



### ■ 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
- Optional dimming function : 1.1~10VDC (D type) or PWM (P type) controlled
- UL1310 Class 2 power unit
- Cooling by free air convection
- 100% full load burn-in test
- Suitable for LED lighting and moving sign applications
- Low cost
- 2 years warranty

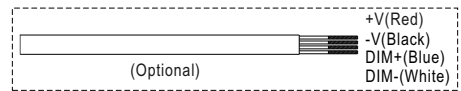
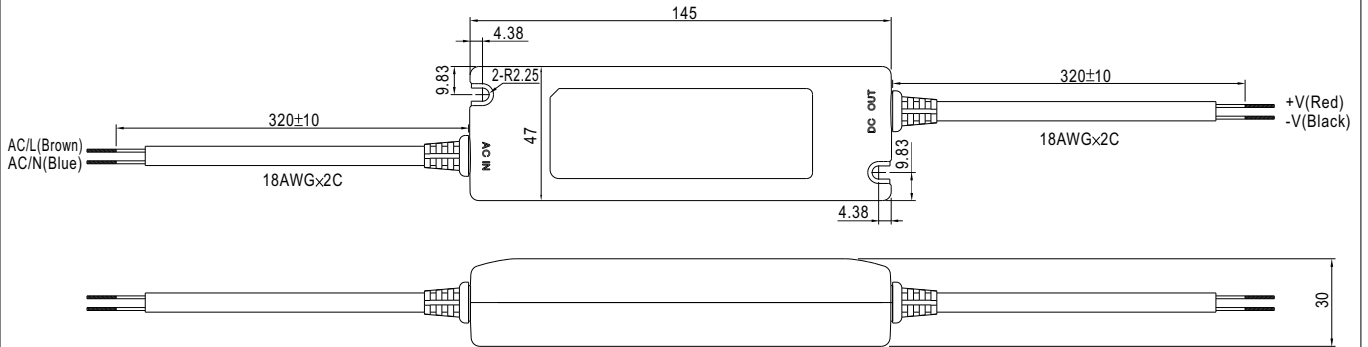
### SPECIFICATION

IP64 CE

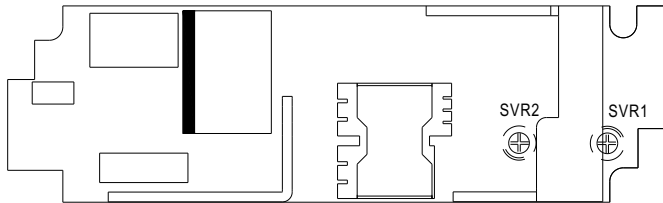
MODEL	ELN-30-5	ELN-30-9	ELN-30-12	ELN-30-15	ELN-30-24	ELN-30-27	ELN-30-48	
OUTPUT	DC VOLTAGE	5V	9V	12V	15V	24V	27V	48V
	LED OPERATION VOLTAGE Note.7	3 ~ 5V	3 ~ 9V	3 ~ 12V	3 ~ 15V	3 ~ 24V	3 ~ 27V	3 ~ 48V
	RATED CURRENT	5A	3.4A	2.5A	2A	1.25A	1.12A	0.63A
	CURRENT RANGE	0 ~ 5A	0 ~ 3.4A	0 ~ 2.5A	0 ~ 2A	0 ~ 1.25A	0 ~ 1.12A	0 ~ 0.63A
	RATED POWER	25W	30.6W	30W	30W	30W	30.24W	30.24W
	RIPPLE & NOISE (max.) Note.2	80mVp-p	100mVp-p	120mVp-p	120mVp-p	150mVp-p	150mVp-p	250mVp-p
	VOLTAGE ADJ. RANGE	4.5 ~ 5.5V	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 potential meter SVR1							
	CURRENT ADJ. RANGE	-25% ~ 3%. Can be adjusted by internal potential meter SVR2						
	VOLTAGE TOLERANCE Note.3	±5.0%						
	LINE REGULATION	±1.0%						
	LOAD REGULATION	±2.0%						
	SETUP, RISE TIME Note.6	500ms, 80ms / 230VAC 1000ms, 80ms / 115VAC at full load						
HOLD UP TIME (Typ.)	50ms/230VAC 16ms/115VAC at full load							
INPUT	VOLTAGE RANGE	90 ~ 264VAC						
	FREQUENCY RANGE	47 ~ 63Hz						
	EFFICIENCY (Typ.)	75%	80%	82%	82%	85%	85%	87%
	AC CURRENT	0.75A/115VAC 0.48A/230VAC						
	INRUSH CURRENT(max.)	COLD STAR 60A/230VAC						
LEAKAGE CURRENT	0.25mA / 240VAC							
PROTECTION	OVER CURRENT Note.4	95 ~ 110%						
	OVER VOLTAGE	Protection type : Constant current limiting, recovers automatically after fault condition is removed						
FUNCTION	DIMMING CONTROL (OPTIONAL)	1 ~ 10VDC or PWM						
	WORKING TEMP.	-20 ~ +60°C (Refer to output load derating curve)						
ENVIRONMENT	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	628.3Khrs min. MIL-HDBK-217F (25°C)						
	DIMENSION	145*47*30mm (L*W*H)						
NOTE	PACKING	0.26Kg; 60pcs/16.6Kg/1.25CUFT						
	<p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF &amp; 47uF parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. Derating may be needed under low input voltage. Please check the derating curve for more details.</p> <p>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.</p> <p>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.</p> <p>7. Constant current operation region is within the specified output voltage range above. This is the suitable operation region for LED related applications.</p>							

**Mechanical Specification**

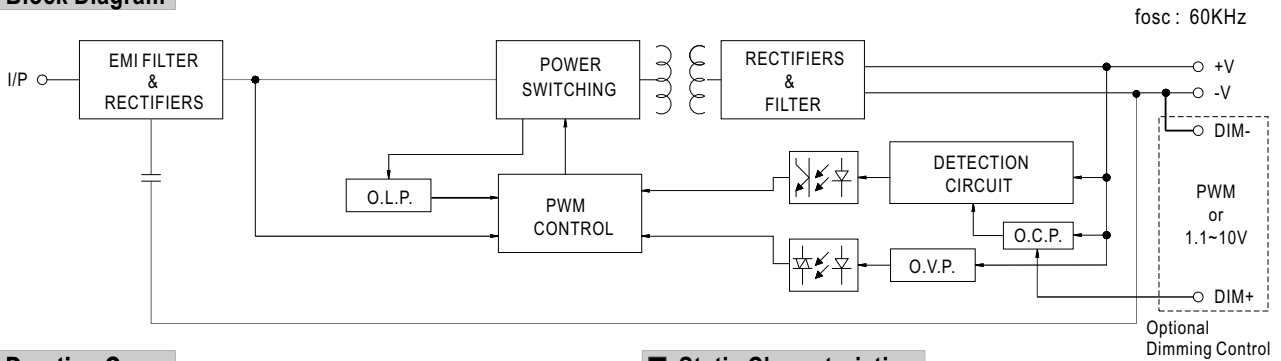
Case No.964A Unit:mm



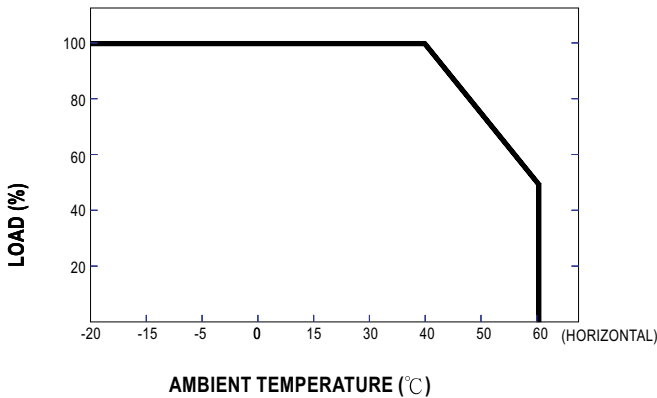
Output voltage and current adjustment : remove the upper case and adjust through SVR1 & SVR2 shown in the diagram.



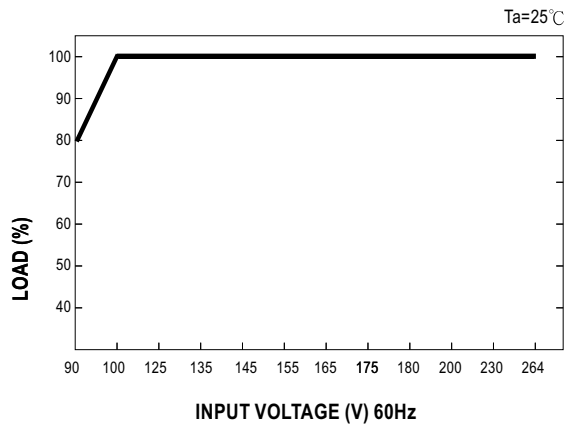
**Block Diagram**



**Derating Curve**



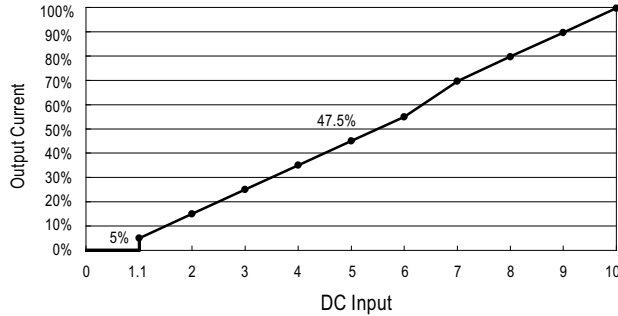
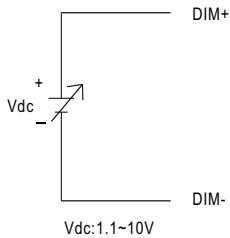
**Static Characteristics**



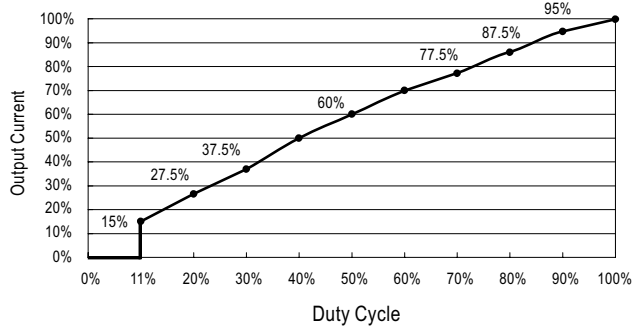
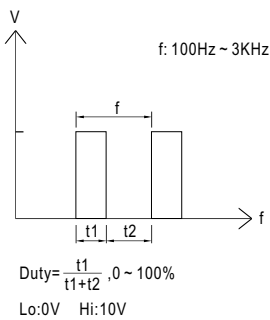
**Dimming Control (Optional)**

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

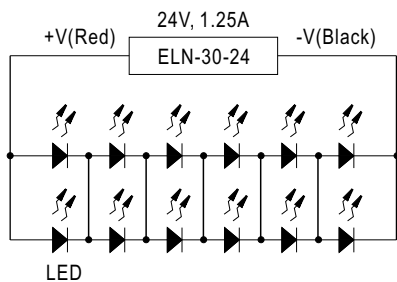
(1) 1.1~10V



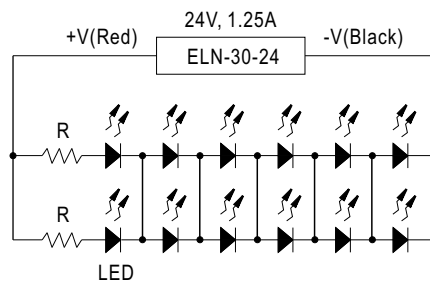
(2) PWM



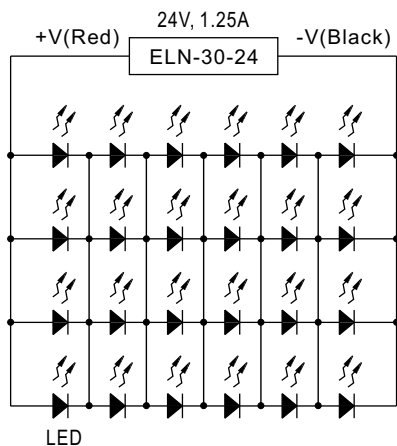
**Recommend Application Deployment (24V)**



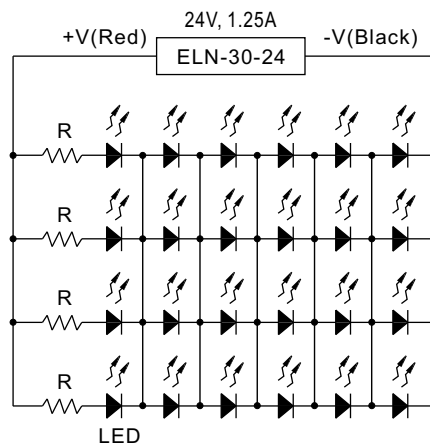
1 to 6 LEDs // 2 strips  
This configuration is based on LED with the following parameters :  
 $V_f = 3.0 \sim 3.5V$   $I_f = 600 \sim 700mA$



6 LEDs // 1 to 2 strips  
This configuration is based on LED with the following parameters :  
 $V_f = 3.0 \sim 3.5V$   $I_f = 600 \sim 700mA$   
 $R = 10 \text{ ohm}, 10W$



1 to 6 LEDs // 4 strips  
This configuration is based on LED with the following parameters :  
 $V_f = 3.0 \sim 3.5V$   $I_f = 300 \sim 350mA$



6 LEDs // 1 to 4 strips  
This configuration is based on LED with the following parameters :  
 $V_f = 3.0 \sim 3.5V$   $I_f = 300 \sim 350mA$   
 $R = 20 \text{ ohm}, 3W$