggio@pewatron.com

PEWATRON AG
Thurgauerstrasse 66
CH-8052 Zürich

Tel. +41 44 877 35 00
Fax +41 44 877 35 25

www.pewatron.com
info@pewatron.com