



ETA-USA

The Power Professionals

AOFD-180

180W 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-180-24 | AOFD-180-48 | | |
|--|----------------------------|--------------------------|---|---------------------------------------|----------|---|
| OUTPUT | Norminal 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] | 5.0 | 2.5 | - | - |
| | Rated Power | [W] | 120 | 120 | - | - |
| | 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] | 100 (AC IN 100V, Io=100%) | | | |
| Hold-up Time typ. | [ms] | 20 (AC IN 100V, Io=100%) | | | | |
| INPUT | Voltage, Frequency | [V] | AC100 - 240(AC 90-264, 50/60Hz(47 - 63) or DC127-370V (Universal Input) | | | |
| | Current Typ. | 110V 220V | [A] | 2.0 1.0 | - | - |
| | Efficiency Typ. | 110V 220V | [%] | 88 90 | 90 92 | - |
| | Power factor Typ. | 110V 220V | [A] | 0.98 (Io= 100%) 0.93 (Io= 100%) | | |
| | Inrush Current Typ. | 110V 220V | [A] | 50 (Ta=25°C, Io=100% at Cold Start) | | |
| | Leakage Current | 110V 1mA Max | [mA] | 0.45 (Typ.) 0.75 (Typ.) | | |
| | Function | Over Voltage Protection | [V] | 125% ~ 146% of rating | | |
| Over Current Protection ^(*) | | [A] | 110% of rating and recovers automatically | | | |
| DC_OK Lamp | | - | LED (GREEN) | | | |
| DC_LOW Lamp | | - | LED (RED) | | | |
| Cooling / O.T.P | | - | Convention Cooling | | | |
| Electrical Isolation | (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 | | | |
| Environment | 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 | | | |
| Dimension | Size(WxHxD) / Weight | mm/g | 50x130x125 / 1000 | | | |
| | Safety | - | UL,CE,CB | | UL,CE,CB | |
| Emission | Conducted Emission | - | Complies with EN55011/EN55022-B, FCC-B | | | |
| PFHC | Harmonic Current | - | Complies with EN55022-B | | | |

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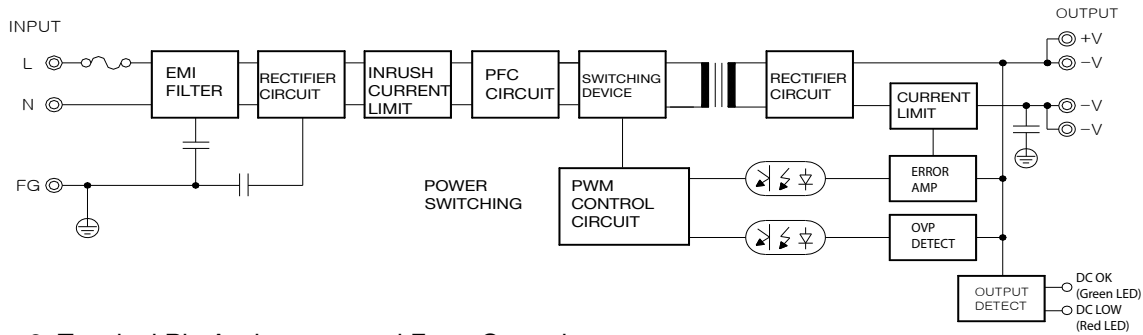
Toll-free (US only): 800-ETA-POWR (800-382-7697) Telephone: 408 778-2793 FAX: 408-779-2753



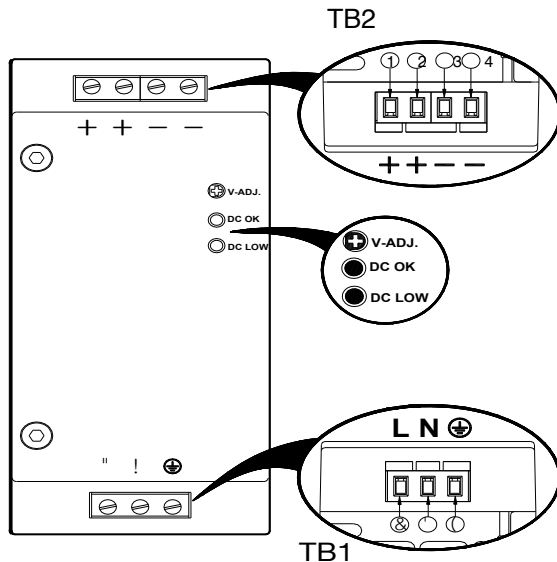
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1. BLOCK DIAGRAM



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 ²] | [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 |



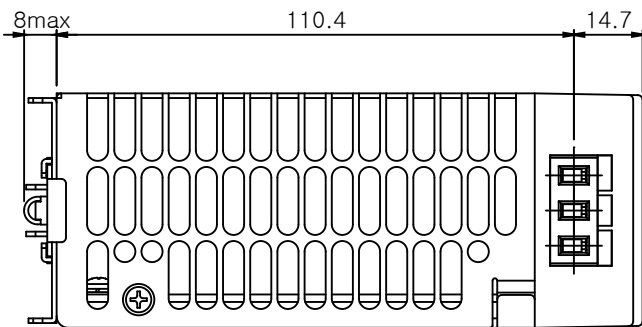
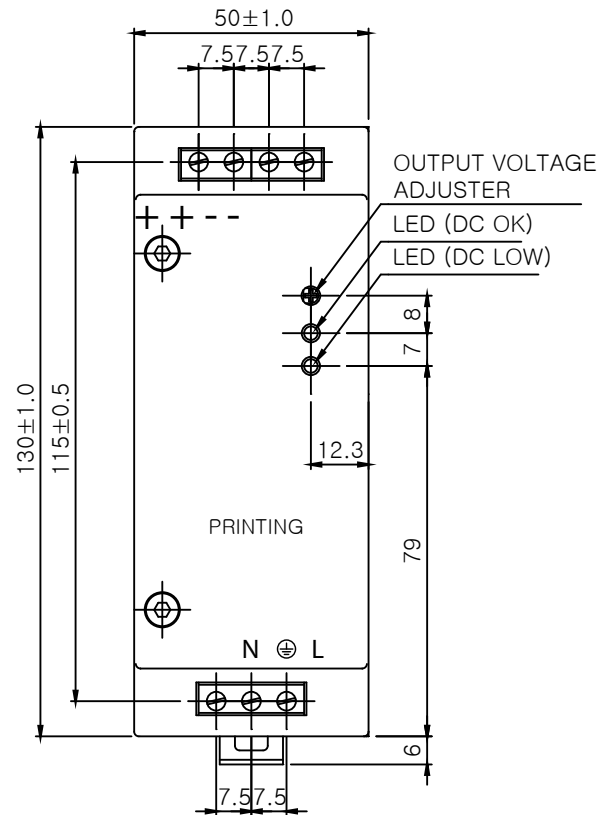
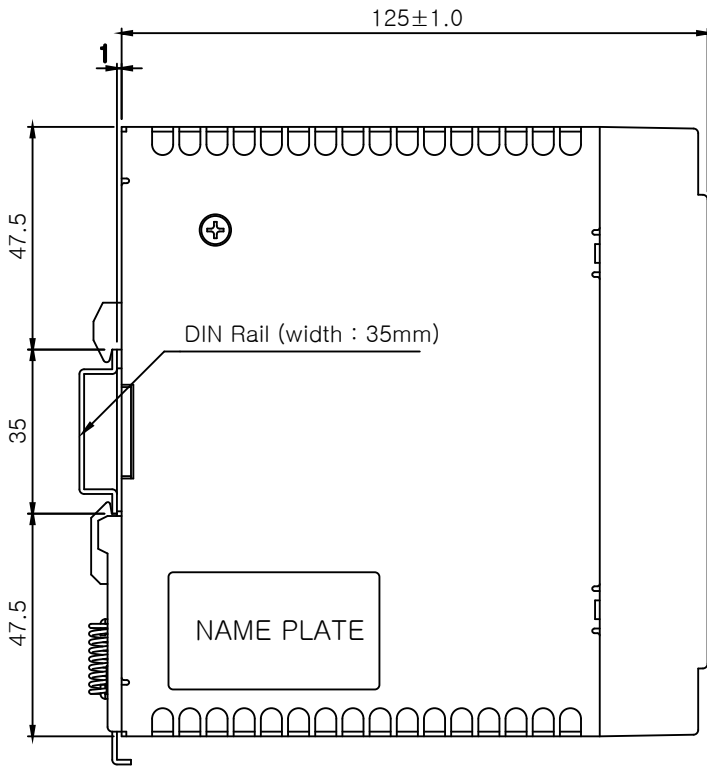


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180W Din Rail Mount



*AOFD180 Series

AOFD180-24

INPUT : AC100 - 240V 2.8A

50/60Hz

OUTPUT : DC 24V 7.5A



- * Weight : 1.0Kg
- * Tolerance : ±1
- * Dimensions in mm



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Output Derating Curve

Note: When using the product between -25°C ~ 0°C, the output ripple and noise could exceed its specification.

