



# OMS-EP400F



MADE IN KOREA

## SPECIFICATION

Model		OMS-EP400F-12V	OMS-EP400F-24V
Input	Voltage Range	200 ~ 240Vac	200 ~ 240Vac
	Input Power	430W	430W
	Frequency Range	50Hz ~ 60Hz	50Hz ~ 60Hz
	Efficiency(typ)	≥ 93%	≥ 93%
	AC current(typ)	4.0A	4.0A
	Inrush current	50A	50A
	Power Factor	0.6	0.6
Output	DC Voltage	12V	24V
	Rated Current	33A	16.5A
	Line & Load Regulation	±5%	±5%
	Ripple & Noise(max)	200mV	200mV
	Setup, Rising Time	1000ms @220Vac Full Load	
	Hold up Time	50ms @220Vac Full Load	
Protection	Short-Circuit Protection	Auto restart mode	
	Over-Current Protection	Auto restart mode	
	Over-Temp. Protection	Latch mode	
Environment	Working Temperature	-20°C ~ 50°C	
	Working Humidity	20 ~ 85% RH (non-condensing)	
	Storage Temperature	-25°C~75°C	
	Storage Humidity	5 ~ 95% RH (non-condensing)	
	IP Rating	IP68 (for indoor or outdoor installations)	
	Vibration	10~500Hz, 2G 10min/1cycle, period for 60min. each along X, Y, Z axes	
Safety and EMC	Safety	IEC61347, KC61347	
	EMC	Cisper22 Class B, EN55015, EN61000	
	Withstand Voltage	I/P-O/P 3.75KVac/10mA, I/P-Case 1.5KVac/10mA	
	Isolation Resistance	100MOhm Max/500Vdc	
	Lightening Surge	L-N : ±2KV, L/N-F/G : ±4KV	
Other Characteristics	MTBF	>50Khrs. MIL-HDBK-217F (25°C)	
	Size & Weight	215*66*43mm (L*W*H) / 1.2Kgs (main body)	
	Molding material	Silicon	
	Packing	10pcs / 13Kgs ( box size 48*28*11 cm)	

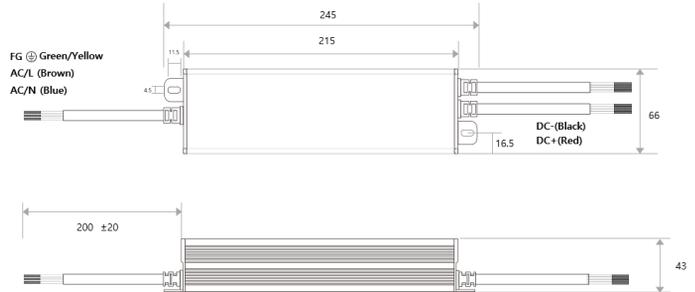


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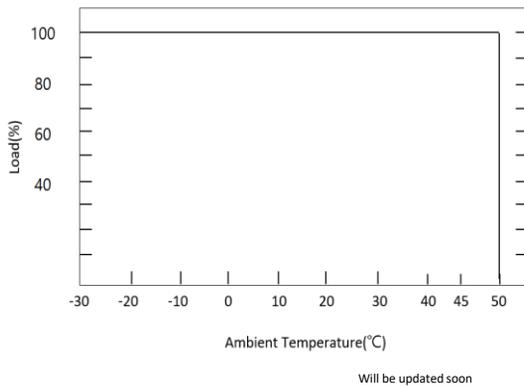
## FEATURES

- Constant Voltage(C.V mode)
- AC Input voltage 200-240VAC
- High efficiency up to 93% (Premium)
- Design for outdoor Sign installations (IP68)
- Safety Standard CE/CB/KC/BIS
- OCP, SCP, OTP Protections
- Metal Housing design
- Typical lifetime > 50000 hours
- 3 years

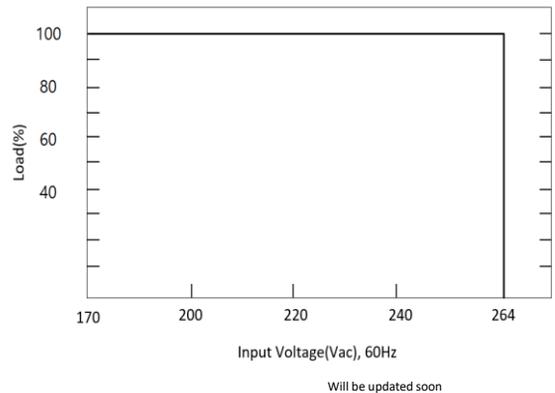
## DIMENSIONS(unit:mm)



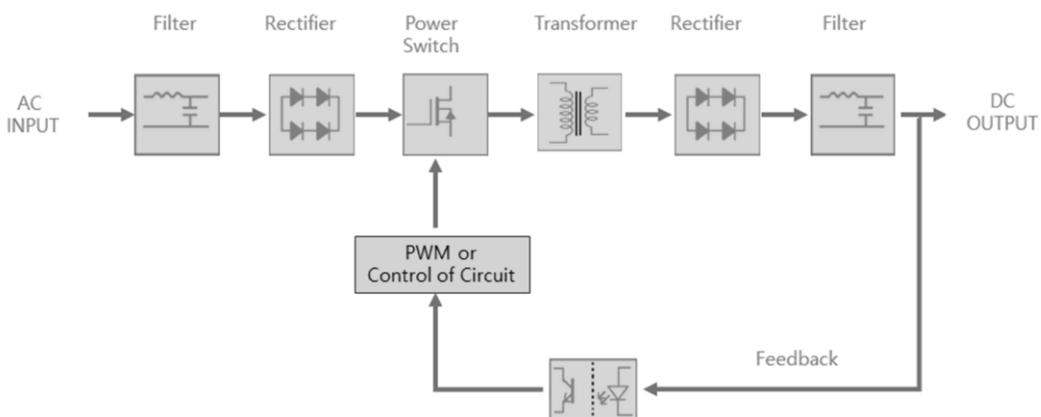
## AMBIENT DERATING



## STATIC CHARACTERISTICS



## BLOCK DIAGRAM





# OMS-EP400F

## INSTALLATION

### Attention / Warning!

1. Please handle the drivers carefully. Risk of electrical shock and energy hazard and all failure should be examined by a qualified technician. Please do not disassemble the driver in anyway.  
Please do not remove the case of the power supply by yourself and consult with the qualified engineer.
2. Reverse connections, wire crosses, and short circuits are strictly prohibited on the input, output, and wires.
3. Output current and output wattage must not exceed the rated values on specifications.
4. Please do not install power supplies in places with high moisture or near the water or places with intense vibrations or occurrence of induction failure and noise
5. Please do not install power supplies in places with high ambient temperature or near fire source or places with generation of corrosive, combustible hazardous gases.
6. Please do not store and install the drivers under the direct ray of sun light.
7. Please avoid body contact with a case and heat dissipation plates since there is a risk or burns due to the generation of high temperatures during application of electric currents to the products.
8. All E-Power products are designed in accordance with EMC regulations.  
Since it is component for power supplies, it will be installed in enclosure and when they are integrated into a system, the EMC characteristics of the end system must be re-verified again.

### Installation

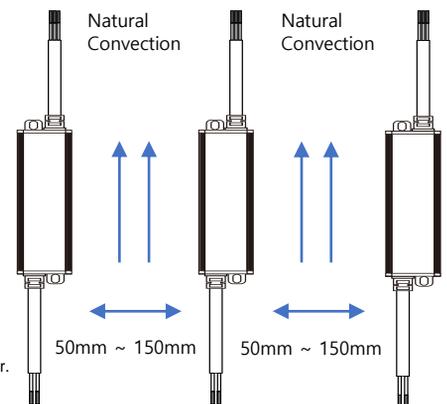
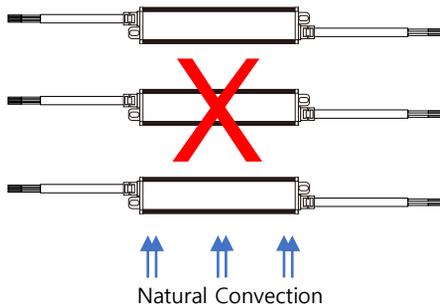
Checking Point before installation :

- 1) Proper input voltage 2) Input/output wiring and enough line thickness 3) Output current and power rate
  - 4) Correctly selected Constant Voltage SMPS for LED loads 5) Correct VF value loading
1. Power Supplies must be installed by a qualified electrician who is familiar with installation and operation manual.
  2. Ensure the drivers are used with the proper power loading and properly complies with the drivers' specifications (refer to the driver's datasheet)
  3. Ensure that the ground wire is properly grounded and ensure it does not come into contact with the neutral wire.
  4. Ensure the power supply position has sufficient airflow. Operating temperature must be between -25°C to +45°C.
  5. Before any installation or maintenance work, please disconnect your system from the utility.
  6. Ensure that it can't be re-connected inadvertently!  
Require spacing between LED power supplies shall be at least 3cm from end to end and 15cm from side to side. This is to ensure adequate heat dissipation. Greater spacing may be required when heat ventilation in the sign or power supply enclosure is not adequate
  7. Installation of metal plates is highly recommended to facilitate heat dissipation from SMPS
  8. Keep enough insulation distance between mounting screws and internal components of power supplies.
  9. Connected the positive '+' output of the driver to the DC Positive '+' input of the light fixture. Connect the negative '-' output of the driver to the DC negative '-' input of the luminaire.
  10. Do not overload the power supply with multiple appliances.
  11. Power supply operates at high temperature so to avoid injury, do not touch while in use.
  12. Do not install with power connected or during an electrical disturbance
  13. If any phenomenon occurs such as tripping or irregular operation, disconnect the power main and the connection to the luminaire before investigating problem.  
If the driver is found to be defective, please replace it or contact E-Power sales branch office for further support.
  14. Mounting orientations other than standard orientation or operate under high ambient temperature may increase the internal component temperature and will require a de-rating in output current.

15. For other information about the product, please contact E-Power sales office <epwr@e-power.kr> for more details.

### Warranty

1. Under normal circumstances, the driver warranty begins from the date of delivery from E-Power.  
If a product has any failure during the warranty period, E-Power will repair or replace the driver after the failure is confirmed as a true defect  
As a proof of defective parts, the photos of serial number with cable cut can be sent to us and the replacement will be along with the next shipment.
2. Warranty is considered out of scope when one or more of the following situations occurs ;
  - 1) The driver suffers damage by not following the instruction manual
  - 2) The driver suffers damage because of improper operation or improper assembly;
  - 3) Improper application or integration with luminaire;
  - 4) Serve damage or deformation of the driver's appearance;
  - 5) Damage to the driver's input or output wires;
  - 6) Driver's identification codes or serial numbers erased, altered or damaged
  - 7) Damage to the driver caused by natural disasters.
3. if it is confirmed that there is a shortage, defects and damage in the delivery of the product, E-Power will provide 1:1 replacement.  
But if a batch of products failure due to user's improper storage, then E-Power is not responsible for the defect.



- Ensure that the ground wire is properly grounded and ensure it does not come into contact with the neutral wire.
- Ensure the power supply position has sufficient airflow. Operating temperature must be between -20°C to +50°C.
- Do not overload the power supply with multiple appliances.
- Power supply operates at high temperature. To avoid injury, do not touch while in use.
- Do not install with power connected or during an electrical disturbance.
- Please read and follow the instructions carefully before installing. Ensure all contact points are in good working order.
- Please pay attention to the environment, and check for any unsafe conditions
- UL 48 Standard requires spacing between LED power supplies shall be at least 50mm to 150mm.  
This is to ensure adequate heat dissipation. Greater spacing may be required when heat ventilation in the sign or power supply enclosure is not adequate.