

## KEY FEATURES

- Switching Power Module for PCB Mountable
- Fully Encapsulated Plastic Case
- Universal Input Range 90-264VAC, 47-440 Hz
- Regulated Output
- Low Ripple and Noise
- CE, UL Approval
- 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.    ( Single Output ) |                                     | ANC-5S    A                                                              | ANC-12S    A | ANC-15S    A | ANC-24S    A |
|--------------------------------|-------------------------------------|--------------------------------------------------------------------------|--------------|--------------|--------------|
| Max Output Wattage (W)         |                                     | 15W                                                                      | 15W          | 15W          | 15W          |
| Input                          | Voltage                             | 90-264 VAC or 120-370 VDC                                                |              |              |              |
|                                | Frequency (Hz)                      | 47-440 Hz                                                                |              |              |              |
|                                | Current (Full load)                 | 310 mA max. (115 VAC) / 170 mA max. (230 VAC)                            |              |              |              |
|                                | Inrush Current (<2ms)               | 10 A max. (115 VAC) / 20 A max. (230 VAC)                                |              |              |              |
|                                | Leakage Current                     | 0.75 mA max.                                                             |              |              |              |
|                                | External Fuse (recommend)           | 1.5 A slow blow type                                                     |              |              |              |
| Output                         | Voltage (V.DC.)                     | 5V                                                                       | 12V          | 15V          | 24V          |
|                                | Voltage Accuracy                    | ±2%                                                                      |              |              |              |
|                                | Current (mA) max                    | 3000                                                                     | 1250         | 1000         | 625          |
|                                | Line Regulation (LL-HL) (typ.)      | ±0.5%                                                                    |              |              |              |
|                                | Load Regulation (5-100%) (typ.)     | ±0.5%                                                                    |              |              |              |
|                                | Minimum Load                        | 4%                                                                       | 2%           | 0%           | 0%           |
|                                | Maximum Capacitive Load             | 31000 uF                                                                 | 4500 uF      | 2700 uF      | 900 uF       |
|                                | Ripple                              | <0.2% Vout +40mV max (Vp-p)                                              |              |              |              |
|                                | Noise                               | <0.5% Vout +50mV max (Vp-p)                                              |              |              |              |
|                                | Efficiency                          | 74%                                                                      | 79%          | 78%          | 80%          |
|                                | Hold-up Time                        | 15 ms min.                                                               |              |              |              |
| 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)                 | 3000V                                                                    |              |              |              |
|                                | Input-FG (V.AC)                     | 1500V                                                                    |              |              |              |
|                                | Output-FG (V.AC)                    | 500V                                                                     |              |              |              |
| Environment                    | Operating Temperature               | -25°C...+70°C (with derating)                                            |              |              |              |
|                                | Storage Temperature                 | -40°C...+85°C                                                            |              |              |              |
|                                | Temperature Coefficient             | ±0.02%/°C                                                                |              |              |              |
|                                | Humidity                            | 95% RH                                                                   |              |              |              |
|                                | MTBF                                | >200,000 h @ 25°C (MIL-HDBK-217F)                                        |              |              |              |
| Physical                       | Dimension (L x W x H)               | 2.91 x 2.13 x 0.86 Inches    ( 74.1 x 54.1 x 21.8 mm ) Tolerance ±0.5 mm |              |              |              |
|                                | Case Material                       | Plastic resin (flammability to UL 94V-0)                                 |              |              |              |
|                                | Weight                              | 114 g                                                                    |              |              |              |
|                                | Cooling Method                      | Free air convection                                                      |              |              |              |
| Safety                         | Agency Approvals                    | UL/cUL, CE                                                               |              |              |              |
| EMC                            | EMI (Conducted & Radiated Emission) | EN 55022 class B                                                         |              |              |              |
|                                | EMS (Noise Immunity)                | EN 55024                                                                 |              |              |              |

## ELECTRICAL SPECIFICATIONS

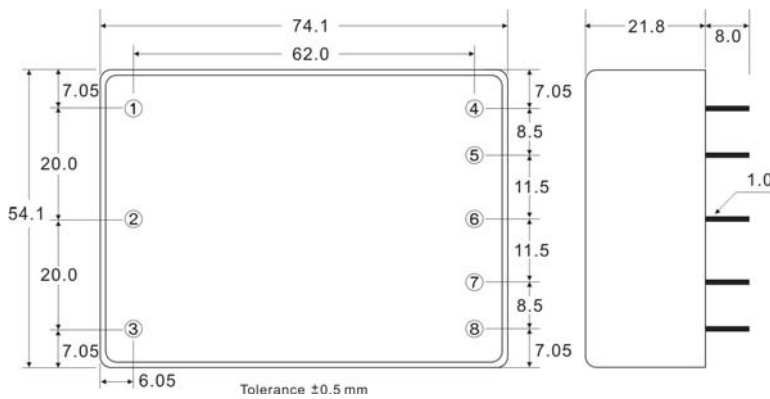
All specifications valid at normal input voltage, full load and +25°C after warm-up time unless otherwise stated.

| Model No.              | ( Dual 、 Triple Output )            | ANC-5D A                                                              | ANC-12D A | ANC-15D A | ANC-5S12D A     | ANC-5S15D A     |
|------------------------|-------------------------------------|-----------------------------------------------------------------------|-----------|-----------|-----------------|-----------------|
| Max Output Wattage (W) |                                     | 15W                                                                   | 15W       | 15W       | 15W             | 15W             |
| Input                  | Voltage                             | 90-264 VAC or 120-370 VDC                                             |           |           |                 |                 |
|                        | Frequency (Hz)                      | 47-440 Hz                                                             |           |           |                 |                 |
|                        | Current (Full load)                 | 310 mA max. (115 VAC) / 170 mA max. (230 VAC)                         |           |           |                 |                 |
|                        | Inrush Current (<2ms)               | 10 A max. (115 VAC) / 20 A max. (230 VAC)                             |           |           |                 |                 |
|                        | Leakage Current                     | 0.75 mA max.                                                          |           |           |                 |                 |
|                        | External Fuse (recommend)           | 1.5 A slow blow type                                                  |           |           |                 |                 |
| Output                 | Voltage (V.DC.)                     | ±5V                                                                   | ±12V      | ±15V      | 5/±12           | 5/±15           |
|                        | Voltage Accuracy                    | ±5%                                                                   |           |           | ±3%             |                 |
|                        | Current (mA) max                    | ±1500                                                                 | ±650      | ±500      | 2000/±200       | 2000/±150       |
|                        | Line Regulation (LL-HL) (typ.)      | ±0.5%                                                                 |           |           | ±1% / ±5%       |                 |
|                        | Load Regulation (5-100%) (typ.)     | ±3%                                                                   |           |           | ±2% / ±5%       |                 |
|                        | Minimum Load                        | 0%                                                                    |           |           | 5V 10% (200 mA) |                 |
|                        | Maximum Capacitive Load             | ±13500 uF                                                             | ±2700 uF  | ±1400 uF  | 14000 / ±900 uF | 14000 / ±680 uF |
|                        | Ripple                              | <0.2% Vout +40mV max (Vp-p)                                           |           |           |                 |                 |
|                        | Noise                               | <0.5% Vout +50mV max (Vp-p)                                           |           |           |                 |                 |
|                        | Efficiency                          | 76%                                                                   | 79%       | 77%       | 73%             | 73%             |
|                        | Hold-up Time                        | 15 ms min.                                                            |           |           |                 |                 |
| 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)                 | 3000V                                                                 |           |           |                 |                 |
|                        | Input-FG (V.AC)                     | 1500V                                                                 |           |           |                 |                 |
|                        | Output-FG (V.AC)                    | 500V                                                                  |           |           |                 |                 |
| Environment            | Operating Temperature               | -25°C...+70°C (with derating)                                         |           |           |                 |                 |
|                        | Storage Temperature                 | -40°C...+85°C                                                         |           |           |                 |                 |
|                        | Temperature Coefficient             | ±0.02%/°C                                                             |           |           |                 |                 |
|                        | Humidity                            | 95% RH                                                                |           |           |                 |                 |
|                        | MTBF                                | >200,000 h @ 25°C (MIL-HDBK-217F)                                     |           |           |                 |                 |
| Physical               | Dimension (L x W x H)               | 2.91 x 2.13 x 0.86 Inches ( 74.1 x 54.1 x 21.8 mm ) Tolerance ±0.5 mm |           |           |                 |                 |
|                        | Case Material                       | Plastic resin (flammability to UL 94V-0)                              |           |           |                 |                 |
|                        | Weight                              | 114 g                                                                 |           |           |                 |                 |
|                        | Cooling Method                      | Free air convection                                                   |           |           |                 |                 |
| Safety                 | Agency Approvals                    | UL/cUL, CE                                                            |           |           |                 |                 |
| EMC                    | EMI (Conducted & Radiated Emission) | EN 55022 class B                                                      |           |           |                 |                 |
|                        | EMS (Noise Immunity)                | EN 55024                                                              |           |           |                 |                 |

## NOTE

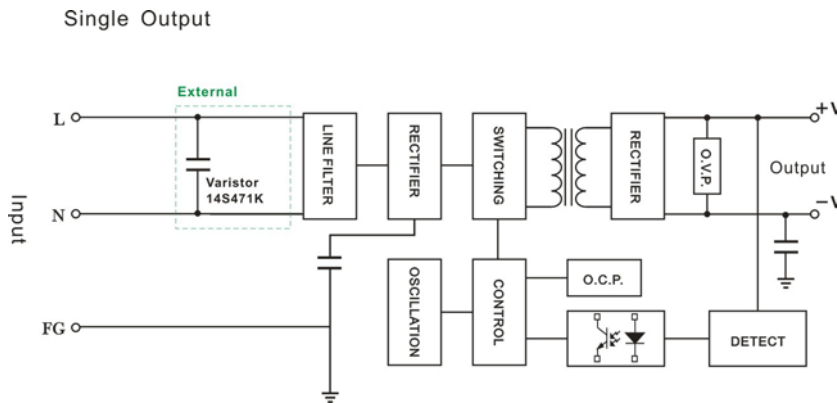
1. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
2. It's recommended to add Varistor 14S471K at L / N input side in parallel.
3. Please refer to our PDF file "AC-DC Application" on our website: [www.archcorp.com.tw](http://www.archcorp.com.tw)

# MECHANICAL DIMENSION ( Top View )



| PIN# | Single    | Dual      | Triple    |
|------|-----------|-----------|-----------|
| 1    | FG        | FG        | FG        |
| 2    | AC IN (N) | AC IN (N) | AC IN (N) |
| 3    | AC IN (L) | AC IN (L) | AC IN (L) |
| 4    | NO PIN    | NO PIN    | -DC OUT   |
| 5    | -DC OUT   | -DC OUT   | COMMON    |
| 6    | NO PIN    | COMMON    | +DC OUT   |
| 7    | +DC OUT   | +DC OUT   | +5V RTN   |
| 8    | NO PIN    | NO PIN    | +5V OUT   |

# BLOCK DIAGRAM



# DERATING

