

FEATURES

- Ultra High Efficiency (Up to 92%)
- High Power Factor (0.95 Typical)
- Constant Voltage with 300 W Continuous Output Power
- 6kV L/N to Ground, 4kV L to N Lightning Protection
- All-Round Protection: SCP, OTP, OVP and Open Lamp
- IP67 and UL Wet Location Approved
- IEC 61347, UL8750 Safety Standards Approved

300W Constant Voltage LED Driver

LEDHV-300 series

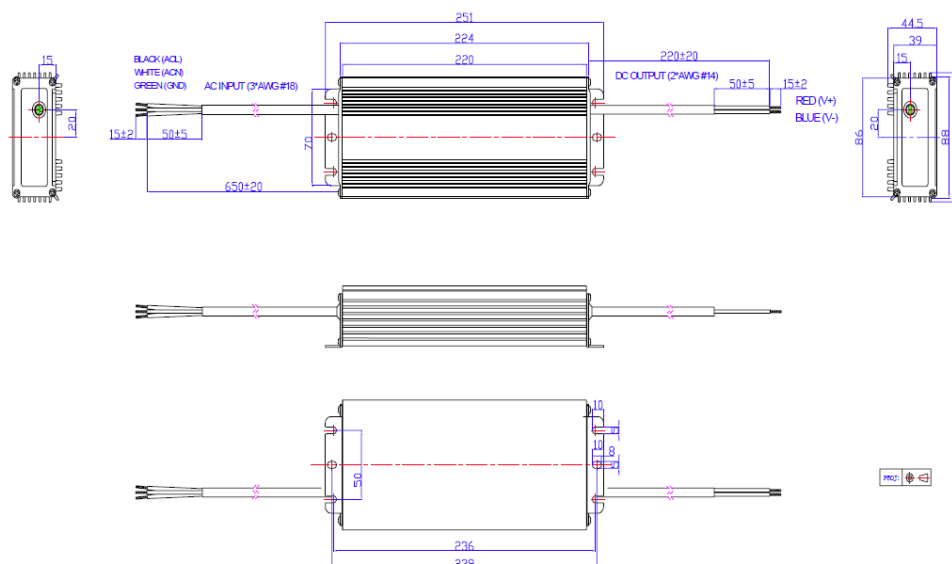


SPECIFICATION

Model (2)		LEDHV-300S024ST	LEDHV-300S028ST	LEDHV-300S036ST	LEDHV-300S048ST
Output	Voltage	24 Vdc	28 Vdc	36 Vdc	48 Vdc
	Current Range (min-max)	0-12.5 A	0-10.71 A	0-8.33 A	0-6.25 A
	Rated Power	300W	300W	300W	300W
	Voltage Tolerance (min-max)	-3% - 3%			
	Ripple & Noise (max.) (9)	2% VO (Measured by 20 MHz bandwidth oscilloscope and the output paralleled a 0.1 uF ceramic capacitor and a 10 uF electrolytic capacitor.)			
	Line Regulation (5)	1% (Vac from min to max)			
	Load Regulation (6)	1.5% (Output current from min to max)			
	Turn-on Delay Time (typ-max) (7)	1s - 2s (Measured at 277Vac input and measured at 480Vac input)			
	Output Overshoot / Undershoot (8)	2% VO (Power on and off)			
Input	Voltage Range	249~ 528 Vac			
	Frequency Range	47Hz / 63Hz			
	Power Factor Correction	277 Vac ➡ 0.95 480 Vac ➡ 0.90			
	Efficiency (Typ.) at 277Vac (1)	90%	91%	91%	91%
	Inrush Current (4)	60A @ 480VAC Input and 25°C			
	AC Current (Typ.) (3)	1.4 A / 277 VAC 0.8 A / 480 VAC			
Protections	Short Circuit Protection	Hiccup and no damage shall occur when any output operating in a short circuit condition.			
	Over Temperature Protection (Typ.)	115 °C Maximum temperature of components inside the case.			
	Over Current Protection (min-typ-max)	110% IO- 145% IO- 180% IO (Hiccup mode. The power supply shall be self-recovery when the fault condition is removed.)			
	Over Voltage (Typ.)	125% VO (Latch mode. The power supply shall return to normal operation only after the power is turn-on again.)			
Environmental	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, UL1012, CAN/CSA-C22.2 No. 223-M91			
	No load Power Dissipation	≤ 3 W @ 277 VAC input			
	EMI Conduction & Radiation	EN55015 with 6db margin EN6100-3-3 (Voltage fluctuations & flicker)			
	EMS Immunity	EN61000-4-2, EN61000-4-3, EN61000-4-4,EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11, EN 61547			
Others	MTBF (3)	92,000 hours			
	Life Time	52,000 hours @80°C Case Temperature			
	Dimension (L*W*H)	224 × 93.6 × 44.5(mm) -8.82 × 3.69 × 1.75(inch)			
	Weight	1400 g			

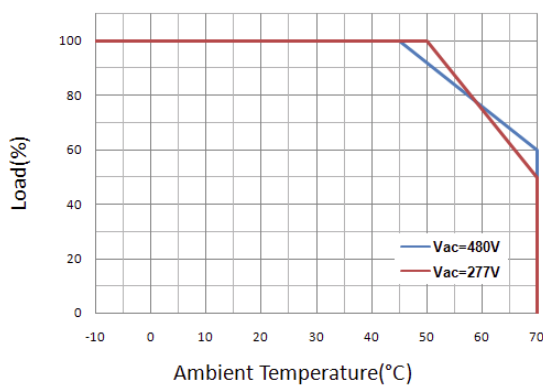


Mechanical Specification



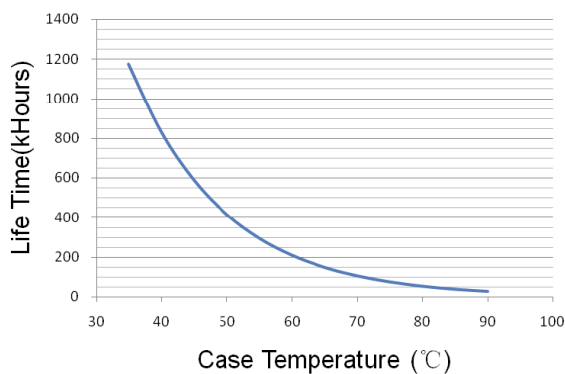
Derating Curve

Derating Curve

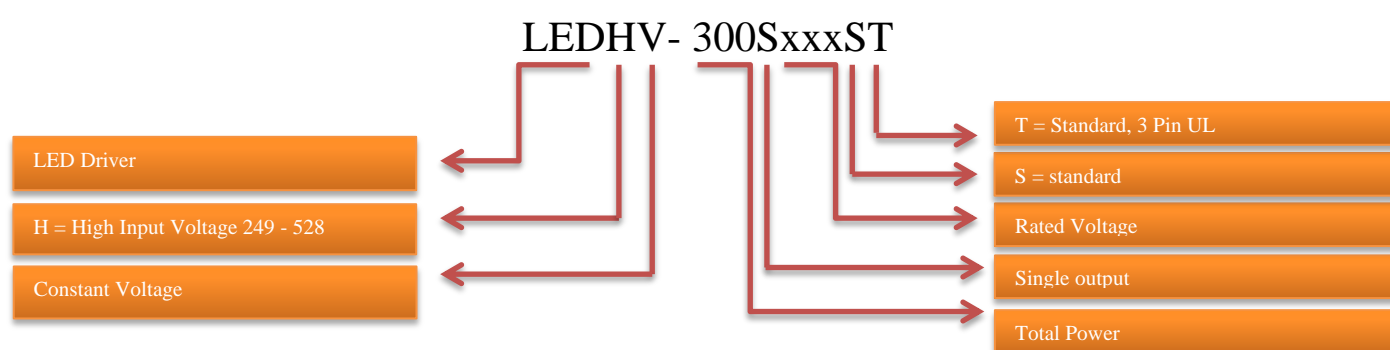


Life Time Curve

Life Time vs. Case Temperature



PART NUMBER SCHEME



Notes

- (1) Measured at full load and 480 Vac input.
- (2) A suffix -xxxx may be added to denote variations or modifications to the base product, where x can be any alphanumeric character or blank.
- (3) For 28V output model, measured at 480Vac input, 80%Load and 25°C ambient temperature [MIL-HDBK-217F]
- (4) At 480Vac input 25°C Cold Start
- (5) Vac from min to max
- (6) Output current from min to max
- (7) Measured at 277Vac input / Measured at 480Vac input
- (8) Power on and off.
- (9) Measured by 20 MHz bandwidth oscilloscope and the output paralleled a 0.1 uF ceramic capacitor and a 10 uF electrolytic capacitor.

