







Rohs compliant compliant CB (E

#### 240 Watts Dual Output Models

- 5.00 x 3.20 x 1.50" U-Frame Package
- 5.00 x 3.20 x 2.00" Top-Mount Fan Package
- 5.00 x 3.20 x 1.66" Perforated Top-Cover Package
- 6.50 x 3.20 x 1.60" End-Mount Fan Package

#### Features:

- Universal AC Input (90-264 VAC)
- Power Factor Correction for EN61000-3-2 Class D Compliance
- Ruggedized Aluminum Enclosure
- International Safety Approvals
- 2 Year Warranty

# INPUT:

Input Voltage 90~264 VAC (Universal)

Input Frequency 47-63Hz

Inrush Current 35A / 70A Max @ 115/ 230 VAC Cold Start

Input Current 5A Max @ 90 VAC (Full Load) Input Protection Single Fuse - F5A/350V Hold-Up Time 20ms @ 80% Load / Minimum Leakage Current <1500 μA @ 240 VAC Maximum Harmonics EN61000-3-2 Class D Compliant

### **GENERAL:**

Efficiency 80% Minimum (Full Load & 230VAC Operation)

Operating Temperature 0-70°C, derate linearly to 50% Load at 70°C

Storage Temperature -20°C to +85°C

Over-Temp Protection >85°C Shutdown (Ambient)

Cooling 25 cfm airflow required for full load

Operating Humidity 5-90% RH, Non-Condensing

Vibration 5 ~ 50 Hz, acceleration 7.35 m/s\*s on X,Y and Z Axis MTBF >100k Hrs (according to MIL-HBK-217F) at 30°C

# **OUTPUT:**

Adjustment Range ±5%

Minimum Load 1% to maintain Regulation

Regulation ±5% max

Ripple & Noise ±1% typ. pk-pk @ 20MHz

Overload Protection 110-140% of max power (Foldback)

Over Voltage Latching, >130% of nominal

Short Circuit Protection Trip without damage & auto-recovery

Transient Response recovers <2.5ms following a 50% load change

Overshoot Turn-on & off overshoot < 5% over nominal voltage

Turn-On Delay 1 Second maxiimum at 230VAC

### EMC:

Electrostatic Discharge EN61000-4-2, ±4KV Contact / ±8KV Air Discharge Radiated Susceptibility EN61000-4-3, 80-1000MHz, 13V/M, 80% AM

EFT / Bursts EN61000-4-4, ±1KV

Surges EN61000-4-5, ±2KV Line-Earth, ±1KV Line-Line

Conducted Immunity EN61000-4-6, 0.15-80MHz,  $3V_{\text{BMS}}$ , 80% AM

Voltage Interruptions EN61000-4-11, 95% reduction, 5s

Fluctuations & Flicker EN61000-3-3

### **STATUS & CONTROL:**

Remote on/off Low signal to inhibit output

Power Good high 100- 500mS after DC Regulation

goes low at least 1mS before loss of regulation

Power Supply On Green LED on PCB Fan Output 12 VDC @ 300mA

Fan Fail open collector, high = fan failure detected

### APPROVALS:

Emissions EN55022 "B", FCC Part 15 Subject J Class B

Safety Approvals UL/cUL 60950-1

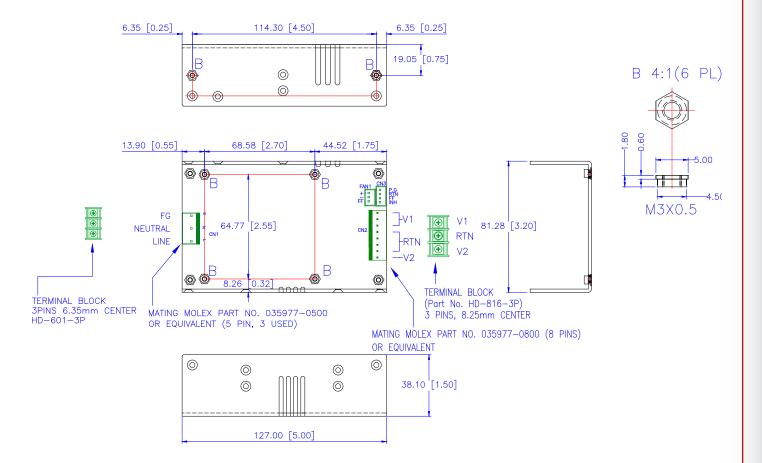
TUV EN60950-1 CB IEC60950-1 CE Mark



		Max Output Current			Max Output Current		Maxim Power (Continuous)	
Model:	V1 Out	Convection	25 cfm	V2 Out	Convection	25 cfm	Convection	25 cfm
APS303RDx-0512	5.0 V	12 A	24A	12V	6.67A	13.33A	120 Watts	240 Watts
APS303RDx-0524	5.0V	12A	24A	24V	3.33A	6.67A	120 Watts	240 Watts
APS303RDx-0548	5.0V	12A	24A	48V	1.67A	3.33A	120 Watts	240 Watts
APS303RDx-1224	12V	6.67A	13.33A	24V	3.33A	6.67A	120 Watts	240 Watts

- To designate preferred mechancial package, Replace "x" with
  - U = U-Frame Package
  - C = Perforated Top Cover
  - F = Top-Mount Fan
  - E = End-Mount Fan (+ Add Suffix to designate Input Connector: "A" = Terminal Block | "B" = IEC-320)
- · Consult APS for custom Output Voltage Setpoint
- Standard Input / Output Connections are Terminal Blocks. Add Suffix "M" to designate Molex Connections:
  - Input Connector(CN1): Mating Molex Part No. 035977-0500 or equivalent (5 pin, 3 used) PCB is Labeled: L = Line; N = Neutral; G = Chassis Ground 3 pin Terminal block 6.35MM Center (HD-602-3P).
  - Output Connector (CN2): Mating Molex Part No. 035977-0800. Mating Pins: Molex Engineering Series 2478, 2578, 8818. or Howder HD-816-3P
- Power Good, Remote On/Off & Fan Failmating connectors (CN1): Mating JST Part No. XHP-3 or equivalent (CHYAO SHIUNN JS-2001-04). Mating Pins: JST SXH-002T-P0.6 for AWG 30 to 26.
- Fan Drive: Mating JST Part No. XHP-2 or equivalent (CHYAO SHIUNN JS-2001-03).
- Mounting Inserts: 6 Places M3. Maximum Penetration 3.8mm. Designated as "B" on mechanical drawing below.

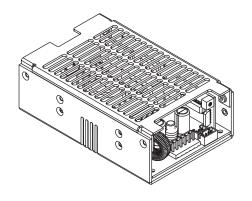
#### **U-FRAME PACKAGE:**

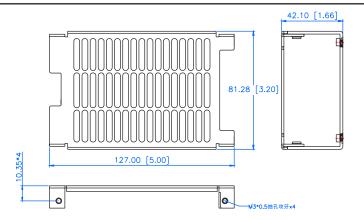




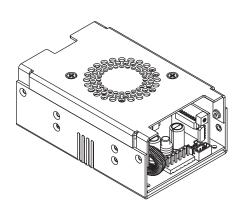
**Mechanical Specifications:** 

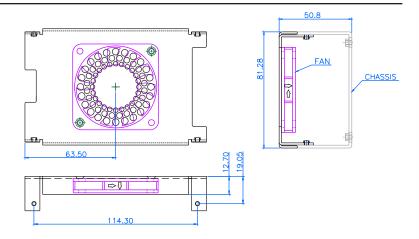
#### **TOP-COVER PACKAGE:**





### **TOP-MOUNT FAN PACKAGE:**







**Mechanical Specifications:** 

#### **END-MOUNT FAN PACKAGE:**

