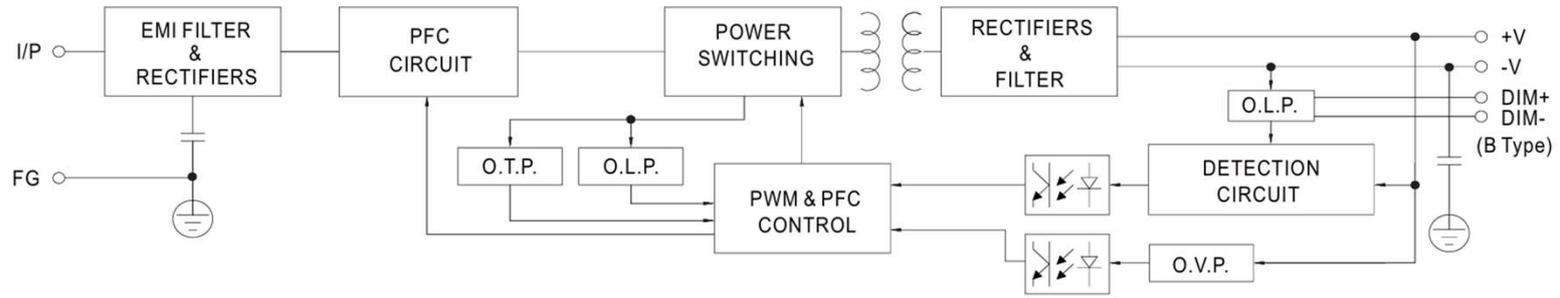


※ SPECIFICATION

MODEL	TLG-80V-12A	TLG-80V-24A	TLG-80V-36A	TLG-80V-42A	TLG-80V-54A	
INPUT	Voltage Range	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	85.00%	87.00%	88.00%	90.00%	91.00%
	AC Current	0.7A/ 115VAC / 0.35A/230VAC / 0.3A/277VAC				
	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	<1mA / 277VAC				
OUTPUT	DC voltage	12VDC	24VDC	36VDC	42VDC	54VDC
	Output rated current	8-12V	14.4-24VA	21.6-36VA	25.2-42A	32.4-54A
	Rated power	80W	80W	80.25W	80.25W	80.25W
	Ripple & Noise	120mVp-p	150mVp-p	200mVp-p	300mVp-p	300mVp-p
	Voltage adjustment	10.5-14V	22-27V	33-40V	40-46V	49-58V
	Current adjustment	1.5-2.5A	0.75-1.25A	0.5-0.84A	0.4-0.72A	0.3-0.56A
	Voltage accuracy	\pm 2.0%	\pm 1.0%	\pm 1.0%	\pm 1.0%	\pm 1.0%
	Linear adjustment rate	\pm 1.0%	\pm 1.0%	\pm 1.0%	\pm 1.0%	\pm 1.0%
	Load regulation ratio	\pm 1.5%	\pm 1.5%	\pm 1.5%	\pm 1.5%	\pm 1.5%
	Start, rise time	800ms,80ms/115VAC, 500ms,50ms/230VAC@full load				
	Hold time (typ.)	30ms/115VAC, 230VAC				
PROTECTION	Over Current	95-110%, constant current limit, automatic recovery after abnormal load conditions are removed				
	Over Voltage Protection	16-18V	28-35V	41-49V	48-58V	59-68V
	Short circuit Protection	Hiccup mode, which can be automatically restored after the abnormal load condition is removed				
	Over Temperature	Turn off output voltage, restart recovery				
ENVIRONMENT	Working Temp	Tcase=-40°C...+70°C				
	Max. Case Temp	Tcase= +90°C				
	Working Humidity	20-95% RH,No condensation				
	Storage Temp	-40...+80°C, 10...95% RH,No condensation				
	Vibration	10-500Hz,2G10min./1cycle,60min.eachalongX,Y,Zaxes				
SAFETY & EMC	Safety Standards	Conform UL8750(type"TL"), CSA C22.2 No. 250.0-08, BS EN/EN/AS/NZS 61347-1, BS EN/EN/AS/NZS 61347-2-13, independent, GB19510.1, GB19510.14, EAC TPTC 004, KC61347-1, IP67				
	Withstand Voltage	I/P-O/P:3.75KVAC I/P-FG:2.0KVAC O/P-FG:1.5KVAC				
	Insulation impedance	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH				
	Electromagnetic Compatibility	Conform BS EN/EN55015, BS EN/EN61000-3-2 Class C (@Load>60%); BS EN/EN61000-3-3,GB/T 17743, GB17625.1, EAC TPTC 020				
	Electromagnetic compatibility immunity	Conform BS EN/EN61000-4-2,3,4,5,6,8,11; BS EN/EN61547,Light industry standards (Surge immunity: wire-to-ground4KV,Line-to-line:2KV), EAC TPTC 020				
OTHERS	MTBF	>3000K hrs. MIL-HDBK-217F (25°C)				
	Dimension	(L) 180 mm*(W) 62 mm*(H) 36 mm				
NOTE	<p>1: Please refer to "LED Module Driving Method".</p> <p>2: Ripple and noise measurement method: Use a 12 "twisted pair, and the terminals must be connected in parallel with 0.1 uf and 47uf capacitors, and measure at 20MHZ bandwidth.</p> <p>3: Type B only adjustable (through internal potential adjustment).</p> <p>4: Accuracy: including setting error, linear adjustment rate, and load adjustment rate.</p> <p>5: Unless otherwise specified, all specifications are measured at 230VAC input, rated load, and 25 °C ambient temperature.</p> <p>6: The power supply is regarded as a component used in combination with the terminal equipment. Because the EMC is affected by the entire device, the terminal equipment manufacturer needs to re-confirm the EMC of the entire device.</p>					

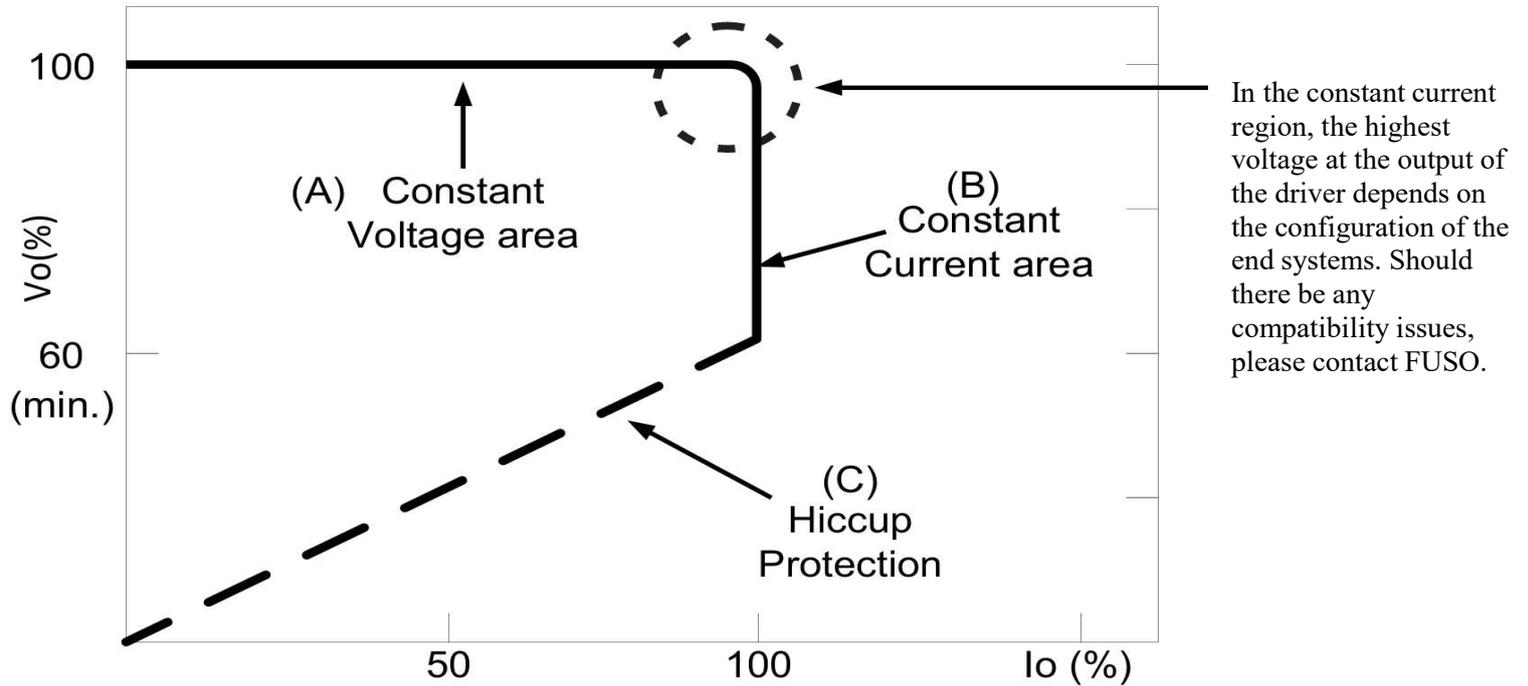
※ **BLOCK DIAGRAM**

Oscillation frequency 100KHZ



※ **LED DRIVING MODE**

This series is able to work in either Constant Current mode (a direct drive way) or Constant Voltage mode (usually through additional DC/DC driver) to drive the LEDs



Typical output current normalized by rated current (%)

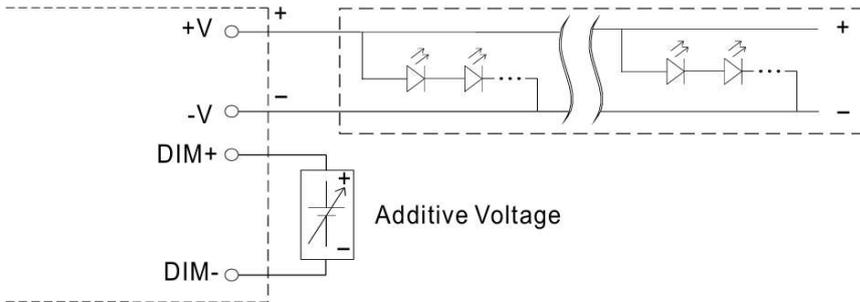
※ **DIMMING OPERATION**



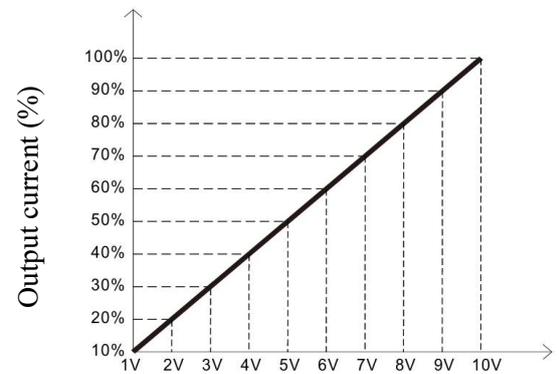
※ **3 in 1 dimming function (for A/B-Type)**

- * Output constant current level can be adjusted by applying one of the three methodologies between DIM+ and DIM-: 1 ~ 10VDC, or 10V PWM signal or resistance.
- * Direct connecting to LEDs is suggested. It is not suitable to be used with additional drivers.
- * Dimming source current from power supply: $100\mu\text{A}$ (typ).

※ **Applying additive 1~10VDC**

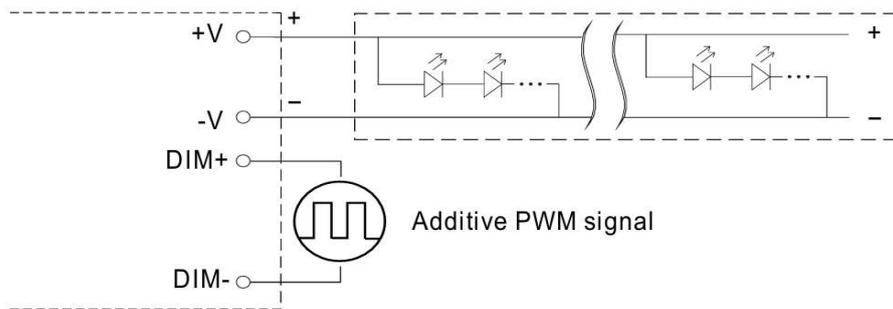


DO NOT connect "DIM- to -V

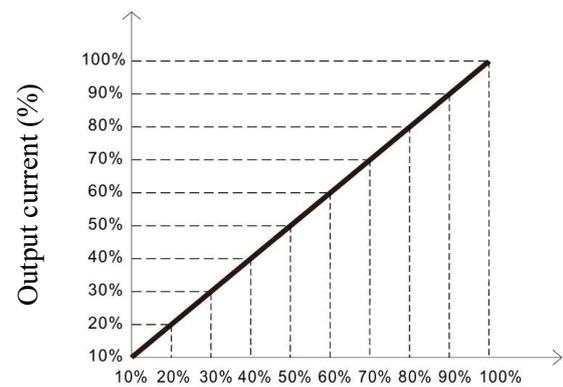


Dimming input: Additive voltage

※ **Applying additive 10V PWM signal (frequency range 100Hz ~ 3KHz):**

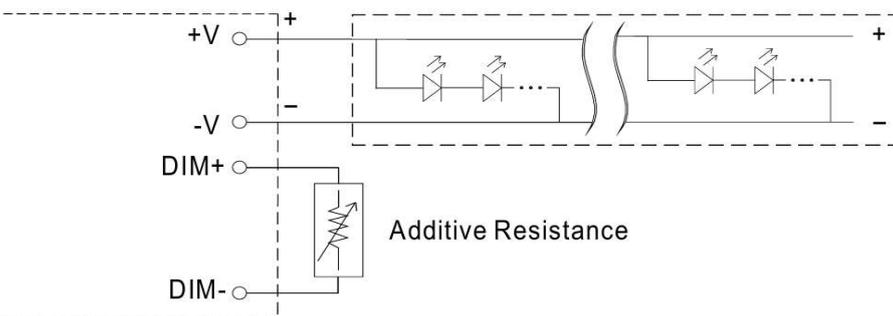


DO NOT connect "DIM- to -V

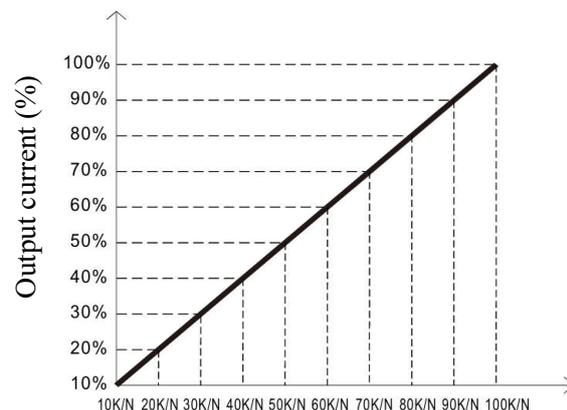


Duty cycle of additive 10V PWM signal dimming

※ **Applying additive resistance:**

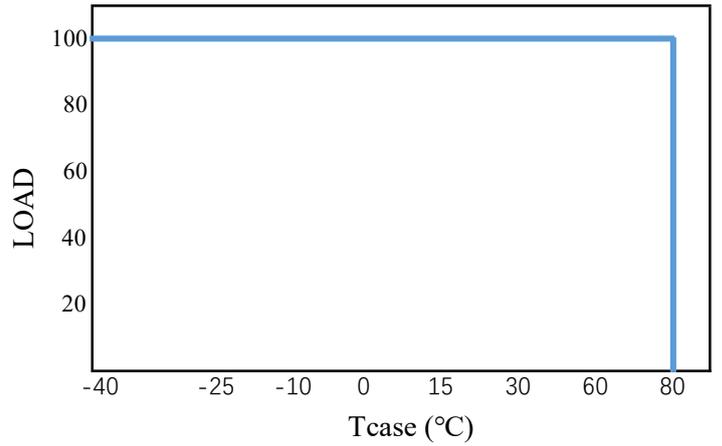
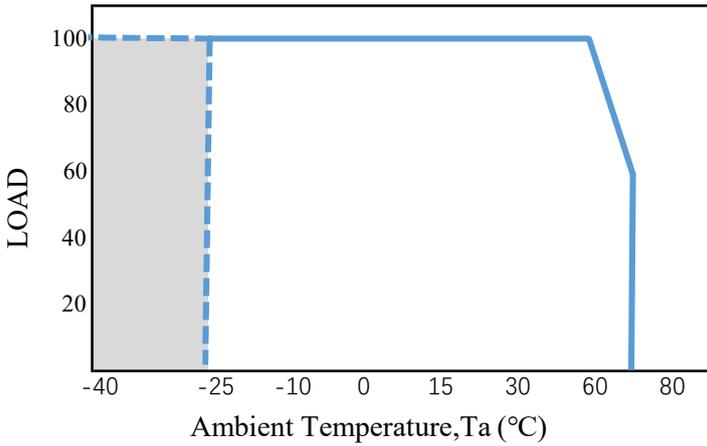


DO NOT connect "DIM- to -V

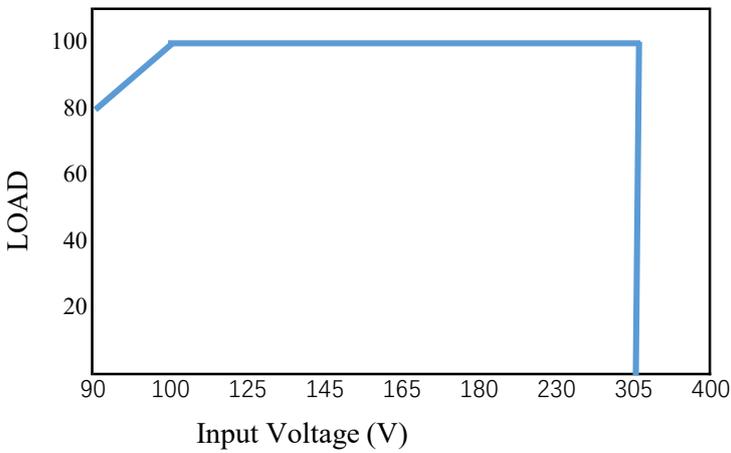


Dimming input: Additive

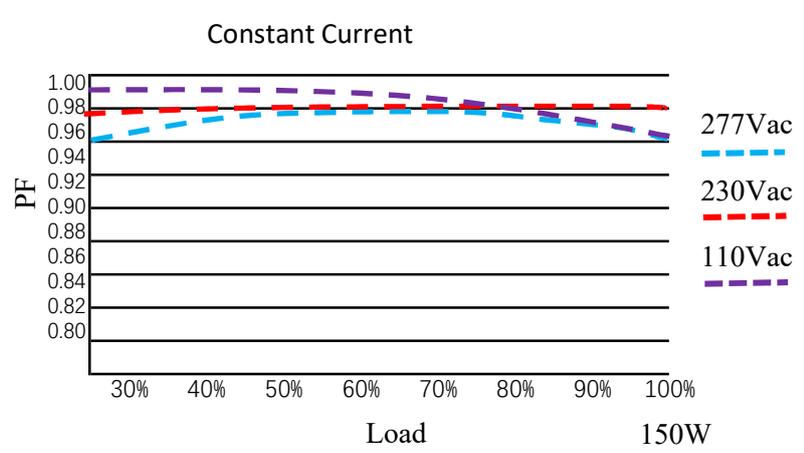
※ **OUTPUT LOAD vs TEMPERATURE(Note.10)**



※ **STATIC CHARACTERISTICS**

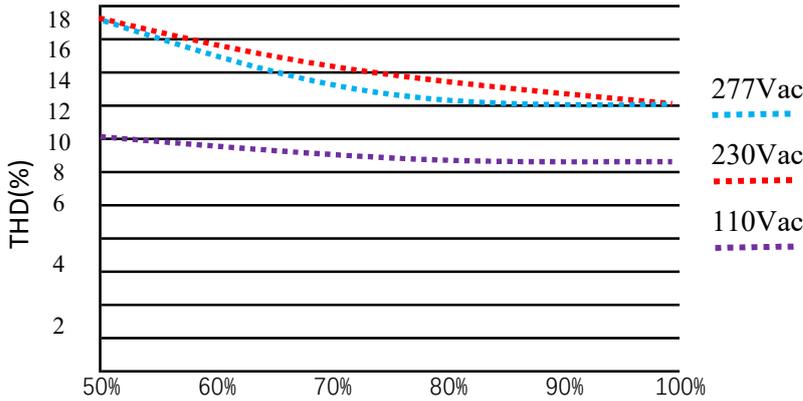


※ **POWER FACTOR(PF) CHARACTERISTIC**



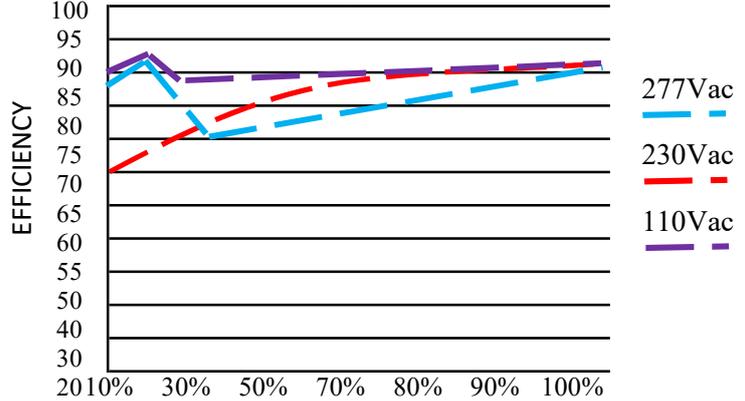
※ **TOTAL HARMONIC DISTORTION (THD)**

48V Model, Tcase at 70°C

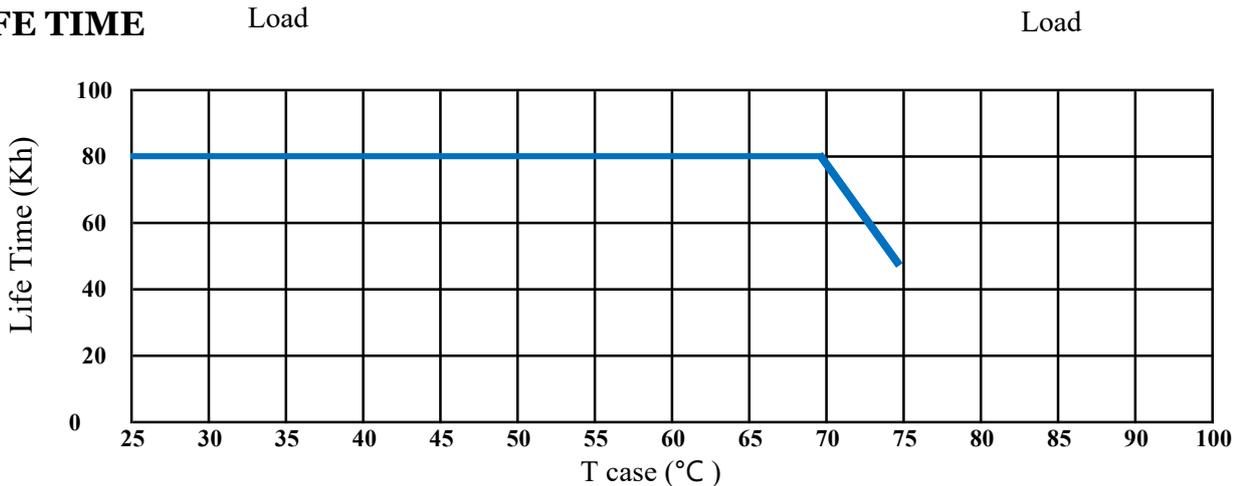


※ **EFFICIENCY vs LOAD**

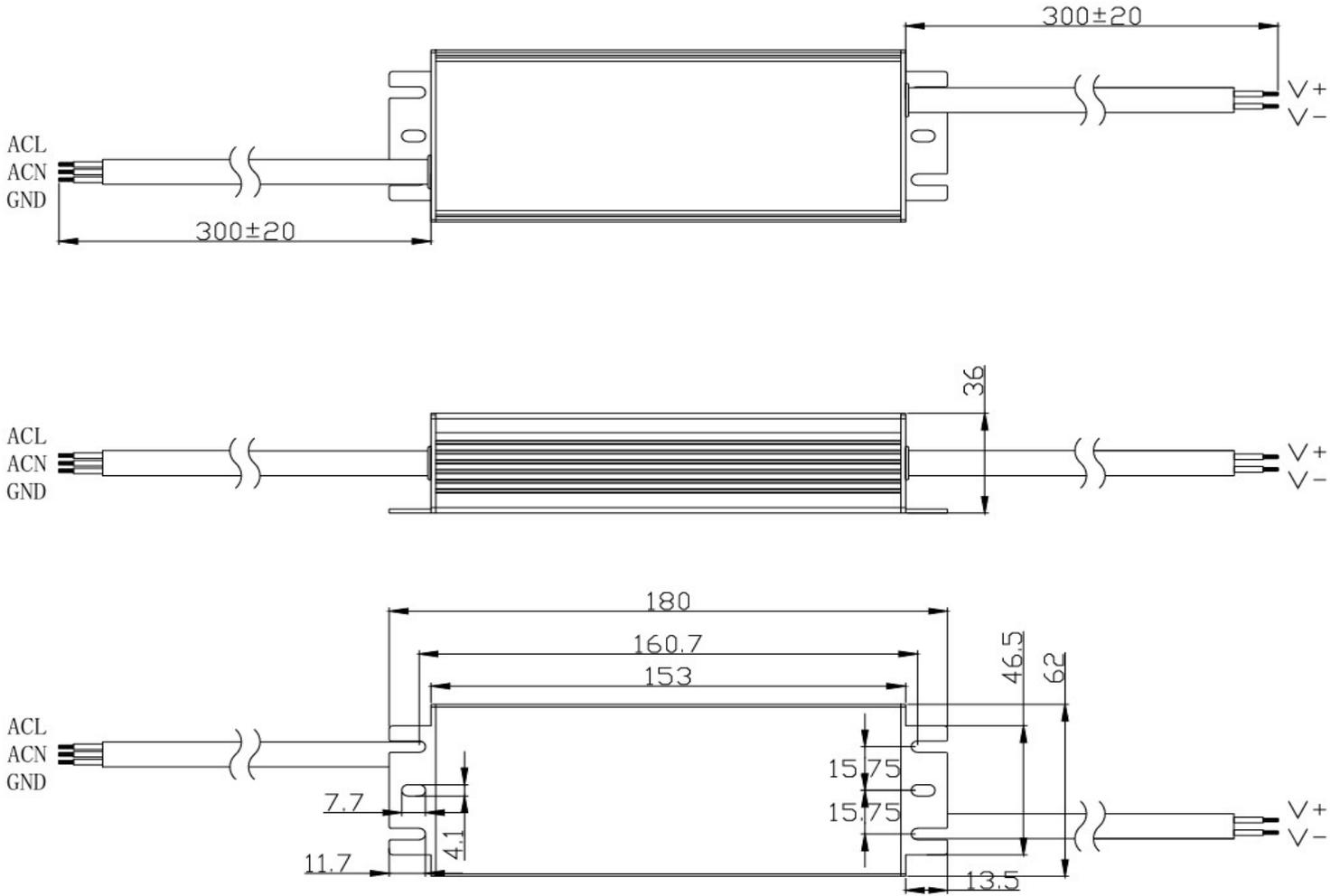
48V Model, Tcase at 70°C



※ **LIFE TIME**



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.