







■ Features :

- Universal AC input / Full range
- Protections: Short circuit / Over current / Over voltage
- Cooling by free air convection
- Built-in constant current limiting circuit with adjustable OCP level
- Optional dimming function : 1~10VDC (D type) or PWM (P type) controlled
- Fully isolated plastic case with IP64 level
- Class II power unit, no FG
- Class 2 power unit
- Pass LPS
- Suitable for LED lighting and moving sign applications (Note.9)
- 100% full load burn-in test
- Low cost, high reliability
- 2 years warranty

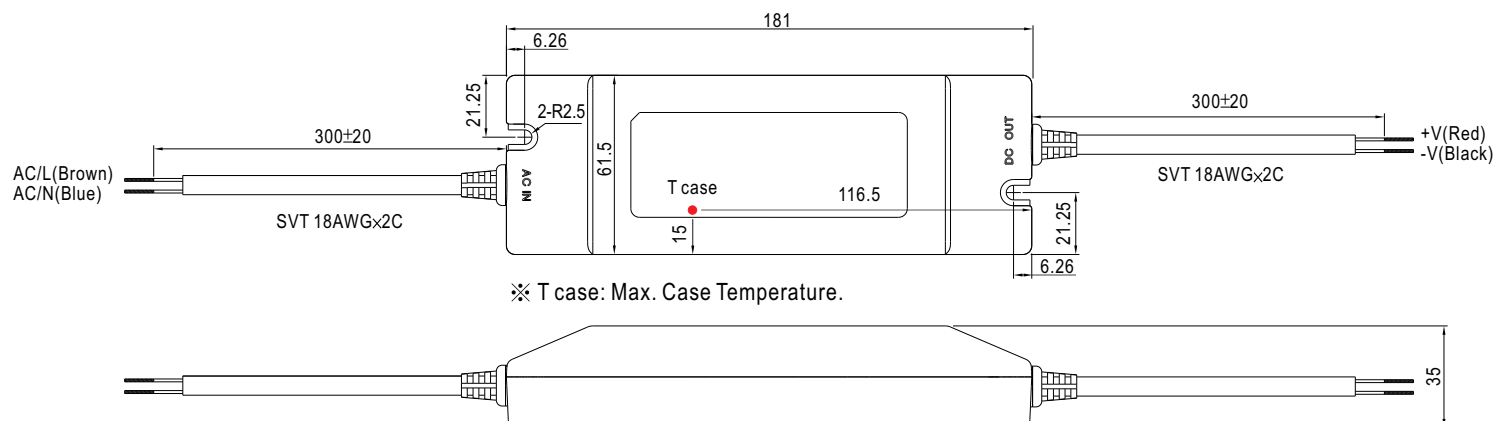
SPECIFICATION


 (for 48V only)
  US (except for 48V)
 

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
	LED OPERATION VOLTAGE <small>Note.8</small>	3 ~ 9V	6 ~ 12V	7.5 ~ 15V	12 ~ 24V	13.5 ~ 27V	24 ~ 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.) <small>Note.2</small>	120mVp-p	120mVp-p	150mVp-p	150mVp-p	200mVp-p	250mVp-p
	VOLTAGE ADJ. RANGE <small>Note.7</small>	8.7 ~ 10.5V	10.8 ~ 13.2V	13.5 ~ 16.5V	21.6 ~ 26.4V	24.3 ~ 29.7V	43.2 ~ 52.8V
		Can be adjusted by internal potentiometer SVR1					
	CURRENT ADJ. RANGE <small>Note.7</small>	-25% ~ 3%. Can be adjusted by internal potentiometer SVR2					
	VOLTAGE TOLERANCE <small>Note.3</small>	±5.0%					
	LINE REGULATION	±1.0%					
	LOAD REGULATION	±2.0%					
SETUP, RISE TIME <small>Note.6</small>	500ms, 30ms / 230VAC 1500ms, 30ms / 115VAC at full load						
HOLD UP TIME (Typ.)	50ms/230VAC 16ms/115VAC at full load						
INPUT	VOLTAGE RANGE <small>Note.4</small>	90 ~ 264VAC 127 ~ 370VDC					
	FREQUENCY RANGE	47 ~ 63Hz					
	EFFICIENCY (Typ.)	82%	85%	86%	87%	87%	88%
	AC CURRENT (Typ.)	1.2A/115VAC 0.7A/230VAC					
	INRUSH CURRENT (max.)	COLD START 60A/230VAC					
	LEAKAGE CURRENT	0.25mA / 240VAC					
PROTECTION	OVER CURRENT	95 ~ 110%					
		Protection type : Constant current limiting, recovers automatically after fault condition is removed					
	OVER VOLTAGE	11 ~ 13.5V	13.8 ~ 16V	17.5 ~ 21V	28 ~ 32V	31 ~ 37V	54 ~ 60V
		Protection type : Shut down o/p voltage, re-power on to recover					
FUNCTION	DIMMING CONTROL (OPTIONAL)	1 ~ 10VDC or PWM signal : 100Hz ~ 3KHz					
ENVIRONMENT	WORKING TEMP.	-20 ~ +60℃ (Refer to "Derating Curve")					
	WORKING HUMIDITY	20 ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-40 ~ +80℃, 10 ~ 95% RH					
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)					
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes					
SAFETY & EMC	SAFETY STANDARDS	UL1310, CAN/CSA C22.2 No. 223-M91(except for 48V), IP64 approved ; design refer to TUV EN60950-1					
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC					
	ISOLATION RESISTANCE	I/P-O/P:>100M Ohms / 500VDC / 25℃ / 70% RH					
	EMC EMISSION	Compliance to EN55022 (CISPR22) Class B, EN61000-3-2 Class A, EN61000-3-3					
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A					
OTHERS	MTBF	603Khrs min. MIL-HDBK-217F (25℃)					
	DIMENSION	181*61.5*35mm (L*W*H)					
	PACKING	0.4Kg; 24pcs/11Kg/0.75CUFT					

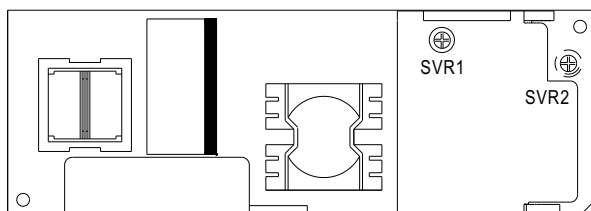
Mechanical Specification

Case No.960A Unit:mm



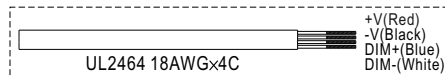
※ T case: Max. Case Temperature.

Output voltage and current adjustment : remove the upper case and adjust through SVR1 & SVR2 shown in the diagram.

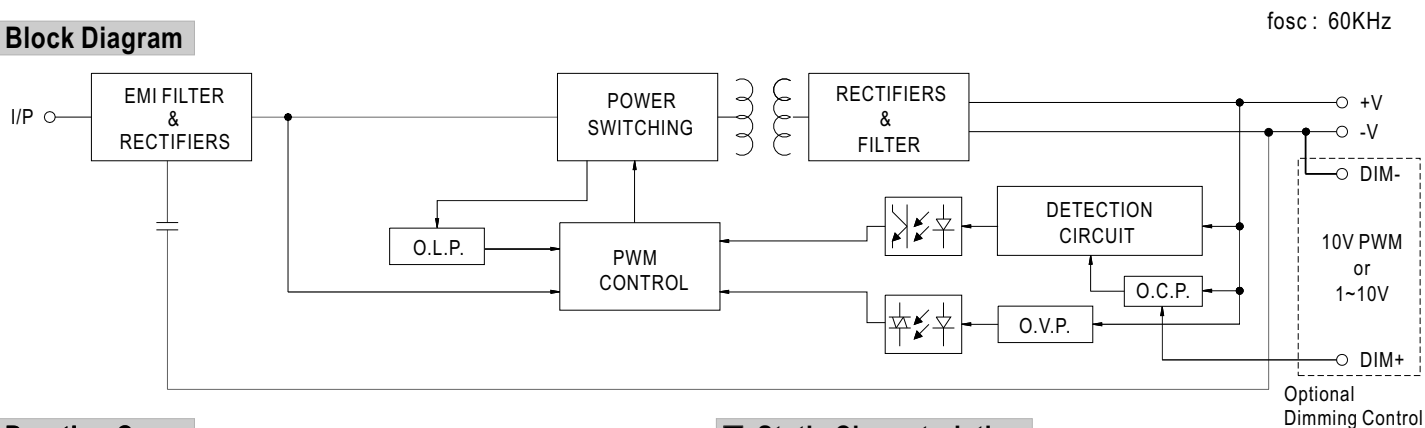


SVR1	Output voltage adjustment
SVR2	Output current adjustment

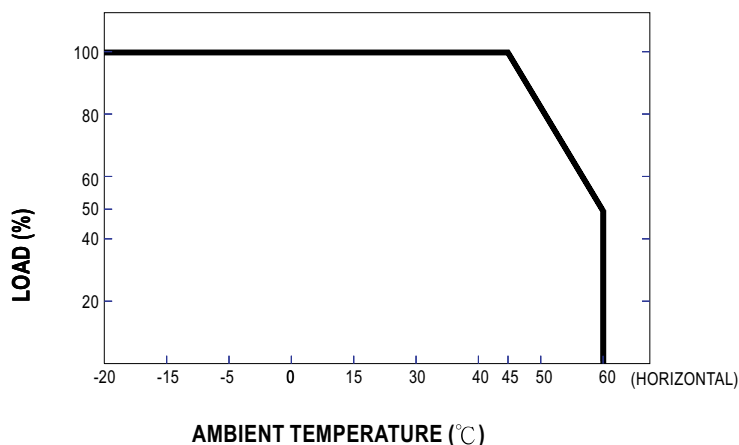
OUTPUT(with optional dimming function)



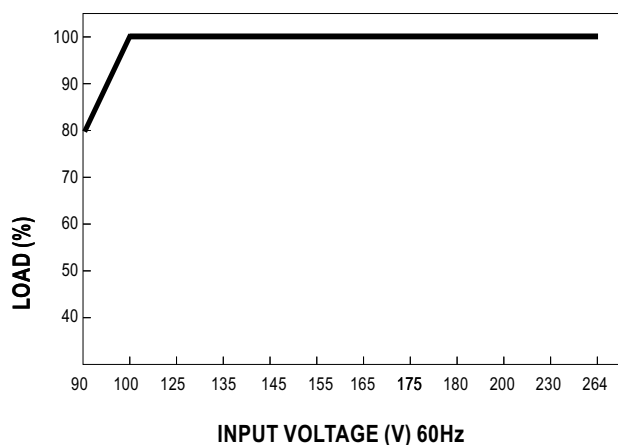
Block Diagram



Derating Curve



Static Characteristics

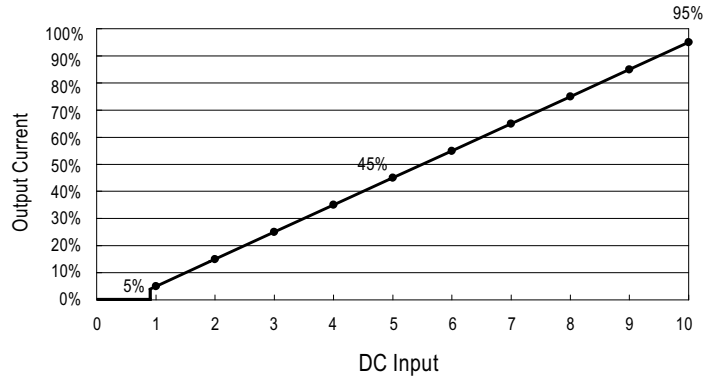
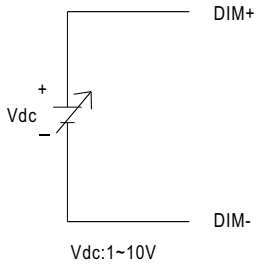


■ Dimming Control (Optional)

Level of output current can be adjusted through the dimming control function.

When there is no signal sending to the control wires (open circuit between the two control wires), the power supply unit will operate as 0V (D-type) or 0% duty (P-type) of input signal and hence the output current will be zero.

(1) 1~10V (D type, & : ELN-60-12D)



(2) PWM (P type, & : ELN-60-12P)

