

**SPECIFICATION** 



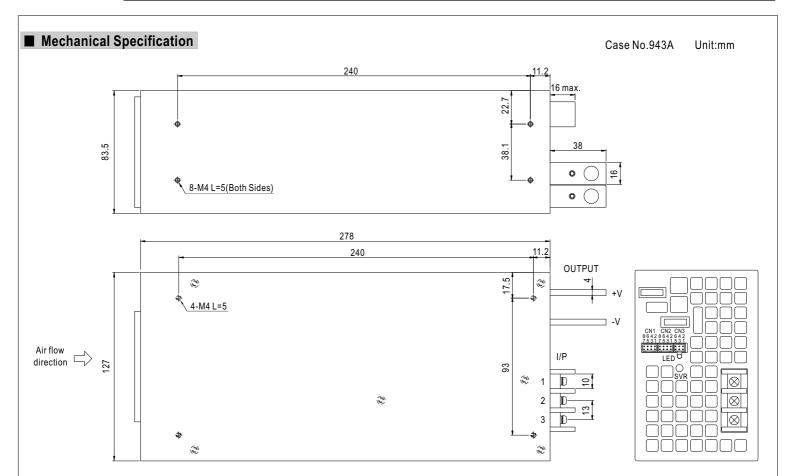
#### Features:

- 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 Pc c Nus Land CBCE

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		±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 ful	l load						
	HOLD UP TIME (Typ.)	10ms at full load	16ms at full load						
	VOLTAGE RANGE	90 ~ 264VAC 127 ~ 370VDC							
	FREQUENCY RANGE	47~63Hz							
	POWER FACTOR (Typ.)	0.95/230VAC 0.98/115VAC at full load							
INPUT	EFFICIENCY (Typ.)	80%	87%	87%	90%	90%	91%		
	AC CURRENT (Typ.)			/	1-570	7.0	/ v		
	INRUSH CURRENT (Typ.)	17A/115VAC 8A/230VAC 8A/230VAC 60A/230VAC							
	LEAKAGE CURRENT		742007710						
	ELANAGE CONNENT	<2.0mA / 240VAC							
	OVERLOAD Note.5	105 ~135% rated output power  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.C C7.0V		
PROTECTION	OVER VOLTAGE				21.0 ~ 32.40	31~30.50	57.6 ~ 67.2V		
		Protection type: Shut down o/p voltage, re-power on to recover  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							
	ALIVII IADV DOWED/ALIV)	12V@0.1A(Only for Remote ON/OFF control)							
	AUXILIARY POWER(AUX)	Please see the Function Manual							
FUNCTION	REMOTE ON/OFF CONTROL	Please see the Function Manual Please see the Function Manual							
FUNCTION	OUTPUT VOLTAGE TRIM	Please see the Function Manual							
		Please see the Function Manual Please see the Function Manual							
	CURRENT SHARING			curvo)					
	WORKING TEMP.	-20 ~ +70°C (Refer to output load derating curve)							
ENVIRONMENT	WORKING HUMIDITY	20~90% RH non-condensing							
ENVIKUNMENI	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH							
	TEMP. COEFFICIENT VIBRATION	±0.05%°C (0 ~ 50°C)							
	SAFETY STANDARDS	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes							
	WITHSTAND VOLTAGE	UL60950-1, TUV EN60950-1 approved  I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC							
SAFETY &	ISOLATION RESISTANCE								
EMC	EMI CONDUCTION & RADIATION	/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH   Compliance to EN55022 (CISPR22)							
(Note 4)	HARMONIC CURRENT	•	· · · · · · · · · · · · · · · · · · ·						
	EMS IMMUNITY	Compliance to EN61000-3-2,-3							
	MTBF	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, light industry level, criteria A							
OTHERS	DIMENSION	62.6K hrs min. MIL-HDBK-217F (25°C)							
CINERS	PACKING	278*127*83.5mm (L*W*H) 3.0Kg; 4pcs/13Kg/1.19CUFT							
NOTE	All parameters NOT special     Ripple & noise are measure     Tolerance: includes set up     The power supply is consid     EMC directives. For guidan     (as available on http://www.	ally mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.  red at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.  to tolerance, line regulation and load regulation.  dered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets not on how to perform these EMC tests, please refer to "EMI testing of component power supplies."							





### 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	LIDO DE 44 **00
2	RC2	6	LS(Current Share)	HRS DF11-8DS or equivalent	or equivalent
3,5,7	-S	8	+S	or oquivaloni	or oquivaloni

RCG: Remote ON/OFF Ground

RC2: Remote ON/OFF -S :-Remote Sensing TRIM: Adjustment of Output Voltage

LS: Load Share +S: +Remote Sensing

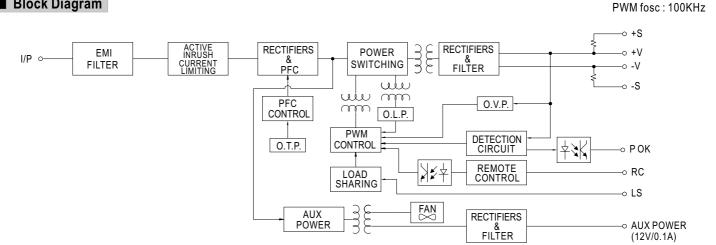
# Control Pin No. Assignment(CN3): HRS DF11-6DP-2DS or equivalent

Pin No.	Assignment	Pin No.	Assignment	Mating Housing	Terminal
1	P OK GND	4	AUXG	LIDO DE 14 ODO	UD0 DE44 **00
2	P OK	5	RC1	HRS DF11-6DS or equivalent	
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** 





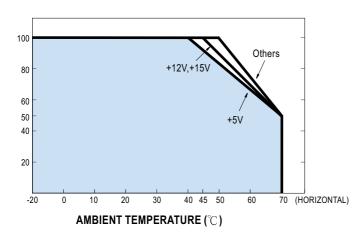
PFC fosc: 70KHz

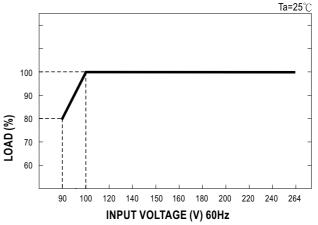


# **■** Derating Curve

(%) **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

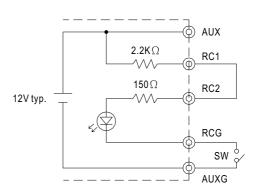
•					
	Connection Method		Fig. 1.2(A)	Fig. 1.2(B)	Fig. 1.2(C)
	SW Logic	Output on	SW Open	SW Open	SW Close
		Output off	SW Close	SW Close	SW Open

Fig.1.2 Examples of connecting remote ON/OFF

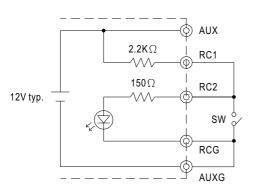
## (A)Using external voltage source

### 

#### (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)
FUN	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

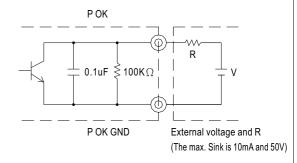


Fig. 2.2 Internal circuit of P OK (Open collector method)

#### 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.

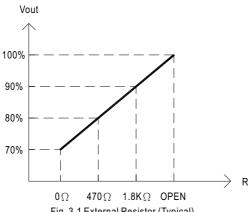


Fig. 3.1 External Resistor (Typical)

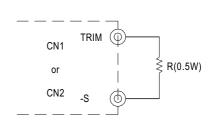


Fig. 3.2 Output voltage trimming

#### 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

