

300W Constant Voltage LED Driver LEDWV-300 series

FEATURES

- Ultra High Efficiency (Up to 94%)
- High Power Factor Correction (0.99 Typ)
- 300 W Continuous Output Power
- Lightning Protection
- Over Voltage, Over Temp. , Short Circuit & Over current Protection
- Waterproof (IP67)
- Comply UL8750 & EN61347 Safety Regulations
- Very High MTBF & Life Time



SPECIFICATION

Model		LEDWV-300S012ST	LEDWV-300S024ST	LEDWV-300S036ST	LEDWV-300S042ST	LEDWV-300S048ST	LEDWV-300S052ST	LEDWV-300S054ST	LEDWV-300S056ST	LEDWV-300S060ST	LEDWV-300S084ST	LEDWV-300S0105ST	LEDWV-300S150ST
Output	Voltage	12 Vdc	24 Vdc	36 Vdc	42 Vdc	48 Vdc	52 Vdc	54 Vdc	56 Vdc	60 Vdc	84 Vdc	105 Vdc	150 Vdc
	Max. Current	22.9 A	12.50 A	8.33 A	7.14 A	6.25 A	5.76 A	5.55 A	5.35 A	5.00 A	3.57 A	2.85 A	2.00 A
	Rated Power	275 W	300 W	300 W	300 W	300 W	300 W	300 W	300 W	300 W	300 W	300 W	300 W
	Voltage Tolerance	±5%											
	Ripple & Noise (max.) (2)	2.0 % Vo											
	Current Range (Min - Max)	0 - 22.9 A	0 - 12.50 A	0 - 8.33 A	0 - 7.4 A	0 - 6.25 A	0 - 5.76 A	0 - 5.55 A	0 - 5.35 A	0 - 5.00 A	0 - 3.57 A	0 - 2.85 A	0 - 2.00 A
	Line Regulation	1%											
	Load Regulation	3%											
	Setup, Rise Time	0.1S @ 110 VAC or 0.1S @ 220 VAC											
	Output Overshoot / Undershoot	10% When Power On or Off											
Input	Voltage Range	W (Wide Range Input) = 90V -305VAC											
	Frequency Range	47Hz / 63Hz											
	Power Factor Correction	0.99 @ 110 VAC and 0.96 at 220 VAC											
	Efficiency (Typ.) at 230Vac	91.5%	93%	94%	93.5%	93.5%	93.5%	94%	94%	94%	94%	94%	94%
Protections	Inrush Current	50A @ 230VAC Input and 25°C											
	AC Current (Typ.)	3.3 A / 100VAC						1.6 A / 220VAC					
	Short Circuit Protection	Protection type : Hiccup mode, recovers automatically after fault condition is removed											
	Over Temperature Protection	110°C max. temp. of components inside the case											
	Over Current Protection	135% Io (Typ.) Protection type : Hiccup mode, recovers automatically after fault condition is removed											
Environments	Over Voltage (Typ.)	15 V	30 V	45 V	50 V	56 V	60 V	60 V	72 V	72 V	96 V	120 V	173 V
	Temperature Range	Operational	-35°C ~ 70°C										
		Storage	- 40 ~ +85°C										
	Humidity	Operational	10 ~ 100% RH										
Storage		5 ~100% R.H											
Safety & EMC	Safety Standards	UL8750 compliance to UL1012 UL935, CSA-C22.2 (No. 0, No 107.1, No. 250.0)											
	No load Power Dissipation	≤3.0W											
	Withstand Voltage	I/P - O/P: 3KVAC (4242 DC) I/P - FG: 1.5KVAC (2121 DC) O/P-FG: 0.5KVAC (707 DC), 1 minute											
	EMI Conduction & Radiation	EN55015 with 6db margin											
	CE	EN 61347-1, EN61347-2-13											
Others	EMS Immunity	EN61000-3-2 , EN61000-3-3, EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5 EN61000-4-6, EN61000-4-8, EN61000-4-11, EN 61547											
	MTBF (3)	227K HRS Compliance: MIL-HDBK-217F @ 25°C ambient temp.											
	Life Time (3)	149,000 hours @ 45°C ambient temp.											
	Dimension (L*W*H)	223*98*44.5 (mm) - 8.78*3.86*1.75 (inch)											
Weight	1540 g - 3.39 Lbs												

**Mechanical Specification**

LEDWV-300S012ST

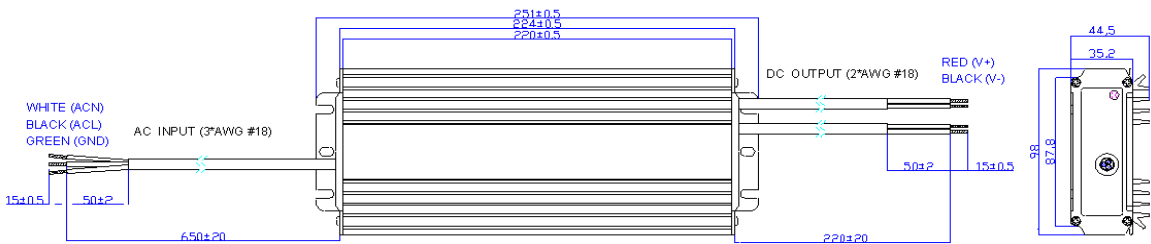


**Note:** The 3 DC output cables are connected in parallel internally because one AWG #18 wire can only carry 10A. Please connect the 3 red wires together and 3 black wires together in application, or ensure

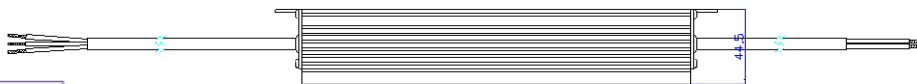


Unspecified tolerance:  $\pm 0.2$

LEDWV-300S024ST  
LEDWV-300S036ST  
LEDWV-300S042ST

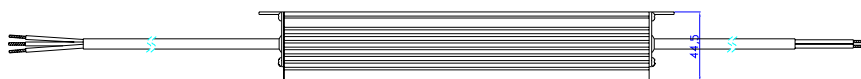
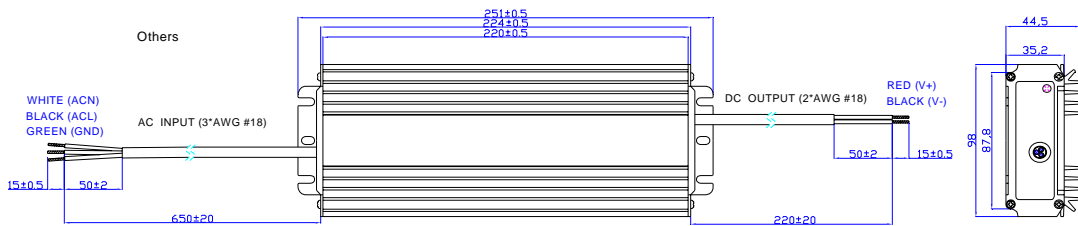


**Note:** The 2 DC output cables are connected in parallel internally because one AWG #18 wire can only carry 10A. Please connect the 2 red wires together and 2 black wires together in application, or ensure

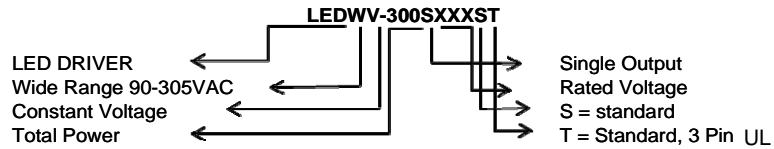


Unspecified tolerance:  $\pm 0.2$

Others



Unspecified tolerance:  $\pm 0.2$

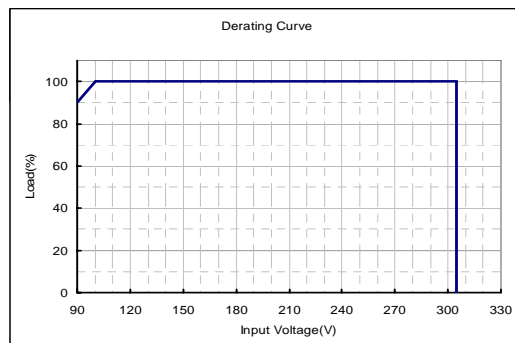
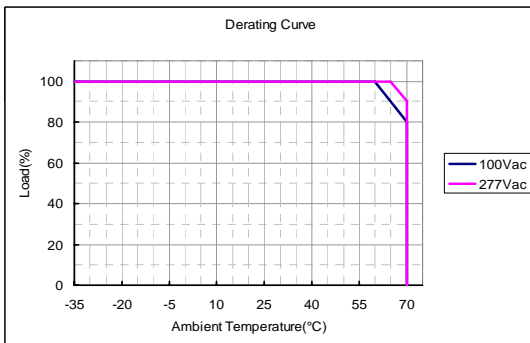


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Efficiency @ Full Load and 115VAC (min)	89.0%	90.5%	91.5%	91%	91.5%	91.5%	92%	92%	92%	92%	92%	92%
Efficiency @ Full Load and 115VAC (typ)	89.5%	91%	92%	91.5%	92%	92%	92.5%	92.5%	92.5%	92.5%	92.5%	92.5%
Efficiency @ Full Load and 230VAC (min)	91%	92.5%	93.5%	93%	93.0%	93%	93.5%	93.5%	93.5%	93.5%	93.5%	93.5%
Efficiency @ Full Load and 230VAC (typ)	91.5%	93%	94%	93.5%	93.5%	93.5%	94%	94%	94%	94%	94%	94%

SHIPPING SPECIFICATIONS			
Series	UNITS PER CARTON	CARTON WEIGHT	
LEDWV-300	20.0	33Kg	72.60Lbs

OUTSIDE CARTON DIMENSION		WIDTH	LENGTH	HEIGHT
Series	inch	25.59	24.80	6.69
LEDWV-300	mm	650.0	630.0	170.0

Derating Curve



**NOTES:**

1. Measured at full load, 220VAC input and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth oscilloscope and the output paralleled a 0.1uf ceramic capacitor & 10 uf electrolytic capacitor.
3. For 54V output model, measured at 110VAC input, 80%load and 25°C of ambient temperature.
4. For 54V output model, measured at 220VAC input, 80%load and 45°C of ambient temperature.
5. All parameters NOT specially mentioned are measured at 220VAC input, rated load and 25°C of ambient temperature.
6. Specifications are subject to change without notice. AUTEK cannot be held liable for errors or omissions or the consequences thereof.
7. A suffix -XXXX may be added to denote variation or modifications to the base product, were X can be any alphanumeric character or blank.
8. **RoHS Compliance:** Our products comply with the European Directive 2002/95/EC, calling for the elimination of lead and other hazardous substances from electronic products.