AMG2012 47-56V_{DC}, 240W Power Supply



Industrial Power Supplies

The AMG2012 Power Supply is a 47-56 V_{DC} , 240W PoE/PoE+ Power Supply which is suitable for all AMG Industrial Ethernet Switches with up to 8x PoE+ ports.





[AMG2012]

/ OVERVIEW

AC - DC DIN Rail mountable 240W Class 2 Output.

FEATURES

- AC/DC Power Module
- Universal Input 90~264V_{AC}
- High Efficiency up to 90%
- Short Circuit Protection
- Internal Input Filter
- DIN Rail Mountable



General.

| Isolation Voltage | 3000V _{AC} Input to ground 1500V _{AC} Input to ground |
|-----------------------|--|
| | 500V _{AC} Output to ground |
| | AO - |
| Switching Frequency | 80kHz |
| Operating Temperature | -40 to +71°C |
| Derating | Linearly from +60°C at 2.5%/°C, start up at -35°C |
| Cooling | Free air convection cooled with 25mm free space on all sides |
| Operating Humidity | 20 to 90% RH, non-condensing |
| Storage Temperature | -40 to +85°C |
| Dimension (W x D x H) | 83 × 111.3 × 125 mm |
| Cooling | Free air convection |
| Case Material | Metal |

Input Specifications.

| Input Voltage | 90-132/180-264 V_{AC} , auto select, 210-375 V_{DC} |
|-----------------------|--|
| Input Frequency | 47-63Hz |
| Input Current | |
| 115V _{AC} | 4A |
| 230V _{AC} | 1.55A |
| Inrush Current | 30/60A at 115/230V _{AC} |
| Power Factor | 0.7 typical |
| Earth Leakage Current | 0.8mA max |
| Input Protection | T6.3A, 250V _{AC} |

Output Specifications.

| Output Voltage Output Voltage Trim Initial Set Accuracy Minimum Load Start Up Delay Start Up Rise Time Hold Up Time | 48V 47-56V _{DC} ±1% No minimum load required <1s (may increase in low temperature extremes) <150ms 25/30ms at 115/230V _{AC} |
|---|---|
| Line Regulation | ±0.5% max |
| Load Regulation | ±1% (±5% for units in parallel) |
| Parallel Operation | A maximum of 3 units can be paralleled (not with standby system). Total power available is 90% of the rated current of each unit. Minimum load per unit is 10%. |
| Transient Response | 4% max deviation recovering to within 1% in 2ms for a 50% load change |
| Ripple and Noise | 100mVpk-pk |
| | 20MHz bandwidth (may increase at low temperature extremes) |
| Overvoltage Protection | Output Clamps at 125%-140% Vnom, auto recovery |
| Overload Protection | 105%-145% constant current, auto recovery |
| Temperature Coefficient | ±0.03%/°C |
| Efficiency | 90% typical |





Approvals and Standards.

| UL508 Listed |
|---|
| UL1310 Class 2 Power Supply (5V, 12V w/o class 2), UL60950-1 Recognised |
| EN60950-1 |
| EN55022 Class B |
| EN61000-3-2, EN61000-3-3 |
| EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, |
| EN61000-4-8, EN61000-4-11 |
| |

Part Numbers.

AMG2012 47V-56V_{DC}, 240W, DIN-Rail mounting, -40°C to +60°C, power derated between 60°C & 71°C

Notes.





