A. Features

IP67

- High Efficiency (Up to 90%).
- Active Power Factor Correction (Typical 0.96).
- Isolation Class I (With FG)
- All-Round Protection: OVP/SCP/OTP/OPP.
- Fully isolated Metal case with IP67 and damp/ wet location.

B. Description

The ***HEC-150LTN-XXQSCF*** Series operate from a 90 ~ 264Vac input range. They are designed to be highly efficient and highly reliable. Features include over voltage protection, short circuit protection, and over temperature protection.

C. Models

Output Current	Input Voltage Range Note 1	Output Voltage Range Note 4	Max. Output Power	Efficiency Note 2	Power Factor Note 2	Model Number
6250mA	90 ~ 264Vac	12-24V	150W	90%	0.96	HEC-150LTN-24QSCF
4200mA	90 ~ 264Vac	18-36V	150 W	90%	0.96	HEC-150LTN-36QSCF
3600mA	90 ~ 264Vac	21-42V	150 W	90%	0.96	HEC-150LTN-42QSCF
3200mA	90 ~ 264Vac	24-48V	150 W	90%	0.96	HEC-150LTN-48QSCF
2800mA	90 ~ 264Vac	27-54V	150 W	90%	0.96	HEC-150LTN-54QSCF
1400mA	90 ~ 264Vac	54-108V	150 W	90%	0.96	HEC-150LTN-108QSCF
1050mA	90 ~ 264Vac	71-143V	150 W	90%	0.96	HEC-150LTN-143QSCF
700mA	90 ~ 264Vac	107-214V	150 W	90%	0.96	HEC-150LTN-214QSCF
350mA	90 ~ 264Vac	214-428V	150 W	90%	0.96	HEC-150LTN-428QSCF

D. Electronic Specifications

- Input Specifications

Parameter	Min.	Typ.	Max.	Notes
Input Voltage (V)	90	-	264	
Input Frequency (Hz)	47		63	
Input AC Current (A)	-	-	2.0	Measured at full load and 100Vac input.
	-	-	0.7	Measured at full load and 240Vac input.
Leakage Current (mA)	-	-	0.7	At 240Vac 60Hz input.

Inrush Current (A)	-	-	100	At 220Vac input 25℃ Cold Start. Duration=100μs, 10%Ipk-10%Ipk.
Inrush Current (I2t)		-	0.16 A2s	
Power Factor	0.9	-	-	At 230Vac input, full load.
THD (%)	-	20	25	

- Output Specifications

Parameter	Min.	Typ.	Max.	Notes
Output Current (mA)				
Io = 6250 mA	5937		6562	
Io = 4200 mA	3990		4410	
Io = 3600 mA	3420		3780	
Io = 3200 mA	3040		3360	
Io = 2800 mA	2660		2940	
Io = 1400 mA	1330		1470	
Io = 1050 mA	997		1102	
Io = 700 mA	665		735	
Io = 350 mA	332		367	
No Load Output Voltage (V)				
Io = 6250 mA			35	
Io = 4200 mA			50	
Io = 3600 mA			63	
Io = 3200 mA	-	-	63	There will be no damage or hazardous conditions occurred with no loading.
Io = 2800 mA			63	
Io = 1400 mA			150	
Io = 1050 mA			200	
Io = 700 mA			250	
Io = 350 mA			450	
Output Ripple Voltage (V)	-	-	1% Vo max	Measured by 20 MHz bandwidth oscilloscopes and the output paralleled a 0.1uF ceramic capacitor and a 10uF electrolytic capacitor.
Output Voltage Overshoot (%)	-	-	110	At full load condition.
Line Regulation (%)	-	-	±3	
Load Regulation (%)	-	-	±5	
Turn-on Delay Time (s)	-	0.5	1.0	Measured at 220Vac input.

- General Specifications

Parameter	Min.	Typ.	Max.	Notes
Efficiency (%) Io = 6250 mA Io = 4200 mA Io = 3600 mA Io = 3200 mA Io = 2800 mA Io = 1400 mA Io = 1050 mA Io = 700 mA Io = 350 mA	-	-	88	Measured at full load and 120Vac input.
Efficiency (%) Io = 6250 mA Io = 4200 mA Io = 3600 mA Io = 3200 mA Io = 2800 mA Io = 1400 mA Io = 1050 mA Io = 700 mA Io = 350 mA	-	-	90	Measured at full load and 220Vac input.
MTBF (hours)	320,000	-		Measured at full load 50℃ ambient temperature (MIL-HDBK-217F).
Life Time (hours)		100,000	-	Measured at rated input voltage with full load, Case temperature=60℃ @ Tc point.See life time vs. Tc curve for the details.
Case Temperature (℃)	-	-	90	
Dimensions Millimeters(L × W × H)	224 × 68 × 39			

- Protection Functions

Parameter	Min.	Typ.	Max.	Notes
Over Voltage Protection			1.50 Vomax	In the event of an over-voltage condition, the LED Drives shall Shut down o/p voltage, re-power on to recover.
Over Temperature Protection	Shut down o/p voltage with re-power on to recovery.			
Short Circuit Protection	No damage shall occur when any output operating in a short circuit condition. The power supply shall be self-recovery when the fault condition is removed.			

- Environmental Specifications

Parameter	Min.	Typ.	Max.	Notes
Operating Temperature (℃)	-40	-	+70	Humidity: 20% RH to 80% RH; See Derating Curve for more details.
Storage Temperature (℃)	-40	-	+80	Humidity: 10% RH to 90% RH.

- Safety and EMC Compliance

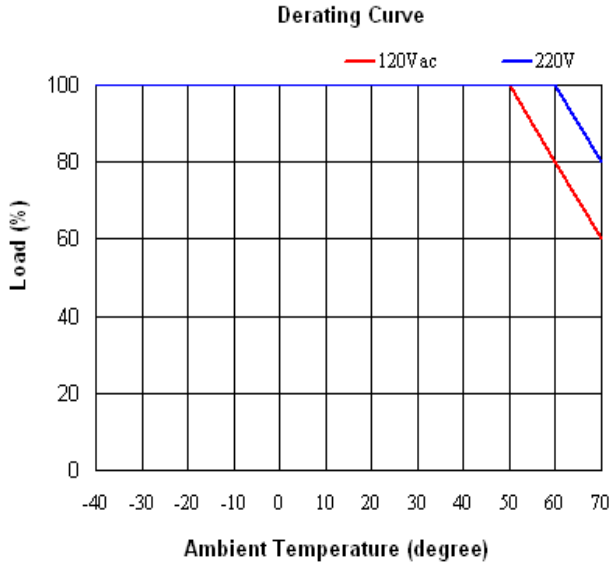
Safety Category	Standard
UL/CUL	UL8750, UL 1012, CSA C22.2 No. 107.1
CE	EN 61347-1, EN61347-2-13.
EMI Standards	**Notes**
EN 55015	Conducted emission Test & Radiated emission Test.
EN 61000-3-2	Harmonic current emissions.
EN 61000-3-3	Voltage fluctuations & flicker.
FCC Part 15	FCC 47 CFR Part 15 Subpart B, ICES-003 Issue 4 ANSI C63.4-2003
EMS Standards	**Notes**
EN 61000-4-2	Electrostatic Discharge (ESD): 8 KV air discharge, 4 KV contact discharge.
EN 61000-4-3	Radio-Frequency Electromagnetic Field Susceptibility Test-RS.
EN 61000-4-4	Electrical Fast Transient / Burst-EFT: Level 2, Criteria A.
EN 61000-4-5	Surge Immunity Test: AC Power Line: line to line 2 KV. line to group 4 KV.
EN 61000-4-6	Conducted Radio Frequency Disturbances Test-CS.
EN 61000-4-8	Power Frequency Magnetic Field Test.
EN 61000-4-11	Voltage Dips.
EN 61547	Electromagnetic Immunity Requirements Applies To Lighting Equipment.

Notes:

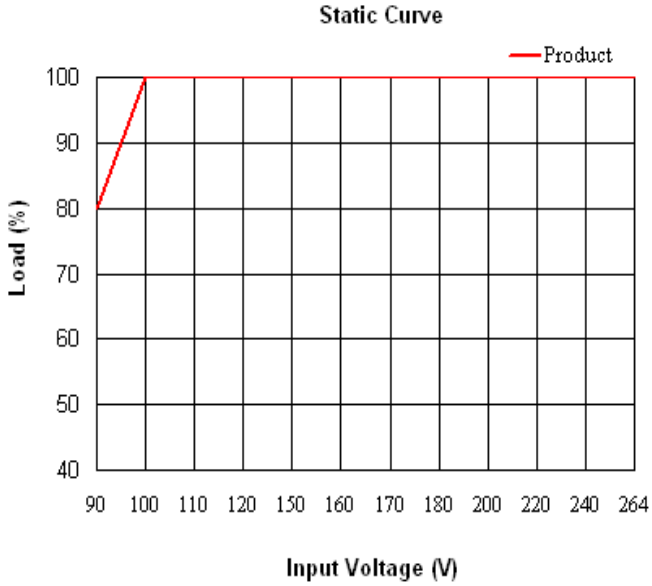
1. Normal input voltage range 100~240Vac.
2. Measured at input 220V with a full load.
3. All specifications are typical at 25 °C unless otherwise stated.
4. Constant current operation region is preferably 50%~100% rated output voltage. This is the suitable operation region for LED related applications, but please reconfirm special electrical requirements for some specific system design.
5. Derating may be needed under low input voltages. Please check the static curve for more details.
6. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again

E. Electronic Curve

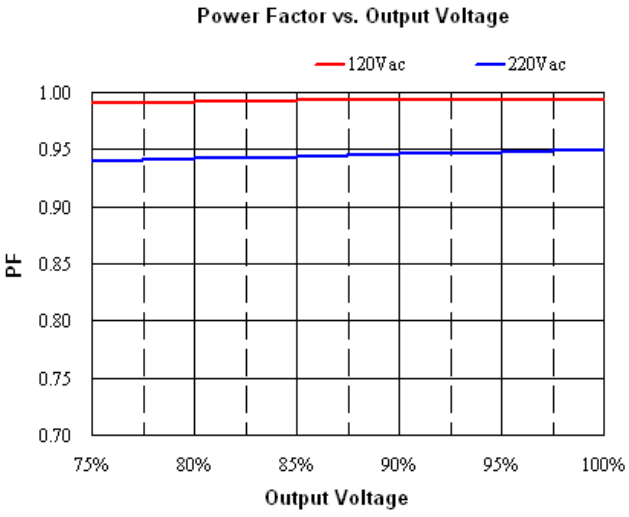
- Derating Curve



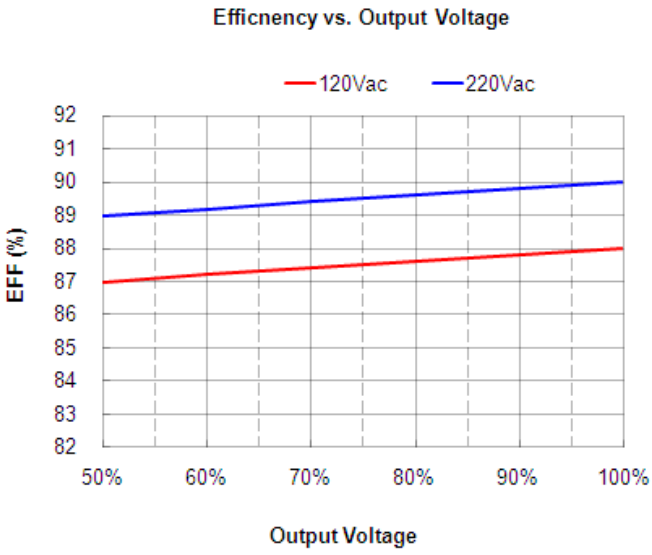
- Static Curve



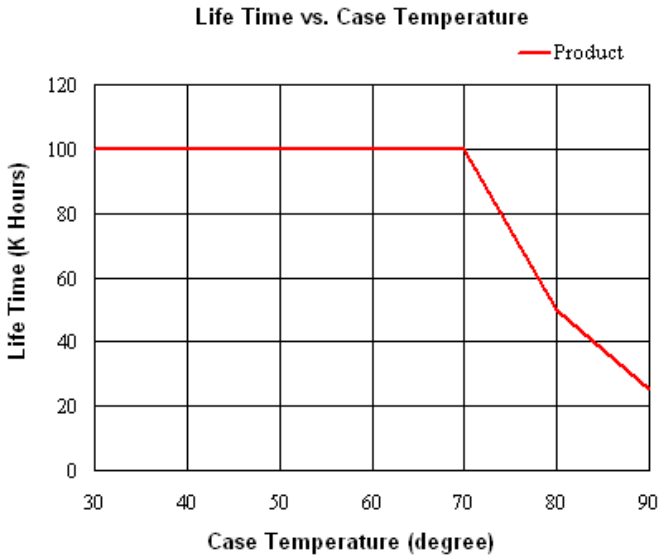
- Power Factor Characteristics Curve



- Efficiency Characteristics Curve

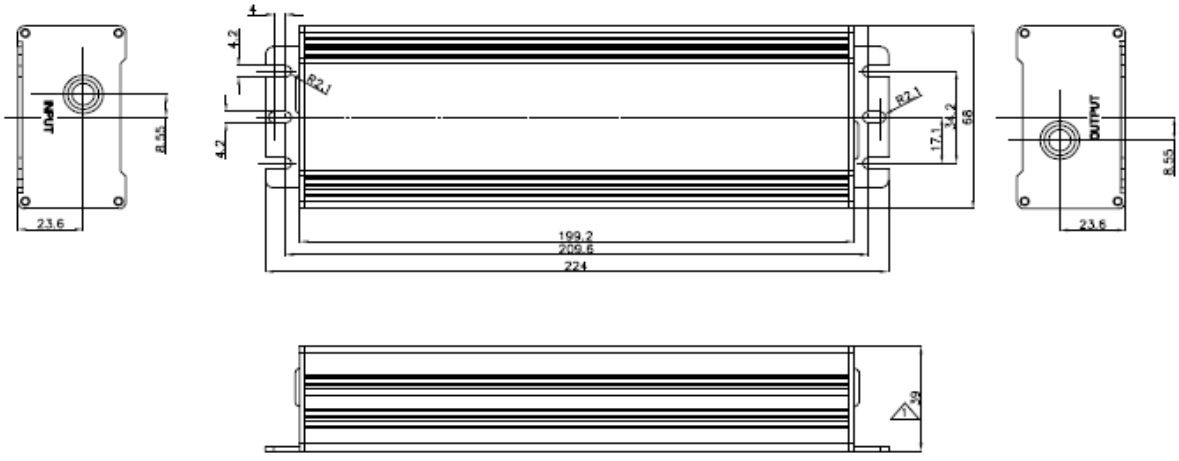


- Life Time vs. Case Temperature Curve



F. Mechanical Outline

150W鋁殼_AC一孔式 LED POWER CASE機構外觀圖



G. RoHS Compliance Outline

Our products comply with the European Directive 2011/65/EU, calling for the elimination of lead and other hazardous substances from electronic products.

H. Revision History

Change Date	Rev.	Description of Change		
		Item	From	To
2013-09-10	A	Datasheets Release	/	/
2014-05-06	A1.0	Revised Static Curve	/	/
2015-02-02	A1.1	Add New Model	/	/