



Features:

- Wide input 90-305Vac(Class I)
- IP67 level
- -40°C-+70°C working temperature(refer to derating curve)
- Surge Protection: Line to Line 4KV, Line to Ground 6KV
- Short circuit/Over load/Over voltage/Over temperature
- Three in one dimming function (dimming can be turned off, isolation design)
- 5 years warranty

Application: Industrial control system, machinery and electrical equipment, electronic instruments, industrial automation, household appliances, etc.

Approval:

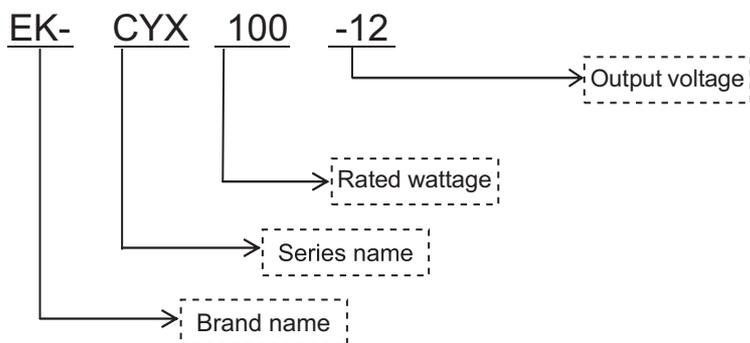


Product description :

EK-CYX-100-12P

series is 100W outside LED driver, the output modes are constant voltage and constant current, wide input range, super high power factor and low THD. This series of products are designed for high temperature resistance, the working temperature of full load can reach as high as 70°C. It is specially designed for outdoor lighting, street lighting, tunnel lighting, high pole lamps, stadium lamps and other LED lighting etc. The adjustable function of output current is beneficial to the flexible design of LED lamp, and the versatility is greatly enhanced. Super high efficiency, compact design, good heat dissipation, and all-round protection ensure the long-term stability of this series of products.

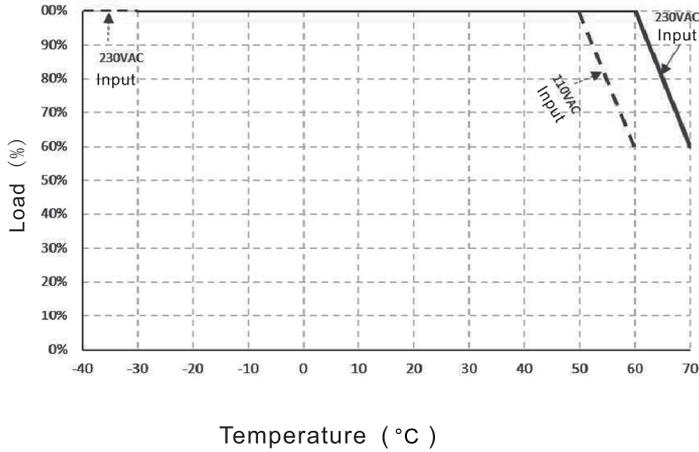
Mode Encoding



SPECIFICATION

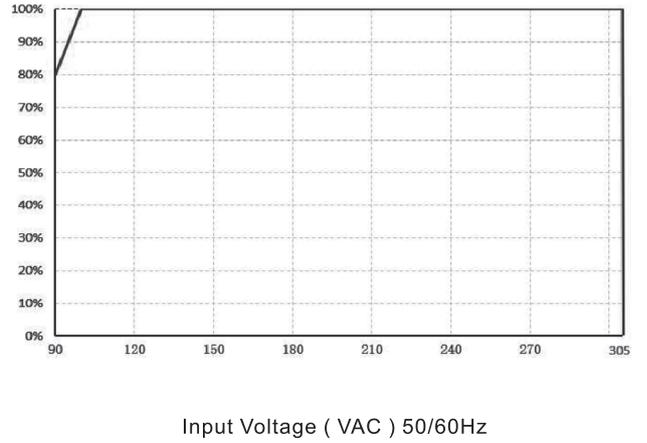
| Model | | EK-CYX-100-12P |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Input | Voltage/Frequency range | 90~305VAC / 47~63HZ |
| | Efficiency | 91% |
| | Input current | 115VAC/1.15A, 230VAC/0.55A, 277VAC/0.5A |
| | Leakage current | <0.75mA/277VAC |
| | Inrush current | 40A/220VAC (Input 230VAC/50Hz, under 50% Ipeak testing, twidth=300us, power supply start-up in cold state) |
| | Max qty of Circuit Breakers | Use 16A breaker, input 230VAC on the same model power supply, 7 units (circuit breaker of type B) / 12 units (circuit breaker of type C) |
| | PF | PF \geq 0.98/110VAC full load, PF \geq 0.98/230VAC full load, or PF \geq 0.95/277VAC full load PF \geq 0.94 (\geq 50% Load 110VAC/230VAC; \geq 75% Load @ 277VAC) |
| | THD | THD<10% (\geq 50% Load @ 110VAC / 230VAC ; \geq 75% Load @ 277VAC) |
| | No-load/standby loss | <0.5W (Dimming models could dimming to turn off output) |
| Output | DC voltage | 12V |
| | Rated current | 8.3A |
| | Voltage adjust range | Not adjustable |
| | Rated current | \leq 200mVp-p |
| | Ripple and noise | 500ms/100ms (220VAC@ full load) ,1000ms/100ms (110VAC 80% load) |
| | Start up time | 8ms/ (220VAC) @ full load |
| | Hold up time | \pm 0.5% |
| | Linear adjustment rate | \pm 2% |
| | Load adjustment rate | \pm 3% |
| EMC | Electromagnetic tolerance | EN61547; EN61000-4-2,3,4,5,6,8,11; (surge immunity Line-Earth 6KV, Line-Line 4KV) |
| | Harmonic current | GB17625.1; EN61000-3-2 Class C. EN61000-3-3 |
| | EMI | EN55015, GB17743 |
| Safety | Safety specification | GB19510.1, 14 / EN61347-1, -2-13/EN62384 / UL8750 / IP67 |
| | Withstand voltage | I/P-O/P: 3.75KVac/10mA; I/P-CASE: 2KVac/10mA; O/P-CASE: 1.5KVac / 10mA Each testing time: 1min |
| | Insulation impedance | I/P-O/P: 100M ohms; I/P-Case: 100M ohms; O/P-Case: 100M ohms |
| Protections | Over voltage | 120~140% output voltage over limit, shut off output voltage, recovery after re-start |
| | Over load | 110~150% load hiccup mode, auto recovery after over load removed |
| | Over temperature | Shut off output voltage, recovery after re-start |
| | Short circuit | Hiccup mode, recovers automatically after fault condition removed |
| Environment | Working condition | Ta=-40~70°C / Tc=-40~90°C, 20%~95% RH no condensing |
| | Storage condition | -40°C~ 80°C; 10%~95% RH no condensing |
| | Vibration | Frequency range 10~500Hz, acceleration 5G. Each sweep cycle 10min. 6 sweep cycles along X, Y and Z axes |
| | Shock | Acceleration 20G, Duration 11ms. 3 shocks along X, Y and Z axes |
| | Elevation | / |
| | Warranty | 5 years |
| | IP level | IP67 |
| Reliability | MTBF | <25°C environment temperature:250000Hrs, MIL-217 Method |
| Other requirements | Size | 148*66*35.5mm (L*W*H) |
| | Package | 0.62Kgs/pc, 20pcs/ctn, 14Kgs/ctn |
| | Cooling method | Free air <input type="checkbox"/> Fan |
| Remarks | <p>*As not specifically stated, all parameters were measured at input voltage 230 VAC, rated current and environment temperature under 25°C.</p> <p>*For longer service life, 20% extra margin is recommended when configuring the load. For example: equipment requires 100W, then choose a power supply no less than 120W.</p> <p>*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.</p> <p>*All electrical performance tests are performed at 25°C.</p> | |

• **Load to Temperature Curve**



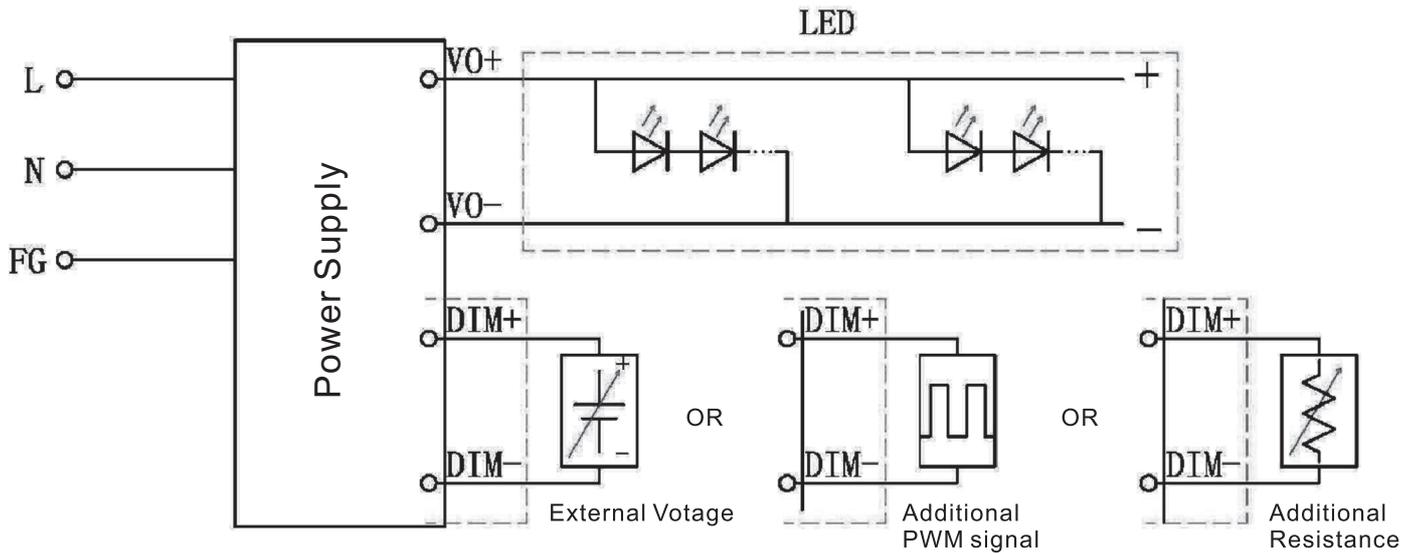
Load VS Ambient Temperature

• **Output Load to Input Voltage**



Load VS Input Voltage

• **Below is Installation sketch :**



● Mechanism size and wire materials

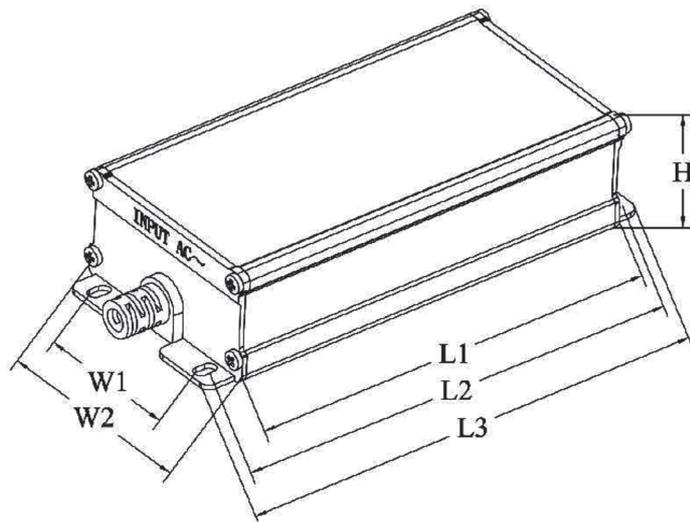
Remarks:

Overall size $L3 \times W2 \times H$: 148x66x35.5mm

Shell length $L1$: 131mm

Installation hole width $W1$: 45.8mm

Installation hole length $L2$: 138mm



● Product installation and Instructions:

- 1、 When installing, please follow the mechanical size and installation method.
- 2、 Before commissioning, please check and proofread the connections on the terminals to make sure that the input and output, AC and DC, positive and negative poles, voltage and current values are correct, to prevent the occurrence of reverse connection errors and to avoid damage to power supply and user equipment.
- 3、 Please use the multimeter to measure whether the fire line, zero line and ground line are short-circuited and whether the output terminal is short-circuited before power is turned on.
- 4、 Do not exceed the nominal value of the power supply in use, so as to avoid affecting the reliability of the product. If you need to change the output parameters of the power supply, please consult the technical department of our company before using the power supply to ensure the effectiveness and reliability of the use.
- 5、 To ensure safety and reduce interference, ensure reliable grounding of grounding end (grounding wire > AWG18#).
- 6、 If the power supply fails, please do not repair it without authorization. Please contact our customer service department as soon as possible. Customer service line: + 55 21 3553-4736

● Transport and storage:

1、 Transport:

This packing is suitable for transportation of automobiles, ships, airplanes and trains. It should be rainproof and handled civilly during transportation.

2、 Storage:

When the product is not in use, it should be placed in the packing box. The storage environment temperature and relative humidity should meet the requirements of the product. There should be no corrosive gas or products in the warehouse, and there should be no strong mechanical vibration, impact and strong magnetic field. Packing box should be at least 20 cm high from the ground, do not allow water immersion.

If the storage time is too long (more than one year), it should be re-examined by professionals before it can be used.