

ARPV-SS12150 (12V, 12.5A, 150W)

ARPV-SS24150 (24V, 6.3A, 150W)

FEATURES

- High efficiency 91%
- Smaller size
- Economical design
- Protections: Short-circuit /Over-load /Over-voltage/
- Over-temperature / Lightning protection (Alternative)
- Working temperature : -18°C ~ + 70°C
- IP67 design
- 2~3 times burn-in tests (+50°C/-40°C at full load with over 14 hours)



SPECIFICATION

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Model		ARPV-SS12150	ARPV-SS24150
Input	Voltage Range	90~130VAC/170~250VAC	
	Frequency Range	47~63Hz	
	Efficiency (Note 3)	87.5%	89%
	AC Current	1.91A ~ 0.62A	
	Inrush Current	Cold Start at 70A/230VAC, Input at Ta: 25°C cold start.	
	Leakage Current	<0.5mA at 230VAC, 60Hz Input	
Output	Rated Voltage (Note 1)	12VDC	24VDC
	Output Current Range	0 ~ 12.5A	0 ~6.25A
	Rated Power	150W	150W
	Ripple and Noise (Max)(Note 2)	120mVp-p	150mVp-p
	Voltage Tolerance	±3.0%	±3.0%
	Line Regulation	±1%	±1%
	Load Regulation	±1.0%	±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	Over-Voltage	$110\% \sim 130\%$ (Shut down O/P voltage, repower on to recover)	
	Over-load	130% \sim 150% (Shut down O/P voltage, repower on to recover)	
	Short Circuit	Hiccup mode, recovers automatically after faulty problem is removed	
	Lightning Protection (Alternative)	Gas discharge tube automatically open to discharge, repower on to recover	
	Over-temperature	85°C±10°C (Shut down O/P voltage, re-power on to recover)	
Working Envi- ronment	Working Environment (Note 4)	-18°C ∼ +70°C	
	Working Humidity	20~90% RH non-condensing	
	Storage Environment & Humidity	-40°C ~ +80°C	
	TEMP. Coefficient	±0.05%°C (0~50°C)	
	Vibration	$10 \sim 500$ Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes	

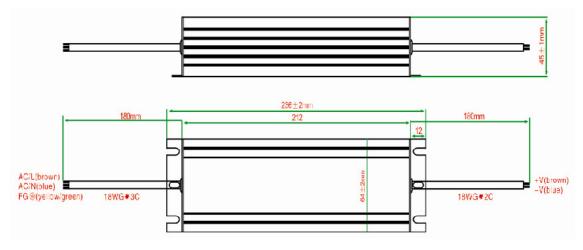


Safety & EMC	Safety standards	EN-61347-1, EN61347-2-13, IP67, ROHS Tests, Design refer to UL8750	
	Withstand voltage	I/P-O/P: 3KVAC, IP-FG:1.5KVAC, OP-FG: 500VAC	
	Isolation resistance	I/P-O/P IP-FG OP-FG: 100M Ohms/500VDC / 25°C / 70% RH	
	EMC Emission	Compliance to EN55015: 2007, EN61547:1995+A1:2000; EN61000-3-2: 2006; EN61000-3-3: 2008	
	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	≤3.0W	
	MTBF (Note 6)	250K hrs min, MIL-HDBK-217F (25°C)	
	Dimension (Note 7)	236*64*45 mm (L*W*H)	
	Packing (Note 8)	15pcs/Carton	
	Weight	1.15Kg/pc	

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

- 1. The rated voltage can be customized, such as 18V/27V... can be customized
- 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 $1\% \sim 2\%$; Working $1\sim2$ hours, efficiency will be higher $0.5\% \sim 1\%$ 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.
- 7. The 15pcs packing method is not suitable for led drivers with waterproof connector

MECHANICAL SPECIFICATION



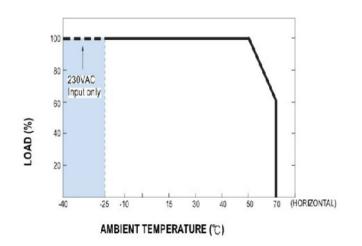
BLOCK DIAGRAM

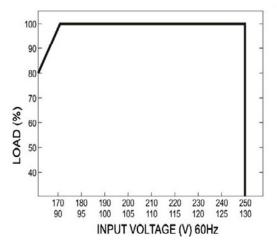
Fosc: 100KHz **RECTIFIERS EMI FILTER POWER** -O +V I/P 0-& SWITCHING RECTIFIERS FILTER O.L.P. 0.T.P. 0.L.P. DETECTION FG O **PWM** CIRCUIT CONTROL 0.V.P.



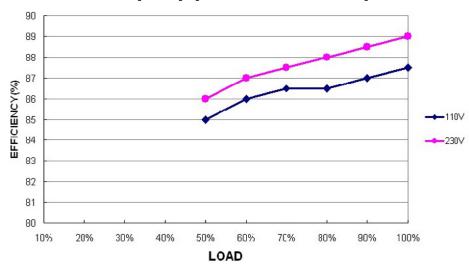
DERATING CURVE

STATIC CHARACTERISTICS



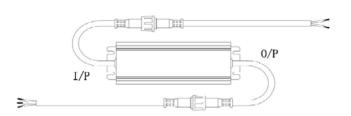


EFFICIENCY & LOAD OF (48V) (110VAC / 230VAC)



WATERPROOF CONNECTOR (ALTERNATIVE OR CUSTOMIZED)

The waterproof connector is usually used to easily assemble and replace in projects. It have waterproof performance when in use.



The type of connector can be customized or customer can independently buy in the market

