

ARPJ-DIM33900-Y (30W, 900mA, PFC, Triac)

ARPJ-DIM291050-Y (30W, 1050mA, PFC, Triac)

ARPJ-DIM221400-Y (30W, 1400mA, PFC, Triac)



FEATURES

- High efficiency 88%
- Active PFC>0.95
- Economical design
- Triac dimmable 170~264VAC
- Protections: Short-circuit /Over-load /Over-voltage /Over-temperature
- Working temperature : -25° C $\sim +40^{\circ}$ C
- Isolation CLASS II, no F.G
- IP40 design
- 2~3 times burn-in tests (+45°C at full load with over 14 hours)

SPECIFICATION

Model		ARPJ-DIM33900-Y	ARPJ-DIM291050-Y	ARPJ-DIM221400-Y	
Input	Voltage Range	170~264VAC / 90~132VAC			
	Frequency Range	47~63Hz			
	Power Factor	PFC>0.98 at 110VAC, PFC>0.95 at 230VAC, PFC>0.93 at 264VAC			
	Efficiency (Note 4)	86%	86%	85%	
	AC Current	0.20A ~ 0.13A			
	Inrush Current	Cold Start at 40A/230VAC			
	Leakage Current	<0.5mA at 230VAC			
Output	DC Current (Note 1)	900 mA	1050 mA	1400 mA	
	Output Voltage Range (Note 2)	23~33VDC	20~29VDC	15~22VDC	
	Rated Power	30W	30W	30W	
	Ripple and Noise (Max)(Note 3)	800mVp-p	800mVp-p	600mVp-p	
	Voltage Tolerance	±3.0%	±3.0%	±3.0%	
	Current Accuracy	±2.0%	±2.0%	±1.5%	
	Line Regulation	±1%	±1%	±1%	
	Load Regulation	±1.0%	±1.0%	±1.0%	
	Set-up, Rise Time	2200ms 80ms/230VAC, 2500ms 80ms/110VAC			
	Hold-up Time	50ms/230VAC, 25ms/110VAC			
	Dimmable Function	AC side with triac dimmable control			
Protection	Current protection	±1% (current limiting type)			
	Over-Voltage	$110\% \sim 130\%$ (Hiccup mode, recovers automatically after faulty problem is removed)			
	Over-load	130% (Hiccup mode, recovers automatically after faulty problem is removed)			
	Short Circuit	Hiccup mode, recovers automatically after faulty problem is removed			
	Over-temperature	$75^{\circ}\text{C} \pm 10^{\circ}\text{C}$ (Hiccup mode, recovers automatically after faulty problem is removed)			

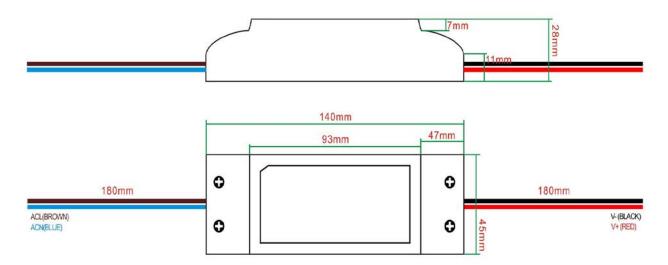


Model		ARPJ-DIM85350-Y	ARPJ-DIM60500-Y	ARPJ-DIM42700-Y	
Working Environment	Working Environment	-25°C ~ +40°C			
	Working Humidity	20~90% RH non-condensing			
	Storage Environment & Humidity	-25°C ~ +50°C			
	TEMP. Coefficient	±0.05%°C (0~50°C)			
	Vibration	$10 \sim 500$ Hz, 2G 10 min./1cycle, period for 60 min. each along X, Y, Z axes			
Safety & EMC	Safety standards	CE: EN-61347-1, EN61347-2-13, IP40, ROHS Tests, Design refer to UL8750			
	Withstand voltage	I/P-O/P: 3KVAC, IP-FG:1.5KVAC, OP-FG:			
	Isolation resistance	I/P-O/P IP-FG OP-FG: 100M Ohms/500VDC			
	EMC Emission	Compliance to EN55015: 2007, EN61547:1995+A1:2000; EN61000-3-2: 2006; EN61000-3-3: 2008			
	EMC Immunity	Compliance to EN55015 EN61547 EN61000-4-2,3,4,5,6,8,11			
Others	Life Span (Note 5)	≥50000Hrs (25~30°C)			
	No Load power consumption	≤1.0W			
	MTBF (Note 6)	250K hrs min, MIL-HDBK-217F (25°C)			
	Dimension (Note 7)	140*40*28 mm (L*W*H)			
	Packing (Note 8)	50pcs/carton			
	Weight	0.13Kg/pc			

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

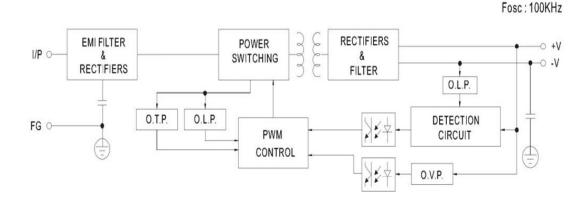
- 1. The rated current can be customized, such as 320mA / 600mA... can be customized
- 2. The output voltage we recommed is $70\% \sim 100\%$ use, it can also be used down to 60% but tolerance will be more larger
- 3. Ripple & Noise are measured at 20kHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 uf & 47uf parallel capacitor (at full load)
- 4. The efficiency measured at Max output voltage, and 230VAC with full load, if with 110VAC the efficiency will be lowered $0.5\% \sim 1.5\%$; Working $1\sim2$ hours, efficiency will be higher $0.5\% \sim 1\%$ than the initial stage
- 5. This series is mainly for indoor application use
- 6. This measured at 120VAC, 80% \sim 85% load with environmental temperature about +25°C \sim +30°C, the outer housing temperature with +55°C or so.
- 7. This measured at 120VAC, 80% ~85% load with environmental temperature about +25°C~+30°C, the outer housing temperature with +55°C or so.
- 8. More details see the following mechanical draft.

MECHANICAL SPECIFICATION

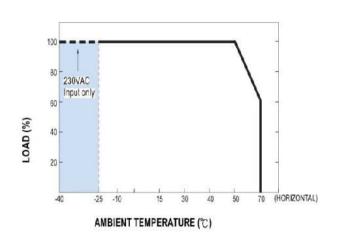




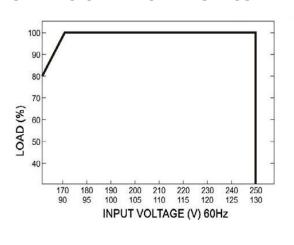
BLOCK DIAGRAM



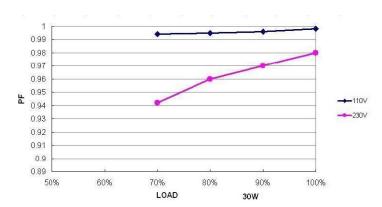
DERATING CURVE



STATIC CHARACTERISTICS



POWER FACTOR CHARACTERISTICS



EFFICIENCY & LOAD OF (700mA) (110VAC / 230VAC)

