

300 Watts Single 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
- Peak Loads up to 600 Watts for 500 μ s
- 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	16ms @ 80% Load / Minimum
Leakage Current	<1500 μ A @ 240 VAC Maximum
Harmonics	EN61000-3-2 Class D Compliant

GENERAL:

Efficiency	70% for 5V units & 80% for other units
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 ² on X,Y and Z Axis
MTBF	>100k Hrs (according to MIL-HBK-217F) at 30°C

OUTPUT:

Adjustment Range	\pm 5%
Minimum Load	1% to maintain Regulation
Regulation	\pm 1% max
Ripple & Noise	\pm 1% typ. pk-pk @ 20MHz
Overload Protection	110-140% of max power (Foldback)
Over Voltage	Latchin, >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 maximum at 230VAC

EMC:

Electrostatic Discharge	EN61000-4-2, \pm 8KV Contact / \pm 8KV Air Discharge
Radiated Susceptibility	EN61000-4-3, 80-1000MHz, 13V/M, 80% AM
EFT / Bursts	EN61000-4-4, \pm 1KV
Surges	EN61000-4-5, \pm 2KV Line-Earth, \pm 1KV Line-Line
Conducted Immunity	EN61000-4-6, 0.15-80MHz, 3V _{RMS} , 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:

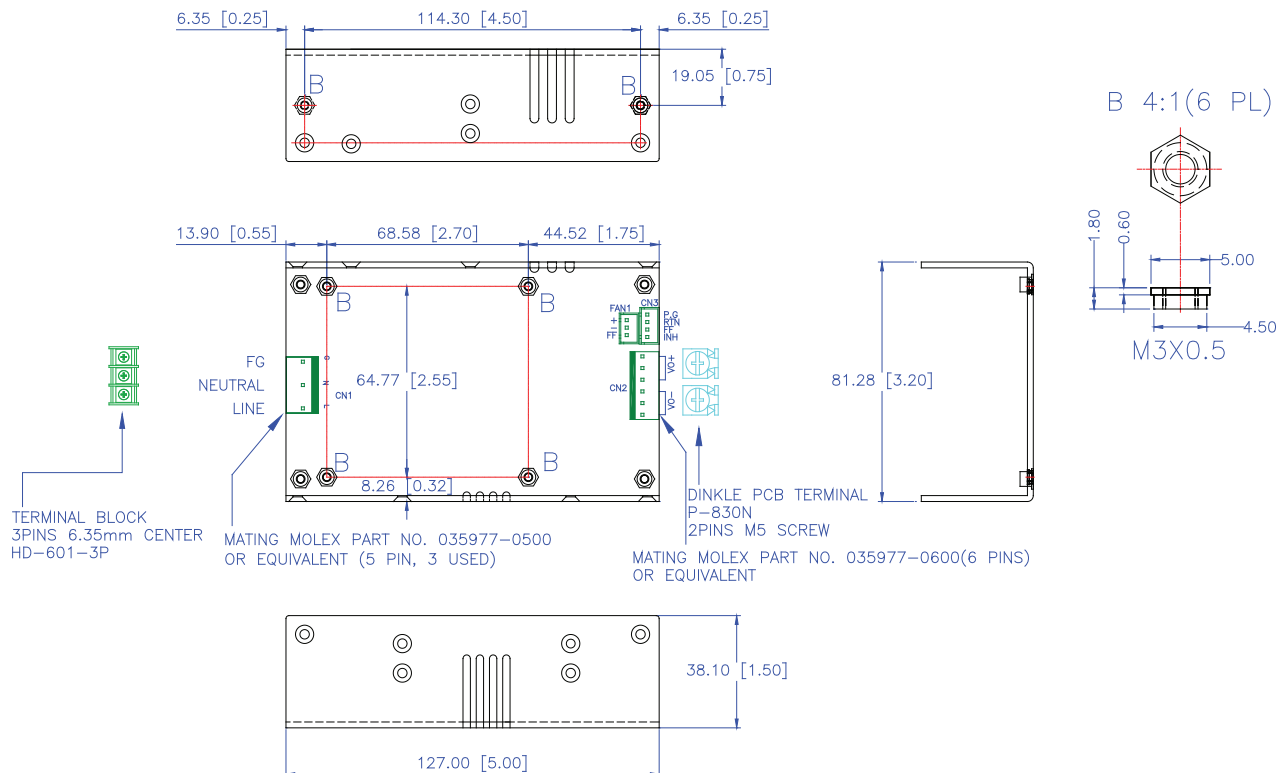
Emissions	EN55022 "B", FCC Part 15 Subject J Class B
Safety Approvals	UL/cUL 62368-1 TUV EN62368-1 CB IEC62368-1 CE Mark

Output Specifications:

Model:	Vout	Convection Ratings		With Airflow		Factory Setpoint Range
		Current	Power	Current	Power	
APS303Rx-05	5.0V	20A	100 Watts	42.00 A	210 Watts	2.0 ~ 5.0 VDC
APS303Rx-09	9.0V	13.64 A	123 Watts	27.27 A	245 Watts	7.0 ~ 11.0VDC
APS303Rx-12	12V	12.50 A	150 Watts	25.00 A	300 Watts	12 ~ 13.8 VDC
APS303Rx-15	15V	10.00 A	150 Watts	20.00 A	300 Watts	14 ~ 16.0 VDC
APS303Rx-18	18V	8.33 A	150 Watts	16.67 A	300 Watts	17 ~ 22 VDC
APS303Rx-24	24V	6.25 A	150 Watts	12.50 A	300 Watts	23 ~ 28 VDC
APS303Rx-30	30V	5.00 A	150 Watts	10.71 A	300 Watts	29 ~ 34 VDC
APS303Rx-36	36V	4.17 A	150 Watts	8.33 A	300 Watts	35 ~ 43 VDC
APS303Rx-48	48V	3.13 A	150 Watts	6.25 A	300 Watts	44 ~ 52 VDC
APS303Rx-54	54V	2.78 A	150 Watts	5.56 A	300 Watts	53 ~ 60 VDC

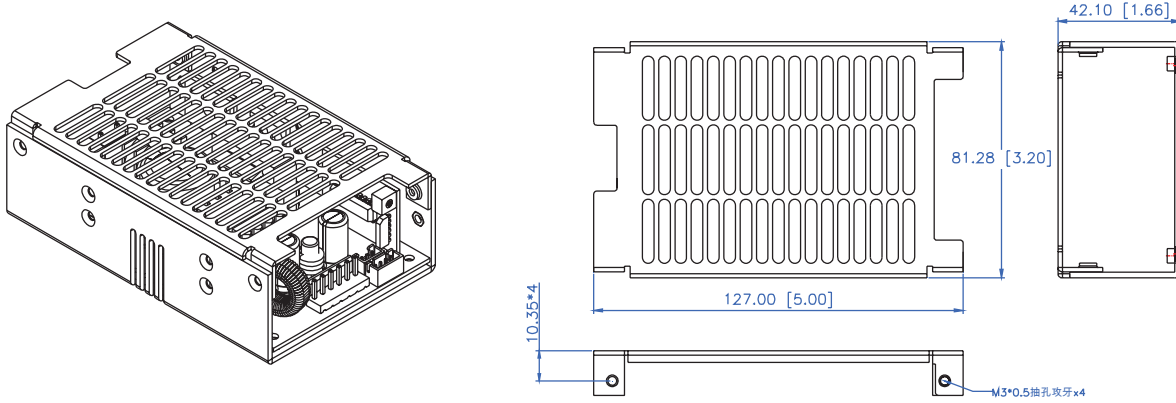
- To designate preferred mechanical package, Replace "x" with
 - U = U-Frame Package
 - C = Perforated Top Cover
 - F = Top-Mount Fan
 - E = End-Mount Fan (+ Add Suffix to designate Input Connector: "A" = Terminal Block | "B" = IEC-320)
- Add Suffix "I" for Industrial option to gain -40 ~ +85°C Operation with derating of 2.5% / °C >50°C.
- Consult APS for any Output Voltage within the specified Factory Setpoint Ranges above (All safety approvals are maintained)
- 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
 - Mating Pins: Molex Engineering Series 2478, 2578, 8818 or Howder M3. 3 pin Terminal block 6.35MM Center (HD-601-3P).
 - Output Connector (CN2): Mating Molex Part No. 035977-0600. Mating Pins: Molex Engineering Series 2478, 2578, 8818. or Dinkle P-830N Terminal Block (M5 Screw)
- 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:

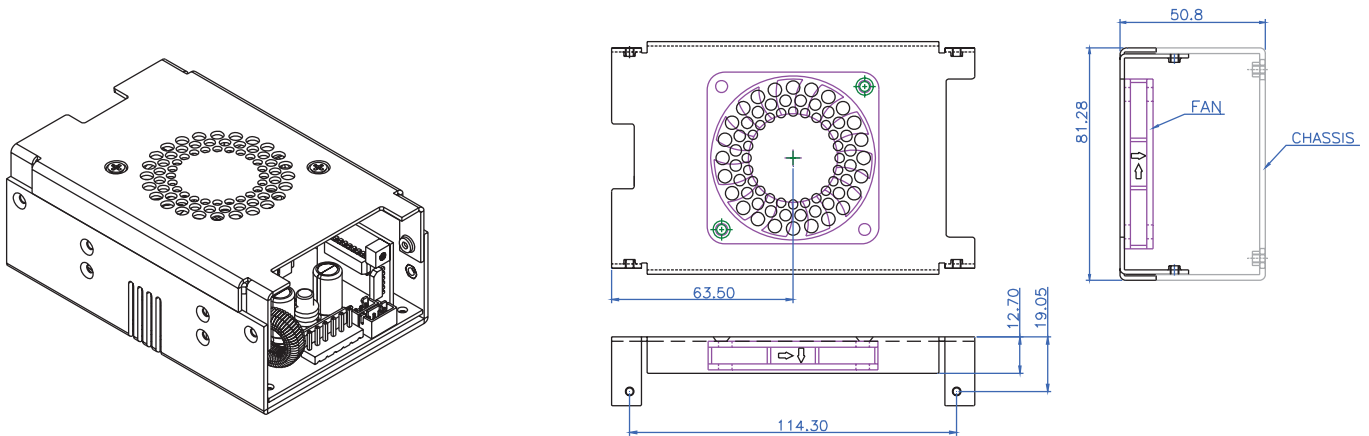


Mechanical Specifications:

TOP-COVER PACKAGE:



TOP-MOUNT FAN PACKAGE:



Mechanical Specifications:

END-MOUNT FAN PACKAGE:

