

HP60 - 5 in 1 Dimmable Series

60W Constant Voltage LED Drivers
Triac/0-10v/1-10v/Potentiometer/10V PWM



Features:

- Input Voltage: 100-240V
- Load: 0.01-100%
- High Efficiency: up to 80%
- · Flicker-free ERP
- Protection: Short Circuit/Over Loading/Over Temperature
- Build in active PFC, typical power factor >0.95
- 3 years warranty



Model No	Power	Output Voltage	Output Current	Weight	Size (L*W*H)	Full Carton Packing
HP60-24	60W	24V	2.5A	400g	212*56*24mm	20PCS/CTN

	Input Voltage:	220-240VAC		
	Input Frequency:	50/60Hz		
	Power Factor (Typ.) @ full load	0.95@277VAC		
Input	THD (Type.) @ full load	<20% @277VAC		
	Efficiency (Type.) @ full load	24V 86%@277Vac		
	Inrush Current (Typ.)	15A, 50%, 660us @277Vac		
	Leakage Current	<0.50mA		
	DC Voltage:	24V		
	Rated Current:	2.5A		
Output	Rated Power:	60W		
Output	Voltage Tolerance:	±0.5V		
	Voltage Regulation:	±0.5%		
	Load Regulation:	±1%		
	Short Circuit	Hiccup mode, recovers automatically after fault condition is removed		
Protection	Over Loading	≤120%		
Trotection	Over temperature	100°C±10°C,Shut down o/p voltage, recover automatically after temperature goes down.		
	Working TEMP.	-40~+60°C (see below derating curve)		
	Working Humidity	20~90%RH, non-condensing		
Environment	Storage TEMP. Humidity	-40~+80°C, 10~95%RH		
	TEMP .co efficient	±0.03%/°C (0~50°C)		
	Vibration	10~500Hz, 5G 10min./1 cycle,period for 60min. each along X,Y,Z axes		

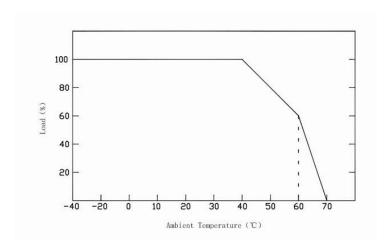


	Safety standards	UL8750+UL1310			
Safety & EMC	Withstand voltage	I/P-O/P:1.88KVAC			
Safety & EMC	Isolation resistance	I/P-O/P:100MΩ/500VDC/25°/70%RH			
	MC EMISSION FCC Part 15 B				
Other	Dimmable	Triac/0-10V/1-10V/10V PWM/Potentiometer			
Other	Ingress Protection	IP20			
Notes	1. All parameters if NOT specially mentioned are measured at 120VAC input, rated load and 25°				
	of ambient temperature.				
	2. To extend the drivers life ,please reduce the loading at lower input voltage.				

Product Advantages:

- Switch to PWM or Voltage regulation output
- Dimming Effect:
 - Voltage Reduce mode: 100%-0.01% dim, stepless dimming, flicker-free
 - PWM dim mode: 100%-0.01% dim, flicker-free
- Triac dim mode: Forward phase & reverse phase, MLV, ELV dim
- Flexible wiring compartment to adjust the AC and DC wiring space
- Title 24 JA8 compliant
- Constant voltage type, fine tune of output voltage
- Super low loading request, works perfectly at 0.001-100% load
- Dimming range: 100%-0.01% Ultra Deep Amplitude
- No Vpeak-peak during driver on/off and dimming, no harm to the LED for long-term using, and slow down the speed of the lumen depreciation
- Switching different output modes, can be compatible with different types of LED lamps
- Compatible with DC-DC design LED fixture, such as MR16, PAR, wall washer, linear lighting, LED strip/type

Derating Curve



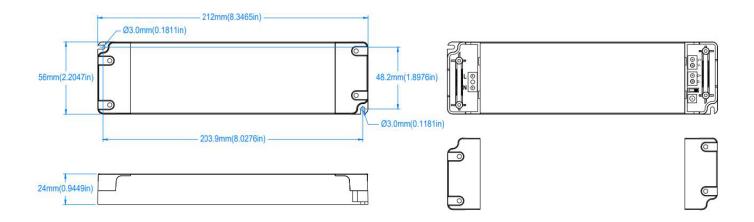
^{*}To extend their life, please refer to the Derating Curve and derate according to the temperature



Mechanical Specification

Unite: mm

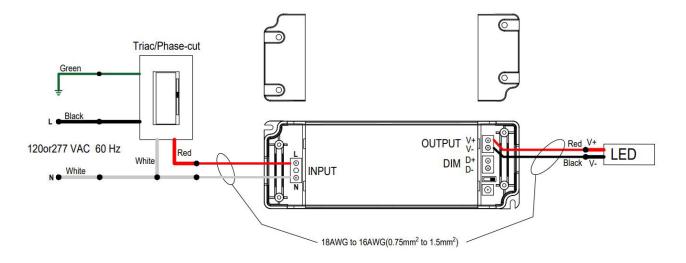
Tolerance: 0.5-2mm



- Input with terminals Live(L) and Neutral(N) wires to be connected AC
- Output LED SEC output Positive (LED+), output negative(LED-). Connected to LED light.
- Output terminals DIM (+) to 0/1-10V dimmer signal(+),DIM (-) white connect to 0/1-10V dimmer signal (-)
- Please DO NOT connect "DIM-" to "LED-", "DIM+" to "LED+", or other incorrect connection
- Please make sure your connect these correctly otherwise your product will not function correctly and could be damaged

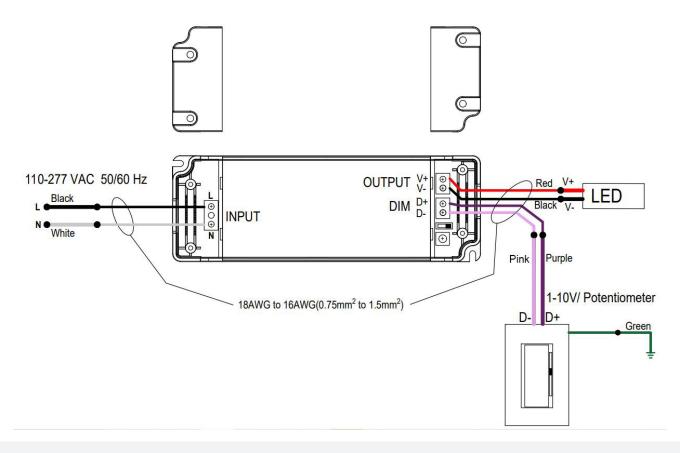
■ Wiring Diagram for Triac/Phase cut dimming

- 1. The Pulse-Width Modulation (PWM) of output voltage can be adjusted through the input terminal of the AC phase line (L) by connection of a phase/Triac dimmer
- 2. Works with forward phase/leading edge, MLV and reverse phase/trailing edge, ELV, TRIAC dimmers
- 3. Please try to use dimmers with power at least 1.5 times as the output power of the driver

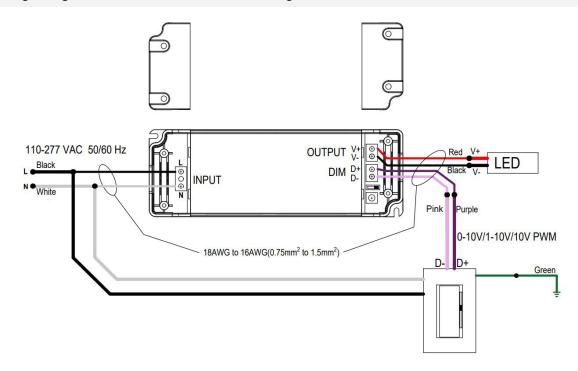




■ Wiring Diagram for 0-10/1-10V Dimming (1)

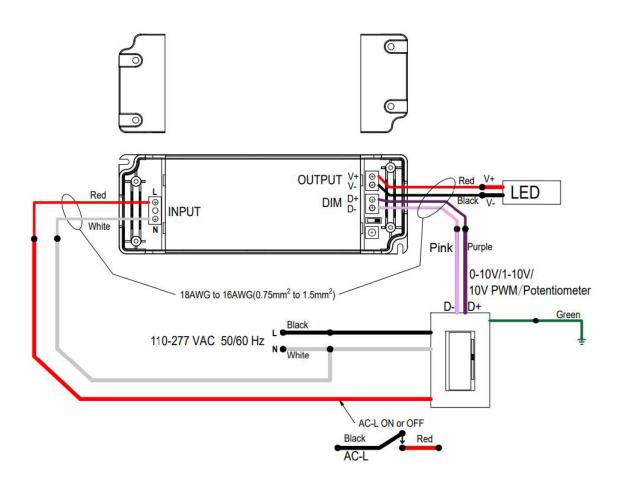


■ Wiring Diagram for 0-10/1-10V Dimming (2)

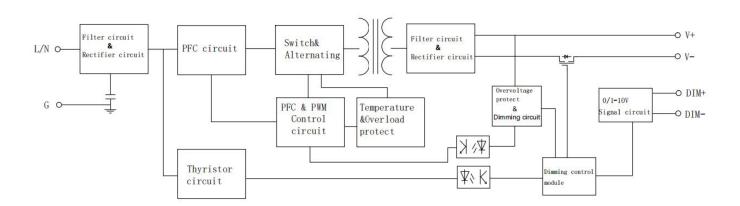




■ Wiring Diagram for 0-10/1-10V Dimming (3)

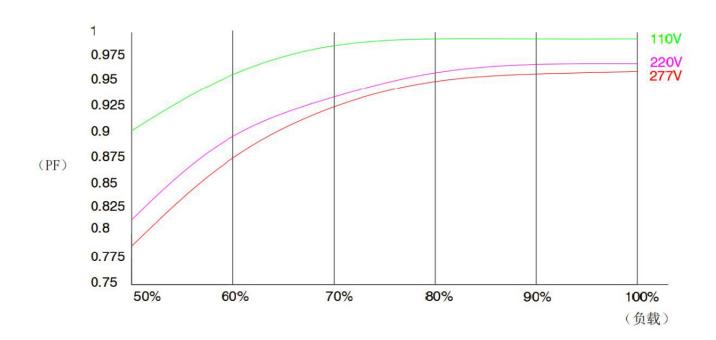


The Topology



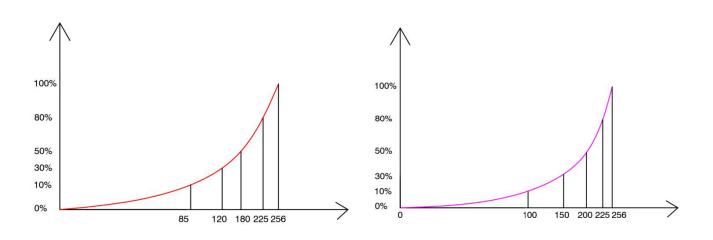


■ PFC load graph



PWM Dimming Curve

VR Dimming Curve





Instructions

- 1. This driver should be installed by a qualified and professional person
- 2. Please make sure this driver is installed with adequate ventilation around it to allow for heat dissipation
- 3. Ensure that wiring is correct before test in order to avoid light and power supply damaage

Power supply operating temperature and life curve

