



■ Features

- Constant Power mode output
- Metal housing design with functional Ground
- Built-in active PFC function
- No load / Standby power consumption <math><0.5\text{W}</math>
- IP67 rating for indoor or outdoor installations
- Typical lifetime >50000 hours
- Made in PRC

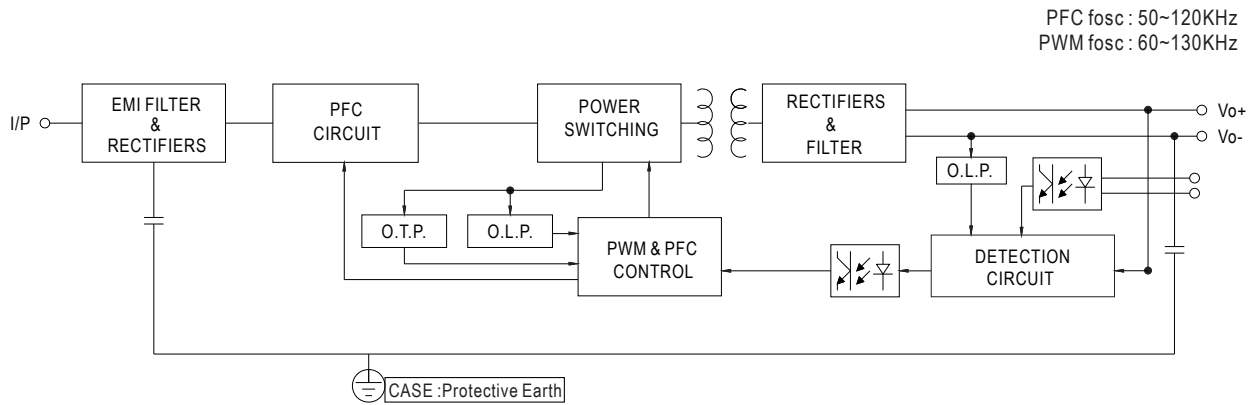
■ Applications

- LED street lighting
- LED architectural lighting
- LED bay lighting
- LED floodlighting
- Type "HL" for use in Class I, Division 2 hazardous (Classified) location.

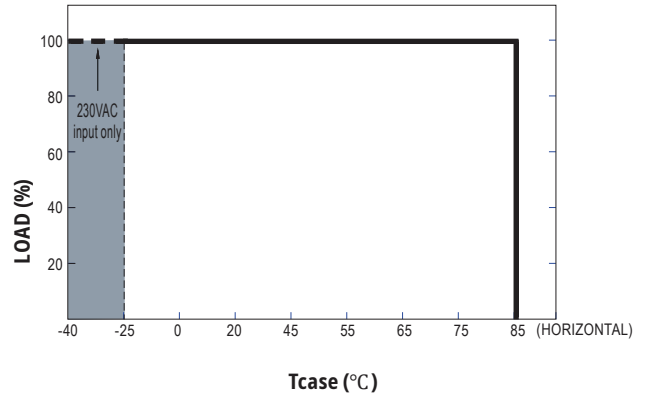
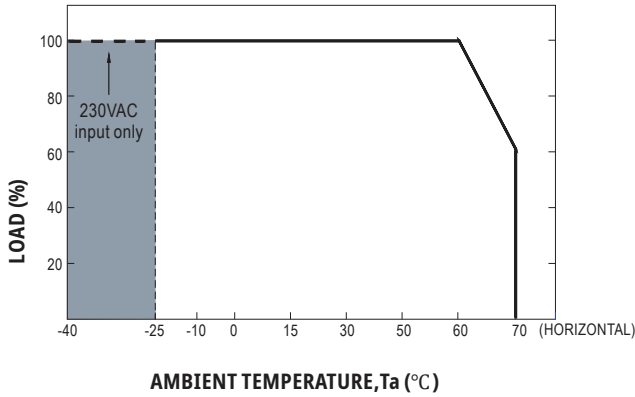
SPECIFICATION

MODEL		DE50025			
OUTPUT	RATED CURRENT	500mA			
	CONSTANT CURRENT REGION	22 ~54V			
	RATED POWER	90VAC ~ 305VAC			
		25W			
	CURRENT RIPPLE	5.0% max. @rated current			
	OPEN CIRCUIT VOLTAGE (max.)	57V			
	SETUP, RISE TIME	Note.2	500ms, 100ms/115VAC, 230VAC		
INPUT	VOLTAGE RANGE	Note.3	90 ~ 305VAC 127 ~ 431VDC (Please refer to "STATIC CHARACTERISTIC" section)		
	FREQUENCY RANGE	47 ~ 63Hz			
	POWER FACTOR	PF 0.97/115VAC, PF 0.95/230VAC, PF 0.92/277VAC@full load (Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section)			
	TOTAL HARMONIC DISTORTION	THD < 10%(@load≥50%/115VAC, 230VAC; @load≥75%/277VAC) (Please refer to "TOTAL HARMONIC DISTORTION(THD)" section)			
	EFFICIENCY (Typ.)	88%			
	AC CURRENT	0.29A / 115VAC 0.15A / 230VAC 0.13A/277VAC			
	INRUSH CURRENT(Typ.)	COLD START 50A(twidth=350μs measured at 50% Ipeak) at 230VAC; Per NEMA 410			
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	5 units (circuit breaker of type B) / 8 units (circuit breaker of type C) at 230VAC			
	LEAKAGE CURRENT	<0.75mA / 277VAC			
	NO LOAD / STANDBY POWER CONSUMPTION	No load power consumption <0.5W			
PROTECTION	OVER POWER	110-150% Over Power Protection, recovers automatically after fault condition is removed			
	OVER CURRENT	Constant current limiting, recovers automatically after fault condition is removed			
	SHORT CIRCUIT	Constant current limiting, recovers automatically after fault condition is removed			
	OVER TEMPERATURE	Hiccup mode, recovers automatically after fault condition is removed			
ENVIRONMENT	WORKING TEMP.	Tcase=-40 ~ +85°C (Please refer to " OUTPUT LOAD vs TEMPERATURE" section)			
	MAX. CASE TEMP.	Tcase=+85°C			
	WORKING HUMIDITY	20 ~ 95% RH non-condensing			
	STORAGE TEMP.	-40 ~ +80°C			
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 60°C)			
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes			
SAFETY & EMC	SAFETY STANDARDS	UL8750(type"HL"), CSA C22.2 No. 250.13-12; ENEC AS/NZS IEC EN61347-1, AS/NZS EN61347-2-13 independent, EN62384;IP67; GB19510.1, GB19510.14, EAC TP TC 004,J61347-1(H29), J61347-2-13(H29),KC61347-1,KC61347-2-13, NOM-058-SCFI-2017 approved			
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:2.0KVAC O/P-FG:1.5KVAC			
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25 / 70% RH			
	EMC EMISSION	Parameter	Standard	Test Level/Note	
		Conducted	EN55015(CISPR15) ,GB/T17743	-----	
		Radiated	EN55015(CISPR15) ,GB/T17743	-----	
		Harmonic Current	EN61000-3-2 ,GB/T17625.1	Class C @load≥50%	
	Voltage Flicker	EN61000-3-3	-----		
	EMC IMMUNITY	EN61547			
		Parameter	Standard	Test Level/Note	
ESD		EN61000-4-2	Level 3, 8KV air ; Level 2, 4KV contact		
Radiated		EN61000-4-3	Level 3		
EFT/Burst		EN61000-4-4	Level 3		
Surge		EN61000-4-5	4KV/Line-Line 6KV/Line-Earth		
Conducted		EN61000-4-6	Level 3		
Magnetic Field		EN61000-4-8	Level 4		
Voltage Dips and Interruptions	EN61000-4-11	>95% dip 0.5 periods, 30% dip 25 periods, >95% interruptions 250 periods			
OTHERS	MTBF	1305.62 K hrs min. Telcordia SR-332 (Bellcore) 399.88Khrs min. MIL-HDBK-217F (25)			
	DIMENSION	105*63*30mm (L*W*H)			
	PACKING	0.41Kg			
NOTE	<ol style="list-style-type: none"> All parameters NOT specially mentioned are measured at 230VAC input, rated current and 25 ° of ambient temperature. Length of set up time is measured at first cold start. Turning ON/OFF the driver may lead to increase of the set up time. De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details. The driver 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. This series meets the typical life expectancy of >50,000 hours of operation when Tcase, particularly (Tc) point (or TMP, per DLC), is about 80 ° or less. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5 °/1000m with fan models for operating altitude higher than 2000m(6500ft). Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. To fulfill requirements of the latest ErP regulation for lighting fixture, this LED driver can only be used behind a switch without permanently connected to the mains. 				

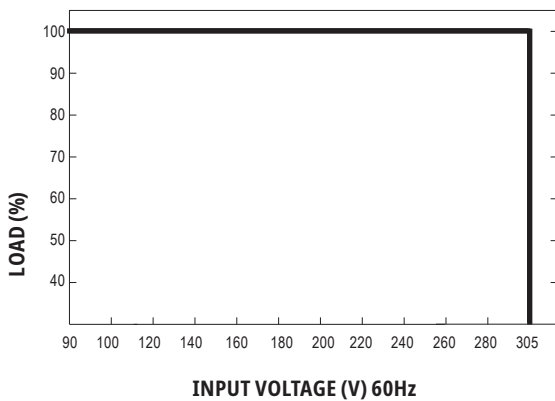
■ Block Diagram



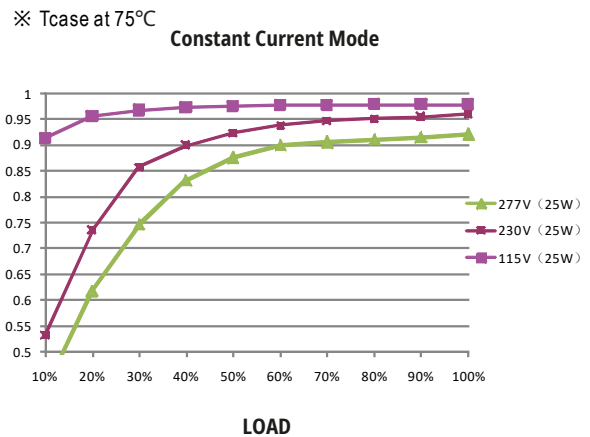
OUTPUT LOAD vs TEMPERATURE



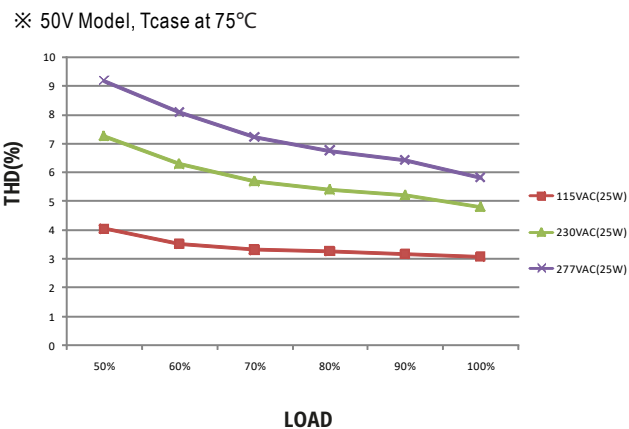
STATIC CHARACTERISTIC



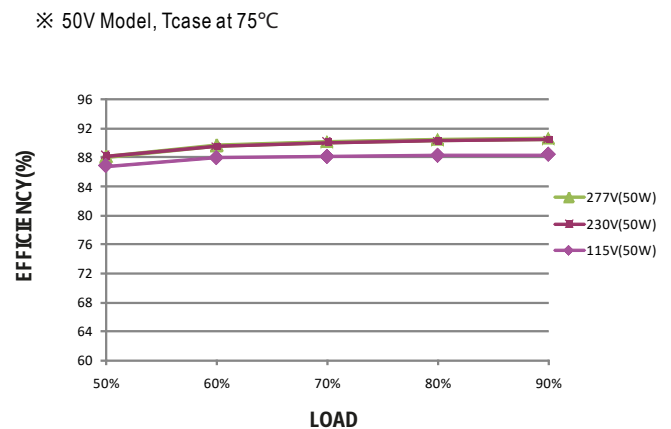
POWER FACTOR (PF) CHARACTERISTIC



TOTAL HARMONIC DISTORTION (THD)



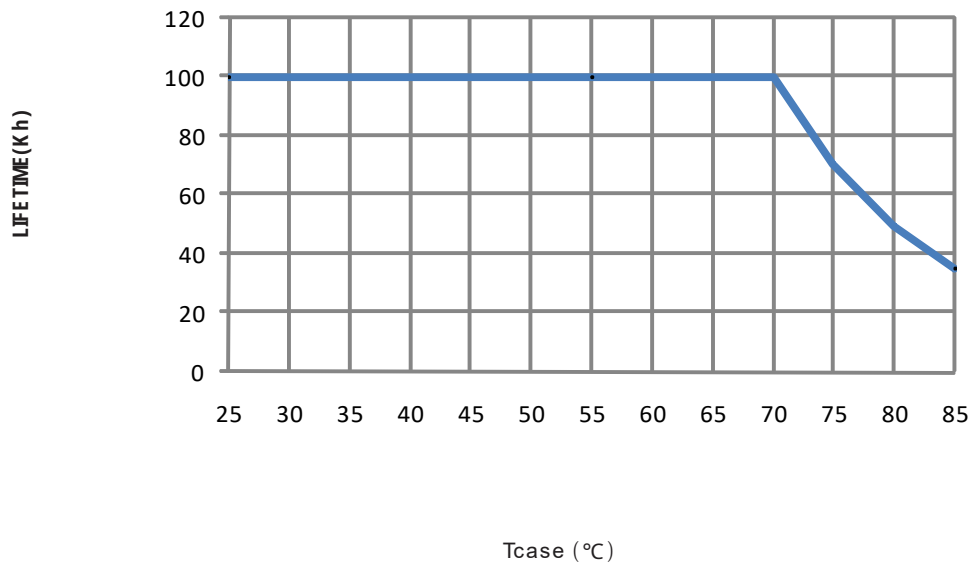
EFFICIENCY vs LOAD





DE50025

■ LIFE TIME





Unit:mm

Mechanical Specification

