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AMED240W-GY



DIN Rail

Features



- Wide Input: 180 - 550VAC/254 - 780VDC
- Operating Temp: -30 °C to +70 °C
- Isolation voltage: 3000VAC
- Low ripple & noise, 150mV(p-p).
- Short circuit protection, over-voltage protection, overload protection, and over-temperature protection
- DC OK Signal Output indication
- Designed for dual-phase applications



Training



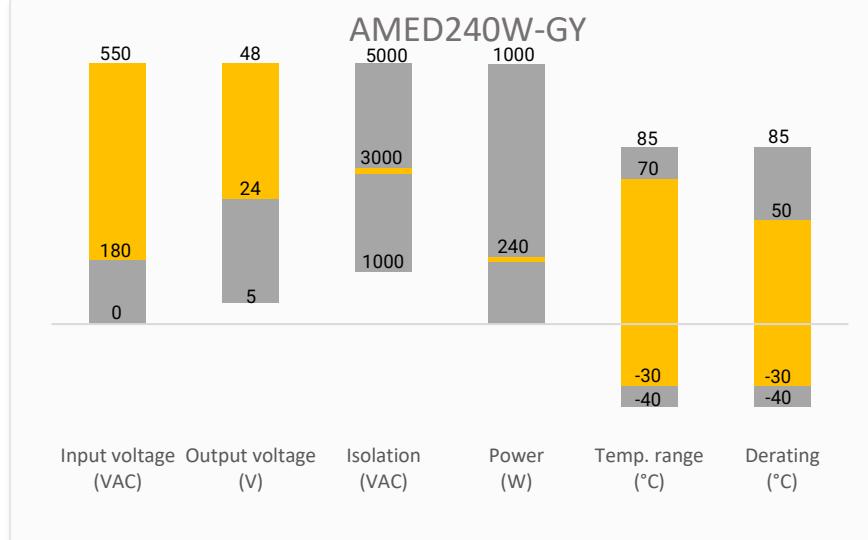
Product Training Video
(click to open)



Coming Soon!

Application Notes

Summary



Applications



Power Grid



Industrial



Telecom

Models & Specifications



| Model | Input Voltage (VAC/Hz) | Input Voltage (VDC) | Max Output wattage (W) | Output Voltage (V) | Output Current max (A) | Efficiency Typ. (%) |
|----------------|------------------------|---------------------|------------------------|--------------------|------------------------|---------------------|
| AMED240W-24SGY | 180~550/47~63 | 254~780 | 240 | 24 | 10 | 91.0 |
| AMED240W-48SGY | 180~550/47~63 | 254~780 | 240 | 48 | 5 | 91.0 |

Input Specifications

| Parameters | Conditions | Typical | Maximum | Units |
|-----------------|---------------------|---------|---------|-------|
| Input Current | 400VAC | 1.0 | | A |
| | 230VAC | 2.0 | | A |
| Inrush Current | Cold Start | | 50 | A |
| Leakage Current | 530VAC | <3.5 | | mA |
| Power Factor | 400VAC at full load | ≥0.84 | | |
| | 230VAC at full load | ≥0.84 | | |

Output Specifications

| Parameters | Conditions | Typical | Maximum | Units |
|--------------------------|-------------------------|---------|---------|--------|
| Voltage accuracy | | ± 2.0 | | % |
| Line regulation | Rated load | ± 0.5 | | % |
| Load regulation | | ± 1.0 | | % |
| Ripple & Noise* | | | 150 | mV p-p |
| Start-up time | 400VAC input, full load | | 0.8 | s |
| | 230VAC input, full load | | 1.5 | s |
| Rise time | 400VAC input, full load | | 150 | ms |
| | 230VAC input, full load | | 150 | ms |
| Hold up time | 400VAC input, full load | 18 | | ms |
| | 230VAC input, full load | 18 | | ms |
| Voltage adjustable range | 24 VDC Output | 24 - 28 | | V |
| | 48 VDC Output | 48 - 55 | | V |

* Ripple and Noise are measured at 20MHz bandwidth. Please refer to the application note for specific details. Measured with a 47µF electrolytic capacitor and a 0.1µF ceramic capacitor.

Isolation Specifications

| Parameters | Conditions | Typical | Maximum | Units |
|------------------------------|---|---------|---------|-------|
| Tested I/O voltage | 60 sec, Leakage current < 10mA | 3000 | | VAC |
| Tested Input to GND voltage | 60 sec, Leakage current < 10mA | 2000 | | VAC |
| Tested Output to GND voltage | 60 sec, Leakage current < 10mA | 500 | | VAC |
| Tested Output to P-G signal | 60 sec, Leakage current < 2mA | 500 | | VAC |
| Insulation resistance | I/P to O/P, I/P-FG, O/P-FG, 500VDC, 25°C, 70%RH | 100 | | MΩ |

| General Specifications | | | | |
|---|--|------------|---------|---------|
| Parameters | Conditions | Typical | Maximum | Units |
| Over voltage protection | 24 VDC Output, auto-recovery after 1 minute | ≤ 33.0 | | VDC |
| | 48 VDC Output, auto-recovery after 1 minute | ≤ 65.0 | | VDC |
| Over temperature protection | 90°C ± 5°C (TSW) detect on heatsink of power switch, output voltage turn off, auto-recovery | | | |
| Overload protection | 105 ~ 130% rated output power, constant current limiting, shut down after 3 sec., auto-recovery after 1 minute | | | |
| Short circuit protection | Hiccup, auto-recovery | | | |
| Operating temperature | 20% ~ 95% RH Non-Condensing | -30 to +70 | | °C |
| Storage temperature | 10 ~ 95% RH | -40 to +85 | | °C |
| Power derating | +50 °C to +70 °C | 2.0 | | % / °C |
| | 180VAC - 200VAC | 0.5 | | % / VAC |
| Temperature coefficient | 0~50°C | ± 0.03 | | % / °C |
| Cooling | Free air convection | | | |
| Case material | Metal | | | |
| Weight | | 1000 | | g |
| Dimensions (L x W x H) | 2.48 x 4.47 x 4.92 inches (63.00 x 113.50 x 125.00 mm) | | | |
| MTBF | 900K hrs min. Telcordia SR-332 (Bellcore) | | | |
| NOTE: All specifications in this datasheet are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified. | | | | |

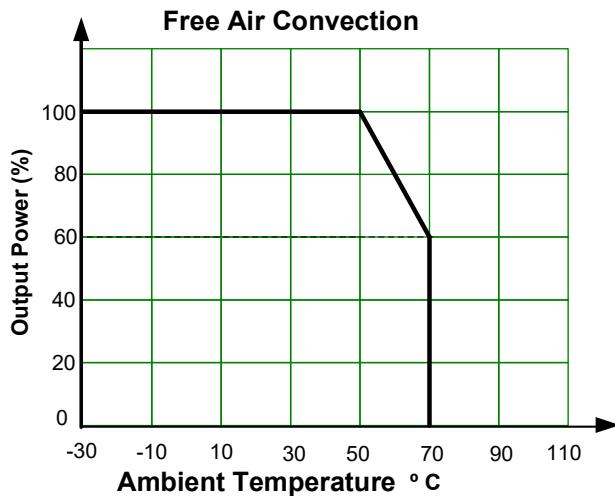
Safety Specifications

| Parameters | | |
|-----------------|--|---|
| Agency approval | UL61010-1, UL61010-2-201, BS EN/EN62368-1 | |
| Standards | EMC - Conducted and radiated emission | CISPR32 / EN55032, Class B |
| | Harmonic Current emission | IEC/EN 61000-3-2, Class A |
| | Voltage Fluctuations & Flicker | IEC/EN 61000-3-3 |
| | Electrostatic Discharge Immunity | IEC/EN 61000-4-2 Contact ±4KV, Air ±8KV, Criteria B |
| | RF, Electromagnetic Field Immunity | IEC/EN 61000-4-3 3V/m, Criteria A |
| | Electrical Fast Transient/Burst Immunity | IEC/EN 61000-4-4 ±1KV, Criteria B |
| | Surge Immunity | IEC/EN 61000-4-5 L-L ±1KV, L-G ±2KV, Criteria B |
| | CS, Conducted Disturbance Immunity | IEC/EN 61000-4-6 3V, 3V~1V, 1V r.m.s, Criteria A |
| | Power Frequency Magnetic Field Immunity | IEC/EN 61000-4-8 50, 60Hz, Criteria A |
| | Voltage dips, Short Interruptions Immunity | IEC/EN 61000-4-11 100% Voltage Dips/Interruptions, 3 cycles, Criteria B |

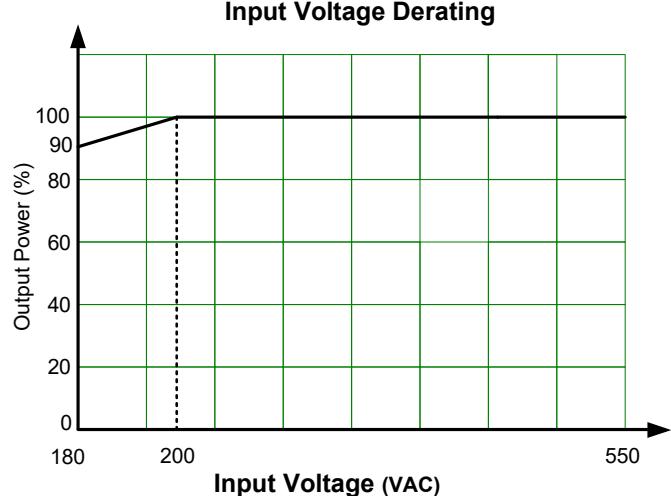
Derating



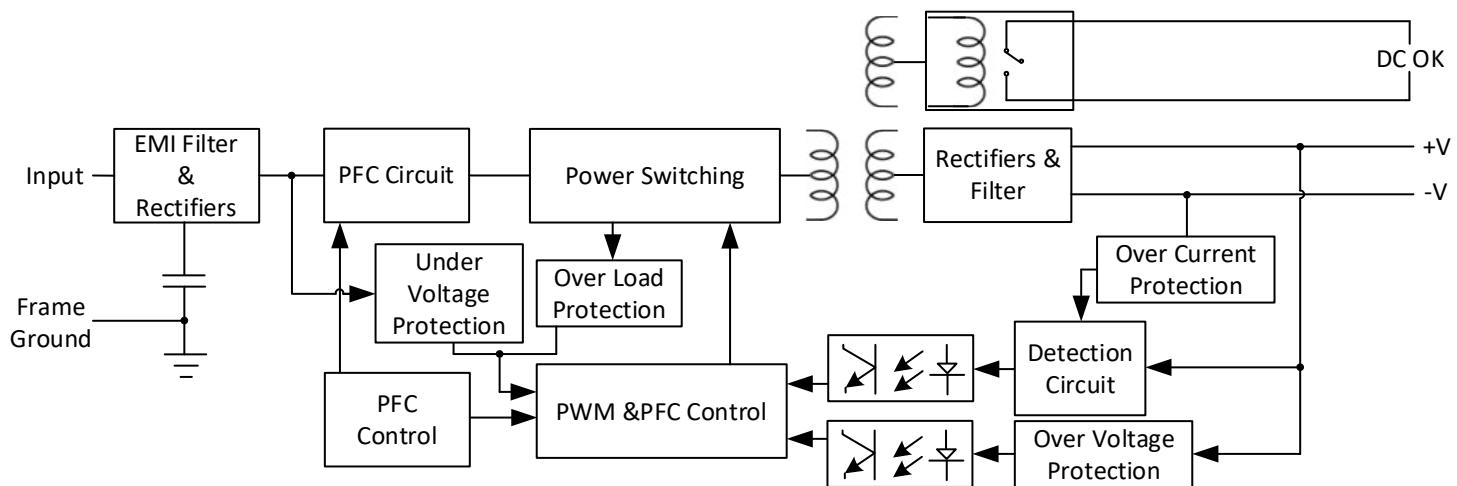
Free Air Convection



Input Voltage Derating



Functional Diagram

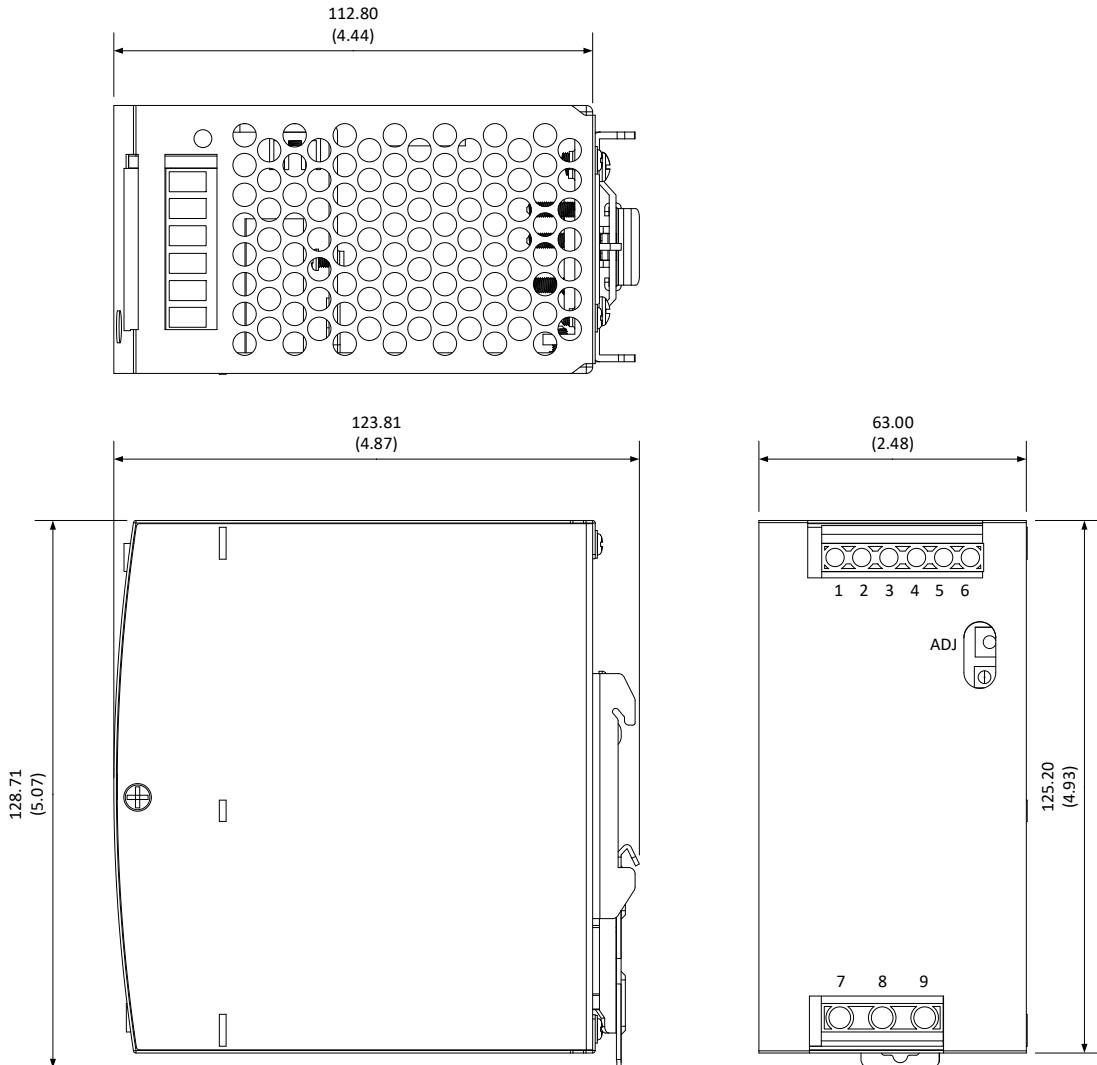


DC OK Active Signal Application



| | |
|---------------------------|---------------------------------------|
| Contact Closed | Power Supply Unit turns on / DC OK |
| Contact Open | Power Supply Unit turns off / DC FAIL |
| Contact Ratings (maximum) | 30V/1 A resistive load |

Dimensions



| Pin Output Specifications | |
|---------------------------|--------------------|
| Pin | Function |
| 1 | Relay Contact |
| 2 | Relay Contact |
| 3 | +V Output |
| 4 | +V Output |
| 5 | -V Output |
| 6 | -V Output |
| 7 | GND |
| 8 | N |
| 9 | L |
| ADJ | Voltage Adjustment |

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