

**SPECIFICATION** 



#### Features:

- · Universal AC input/Full range
- ZVS new technology
- · AC input active surge current limiting
- High efficiency up to 91%
- Built-in active PFC function, PF>0.95
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Forced air cooling by built-in DC ball bearing fan
- Output voltage can be trimmed between 70~100% of the rated output voltage
- High power density 8.3W/inch<sup>3</sup>
- Current sharing up to 6000W(3+1)
- · Alarm signal output
- Built-in 12V/0.1A auxiliary output for remote control
- · Built-in remote ON-OFF control
- · Built-in remote sense function
- 3 years warranty

# Parallel (FC) c Aus (As a second process of the Company of the Com

MODEL		RSP-1500-5	RSP-1500-12	RSP-1500-15	RSP-1500-24	RSP-1500-27	RSP-1500-48		
	DC VOLTAGE	5V	12V	15V	24V	27V	48V		
	RATED CURRENT	240A	125A	100A	63A	56A	32A		
	CURRENT RANGE	0 ~ 240A	0 ~ 125A	0 ~ 100A	0 ~ 63A	0 ~ 56A	0 ~ 32A		
	RATED POWER	1200W	1500W	1500W	1512W	1512W	1536W		
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p		
OUTPUT	VOLTAGE ADJ. RANGE	4.5 ~ 5.5V	10 ~ 13.5V	13.5 ~ 16.5V	20 ~ 26.4V	24 ~ 30V	43 ~ 56V		
	VOLTAGE TOLERANCE Note.3	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%		
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%		
	LOAD REGULATION	±2.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%		
	SETUP, RISE TIME	1500ms, 100ms at f	ull load						
	HOLD UP TIME (Typ.)	10ms at full load		14ms at full load 16ms at full load					
	VOLTAGE RANGE	90 ~ 264VAC 1	90 ~ 264VAC 127 ~ 370VDC						
	FREQUENCY RANGE	47~63Hz							
	POWER FACTOR (Typ.)	0.95/230VAC	).98/115VAC at full loa	ad					
INPUT	EFFICIENCY (Typ.)	80%	87%	87%	90%	90%	91%		
	AC CURRENT (Typ.)	17A/115VAC 8A	A/230VAC				•		
	INRUSH CURRENT (Typ.)	30A/115VAC 6	0A/230VAC						
	LEAKAGE CURRENT	<2.0mA/240VAC							
		105 ~135% rated output power							
	OVERLOAD Note.5	Protection type: Constant current limiting unit will shut down o/p voltage after 5sec. Re-power on to recover							
		5.75 ~ 6.75V	13.8 ~ 16.8V	17 ~ 20.5V	27.6 ~ 32.4V	31 ~ 36.5V	57.6 ~ 67.2V		
PROTECTION	OVER VOLTAGE	Protection type : Sh	ut down o/p voltage, r	e-power on to recove	r				
	OVED TEMPEDATURE	95°C±5°C (TSW2) detect on heatsink of power transistor							
	OVER TEMPERATURE	Protection type: Shut down o/p voltage, recovers automatically after temperature goes down							
	AUXILIARY POWER(AUX)	12V@0.1A(Only for Remote ON/OFF control)							
	REMOTE ON/OFF CONTROL	Please see the Function Manual							
FUNCTION	ALARM SIGNAL OUTPUT	Please see the Function Manual							
	OUTPUT VOLTAGE TRIM	Please see the Function Manual							
	CURRENT SHARING	Please see the Function Manual							
	WORKING TEMP.	-20 ~ +70°C (Refer to "Derating Curve")							
	WORKING HUMIDITY	20~90% RH non-condensing							
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH							
	TEMP. COEFFICIENT	±0.05%/°C (0~50°C)							
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes							
	SAFETY STANDARDS	UL60950-1, TUV EI	160950-1 approved						
SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC							
EMC	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃ / 70% RH							
(Note 4)	EMC EMISSION	Compliance to EN55022 (CISPR22), EN61000-3-2,-3							
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A							
	MTBF	62.6K hrs min. MIL-HDBK-217F (25°C)							
OTHERS	DIMENSION	278*127*83.5mm (L*W*H)							
	PACKING	3.0Kg; 4pcs/13Kg/1.19CUFT							

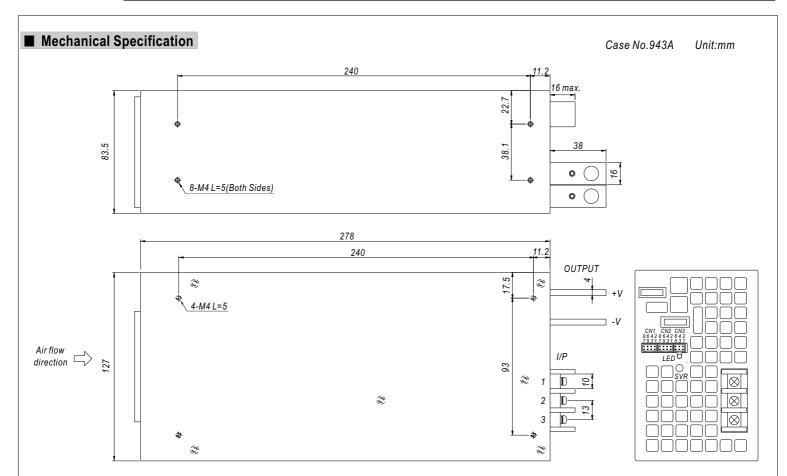
4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets

EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."

5. Derating may be needed under low input voltages. Please check the derating curve for more details.

(as available on http://www.meanwell.com)





#### AC Input Terminal Pin No. Assignment

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

## Control Pin No. Assignment(CN1, CN2): HRS DF11-8DP-2DS or equivalent

	•				•
Pin No.	Assignment	Pin No.	Assignment	Mating Housing	Terminal
1	RCG	4	TRIM	UD0 DE44 0D0	UD0 DE44 **00
2	RC2	6	LS(Current Share)	HRS DF11-8DS or equivalent	or equivalent
3,5,7	-S	8	+S	or oquivalent	o, oquivaloni

RCG: Remote ON/OFF Ground RC2: Remote ON/OFF

-S :-Remote Sensing

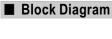
TRIM: Adjustment of Output Voltage

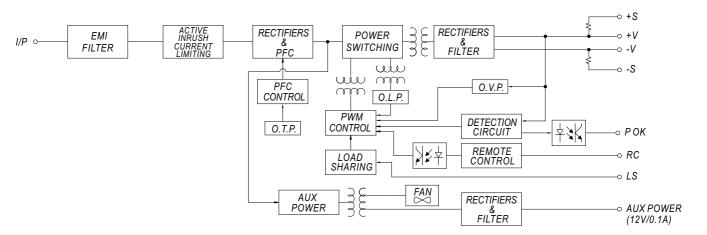
LS: Load Share +S: +Remote Sensing

Control Pin No. Assignment(CN3): HRS DF11-6DP-2DS or equivalent

	Pin No.	Assignment	Pin No.	Assignment	Mating Housing	Terminal
I	1	P OK GND	4	AUXG	UD0 DE44 0D0	UD0 DE44 **00
l	2	P OK	5	RC1	HRS DF11-6DS or equivalent	HRS DF11-**SC
ĺ	3	RCG	6	AUX	or equivalent	or equivalent

P OK GND: Power OK Ground P OK: Power OK Signal RCG: Remote ON/OFF Ground AUXG: Auxiliary Ground RC1: Remote ON/OFF AUX: Auxiliary Output

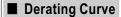




PFC fosc: 70KHz

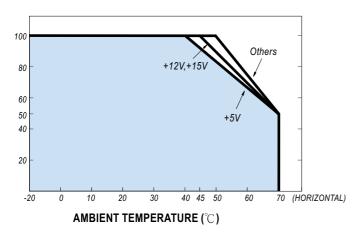
PWM fosc: 100KHz

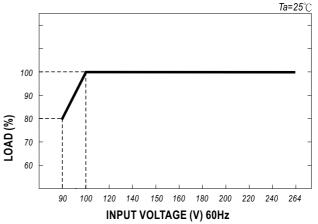




(%) **GVO** 

## **■** Static Characteristics





## **■** Function Manual

## 1.Remote ON/OFF

(1) Remote ON/OFF control becomes available by applying voltage in CN1 & CN2 & CN3

(2) Table 1.1 shows the specification of Remote ON/OFF function

(3)Fig.1.2 shows the example to connect Remote ON/OFF control function

Table 1.1 Specification of Remote ON/OFF

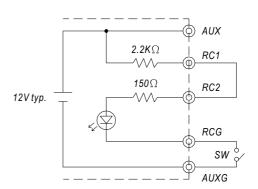
,				
Connection Method		Fig. 1.2(A)	Fig. 1.2(B)	Fig. 1.2(C)
SW Logic	Output on	SW Open	SW Open	SW Close
	Output off	SW Close	SW Close	SW Open

Fig. 1.2 Examples of connecting remote ON/OFF

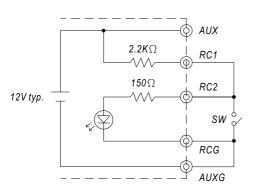
## (A)Using external voltage source

# 

## (B) Using internal 12V auxiliary output



#### (C)Using internal 12V auxiliary output





#### 2.Alarm Signal Output

(1) Alarm signal is sent out through "P OK" & "P OK GND" pins

(2)An external voltage source is required for this function. The maximum applied voltage is 50V and the maximum sink current is 10mA

(3) Table 2.1 explain the alarm function built-in the power supply

Function	Description	Output of alarm(P OK)
P OK	The signal is "Low" when the power supply is above 65% of the rated output voltage-Power OK	Low (0.5V max at 10mA)
POR	The signal turns to be "High" when the power supply is under 65% of the rated output voltage-Power Fail	High or open (External applied voltage 10mA max.)

Table 2.1 Explanation of alarm

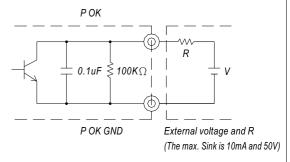
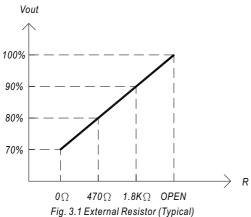


Fig. 2.2 Internal circuit of P OK (Open collector method)

#### 3. Output Voltage TRIM

(1) Adjustment of output voltage is possible between 70~100%(Typ.) of the rated output which is shown in Fig. 3.1 (2) Connecting a resistor externally between TRIM and-S on CN1 or CN2 that is shown in Fig. 3.2.



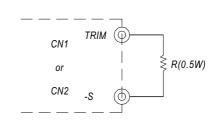


Fig. 3.2 Output voltage trimming

#### 4. Current Sharing

- (1)Parallel operation is available by connecting the units shown as below (+S,-S and LS are connected mutually in parallel):
- (2) The voltage difference among each output should be minimized that less than ±2% is required
- (3) The total output current must not exceed the value determined by the following equation (Output current at parallel operation)=(The rated current per unit) x (Number of unit) x 0.9
- (4) In parallel operation 4 units is the maximum, please consult the manufacture for other applications
- (5) When remote sensing is used in parallel operation, the sensing wire must be connected only to the master unit

