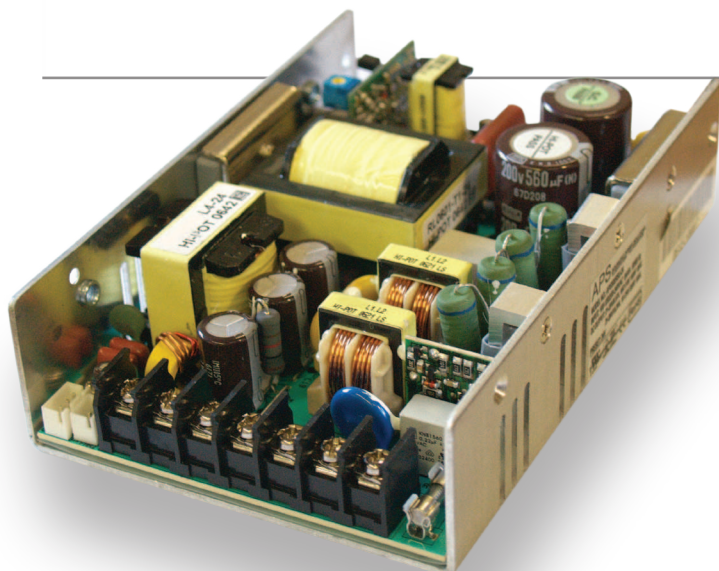


APS403Rx SERIES:



400 Watts Single Output Models

- 6.00 x 4.00 x 1.50" U-Frame Package
- 6.00 x 4.00 x 1.55" U-Frame with Perforated Cover Package
- 7.00 x 4.00 x 1.60" End-Mount Fan Package
- 6.00 x 4.00 x 2.00" Top-Mount Fan Package

Features:

- Universal AC Input (90~264 VAC)
- Active Power Factor Correction for EN61000-3-2 Compliance
- Peak Loads up to 700 Watts for 500 μ s
- Low Profile for 1U High Applications
- Power Good & Fan Fail Functions
- 12V Aux Fan Output
- International Safety Approvals
- 2 Year Warranty

INPUT:

Input Voltage	Universal 90~264 VAC (Universal)
Input Frequency	47-63Hz
Inrush Current	35A @ 115 / 70A @ 230 VAC Cold Start
Input Current	6A @ 100 VAC / 3A @ 200 VAC (max)
Input Protection	Single Fuse - 8A / 250VAC
Hold-Up Time	20ms @ 80% Load
Leakage Current	<1500 μ A @ 240 VAC Max
Harmonics	EN61000-3-2 Class D Compliant

GENERAL:

Efficiency	70~83% typical (230 VAC / Full Load)
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	18 cfm airflow required for full load (except 5V model requires 22 cfm 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	±5%
Minimum Load	1% to maintain Regulation
Regulation	±1% max
Ripple & Noise	±1% or 50mV typ. pk-pk @ 20MHz (whichever is greater)
Overload Protection	110-140% of max power (Hiccup Mode)
Over Voltage	Latching before 130% of nominal
Short Circuit Protection	Trip without damage & auto-recovery
Transient Response	recovers <500 μ s following a 50% load change
Overshoot	Turn-on & off overshoot < 5% over nominal voltage
Turn-On Delay	1 Second maximum at 120VAC

EMC:

Electrostatic Discharge	EN61000-4-2, ±4KV Contact / ±8KV Air Discharge
Radiated Susceptibility	EN61000-4-3, 26-1000MHz, 10V/M, 80% AM
EFT / Bursts	EN61000-4-4, ±2KV
Surges	EN61000-4-5, ±2KV Line-Earth, ±1KV Line-Line
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

STATUS & CONTROL:

Power Supply On	Green LED on PCB
Fan Output	12 VDC @ 300mA
Fan Fail	High = Failure (15V/5mA Sink Current)
Remote on/off	Included

APPROVALS:

Emissions	EN55022 "B", FCC Part 15 Subject J Class B
Safety Approvals	UL/cUL 60950-1 CSA22.2 No. 60950-1 TUV EN60950-1 CB IEC60950-1 CE Mark (LVD)

APS403Rx SERIES:

Output Specifications:

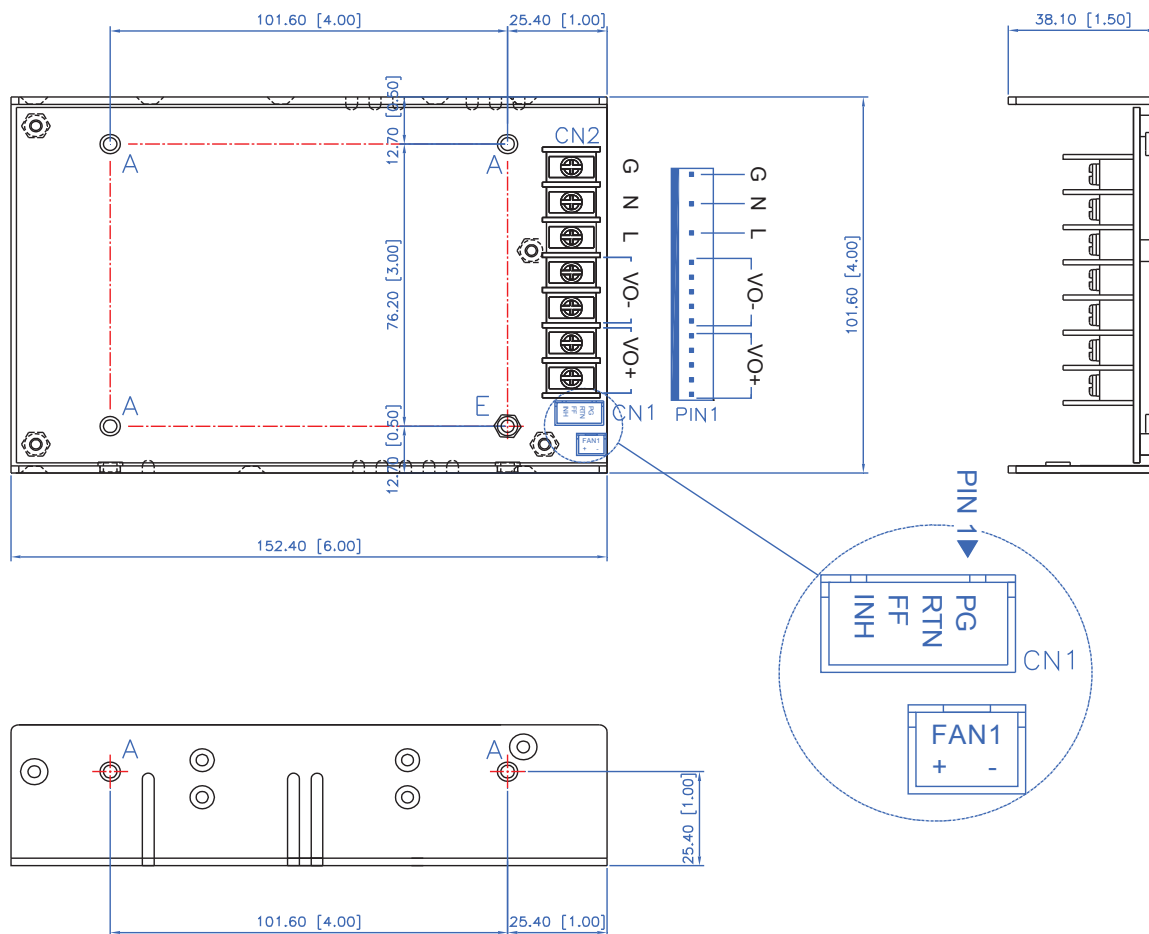
Model:	Vout	Convection Ratings		With Airflow		Factory Setpoint Range
		Current	Power	Current	Power	
APS403Rx-12	12 V	18.33 A	220 Watts	33.33 A	400 Watts	10 ~ 13.8 VDC
APS403Rx-15	15 V	14.67 A	220 Watts	26.67 A	400 Watts	14 ~ 15.5 VDC
APS403Rx-18	18 V	12.22 A	220 Watts	22.22 A	400 Watts	16 ~ 20 VDC
APS403Rx-24	24 V	9.17 A	220 Watts	16.67 A	400 Watts	21 ~ 26 VDC
APS403Rx-28	28 V	7.88 A	220 Watts	14.29 A	400 Watts	27 ~ 34 VDC
APS403Rx-36	36 V	6.11 A	220 Watts	11.11 A	400 Watts	35 ~ 42 VDC
APS403Rx-48	48 V	4.53 A	220 Watts	8.33 A	400 Watts	43 ~ 50 VDC
APS403Rx-54	54 V	4.07 A	220 Watts	7.41 A	400 Watts	51 ~ 60 VDC

- Replace "x" with the options below to designate preferred mechanical package:

U = U-Frame Package C = Perforated Cover F = Top-Mount Fan E = End Mount Fan
 (Convection Cooled Only)

- Consult APS for any Output Voltage within the specified Factory Setpoint Ranges above (All safety approvals are maintained)
- Standard Connections are Terminal Block. Add the Suffix "M" to designate Molex type connectors.
- Input and Output Connector (CN2): HowderTerminal block Part No. HB-95-7P or Mating Molex Part No. 09-91-1600 (16 pin).
- Mounting Inserts: 8 Places / M4X0.7 / Maximum Penetration 4mm sees outline drawing for location.
- Logic connector: JST XHP-4 or equivalent (CHYAO SHIUNN JS-2001-04); Mating Pins: JST SXH-002T-P0.6 FOR AWG 30 to 26.
- Fan driver connector (FAN2): Mating connector is a P/N JST XHP-2 or equiv (JS-2001-02).

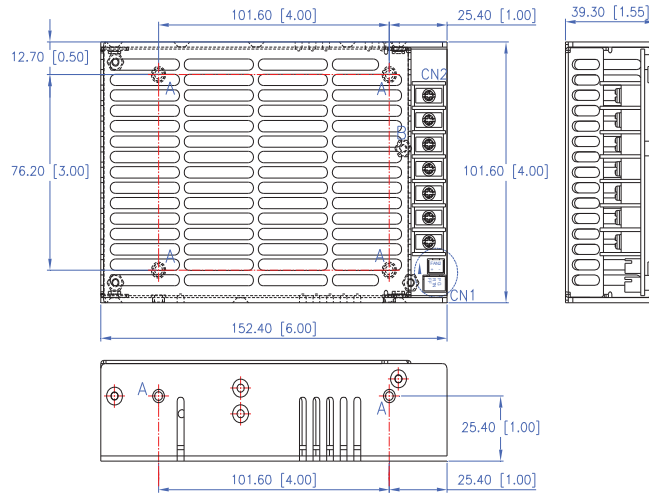
U-FRAME PACKAGE (OPTION "U"):



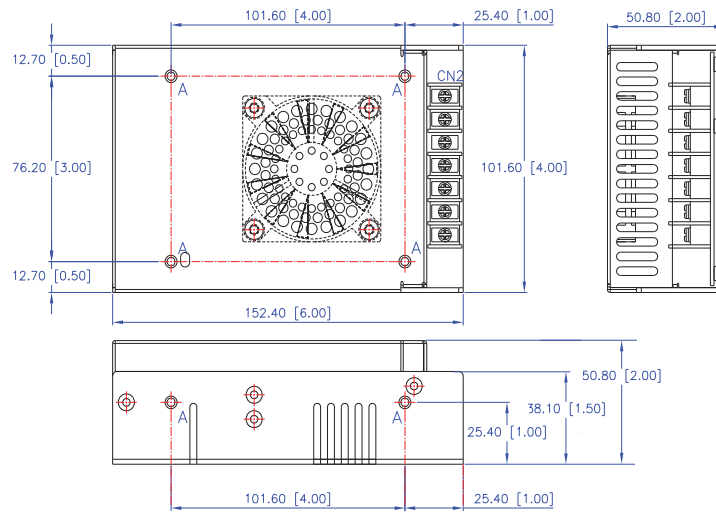
APS403Rx SERIES:

SEE U-FRAME PACKAGE FOR PIN ASSIGNMENTS:

**PERFORATED COVER PACKAGE
(OPTION "C"):**



**TOP-MOUNT FAN PACKAGE
(OPTION "F"):**



**END-MOUNT FAN PACKAGE
(OPTION "E"):**

