

**SPECIFICATION** 



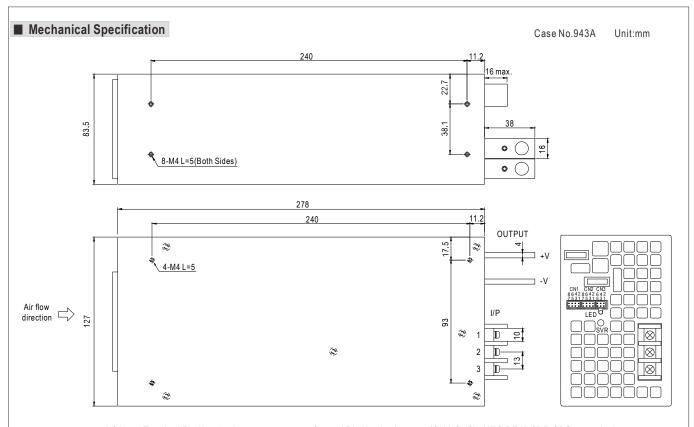
#### ■ Features :

- 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/inch³
- 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
- 5 years warranty



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 a	t full load							
	HOLD UP TIME (Typ.)	10ms at full load 14ms at full load 16ms at full load								
	VOLTAGE RANGE	90 ~ 264VAC 127 ~ 370VDC								
	FREQUENCY RANGE	90~204VAC 127~370VDC 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.)	17A/115VAC	8A/230VAC	U1 /0	0070	5070	3170			
	INRUSH CURRENT (Typ.)	30A/115VAC 60A/230VAC 60A/230VAC								
	LEAKAGE CURRENT	<2.0mA/240VAC 60A/230VAC <2.0mA/240VAC								
	LETHONGE GONNENT	105 ~135% rated output power								
	OVERLOAD Note.5									
PROTECTION		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									
	OVER TEMPERATURE	Protection type: Shut down o/p voltage, re-power on to recover  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								
ELINCTION	ALARM SIGNAL OUTPUT	Please see the Function Manual								
1011011	OUTPUT VOLTAGE TRIM	Please see the Function Manual								
	CURRENT SHARING	Please see the Function Manual 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	20 ~ 90 % RH Hoth-condensing								
LITTINOAMLITI	TEMP. COEFFICIENT	-40 ~ +85 €, 10 ~ 95% RH ±0.05%/°€ (0 ~ 50°€)								
	VIBRATION	\		each along Y V 7 avec	<u> </u>					
	SAFETY STANDARDS	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes  UL60950-1, TUV EN60950-1 approved								
CAFETY	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC								
SAFETY &	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH								
EMC (Note 4)	EMC EMISSION		N55022 (CISPR22), EN							
(	EMC IMMUNITY		, ,.		ıstry level criteria A					
	MTBF	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A  62.6K hrs min. MIL-HDBK-217F (25°C)								
OTHERS	DIMENSION	2.78*127*83.5mm (L*W*H)								
O ITILINO	PACKING	3.0Kg; 4pcs/13Kg/1.19CUFT								
NOTE	All parameters NOT special     Ripple & noise are measure     Tolerance : includes set up     The power supply is consid	ially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.  ured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.  p tolerance, line regulation and load regulation.  idered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets ance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."								





## AC Input Terminal Pin No. Assignment

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

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

			*	. ,		•
ĺ	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)	or equivalent	HRS DF11-**SC or equivalent
ĺ	3,5,7	-S	8	+S	or oquivaloni	or oquivaloni

TRIM: Adjustment of Output Voltage

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

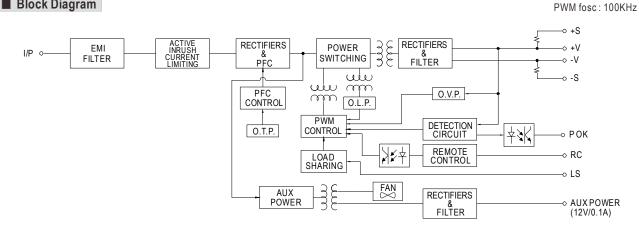
LS: Load Share -S :-Remote Sensing +S: +Remote Sensing

#### 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	11D0 DE44 0D0	UD0 DE44 **00
2	POK	5	RC1	HRS DF11-6DS or equivalent	
3	RCG	6	AUX	5. 545. Valont	o. oquivaloni

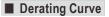
P OK GND: Power OK Ground P OK: Power OK Signal RCG: Remote ON/OFF Ground AUXG: Auxiliary Ground RC1: Remote ON/OFF AUX: Auxiliary Output

## ■ Block Diagram

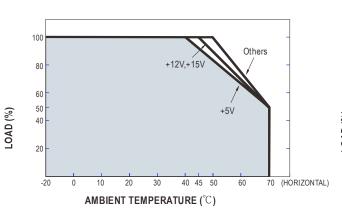


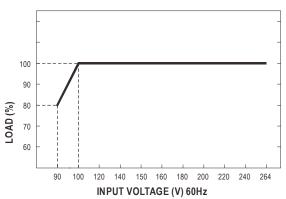
PFC fosc: 70KHz





## **■** Static Characteristics





### ■ Function Manual

#### 1.Remote ON/OFF

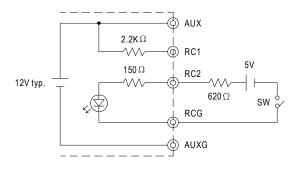
- (1)Remote ON/OFF control becomes available by applying voltage in CN1 & CN2 & CN3
- (2) Table 1.1 shows the specification of Remote ON/OFF function
- (3) Fig. 1.2 shows the example to connect Remote ON/OFF control function  $% \left( 1,0\right) =\left( 1,0\right)$

Table 1.1 Specification of Remote ON/OFF

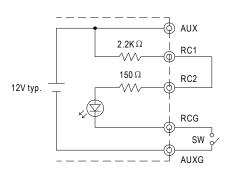
Connec	tion Method	Fig. 1.2(A)	Fig. 1.2(B)	Fig. 1.2(C)
SW Logic	Output on	SW Open	SW Open	SW Close
3W Logic	Output off	SW Close	SW Close	SW Open

Fig.1.2 Examples of connecting remote ON/OFF

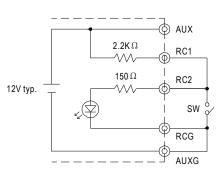
#### (A)Using external voltage source



#### (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)				
	PUK	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

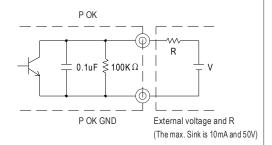
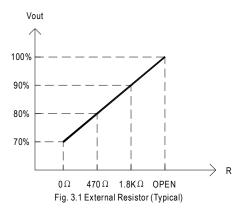


Fig. 2.2 Internal circuit of P OK (Open collector method)

#### 3.Output Voltage TRIM

- $(1) Adjustment of output voltage is possible between 70 \sim 100\% (Typ.) of the rated output which is shown in Fig. 3.1$
- (2)Connecting a resistor externally between TRIM and-S on CN1 or CN2 that is shown in Fig. 3.2.
- (3)+S & +V, -S & -V also need to be connected on CN1 or CN2.



## 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 0.2V 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)×(Number of unit)×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

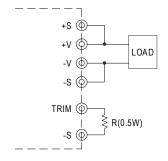
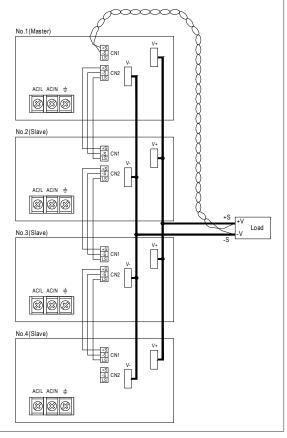


Fig. 3.2 Output voltage trimming



# AMEYA360 Components Supply Platform

## **Authorized Distribution Brand:**

























# Website:

Welcome to visit www.ameya360.com

## Contact Us:

## > Address:

401 Building No.5, JiuGe Business Center, Lane 2301, Yishan Rd Minhang District, Shanghai , China

## > Sales:

Direct +86 (21) 6401-6692

Email amall@ameya360.com

QQ 800077892

Skype ameyasales1 ameyasales2

## Customer Service :

Email service@ameya360.com

# Partnership :

Tel +86 (21) 64016692-8333

Email mkt@ameya360.com