ACEPOWER-USA

V series-AC phase control dimmable constant voltage LED driver

Features :

AC phase control dimmer input option, 90~126V model or 200~305Vac m
Instant start, light turn on less than 250mSec.
High power factor, PF>0.9 with no inrush current
High efficiency up to 85%
Protections: Short circuit / Overload / Over voltage/Over Temp. Protection
Free air convection cooling
Constant voltage output, for signage or luminaire application
suitable for dry / damp / wet locations
3 years warranty

SPECIFICATION

INPUT	Voltage and Frequency RANGE	Both 90~126Vac(CL model), or 200~277Vac(CH model) 47 ~ 63Hz input model available	
	AC CURRENT	0.7A at 120Vac input,0.35A at 220Vac input, at 72W load condition	
	POWER FACTOR	> 0.9 at full load output,0.95 typical	
	INRUSH CURRENT(Typ.)	less than 1A at 115 or 230V input	
	LEAKAGE CURRENT	<1mA at 240VAC	
	Dimming control options	**B option Standard model without the dimming option**	
		P option models can operate with ELV type AC input phase control switch (note 3)	
		D option models can operate with 0~10V control input from the output side	
		E option models can operate with TTL digital PWM input control signal(from the output side	
MODEL		**VX6012-Y version**	**VX7224-Y version**
		X=L for 120Vac , X=H for 240/277Vac model, Y=B for base model without dimming option, Y=D for 0~10V control model, Y=E for TTL PWM control, Y=P for AC phase control model	
OUTPUT	VOUT (VOLT)	12V	24V
	IOUT (AMP)	5A	3A
	MAX POWER (Watt)	60W	72W
	Voltage tolerance	+/-3%	
	Voltage ADJ. RANGE	10.8~13.2V	
	SETUP, RISE TIME	250mS MAX with an output	
	EFFICIENCY (Typ.)	80~85%	
PROTECTION	OVER CURRENT	CONSTANT CURRENT <120% rated current down to 70% output voltage	
	SHORT CIRCUIT	output shall shut down and automatic restart	
	OVER VOLTAGE	Output Voltage shall NOT exceed 150% of the max rated voltage.	
	OTP(over temperature)	internal over temperature protection circuit will shut down output in case of over temperature condition	
ENVIRONMENT	WORKING TEMP.	nominal -20 to +50 C ambient at full load, linearly derate to 60% of output rating up to 80C	
	WORKING HUMIDITY	5% to 100%, non-condensing	
	STORAGE TEMP., HUMIDITY	-40 to 80 C, 5% to 95%RH	
	TEMP. COEFFICIENT	0.1% per degree C maximum	
	VIBRATION	Frequency 5 to 50 Hz, acceleration ±7.35 M/(S*S), direction X,Y and Z Axis	
SAFETY & EMC	SAFETY STANDARDS	UL pending FOR SPECUALTY POWER SUPPLY with class 2 output	
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC	
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25C / 70% RH	
	EMI CONDUCTION & RADIATION	Meet FCC Part 15 Class B, CISPR22 Class B	
	HARMONIC CURRENT	Compliance to EN61000-3-2 Class A ; EN61000-3-3	
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11.	
Dimming control	**Phase control dimming option Y=P Model**	**Output voltage PWM dutiy cycle calcluated by Microporcessor using the phase controlled AC input for dimming of the LED. No extra control wire needed (ELV type phase control dimmer only)**	
	0~10V control dimming option Y=D Model	**Output voltage PWM dutiy cycle (at ~1KHz) controlled by the 0-10V sink type controls dimmer as specified in IEC 60929 Annex E(note 3, 4) or a external 100K variable resister**	
	TTL PWM control Y=E Model	**Output voltage PWM dutiy cycle controlled by external TTL PWM digital signal (100Hz~ 5KHz). When the input signal is active high the output is inhibited.**	
OTHERS	MTBF	>100K hours, MIL-HDBK217E at 25 degrees C ambient.	
	DIMENSION	163mm X 41mm X 30 mm (6.4" X1.625" X 1.2") max	
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25 of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. **For 0~10V PWM control dimming** 3 The external control signal source connected to the -D models purple and gray control wires, should have the capability to sink a minimum of 10mA for multiple power supply connected together. A single module requires a minimum sink current of 250uA 4. In IEC standard for current sink controls - Standard 60929 Annex E. it requires that the ballast (or driver) provides full light output when the control voltage is 10 Volts (or above). As the control voltage is reduced by the control, the light level is reduced. At a control voltage of 1 volt, the ballast (driver) provides its minimum light level. Any voltage less than 1 volt is defined as minimum. Some drivers' minimum is off, while other drivers' minimum is the lowest light level of the driver. It is important to understand what minimum is for a particular driver. For drivers that do not go to off at minimum, a separate relay or switching device is required. Our SDVN min dimming level can be factory set to what customer required		