

SMWC40 SERIES**40W Single Constant Current Output LED Driver**

- Wide Input Voltage 90 to 305VAC, 47 to 63Hz
- Over Voltage / Short Circuit / Over Temperature Protection
- High Efficiency (up to 88%), Active Power Factor Correction (PFC)
- IP67 Waterproof Rating, Fully isolated
- Comply to worldwide safety regulations for lighting
- Cooling by free air convection
- Suitable for LED lighting & moving sign applications, for dry / damp / wet locations

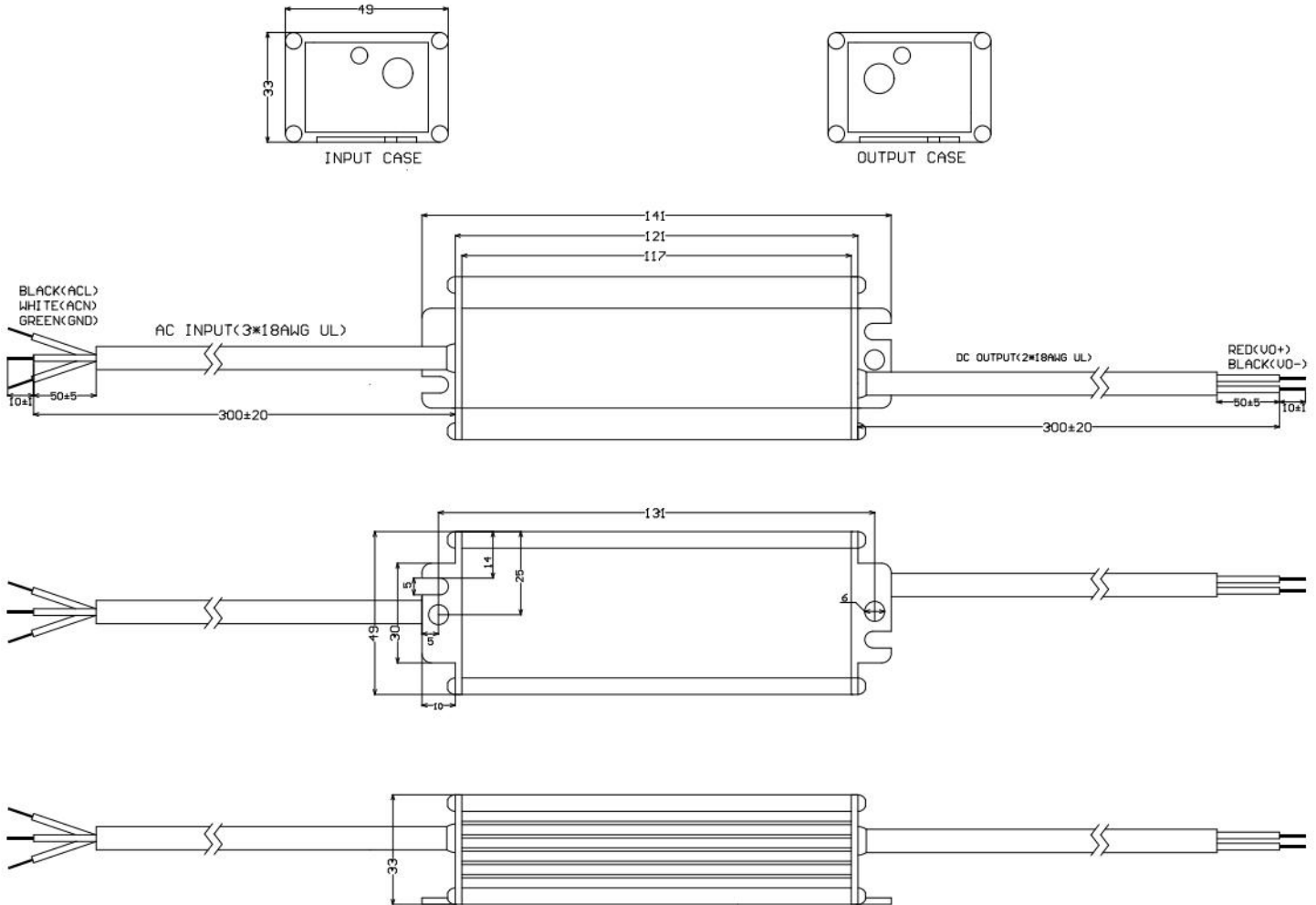
5 Year WarrantyApprovals: **IP67** **RoHS** **CE****SPECIFICATION**

Part Number		SMWC040-0350SS/D	SMWC040-0700SS/D	SMWC040-1050SS/D	SMWC040-1400SS/D
OUTPUT	DC VOLTAGE	86-114V		43 -57V	
	CONSTANT CURRENT REGION Note.4	29-38V		21-29V	
	RATED POWER	350mA		700mA	
	RIPPLE & NOISE(max.) Note.2	1050mA		1400mA	
	CURRENT TOLERANCE Note.3	40W			
	LINE REGULATION	6.5V		4.4V	
	LOAD REGULATION	±5.0%		3.4V	
INPUT	SETUP, RISE TIME(Typ.) Note.7	±2.0%		3.7V	
	VOLTAGE RANGE Note.5	±3.0%			
	FREQUENCY RANGE	1500ms/50ms 115VAC at full load		500ms/50ms 230VAC	
	POWER FACTOR(Typ.)	90% ~305VAC			
	EFFICIENCY(Typ.)	47 ~ 63Hz			
	AC CURRENT(Typ.)	0.99@115VAC 60HZ		0.99@115VAC 60HZ	
	INRUSH CURRENT(Typ.)	0.99@115VAC 60HZ		0.99@115VAC 60HZ	
PROTECTION	LEAKAGE CURRENT	90%		89%	
	OVER CURRENT Note.4	0.4A/115VAC		0.2A/230VAC	
	SHORT CURRENT	COLD START 48A (Twidth=270us measured at 50% Ipeak) at 230VAC			
	OVER VOLTAGE	<0.75mA/265VAC			
	OVER TEMP.	95 ~ 108%			
ENVIRONMENT	WORKING TEMP.	Protection type: Constant current limiting, recovers automatically after fault condition is removed			
	WORKING HUMIDITY	Hiccup mode, recovers automatically after fault condition is removed			
	STORAGE TEMP., HUMIDITY	160V		90V	
	TEMP. COEFFICIENT	90V		63V	
	VIBRATION	Protection type: Hiccup mode, recovers automatically after fault condition is removed		48V	
SAFETY & EMC	SATETY STANDARDS Note.6	-35 ~ +70℃ (Refer to “Derating Curve”)			
	WITHSTAND VOLTAGE	10 ~ 100% RH non-condensing			
	ISOLTATION RESISTANCE	-40 ~ +85℃, 5 ~ 100% RH			
	EMC EMISSION	±0.03%℃ (0~50℃)			
	EMC IMMUNITY	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes			
OTHERS	MTBF	UL8750, UL935, UL1012, CSA-C22.2 No.107.1, EN61347-1, EN61347-2-13			
	DIMENSIION	I/P – O/P: 3.75kVAC, I/P-FG: 2KVAC			
	PACKING	I/P – O/P: 100M Ohms / 500VDC /25℃ / 70% RH			

NOTE

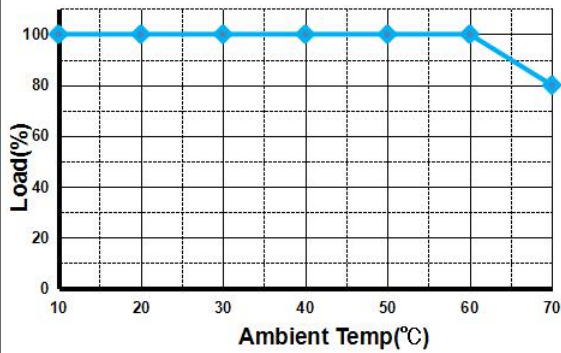
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation & load regulation.
4. Please refer to "DRIVING METHODS OF LED MODULE".
5. Derating may be needed under low input voltages. Please check the static characteristics for details.
6. Suitable for indoor use or outdoor use without direct sunlight exposure. Please avoid immerse in the water over 30 minutes.
7. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time.
8. 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 manufactures must re-qualify EMC DIRECTIVE on the complete installation again.
9. Direct connecting to LEDs is suggested, but is not suitable for using additional drivers.
10. To fulfill requirements of the latest ERP regulation for lighting fixtures, this LED power supply can only be used behind switch without permanently connected to the mains.

Mechanical Specification

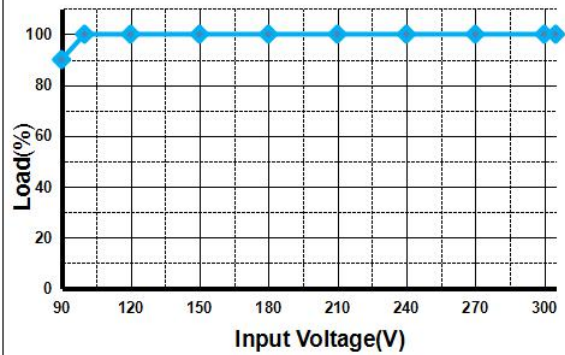


Derating Curve

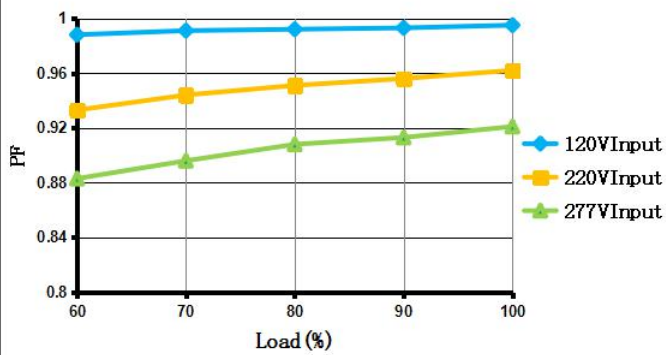
Derating Characteristics



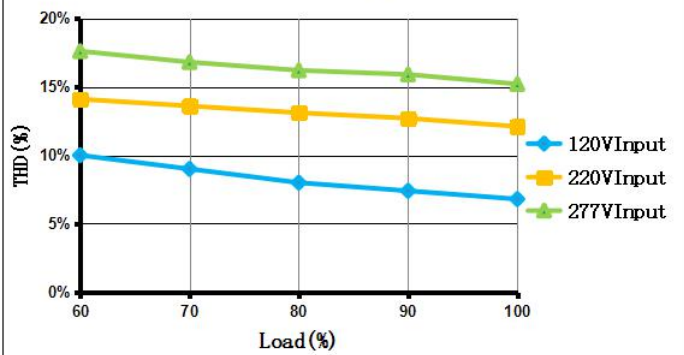
Static Characteristics



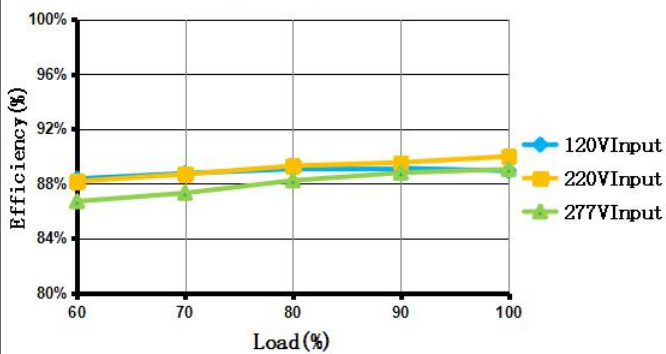
PF vs Output



THD vs Output



Efficiency vs Output



Lifetime vs Case Temp

