

Switching Power Supply

340 WATT / SINGLE OUTPUT

KEY FEATURES:

- 340 Watts output power
- 24Vdc Single Output
- Open Frame Package measuring only 3" x 5" x 1.4"
- High Density in excess of 10W/in³
- 90% Efficiency typical
- High Reliability in excess of 500,000 Hours
- Medical Safety Approvals
- Class B Radiated and Conducted Emissions
- 3 year warranty



| MODEL | Output Voltage (V) | Regulation | Maximum Current (A) | Ripple/Noise (mVp-p) | Standby (Vsb) |
|-----------------|--------------------|------------|---------------------|----------------------|---------------|
| ARFS-3411M-2405 | +24.0 | +/- 3% | 14.0 | 240 | +5V/2A |

INPUT SPECIFICATIONS

| | |
|-------------------------|--|
| Input Voltage | 90 – 264 VAC |
| Input Frequency | 47 – 63 Hz |
| Input Current | Maximum 4.5A @ 100 VAC |
| Inrush Current | 40A @ 230 VAC |
| Input Protection | Fuse |
| Leakage Current | Maximum 300 uA @ 264VAC, single fault |
| Normal (typical): | 75uA @ 120VAC , 150uA @ 240VAC |
| Single Fault (typical): | 150uA @ 120VAC , 250uA @ 240VAC |
| Power Factor Correction | Active PFC to meet or exceed EN61000-3-2 |

ENVIRONMENT SPECIFICATIONS

| | |
|-----------------------|---|
| Operating Temperature | 0 °C to +70 °C Derate linearly above 50 °C to 50% load @ 70 °C |
| Storage Temperature | -40 °C to +85 °C |
| Forced Air Cooling | 15CFM from AC to DC side |
| MTBF | > 500 kHrs based on Telcordia SR-332 at 25 °C |
| Shock | Storage: 30G , 11ms, 1/2 sine wave pulse, 6 axis Operation: 5G , 11ms, 1/2 sine wave pulse, 6 axis |
| Vibration | 2G rms, 5Hz to 500kHz, 3 axis |

OUTPUT SPECIFICATIONS

| | |
|--------------------|---|
| Setpoint Accuracy | +/- 1% |
| Total Output Power | 340W @ 24V |
| Hold-up Time | 16ms @ 200W load |
| Efficiency | 90% typical |
| Minimum Load | No minimum load |
| Isolation (HiPot) | 1500 VAC Input to Ground |
| Remote Sense | Compensates for up to 0.5V drop |
| PSOEN# | Turns on the outputs when signal is pulled low. |
| PowerGood | Goes high (> 2.4V) within 100ms - 500ms of output in regulation. Goes low (<0.4V) at least 1ms before output out of regulation. |

PROTECTION

| | |
|---------------|-----------------------------|
| Overvoltage | Latch-mode (Cycle AC input) |
| Overpower | Auto-recovery |
| Short Circuit | Auto-recovery |
| Thermal | Auto-recovery |

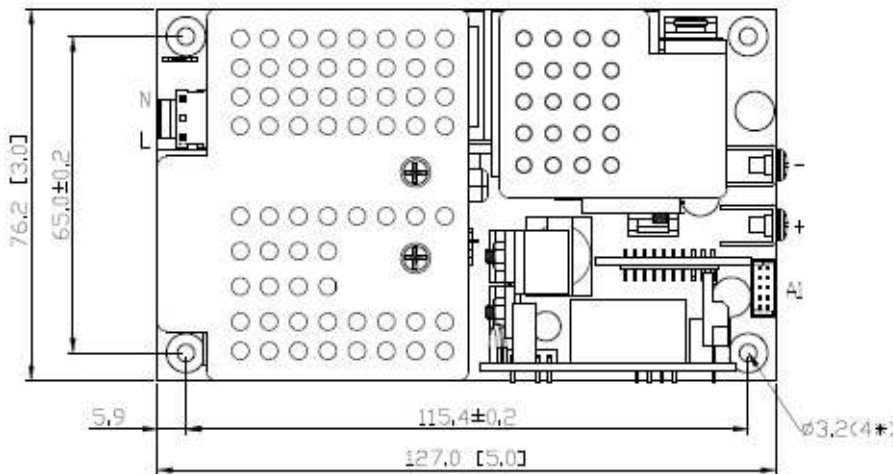


COMPLIANCE

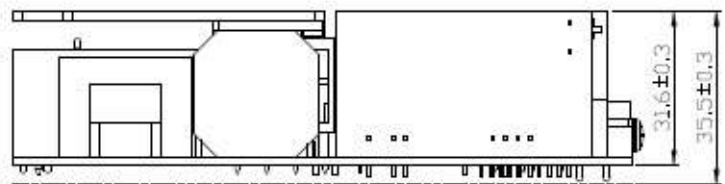
| | |
|-------------------------|--|
| EMI | FCC Class B / EN55032 Class B under all rated input and load conditions |
| Electrostatic Discharge | EN61000-4-2: Contact Discharge- Contact discharge in 2kV increments to 6kV for metallic surfaces including connector bodies. 10 discharges pretest point at each voltage: 5 positive polarity and 5 negative polarity. Air discharge – Air discharge in 2kV increments to 8kV for scams and non-metallic user accessible surfaces. 10 discharges pretest point at each voltage: 5 positive polarity and 5 negative polarity. |
| Radiated Susceptibility | EN61000-4-3: Electromagnetic Field Strength 3V/m |
| EFT / Bursts | EN61000-4-4: Direct Coupling Line to Ground Reference Plane: 1kV increments up to 2kv for a minimum of 1 min. at each voltage. Direct Coupling Neutral to Ground Reference Plane: 1kV increments up to 2kV for a minimum of 1 min. at each voltage. Direct Coupling Ground to Ground Reference Plane: 1kV increments up to 2kV for a minimum of 1 min. at each voltage |
| Surges | EN61000-4-5: The peak value of the bi-directional surge waveform shall be 2kV for common mode and 1kV for differential modes of transient surge injection. No unsafe operation or no user noticeable degradation is allowed under any condition. |
| Conducted Immunity | EN61000-4-6: 0.15~800MHz, 10V, 80% AM |
| Voltage Dips | EN61000-4-10: 95% Dip & 10ms, 30% Dip & 500mS |
| Voltage Interruptions | EN61000-4-11, 95% reduction, 5s |
| Fluctuations & Flicker | EN61000-3-3 |
| Harmonic Distortion | EN61000-3-2 Class D |
| Safety Certifications | cTUVus UL60601, CB Report IEC 60601, CE |

Typical Outline Drawing:

(REFER TO PRODUCT MECHANICAL DRAWING FOR COMPLETE INFORMATION)



Airflow Direction



INPUT CONNECTOR (CN1)
MATES WITH MOLEX 26-0330-31

| Pin | Signal |
|-----|---------|
| 1 | Line |
| 2 | N/A |
| 3 | Neutral |

DC OUTPUT SCREW TERMINALS
MATES WITH M3.0 x 0.5 RINGS

SIGNALS CONNECTOR (A1)
MATES WITH MOLEX 104142-1000

| Pin | Signal |
|-----|----------------|
| 1 | DC Return |
| 2 | PSON# |
| 3 | DC Return |
| 4 | 5Vsb |
| 5 | DC Return |
| 6 | 5Vsb |
| 7 | DC Return |
| 8 | PowerGood |
| 9 | DC Return |
| 10 | Remote Sense + |

