



# ETA-USA

The Power Professionals

## AOFD-240

## 240W Din Rail Mount



### FEATURES:

- Universal AC input 90~264 VAC and 127~370 VDC
- Flexible Din Rail Mount
- Industrial Temp Range -25 ~ +70°C range
- Rugged Design
- Warranty: 3 years**
- Installation on DIN rail 30mm only
- PFC as standard (180W-240W)
- Over voltage protection
- Over current protection
- LED Indicator for DC power ON
- LED Indicator for DC low



MODEL/CHANNEL		Unit	AOFD-240-24	AOFD-240-48		
<b>OUTPUT</b>	Normal Voltage	[V]	24	48	-	-
	Setting Voltage Range	[V]	23.76 ~ 24.24	47.52 ~ 48.48	-	-
	Voltage Adjustment Range	[V]	22.5 ~ 28.5	45 ~ 55	-	-
	Current	[A]	10.0	5.0	-	-
	Rated Power	[W]	240	240	-	-
	Line Regulations	[mV]	120	240	-	-
	Load Regulations	[mV]	240	480	-	-
	Temperature Drift	[mV]	360	720	-	-
	Ripple & Noise(pk-pk) (*1)	[mV]	100	120	-	-
	Turn-on Time typ.	[ms]	3600 (AC IN 100V, Io=100%)			
Hold-up Time typ.	[ms]	20 (AC IN 100V, Io=100%)				
<b>INPUT</b>	Voltage, Frequency	[V]	AC100 - 240(AC 90-264, 50/60Hz(47 - 63) or DC127-370V (Universal Input)			
	Current Typ. 110V	[A]	2.5		-	
	220V		1.25		-	
	Efficiency Typ. 110V	[%]	89	90	-	-
	220V		91	92	-	-
	Power factor Typ. 110V	-	0.98 (Io= 100%)		-	
	220V		0.93 (Io= 100%)		-	
Inrush Current Typ. 110V	[A]	50 ( Ta=25°C, Io=100% at Cold Start )				
220V						
Leakage Current 110V	[mA]	0.45 (Typ.)				
1mA Max 220V		0.75 (Typ.)				
<b>Function</b>	Over Voltage Protection	[V]	125% ~ 146% of rating			
	Over Current Protection <sup>(*)</sup>	[A]	110% of rating and recovers automatically			
	DC_OK Lamp	-	240			
	DC_LOW Lamp	-	LED (RED)			
	Remote ON.OFF	-	-			
	Parallel/Series Operation	-	Series operations is possible			
Cooling / O.T.P	-	Convention Cooling				
<b>Electrical Isolation</b>	(1) Input - Output	-	AC 3.0KV 1min, cut-off: 20mA / DC 500V 100MΩ			
	(2) Input - F.G	-	AC 2.0KV 1min, cut-off: 20mA / DC 500V 100MΩ			
	(3) Output - F.G	-	AC 0.5KV 1min, cut-off:100mA / DC 500V 100MΩ			
<b>Environment</b>	Operating temp. & Humidity	-	-25 ~ +70°C(Required Derating), 20 ~ 90%RH (Non Condensing)			
	Storage temp. & Humidity	-	-40 ~ +75°C, 20 ~ 90% RH (Non Condensing)			
	Vibration	-	10~55Hz at 1G 3minutes period, 30minutes along X,Y and Z axis			
<b>Dimension</b>	Size(WxHxD) / Weight	mm/g	60 x 130 x 125 / 1200			
<b>Safety</b>	-	-	cUL, CE, CB		cUL, CE, CB	
<b>Emission</b>	Conducted Emission	-	Complies with EN55022-B			
<b>PFHC</b>	Harmonic Current	-	Complies with EN61000-3-2 (Class-D)			

(\*1) Terminated with 0.1uF & 47uF parallel capacitor(Bandwidth=20MHz), (Ta=0°C~70°C)

(\*2) Protection Mode : Current limiting with Hiccup Mode



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16170 Vineyard Blvd. Suite 180 Morgan Hill, CA 95037 <http://www.eta-usa.com>

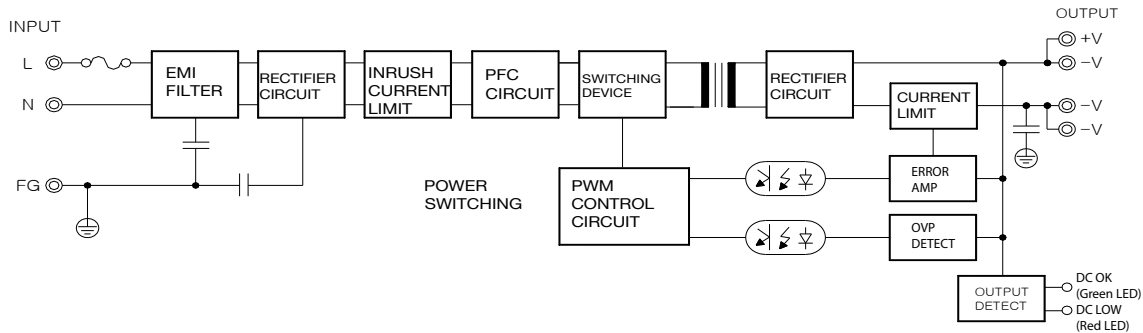
Toll-free (US only): 800-ETA-POWR (800-382-7697) Telephone: 408 778-2793 FAX: 408-779-2753



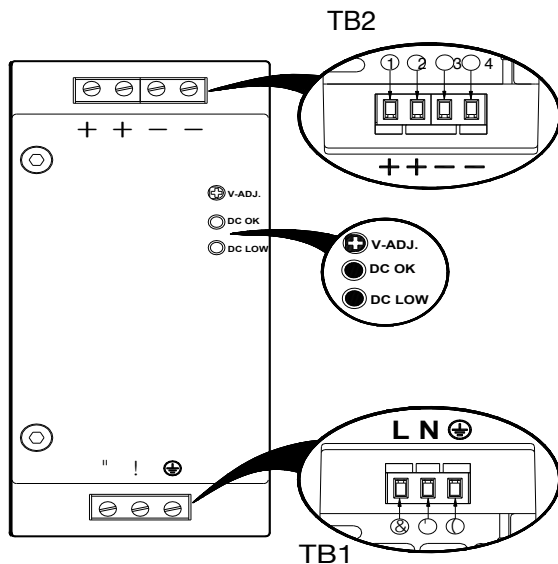
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### 1. BLOCK DIAGRAM



### 2. Terminal Pin Assignment and Front Controls



Marking	No.	Assignment
L	①	AC(L) Input Terminals
N	②	AC(N) Input Terminals
⊕	③	AC Grounding Terminal

#### TB2 : Output Terminal Assignment

Marking	No.	Assignment
+	①	DC (+) Output Terminals
+	②	
-	③	DC (-) Output Terminals
-	④	

#### Front Controls Assignment

Marking	Assignment
V-ADJ.	DC Output voltage adjustment
DC OK	DC Output indication LED (Green)
DC LOW	DC Output Low indication LED (Red)

### 3. Connection / Connecting Cable

Terminals	Solid or Stranded Wires		Torque	Stripping Length
	[mm <sup>2</sup> ]	[AWG]	[Nm]	L [mm]
Input Terminals	(TB1)	0.5 ~ 2.5	30 ~ 12	0.5~0.6 8
Output Terminals	(TB2)	0.5 ~ 2.5	30 ~ 12	0.5~0.6 8



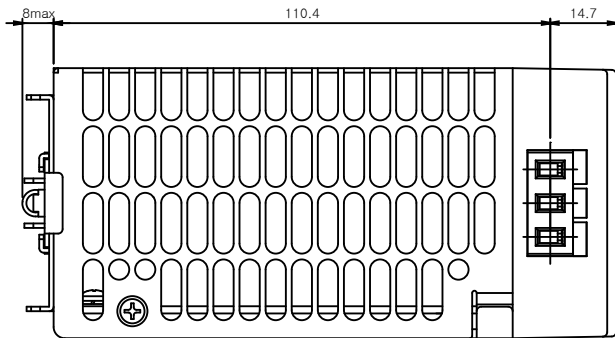
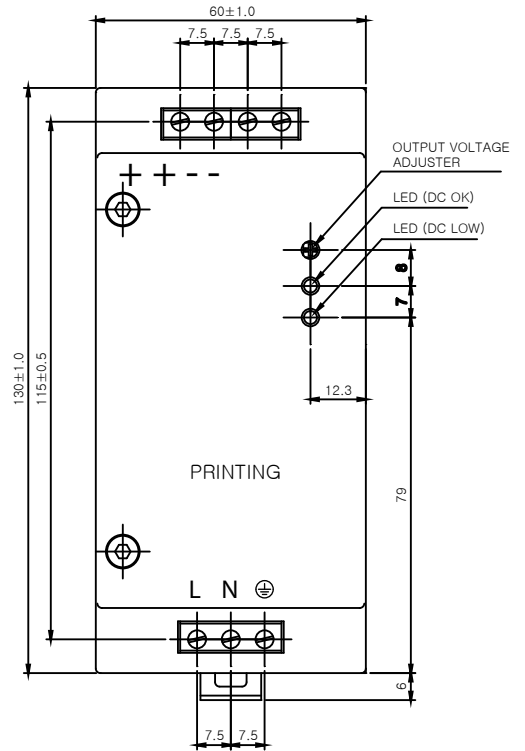
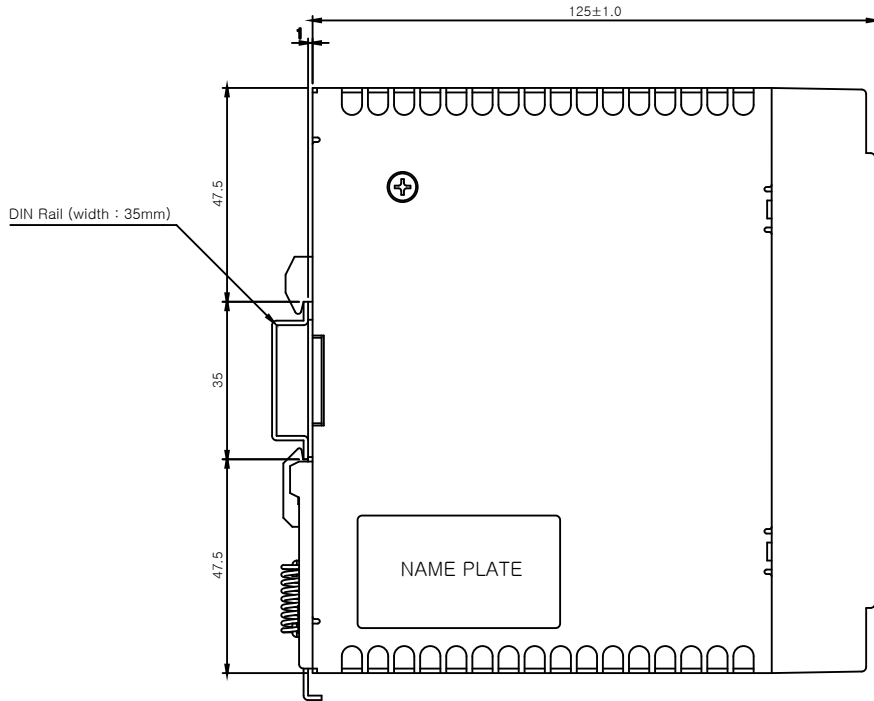


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### AOFD240-S

- \* Weight : 1.2Kg
- \* Tolerance : ±1
- \* Dimensions in mm



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## Output Derating Curve

Note: When using the product between  $-25^{\circ}\text{C} \sim 0^{\circ}\text{C}$ , the output ripple and noise could exceed its specification.



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