Model: GP-CVM300P-xxVH(300W/230V)

300W Constant Voltage LED Driver with Triac Dimming

■ Features

- AC phase-cut dimming
- Input range from 200VAC to 264VAC.
- Constant voltage mode.
- Active PFC design.
- Protections: OVP / OCP / SCP / OTP.
- Surge protection with 4KV/2KV.
- Work with leading edge and trailing edge TRIAC dimmers.
- Fully insulated case with IP67 rated.
- Cooling by free air convection (Metal Housing).
- No-load power consumption < 0.5W at 230VAC.
- Suitable for LED strip, signage, light box and neon flex.
- High efficiency up to 92%

■ Approvals

CE SELV IP67

■ Size

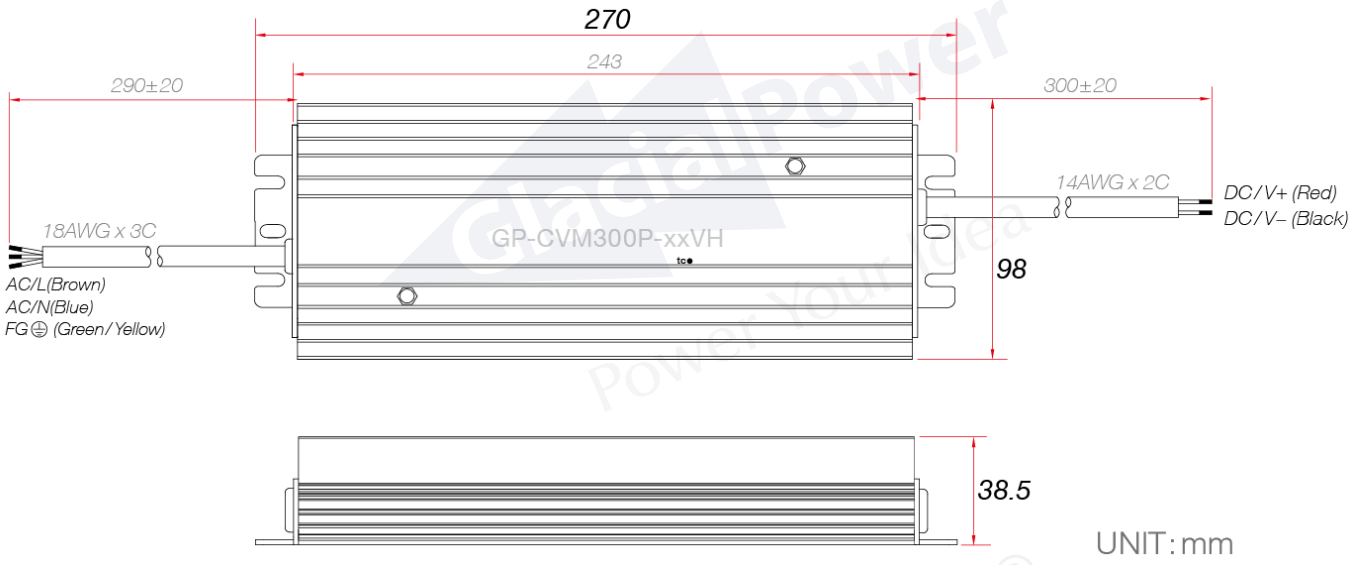
270 x 98 x 38.5mm (L x W x H)

■ Specifications

Model No.		GP-CVM300P-12VH	GP-CVM300P-24VH	GP-CVM300P-36VH	GP-CVM300P-48VH
Output	DC Voltage	12V	24V	36V	48V
	Rated Current	20A	12.5A	8.3A	6.25A
	Rated Power	240W	300W	298.8W	300W
	Ripple &Noise(Max.)note.2	240mV	350mV	400mV	500mV
	Efficiency (Typ.)note.1	90.5%	91.5%	91.5%	92%
	Voltage Tolerance note.3	± 5%	± 5%	± 5%	± 5%
	Dimming Range	3%~100%			
	Minimum Load	100W			
	PWM Dimming	> 1600Hz			
	Set up Time (Max.)	0.5S / 230VAC at full load			
Input	Rated Voltage	220~240VAC			
	Voltage Range	200~264VAC			
	Frequency Range	50/60 Hz			
	AC Current (Typ.)	1.7A at 230VAC			
	Power Factor	> 0.94 at 230VAC with full load.			
	Inrush Current (Typ.)	Cold Start 50A (Td=1300us measured at 50% Ipeak) at 230VAC			
	Max. Number of PSUs on Circuit Breaker	B type : 1 unit (10A) / 2 units (16A) / 3 units (25A), C type : 2 units (10A) / 3 units (16A) / 5 units (25A), D type : 6 units (16A) / 10 units (25A) at 230VAC			
	Leakage Current(Typ.)	<1mA / 230VAC			
	No-load power consumption	< 0.5W at 230VAC (0.45W Typ.)			
Protections	Over Voltage	13V~19V	26V~38V	38V~50V	50V~65V
		Type:Hiccup mode (Auto recover after fault condition disappeared).			
	Over Current	105~180% rated current, Type: Latch Off(re-power on to recover).			
	Over Temperature	95°C±10%,Type: Latch Off (re-power on to recover).			
	Short Circuit	Type: Latch Off(re-power on to recover).			

Environment	Operation Temp.	-30°C ~ 50°C (Refer to output load derating curve)
	Operation Humidity	20% ~ 90% RH non-condensing.
	Storage Temp.	-40 ~ +80°C
	Storage Humidity	10% ~ 90% RH
	Vibration	10~500 Hz, 2G 10 min./1 cycle, period for 60 min. each along X, Y, Z axes.
Safety&EMC	Safety Standards	EN61347-1,EN61347-2-13, independent. ,IP67 Approved.
	Withstand Voltage	I/P - O/P : 3.75K VAC I/P-FG:1.88KVAC O/P-FG:0.5KVAC
	Isolation Resistance	I/P-O/P,I/P-FG : 100M ohms , O/P-FG : 4M ohms / 500VDC at 25°C
	EMI Conduction & Radiation	Compliance to EN55015
	Harmonic Current	Compliance to EN61000-3-2 Class C(100% load), EN61000-3-3
	EMS Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547
Others	MTBF	100K hours min. @Ta=25°C
	Dimension (L x W x H)	270 x 98 x 38.5mm ; 1150g/pcs
Note	1. All parameters NOT specially mentioned are measured at230V/50HZ AC input, rated load and 25°C ambient temperature. 2. Ripple & Noise are measured at 20MHZ bandwidth oscilloscope and with0.1uf & 47uf parallel capacitorat 100% duty output. 3. Voltage Tolerance: includes line regulation, load regulation and set-up tolerance. 4. The power supply is considered a component which will beinstalled a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.	

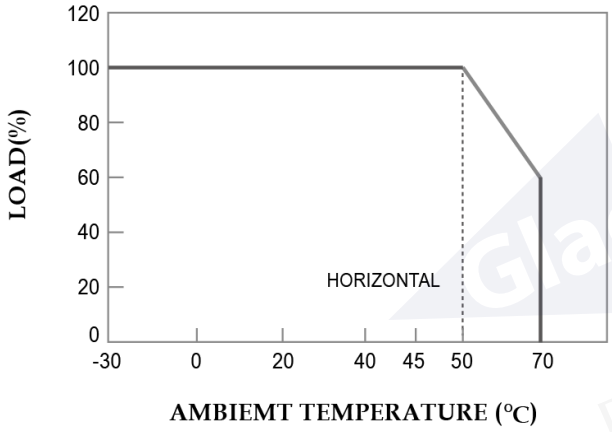
■ Mechanical Specification



■ Dimmer Recommended

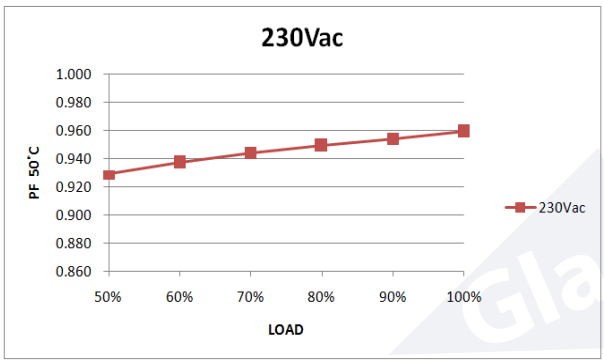
Brand	Parts NO.
BERKER	286710
GIRA	245500

■ Derating Curve



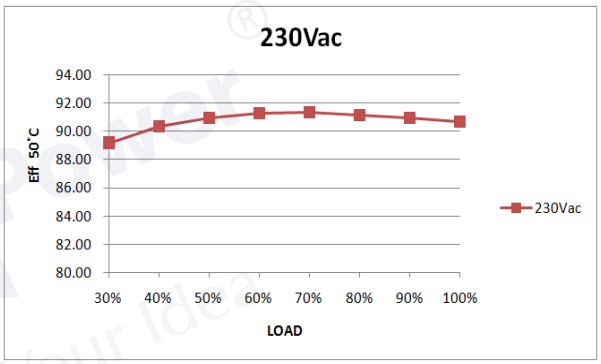
■ Power Factor (PF) Characteristic (※Ta at 50℃)

GP-CVM300P-24VH Model

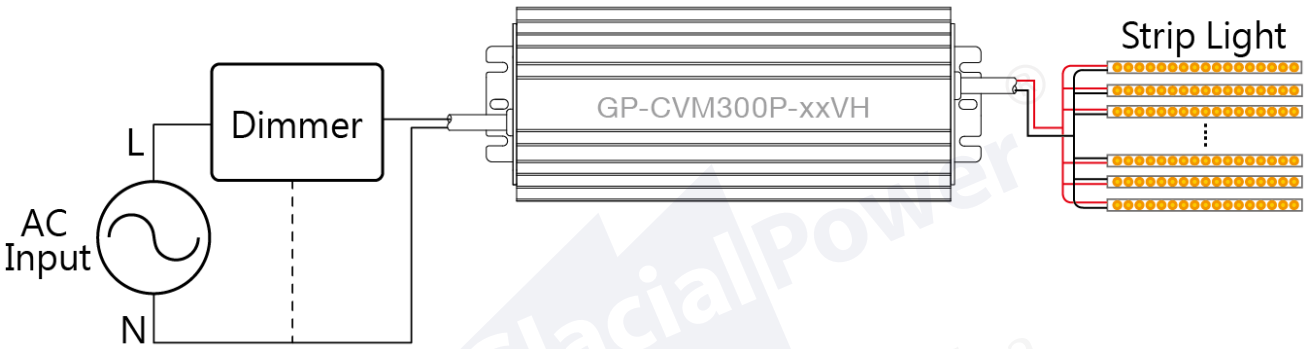


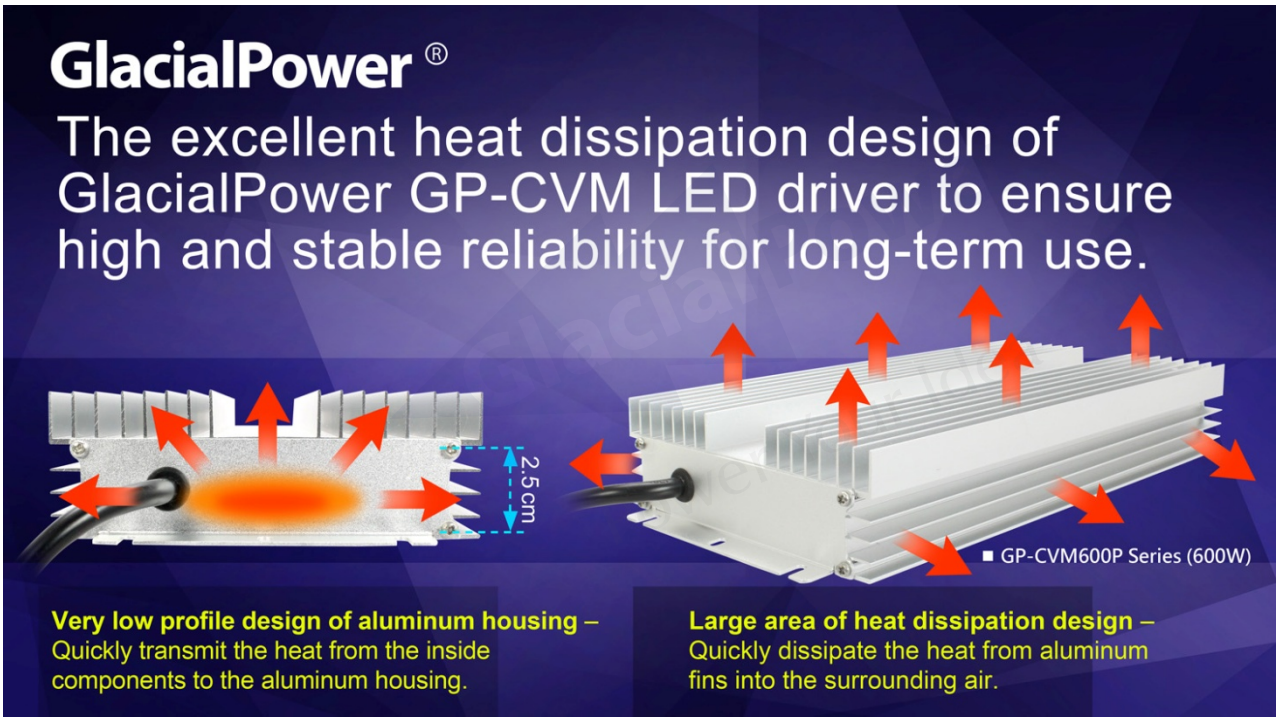
■ Efficiency vs Load (※Ta at 50℃)

GP-CVM300P-24VH Model



■ Wiring Diagram





■ Application