



■ Features :

- Universal AC input / Full range
- Fully isolated plastic case with IP64 level
- Built-in constant current limiting circuit with adjustable OCP level
- Protections: Short circuit / Overload / Over voltage
- IP64 design for indoor or outdoor installations
- Built-in dimming function : 1~10VDC or PWM controlled(Optional)
- UL1310, Class 2 power unit
- Cooling by free air convection
- 100% full load burn-in test
- Suitable for LED lightening and moving sign applications
- High reliability

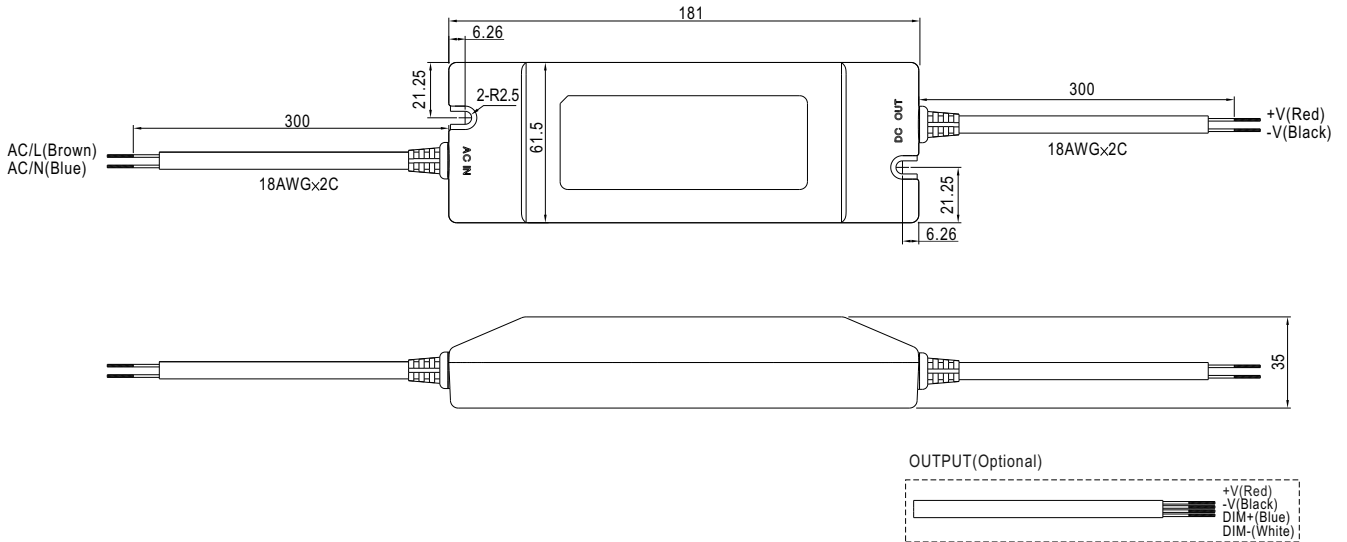
IP64 CE

SPECIFICATION

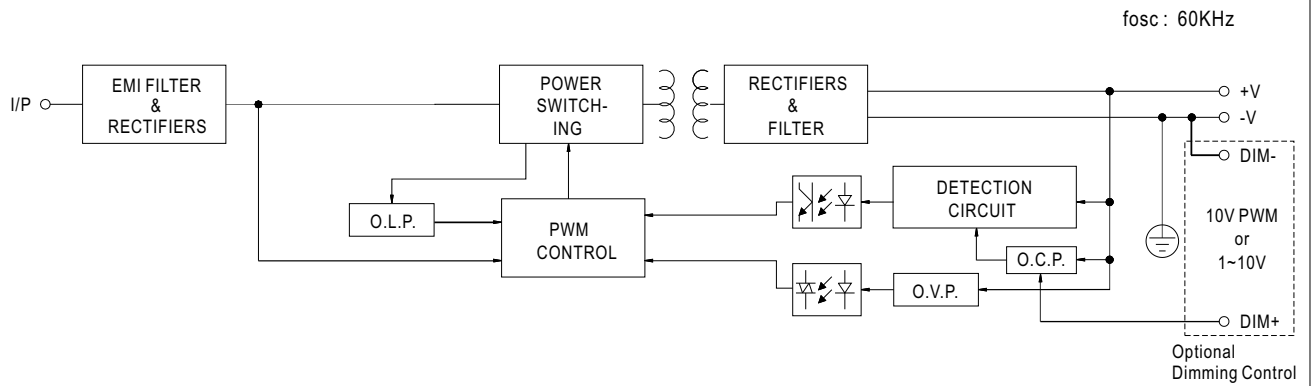
MODEL	ELN-60-9	ELN-60-12	ELN-60-15	ELN-60-24	ELN-60-27	ELN-60-48	
OUTPUT	DC VOLTAGE	9V	12V	15V	24V	27V	48V
	RATED CURRENT	5A	5A	4A	2.5A	2.3A	1.3A
	CURRENT RANGE	0 ~ 5A	0 ~ 5A	0 ~ 4A	0 ~ 2.5A	0 ~ 2.3A	0 ~ 1.3A
	RATED POWER	45W	60W	60W	60W	62.1W	62.5W
	RIPPLE & NOISE (max.) Note.2	120mVp-p	120mVp-p	150mVp-p	150mVp-p	200mVp-p	250mVp-p
	VOLTAGE ADJ. RANGE	8.7 ~ 10.5V	10.8 ~ 13.2V	13.5 ~ 16.5V	21.6 ~ 26.4V	24.3 ~ 29.7V	43.2 ~ 52.8V
	CURRENT ADJ. RANGE	-25% ~ 3%					
	VOLTAGE TOLERANCE Note.3	±5.0%					
	LINE REGULATION	±1.0%					
	LOAD REGULATION	±2.0%					
INPUT	SETUP, RISE TIME Note.6	500ms, 30ms / 230VAC 1500ms, 30ms / 115VAC at full load					
	HOLD UP TIME (Typ.)	50ms/230VAC 16ms/115VAC at full load					
	VOLTAGE RANGE Note.5	90 ~ 264VAC					
	FREQUENCY RANGE	47 ~ 63Hz					
	EFFICIENCY (Typ.)	82%	85%	86%	87%	87%	88%
	AC CURRENT (Typ.)	1.2A/115VAC 0.7A/230VAC					
PROTECTION	INRUSH CURRENT(max.)	COLD STAR 60A/230VAC					
	LEAKAGE CURRENT	0.25mA / 240VAC					
	OVER CURRENT	95 ~ 110%		130% max.			
FUNCTION	OVER VOLTAGE	11 ~ 13.5V	13.8 ~ 16V	17.5 ~ 21V	28 ~ 32V	31 ~ 35V	54 ~ 60V
	DIMMING CONTROL (OPTIONAL)	1 ~ 10VDC or PWM					
ENVIRONMENT	WORKING TEMP.	-20 ~ +60°C (Refer to output load derating curve)					
	WORKING HUMIDITY	20 ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH					
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)					
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes					
SAFETY & EMC	SAFETY STANDARDS	Design refer to UL1310 Class 2, TUV EN60950-1, CAN/CSA C22.2 No. 223-M91(except for 48V), EN61347-2-13; IP64 approved					
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC					
	ISOLATION RESISTANCE	I/P-O/P:>100M Ohms/500VDC 25°C 70%RH					
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B					
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3					
OTHERS	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, light industry level, criteria A					
	MTBF	603Khrs min. MIL-HDBK-217F (25°C)					
	DIMENSION	181*61.5*35mm (L*W*H)					
NOTE	PACKING	0.4Kg; 24pcs/11Kg/0.75CUFT					
		<ol style="list-style-type: none"> 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 and load regulation. 4. Derating may be needed under low input voltage. Please check the derating curve for more details. 5. The power supply is considered a component which will be installed a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. 6. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time. 					

Mechanical Specification

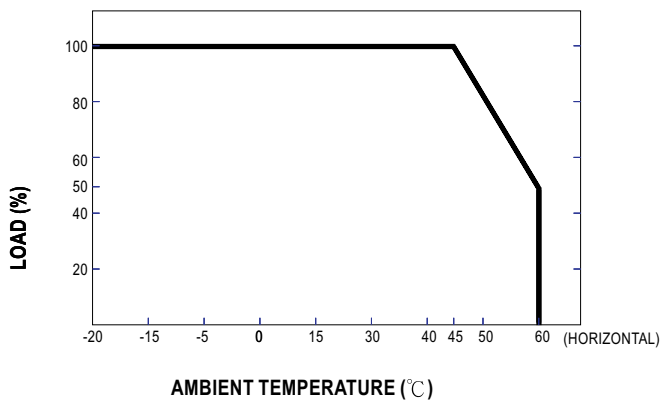
Case No.960A Unit:mm



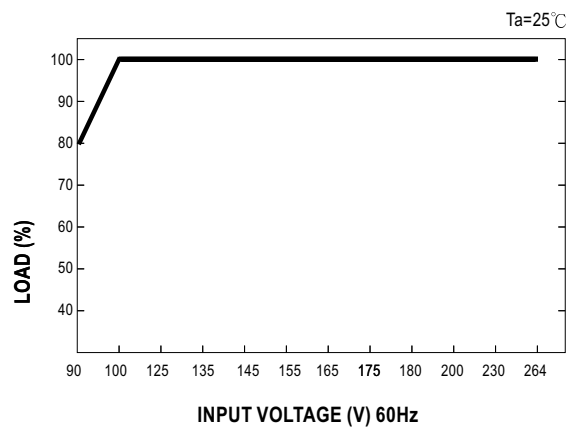
Block Diagram



Derating Curve

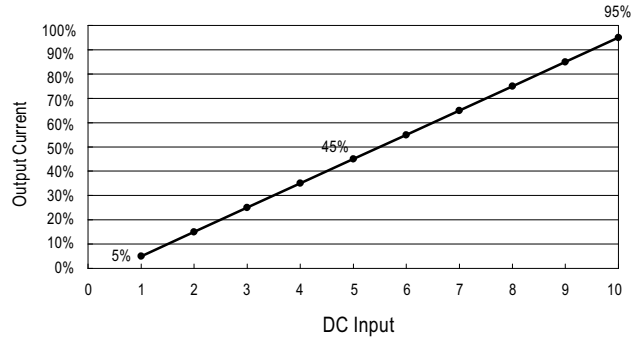
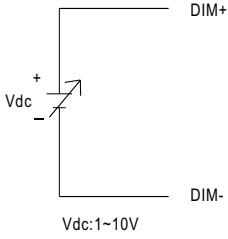


Static Characteristics



■ Dimming Control

(1) 1~10V



(2) PWM

