



- Application:Outdoor lighting,Architectural lighting,Decorative lighting,Sign light,and Street lights, etc.
- Approvals:



## Standard:

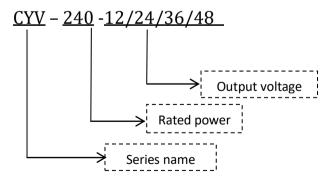
 $\label{lem:en61547} EN61000-4-2,3,4,5,6,8,11\\ GB17625.1\\ EN61000-3-2\\ EN61000-3-3\\ EN55015\\ GB17743\\ GB19510.1\\ 14/EN61347-1, -2-13$ 

# Product Description:

CYV-240 series is 250W waterproof power supply with IP67 high protection level. The input voltage ranges are from 176 to 264Vac. This series of products are designed for high temperature resistance. The working temperature of full load can reach as high as 50  $^{\circ}$ C. It is specially designed for outdoor lighting, indoor and outdoor lighting, and street lamps. Super high efficiency, compact shell design, good heat dissipation, and all-round protection ensure the long-term stability of this series of products.

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#### Product name





Model   CYV-240-12   CYV-240-24   CYV-240-36	CYV-240-48   ≥93%  =800us, power supply
Input	
Frequency	
Input  Frequency range 47~63HZ  Leakage current <a href="color: 10px;">Co.75mA/240VAC</a> Inrush 50A/230VAC (Input 230Vac/50Hz,under 50% Ipeak testing,twidthestart-up in cold state)  No-load/standb y loss <a href="color: 10px;">All to the current start-up in cold state</a> )  No-load/standb y loss	
Input    range	=800us, power supply
Input    Content   Content   Content	=800us, power supply
Current   <0.75mA/240VAC	=800us, power supply
Inrush 50A/230VAC (Input 230Vac/50Hz,under 50% Ipeak testing,twidthstart-up in cold state)  No-load/standb y loss <a block"="" href="https://www.norm.new.norm.new.norm.new.norm.new.norm.new.norm.new.new.new.new.new.new.new.new.new.new&lt;/th&gt;&lt;td&gt;=800us, power supply&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;current start-up in cold state)  No-load/standb y loss  start-up in cold state)  &lt;1W&lt;/th&gt;&lt;td&gt;=800us, power supply&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;No-load/standb&lt;br&gt;y loss &lt;1W&lt;/th&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;y loss &lt;1W&lt;/th&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;  DC voltage   12V   24V   36V&lt;/th&gt;&lt;th&gt;4011&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;th&gt;48V&lt;br&gt;5.3A&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;Power 252W 250.08W 250.2W&lt;/th&gt;&lt;td&gt;254.4W&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;Voltage adjust&lt;/th&gt;&lt;td&gt;27 . 17 . 13&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;range Not adjustable Not adjustable Not adjustable&lt;/th&gt;&lt;td&gt;Not adjustable&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;Ripple and ≤400mVp-p ≤800mVp-p 1080mVp-p&lt;/th&gt;&lt;td&gt;1440mVp-p&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;Output&lt;/th&gt;&lt;td&gt;1440IIIVp-p&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;Start up time 1500ms/100ms (230VAC 100% at full load)&lt;/th&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;Hold up time 8ms/ (230VAC) 100% at full load&lt;/th&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;Linear ±1% ±1% ±1%&lt;/th&gt;&lt;td&gt;±1%&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;adjustment rate&lt;/th&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;Load ±2% ±2% ±2%&lt;/th&gt;&lt;td&gt;±2%&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;adjustment rate&lt;/th&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;Output Voltage&lt;br&gt;Accuracy ±3% ±3% ±3%&lt;/th&gt;&lt;td&gt;±3%&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;Electromagnetic Compliance to:EN61547;EN61000-4-2,3,4,5,6,8,11; (surge immunity&lt;/th&gt;&lt;th&gt;Line-Farth AKV Line-Line&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;tolerance 2KV)&lt;/th&gt;&lt;th&gt;Ellic Earth 4KV, Ellic Ellic&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;EMC Harmonic&lt;/th&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;current Compliance to:GB17625.1;EN61000-3-2 Class A, EN61000-3-3&lt;/th&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;EMI Compliance to:EN55015, GB17743&lt;/th&gt;&lt;th&gt;&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;Safety Compliance to:GB19510.1, .14/EN61347-1, -2-13/IP67&lt;/th&gt;&lt;th&gt;&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;specification&lt;/th&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;Safety Withstand I/P-0/P:3.75KVac/10mA; I/P-CASE:2KVac/10mA; O/P-CASE:1.5KVac&lt;/th&gt;&lt;td&gt;c/10mA 1min for each&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;voltage test 为:1min&lt;/th&gt;&lt;td colspan=2&gt;test 为:1min&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;Insulation I/P-0/P:100M ohms; I/P-Case:100M ohms; O/P-Case:100M ohms&lt;/th&gt;&lt;td&gt;ms&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;Impedance&lt;/th&gt;&lt;th&gt;&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;Over voltage /&lt;/th&gt;&lt;th&gt;&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;Protecti Over load &lt;math&gt;115 \sim 135\%&lt;/math&gt; load(CC limit), After eliminating overload, normal work of restored.&lt;/th&gt;&lt;td&gt;can be automatically&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;Protecti restored.&lt;/th&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;temperature /&lt;/th&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;Power supply protection after output short circuit can automatically&lt;/th&gt;&lt;td&gt;restore output after&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;Short circuit eliminating short circuit&lt;/th&gt;&lt;td&gt;· ·&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;th&gt;&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;Working&lt;/th&gt;&lt;td&gt;RH no condensing&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;temperature and Ta=-40&lt;math&gt;\sim&lt;/math&gt;70°C/TC=-40&lt;math&gt;\sim&lt;/math&gt;90°C (refer to derating curve), 20%&lt;math&gt;\sim&lt;/math&gt;95%&lt;/th&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;temperature and humidity Ta=-40 &lt;math&gt;\sim&lt;/math&gt; 70 &lt;math&gt;^{\circ}&lt;/math&gt;C/TC=-40 &lt;math&gt;\sim&lt;/math&gt; 90 &lt;math&gt;^{\circ}&lt;/math&gt;C (refer to derating curve) , 20% &lt;math&gt;\sim&lt;/math&gt; 95%&lt;/th&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;temperature and humidity Ta=-40&lt;math&gt;\sim&lt;/math&gt;70°C/TC=-40&lt;math&gt;\sim&lt;/math&gt;90°C (refer to derating curve), 20%&lt;math&gt;\sim&lt;/math&gt;95% Storage&lt;/th&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;temperature and humidity  Storage temperature &lt;math&gt;-40^{\circ}\%&lt;/math&gt; &lt;math&gt;-40^{\circ}&lt;/math&gt;&lt;/th&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;math display=">\begin{tabular}{c ccccccccccccccccccccccccccccccccccc</a>	
temperature and humidity  Storage temperature and humidity  Environ ment  Ta=-40 $\sim$ 70 $^{\circ}$ C/TC=-40 $\sim$ 90 $^{\circ}$ C (refer to derating curve), 20% $\sim$ 95%  Ta=-40 $^{\circ}$ C $\sim$ 80 $^{\circ}$ C; 10% $\sim$ 95%RH no condensing and humidity  Vibration  Frequency range 10 $\sim$ 500Hz,acceleration 5G, Each sweep cycle 10	)min.6 sweep cycles along X,
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	)min.6 sweep cycles along X,
temperature and humidity  Storage temperature and humidity  Storage temperature and humidity  Vibration  Ta=-40~70°C/TC=-40~90°C (refer to derating curve), 20%~95% (refer to derating curve),	)min.6 sweep cycles along X,
temperature and humidity  Storage temperature and humidity  Storage temperature and humidity  Vibration  Ta=-40~70°C/TC=-40~90°C (refer to derating curve), 20%~95% refer to der	)min.6 sweep cycles along X,
temperature and humidity  Storage temperature and humidity  Vibration  Shock  Acceleration 20G, Duration 11mS, 3 shocks along X, Y and Z axes  Altitude  Warranty  Ta=-40~70°C/TC=-40~90°C (refer to derating curve), 20%~95%  10%~95%RH no condensing  -40°C~80°C; 10%~95%RH no condensing	)min.6 sweep cycles along X,
temperature and humidity  Storage temperature and humidity  Vibration  Shock  Altitude  Warranty  Itemperature and humidity  Ta=-40~70°C/TC=-40~90°C (refer to derating curve), 20%~95%  10%~95%RH no condensing and humidity  Frequency range 10 ~ 500Hz,acceleration 5G, Each sweep cycle 10 Y and Z axes  Shock  Acceleration 20G, Duration 11mS, 3 shocks along X, Y and Z axes  Altitude  Warranty  IP Level  IP67	)min.6 sweep cycles along X,
temperature and humidity  Storage temperature and humidity  Storage temperature and humidity  Vibration  Frequency range 10 ~ 500Hz,acceleration 5G, Each sweep cycle 10 Y and Z axes  Shock Acceleration 20G, Duration 11mS, 3 shocks along X, Y and Z axes  Altitude  Warranty IP Level  Reliabili  MTBF  25°C:250000Hrs, MIL-217 Method	)min.6 sweep cycles along X,
temperature and humidity Storage temperature and humidity Storage temperature and humidity Vibration Shock Acceleration 20G, Duration 11mS, 3 shocks along X, Y and Z axes Altitude Warranty IP Level Reliabili ty  Ta=-40~70°C/TC=-40~90°C (refer to derating curve), 20%~95% 10%~95%RH no condensing -40°C~80°C; 10%~95%RH n	Omin.6 sweep cycles along X,
temperature and humidity  Storage temperature and humidity  Vibration  Trequency range 10 ~ 500Hz,acceleration 5G, Each sweep cycle 10 Y and Z axes  Shock Acceleration 20G, Duration 11mS, 3 shocks along X, Y and Z axes  Altitude /  Warranty Z years(refer to lifetime diagram)  IP Level IP67  Reliabili ty  Other Size 191.5*56*36mm (L*H*W)	)min.6 sweep cycles along X,
temperature and humidity Storage temperature and humidity Vibration  Shock Acceleration 20G, Duration 11mS, 3 shocks along X, Y and Z axes Altitude Warranty 2 years(refer to lifetime diagram) IP Level IP67  Reliabili ty  Other  Ta=-40~70°C/TC=-40~90°C (refer to derating curve), 20%~95% In a condensing curve), 20%~95%	)min.6 sweep cycles along X,

2

# Remark

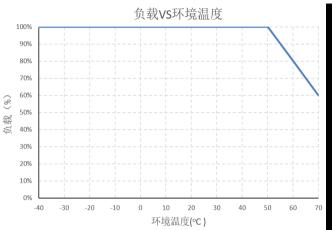
 $^*$ In order to prolong the service life, it is recommended to leave 20% more allowance when configuring the load. For example, if the equipment needs 100W power, the power supply should be not less than 120W.

\*The ripple test method of switching power supply: 20 MHz oscilloscope is used to test the output terminal of power supply. The length of ground wire of oscilloscope probe is not more than 12 mm, and 47 uF electrolytic capacitor and 0.1 uF high frequency capacitor are input into the probe.

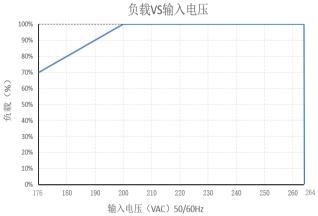
\*All electrical performance tests are performed at 25 C.



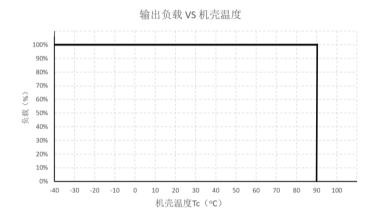
# Load and temperature curve



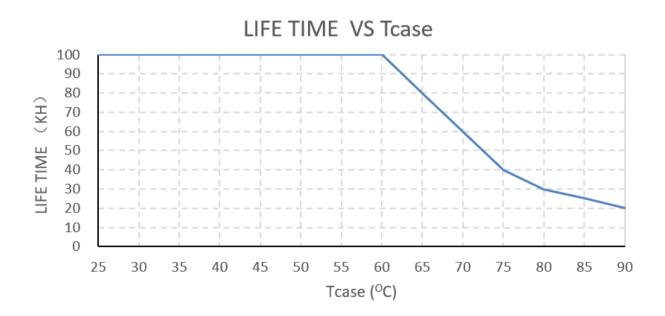
# **Output Load to Input Voltage**



# • Output load to shell temperature

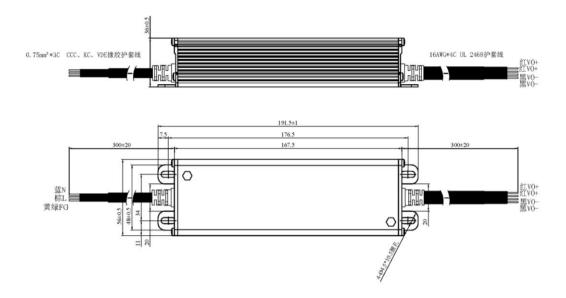


## • LIFETIME





#### Install drawing



#### • Use instructions:

- 1. please follow the installation instructions when use the power supply of
- 2. Before power on test run after installation, please check and proofread the wiring on each terminal, make sure that the input and output, AC and DC, positive and negative, voltage and current values are correct, prevent the occurrence of wrong connection, and avoid damaging the power supply and user equipment.
- 3. Before power on, please use a multimeter to measure whether the live wire, zero wire and ground wire are short circuited, and whether the output terminal is short circuited; it is better to start without load when power on o
- 4. Do not exceed the nominal value of the power supply when using, so as not to affect the reliability of the product. If you need to change the output parameters of the power supply, please consult our technical department before using.
- $5_{\circ}$  In order to ensure the safety of use and reduce interference, please ensure that the grounding terminal is reliably grounded (ground wire please thicker than AWG18#)  $_{\circ}$
- 6. If the power supply fails, please do not repair it without permission. Please contact our customer service department as soon as possible, customer service line: 86-519-85215050.

## Transport, storage:

#### 1. Transport:

The package is suitable for shipping by automobiles, ships, airs, trains, etc. During transportation, it shall be rain proof,loaded and unloaded gently  $_{\circ}$ 

#### 2. **Storage**:

When the product is not in use, it shall be placed in the packing box. The storage environment temperature and relative humidity shall meet the requirements of the product. No corrosive gas or product in the warehouse, and no strong mechanical vibration, impact and strong magnetic field. The packing box shall be padded at least 20cm above the ground, and not be soaked. If the storage time is too long (more than 1 year), it shall be rechecked by professionals before use.