

KEY FEATURES

- Ultra Compact Size: 2.92" x 1.85"
- Universal Input Range 90-305VAC, 47-440Hz
- I/O Isolation 4000VAC
- Operating Ambient Temperature Range -40°C to +70°C
- No Load Power Consumption < 0.1W
- High Efficiency up to 89%
- Screw Terminal for Option
- EMC Compliant without External Components
- Safety Approval to UL / IEC / EN 62368-1, IEC / EN 60950, IEC / EN 60335-1, IEC / EN 61558-2-16
- 3-Year Product Warranty



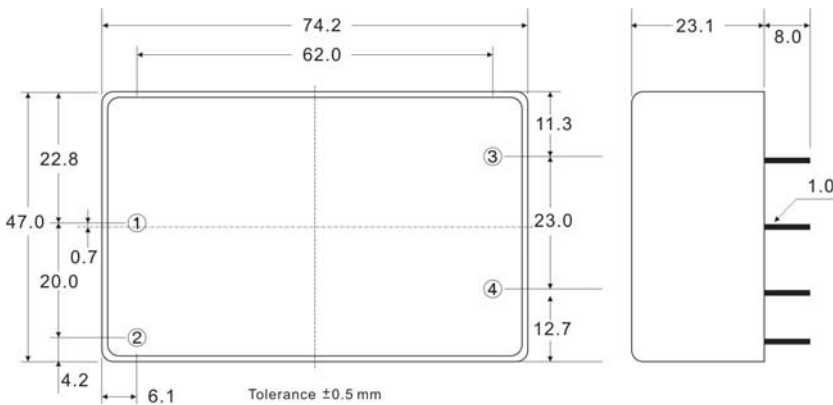
ELECTRICAL SPECIFICATIONS

All specifications valid at normal input voltage, full load and +25°C after warm-up time unless otherwise stated.

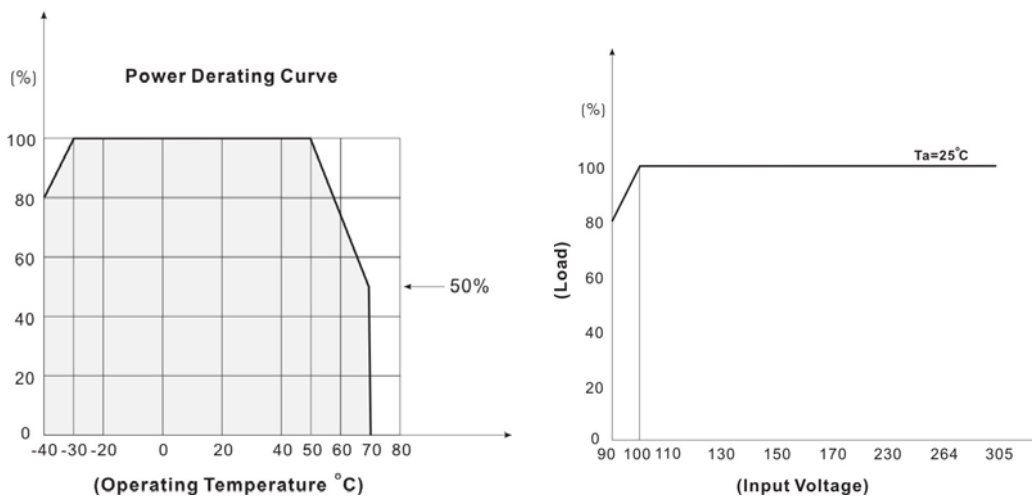
| Model No. | ANCH50-12S | ANCH50-15S | ANCH50-24S | |
|------------------------|-------------------------------------|--|------------------|------------------|
| Max Output Wattage (W) | 50W | | | |
| Input | Voltage | 90-305 VAC or 120-430 VDC | | |
| | Frequency (Hz) | 47-440 Hz | | |
| | Current (Full load) | 1000 mA max. (115 VAC) / 600 mA max. (230 VAC) | | |
| | Inrush Current (Cold star) | 45 A max. (115 VAC) / 90 A max. (230 VAC) | | |
| | Leakage Current | 0.25 mA max. (100-240 VAC) | | |
| Output | Voltage (V.DC.) | 12V | 15V | 24V |
| | Voltage Accuracy | ±2% | | |
| | Current (mA) max | 4167 | 3333 | 2083 |
| | Line Regulation (LL-HL) (typ.) | ±2% | | |
| | Load Regulation (0-100%) (typ.) | ±2.5%. | | |
| | Minimum Load | 0% | | |
| | Maximum Capacitive Load | 3500µF | 3000µF | 2200µF |
| | Ripple & Noise | 120mV max (Vp-p) | 150mV max (Vp-p) | 240mV max (Vp-p) |
| | Efficiency (at 230 VAC) | 89% | 88% | 88% |
| Hold-up Time (typ) | 30 ms (at 230VAC) | | | |
| Protection | Over Power Protection | Hiccup technique, auto-recovery | | |
| | Over Voltage Protection | Zener diode clamp | | |
| | Short Circuit Protection | Hiccup mode, indefinite (automatic recovery) | | |
| Isolation | Input-Output (V.AC) | 4000V | | |
| Environment | Operating Temperature | -40°C...+70°C (with derating) | | |
| | Storage Temperature | -40°C...+85°C | | |
| | Temperature Coefficient | ±0.05%/°C | | |
| | Humidity | 95% RH | | |
| | MTBF | >300,000 h @ 25°C (MIL-HDBK-217F) | | |
| | Vibration | IEC60068-2-6 (10~500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes) | | |
| Physical | Shock | IEC60068-2-27 | | |
| | Dimensions (L x W x H) | 2.92 x 1.85 x 0.91 Inches (74.2 x 47.0 x 23.1 mm) Tolerance ±0.5 mm | | |
| | Case Material | Plastic resin (flammability to UL 94V-0) | | |
| | Weight | 158 g | | |
| Safety | Cooling Method | Free air convection | | |
| | Agency Approvals | UL / IEC / EN 62368-1, IEC / EN 60950, IEC / EN 60335-1, IEC / EN 61558-2-16 | | |
| EMC | EMI (Conducted & Radiated Emission) | EN 55032 class B | | |
| | EMS (Noise Immunity) | EN 55035 | | |

NOTE

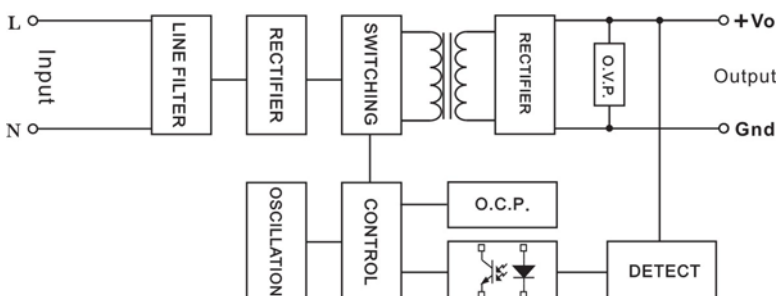
1. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
2. Please refer to our PDF file "AC-DC Application" on our website: www.archcorp.com.tw
3. **CAUTION: Double pole, neutral fusing. Disconnect mains before servicing.**

MECHANICAL DIMENSIONS (Top View)


| PIN# | Single |
|------|-----------|
| 1 | AC IN (N) |
| 2 | AC IN (L) |
| 3 | -DC OUT |
| 4 | +DC OUT |

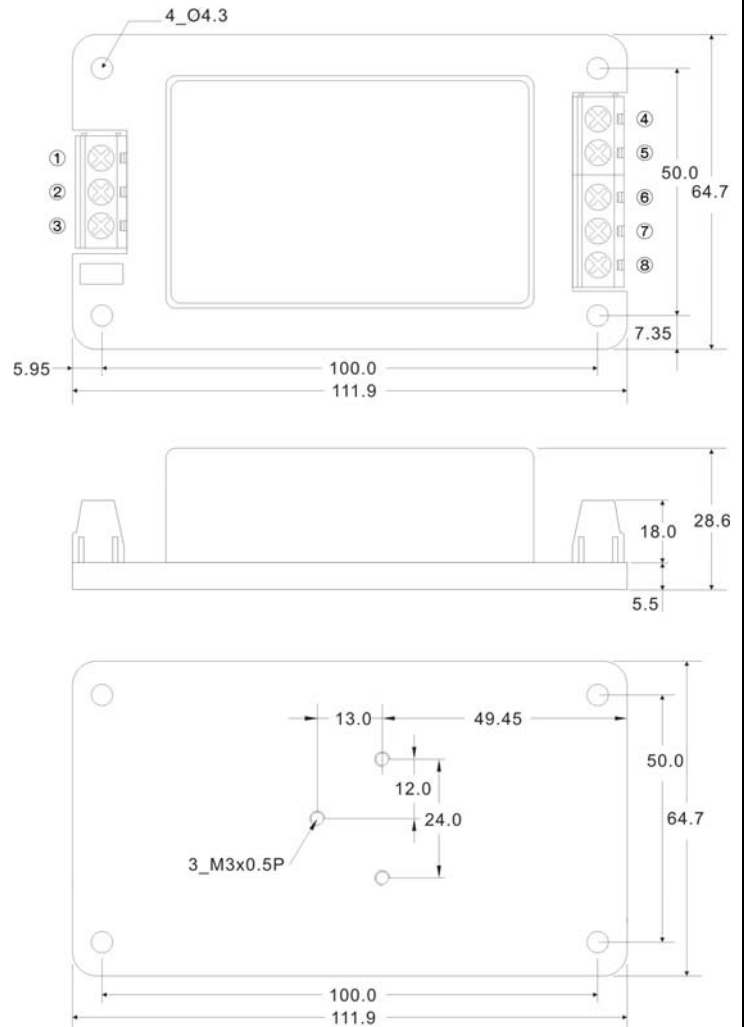
DERATING

BLOCK DIAGRAM

Single Output



SCREW TERMINAL
ANCH50-A2


| PIN# | Single |
|------|------------|
| 1 | NO CONNECT |
| 2 | AC IN (N) |
| 3 | AC IN (L) |
| 4 | NO CONNECT |
| 5 | -DC OUT |
| 6 | NO CONNECT |
| 7 | +DC OUT |
| 8 | NO CONNECT |



We reserve the right to make alterations in the product materials and specifications without prior notification and consent to improve reliability, function or design or otherwise.

<http://www.archcorp.com.tw>

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