



Features

- ※ 100~305VAC input range
- ※ Efficiency up to 89%
- ※ Optional dimming function: 0-10v, PWM, Resistor; Timing
- ※ IP67 rated; Suitable for Dry, Damp and Wet Locations
- ※ Protections: SCP, OTP, OVP
- ※ Metal case with full potted for hazardous scenarios
- ※ Surge Protection: L/N-PE: 6KV, L-N 4KV
- ※ 5 years warranty

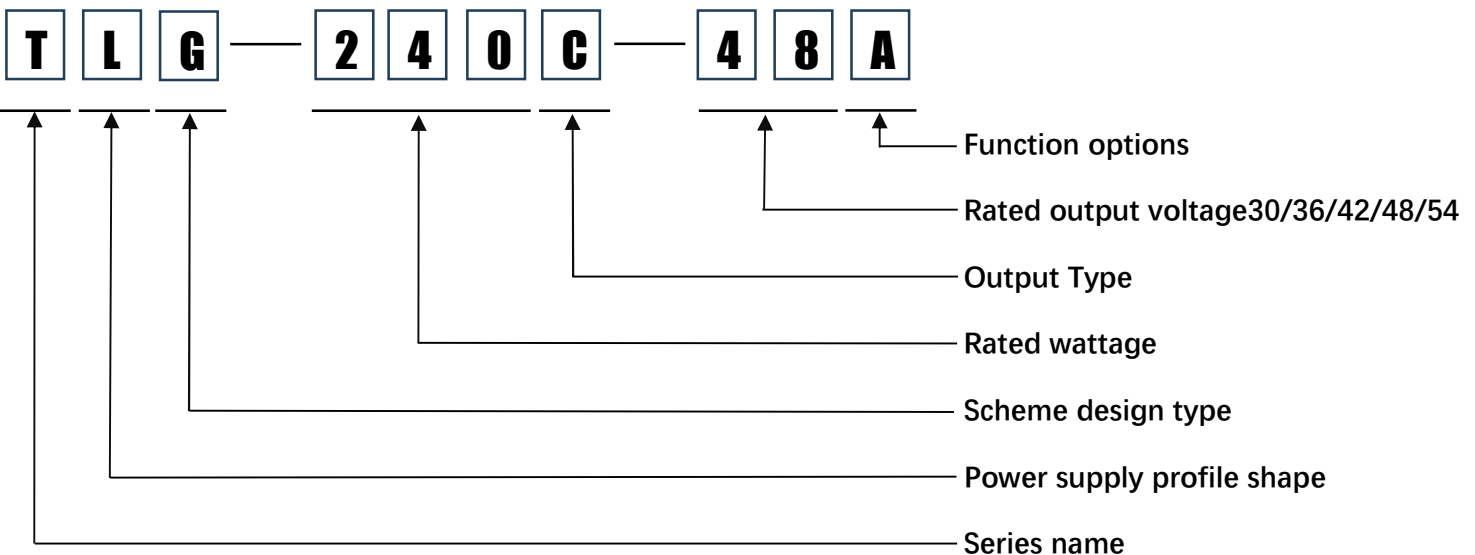
Applications

- ※ Led Tower chandelier light
- ※ Led Shoes box light
- ※ Led Gas station lamp
- ※ Led garden light
- ※ Led ufo led highbay light
- ※ Led high bay light
- ※ Led roadway light
- ※ Led roadway light

Description

TLG-50C-A series is a 50W AC/DC LED driver featuring the constant current mode and high voltage output. TLG-50C-A operates from 90-305VAC and offers models with different rated current ranging between 700mA and 1500mA. Thanks to the high efficiency up to 91%, with the fanless design, the entire series is able to operate for -40°C ~ +90°C, case temperature under free air convection, The design of metal housing and IP67/IP65 ingress protection level allows this series to fit both indoor and outdoor applications. TLG-50C-A is equipped with various function options, such as dimming methodologies, so as to provide the optimal design flexibility for LED lighting system.

Model Encoding



SPECIFICATION

MODEL		TLG-50C-30A	TLG-50C-36A	TLG-50C-42A	TLG-50C-48A	TLG-50C-54A
INPUT	VOLTAGE RANGE	100-305VAC	100-305VAC	100-305VAC	100-305VAC	100-305VAC
	FREQUENCY RANGE	47-63Hz				
	POWER FACTOR	PF \geq 0.98/100VAC, PF \geq 0.95/220VAC, PF \geq 0.92/277VAC @full load				
	EFFICIENCY	88.30%	88.60%	89.50%	89.80%	89.80%
	AC CURRENT	0.5A/ 115VAC / 0.24A1 230VAC / 0.2A1277VAC				
	INRUSH CURRENT	25Amax.@Full Load,230VAC,Cold Start				
	CIRCUIT BREAKER	2 units (circuit breaker of type B) / 3 units (circuit breaker of type C) at 230VAC				
	LEAKAGE CURRENT	<0.75mA / 277VAC				
OUTPUT	Output Voltage	24-30VDC	30-36VDC	36-42VDC	42-48VDC	48-54VDC
	Output Current	1-1.5A	1-1.5A	1-1.5A	0.7-1.1A	0.7-1.1A
	Current Accuracy	Less than or equal to 5.0% max. @rated current				
	Line Regulation	\pm 3%				
	Load Regulation	Less than or equal to 5% @Full Load,90-264VAC				
	Hold-up Time	10Ms Min				
	Ripple & Noise(max) Note.2	20% (Pk-Pk)				
PROTECTION	Over Load Protection	Protection type: Auto recovery				
	Over Voltage Protection	Protection type: Hiccup, Auto recovery				
	Short circuit Protection	Shut down o/p voltage, recovers automatically after temperature goes down				
	OVER TEMPERATURE	Ta=-40°C...+90°C(Refer to output load derating curve)				
		Tc=+90°C				
ENVIRONMENT	WORKING TEMP	-25°C...+80°C				
	MAX. CASE TEMP	20-90%RH				
	WORKING HUMIDITY	30000Hrs@Full Load,230VAC,Tc=75°C				
	STORAGE TEMP	10-500Hz,2G10min./1cycle,60min.eachalongX,Y,Zaxes				
	Humidity	20-90%RH				
	Life Time	30000Hrs@Full Load,230VAC,Tc=75°C				
	VIBRATION	10-500Hz,2G10min./1cycle,60min.eachalongX,Y,Zaxes				
SAFETY & EMC	SAFETY STANDARDS	EN61347-1; EN61347-2-13 EN60598-1; EN60598-2-6				
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC IP-FG:2.0KVAC O/P-FG:1.5KVAC				
	EMC EMISSION	EN55015; EN61547				
	EMC IMMUNITY	EN61547;				
	Harmonic	EN61000-3-2				
	Leakage Current	<0.7 mA(240VAC)				
	Input-Output(V.AC)	Less than or equal to 4M Ω @500VDC				
Input-FG(V.AC)	Less than or equal to 2M Ω @500VDC					
Output-FG(V.AC)	Less than or equal to 2M Ω @500VDC					
OTHERS	MTBF	200,000hrs,230Vac, full load, Ta= 25°C (MIL-HDBK-217F)				
	DIMENSION	(L)210mm*(W)46mm*(H)36mm				
	PACKING	0.58Kg; 20pcs/16.6Kg; 10.84CUFT				

NOTE

- * The start-up time is measured when the machine is started cold. Frequent switching on and off may increase the start-up time.
- * When the input voltage is low, the output needs to be reduced. Please refer to the static characteristic curve for details.
- * Accuracy: including setting error, linear adjustment rate and load adjustment rate.
- * Unless otherwise specified, all specifications are measured at 230VAC input, rated load, and 25 °C ambient temperature.
- * Please refer to "LED module driving method"
- * The driver is regarded as a component used in combination with the terminal equipment. Because the EMC is affected by the whole device, the terminal equipment manufacturer needs to re-confirm the EMC of the whole device.
- * When the maximum temperature point TC of the shell of this series of models is lower than 80 °C, the working life is greater than 50,000 hours
- * When the altitude exceeds 2000 meters (6,500 feet), the ambient temperature of the fanless model decreases at a rate of every 3.5 °C 1000m, and the ambient temperature of the fanless model decreases at a rate of every 5C 11000m.
- * For any application instructions and IP dustproof and waterproof function installation precautions, please refer to our instruction manual before designing and installing.

PERFORMANCE CURVES

Fig.1 O/P Voltage Vs Output Current

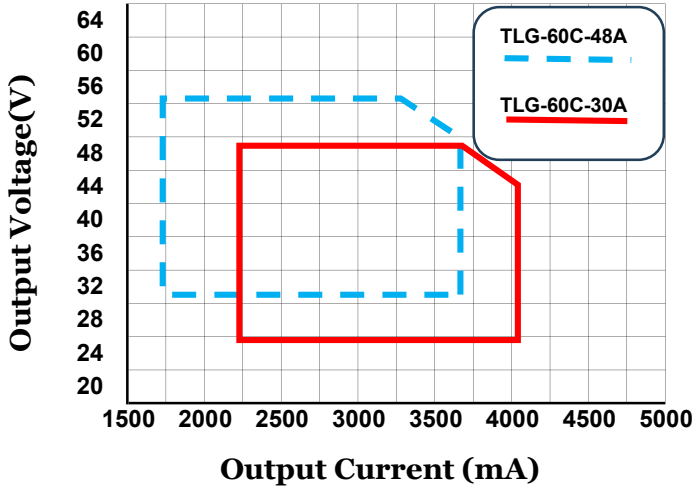


Fig.2 O/P Power VS Ambient Temperature

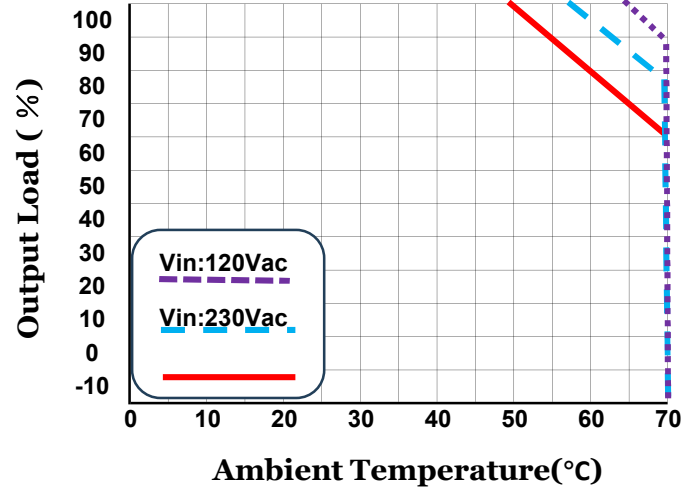


Fig.3 Power Factor VS Output Power

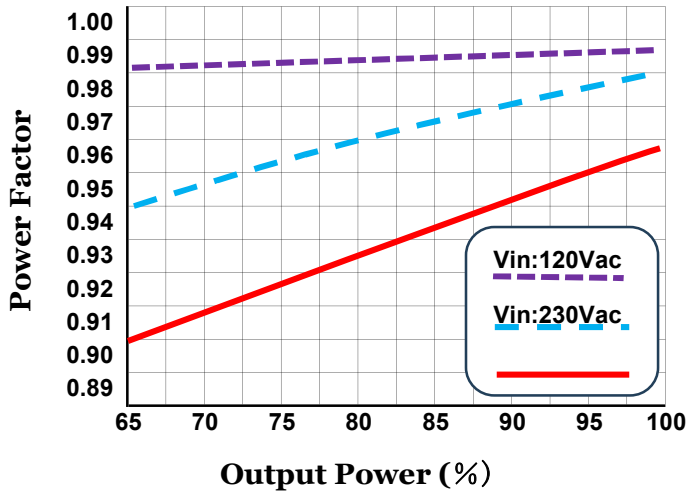


Fig.4 THD VS Output Power

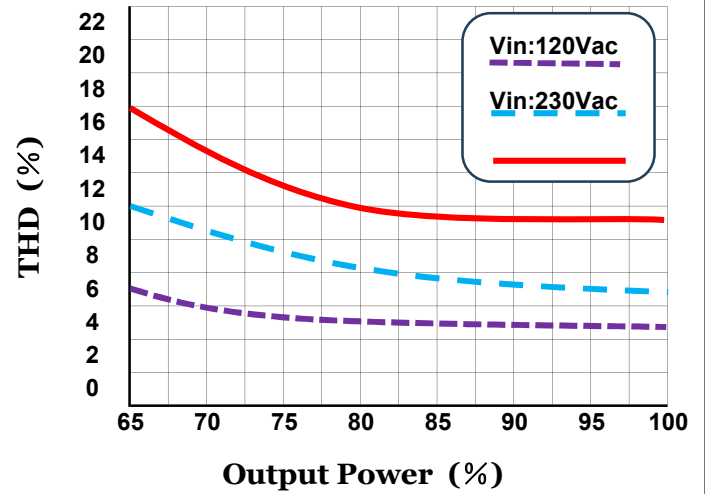


Fig.5 Efficiency Vs Output Power

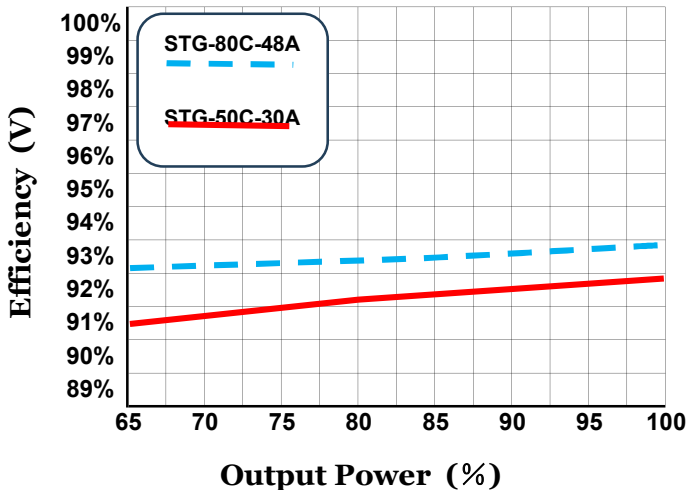
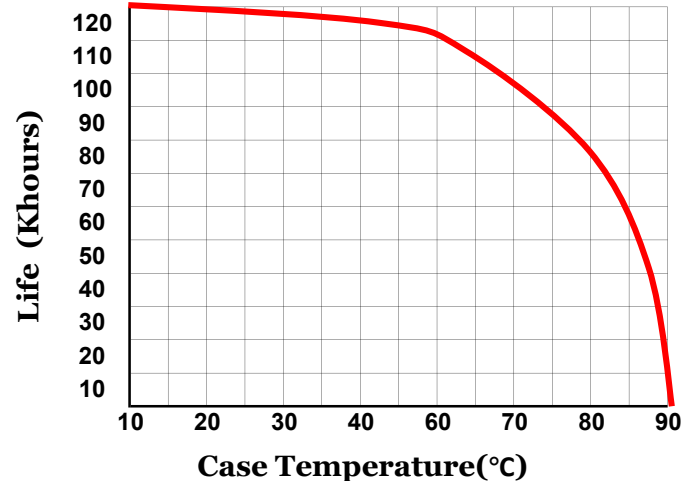
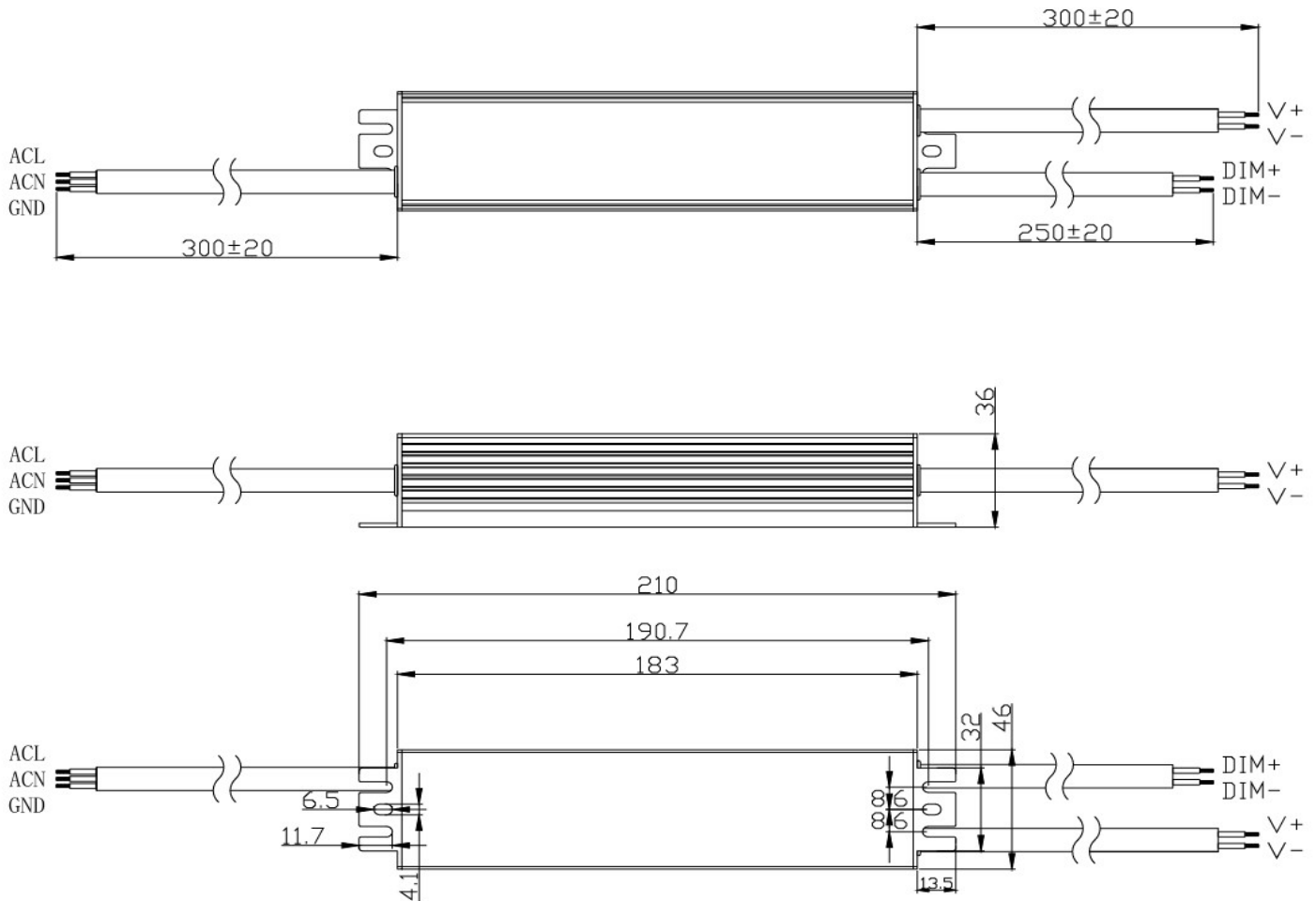


Fig.6 Lifespan VS Case Temperature



MECHANICAL SPECIFICATION(Unit: mm)



NOTE

Input Wire	BROWN: L ; BLUE: N ; Global certified wire: SJOW, HO5RN-F/YZW/PNCTF 3*17AWG 105°C 3*1.0mm, YELLOW&GREEN:
Output Wire	RED:V+ ;BLACK:V- Global certified wire: SJOW, HO5RN-F/ZW/PNCTF 2*17AWG 105 'C 2*1.0mm
Grounding wire	YELLOW&GREEN:Ground Wire

PHYSICAL PICTURES OF PRODUCTS



PRECAUTIONS:

When the dimming cable is not in use, insulate and waterproof it.
 It is suitable for transportation by vehicles, ships and airplanes. During transportation, it should be sheltered, sunscreen and loaded and unloaded in a civilized way.
 Product storage shall comply with the provisions of GB3873-83.
 Products with a storage period of more than 1 year should be re-inspected and can only be used after qualifying.
 The product complies with the EU RoHS Directive (2011/65/EU) and the European Parliament's amendments 2015/863/EU.