

ARPJ-SS140350A (50W, 240-360mA, PFC)

ARPJ-SS100500A (50W, 350-500mA, PFC)

ARPJ-SS72700A (50W, 500-700mA, PFC)



FEATURES

- Efficiency $\geq 87\%$
- Active PFC >0.95 at 220VAC
- No pulsation
- Protections: Short-circuit /Over-load /Over-voltage /Over-temperature
- Working temperature : $-20^{\circ}\text{C} \sim +50^{\circ}\text{C}$
- IP20 design
- 2~3 times burn-in tests ($+50^{\circ}\text{C}/-40^{\circ}\text{C}$ at full load with over 14 hours)
- Economical design

SPECIFICATION

Model		ARPJ-SS140350A	ARPJ-SS100500A	ARPJ-SS72700A
Input	Voltage Range	170~264VAC or 90~132VAC		
	Frequency Range	47~63Hz		
	Efficiency (Note 3)	89%	89%	88%
	AC Current	0.27A ~ 0.17A		
	Inrush Current	Cold Start at 45A/230VAC, Input at Ta: 25°C cold start.		
	Leakage Current	<0.5mA at 230VAC, 60Hz Input		
Output	Rated Current (Note 1)	240~360 mA	350~450 mA	600~700 mA
	Output Voltage Range	80~140VDC	70~100VDC	40~72VDC
	Rated Power	50W	50W	50W
	Ripple and Noise (Max)(Note 2)	350mVp-p	350mVp-p	300mVp-p
	Voltage Tolerance	$\pm 3.0\%$	$\pm 3.0\%$	$\pm 3.0\%$
	Line Regulation	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$
	Load Regulation	$\pm 1.0\%$	$\pm 1.0\%$	$\pm 1.0\%$
	Set-up, Rise Time	1500ms 80ms/230VAC, 2000ms 80ms/110VAC		
	Hold-up Time	50ms/230VAC at full load, 25ms/110VAC at full load		
Protection	Current protection	$\pm 1\%$ (current limiting type)		
	Over-Voltage	110% ~ 130% (Shut down O/P voltage, repower on to recover)		
	Over-load	110% ~ 130% (Shut down O/P voltage, repower on to recover)		
	Short Circuit	Hiccup mode, recovers automatically after faulty problem is removed		
	Over-temperature	$85^{\circ}\text{C} \pm 10^{\circ}\text{C}$ (Shut down O/P voltage, re-power on to recover)		
Working Environment	Working Environment	$-25^{\circ}\text{C} \sim +50^{\circ}\text{C}$		
	Working Humidity	20~90% RH non-condensing		
	Storage Environment & Humidity	$-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$		
	TEMP. Coefficient	$\pm 0.05\%/^{\circ}\text{C}$ ($0 \sim 50^{\circ}\text{C}$)		
	Vibration	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes		

Safety & EMC	Safety standards	EN-61347-1, EN61347-2-13, ROHS Tests, Design refer to UL8750
	Withstand voltage	I/P-O/P: 3KVAC I/P-F/G:1.5KVAC O/P-F/G: 500VAC
	Isolation resistance	I/P-O/P IP-FG OP-FG: 100M Ohms/500VDC / 25°C / 70% RH
	EMC Emission	Compliance to EN55015: 2007, EN61547:1995+A1:2000; EN61000-3-2: 2006; EN61000-3-3: 2008
Others	Life Span (Note 4)	≥50000Hrs (25~30°C)
	No Load power consumption	≤1.0W
	MTBF (Note 5)	250K hrs min, MIL-HDBK-217F (25°C)
	Dimension (Note 6)	225*30*28 mm / 238*36*30mm (L*W*H)
	Packing	50pcs/carton
	Weight	0.21Kg/pcs

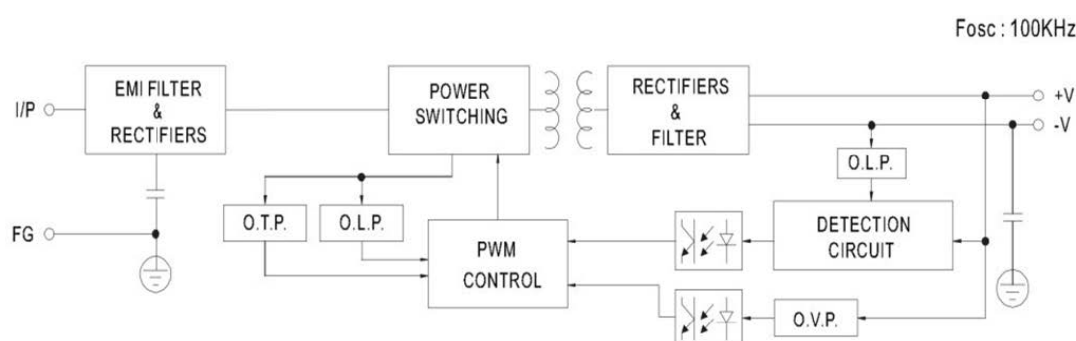
All parameter are measured at normal temperature (+25°C ~ +28°C)

1. The rated current can be customized between 300mA~700mA
2. Ripple & Noise are measured at 20KHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 uf & 47uf parallel capacitor (at full load).
3. The efficiency measured at Max output voltage, and 230VAC with full load, if with 110VAC the efficiency will be lowered 1% ~ 1.5%; Working 1~2 hours, efficiency will be increase up 0.5% ~ 1% than the initial stage.
4. This measured at 120VAC, 80% ~85% load with environmental temperature about +25°C ~ +30°C, the outer housing temperature with +55°C or so.
5. This measured at 120VAC, 80% ~85% load with environmental temperature about +25°C ~ +30°C, the outer housing temperature with +55°C or so.
6. More details see the following mechanical draft.

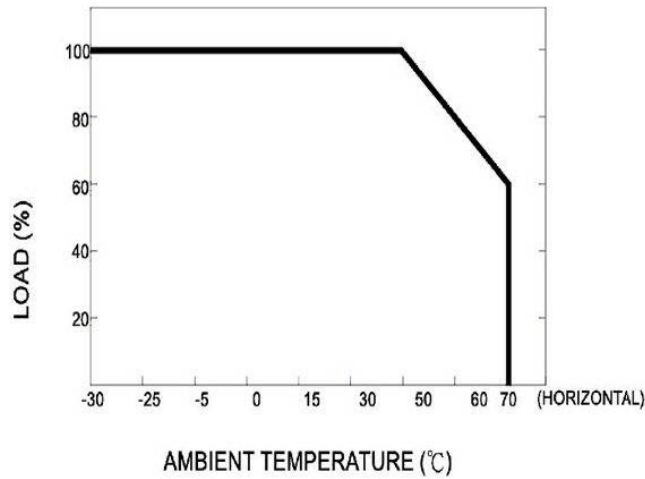
MECHANICAL SPECIFICATION



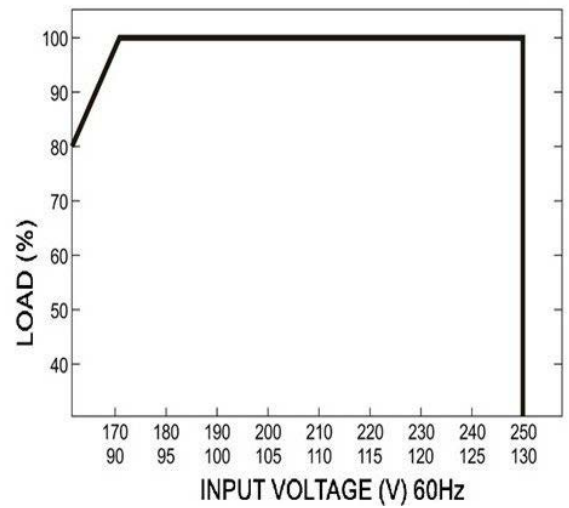
BLOCK DIAGRAM



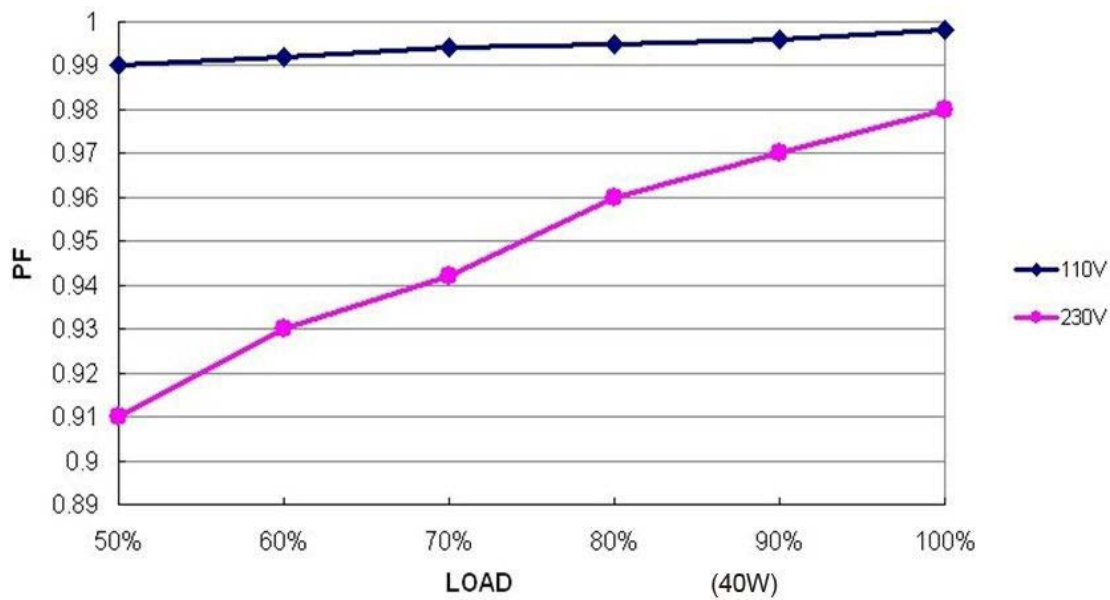
DERATING CURVE



STATIC CHARACTERISTICS



POWER FACTOR CHARACTERISTICS



EFFICIENCY & LOAD OF (350mA) (110VAC / 230VAC)

