

## APS500Rx SERIES:



### 500 Watts / Single Output

- 8.00 x 4.33 x 2.50" U-Frame Package (Optional Cover)
- 8.00 x 4.33 x 3.40" Top-Mount Fan Package
- 9.17 x 4.25 x 2.50" End-Mount Fan Package

### Features:

- Universal AC Input
- Active Power Factor Correction
- U-Frame / Top-Mount Fan / End-Mount Fan Packages
- Remote Sense Function
- Remote on/off Control
- Optional Current Share
- International Safety Approvals
- 2 Year Warranty

### INPUT:

Input Voltage	90-264 VAC
Input Frequency	47-63Hz
Inrush Current	70A Max @ 230 VAC Cold Start
Input Current	8A @ 90 VAC Max.
Input Protection	Single T10A/250V Fuse
Hold-Up Time	20ms @ 80% Load / Minimum
Leakage Current	<750 $\mu$ A @ 230 VAC
Power Factor	EN61000-3-2 Class D Compliant

### GENERAL:

Efficiency	80% typical
Operating Temperature	0 to 50°C full load, derate 2.5% per °C to 70°C max.
Storage Temperature	-20°C to +85°C
Over-Temp Protection	>85°C Shutdown (Ambient)
Cooling	25CFM Required for full load or Enclosed Fan for Self-Cooling
Temp Co-Efficient	0.04% per °C
OverTemp Protection	>85°C
Operating Humidity	5-90% RH, Non-Condensing
Vibration	5 ~ 50 Hz, acceleration 7.35 m/s*s on X,Y and Z Axis
MTBF	>150k Hrs (according to MIL-HBK-217F) at 30°C

### OUTPUT:

Minimum Load	n/a
Line Regulation	$\pm$ 0.1% typ.
Load Regulation	$\pm$ 1% max
Ripple & Noise	$\pm$ 1% typ. pk-pk @ 20MHz
Overload Protection	110-140% of max power
Over Voltage	Latching before 130% of nominal
Adjustment Range	$\pm$ 5% minimum (see factory set point range)
Transient Response	recovers <2.5ms following a 50% load change
Overshoot	Turn-on & off overshoot < 5% over nominal voltage

### EMC:

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

Remote Sense	Compensates <0.25V / not available w/ Current Share
Remote on/off Control	Low signal to inhibit output
Power Good	TTL high 100- 500mS after regulation. It goes low at least 1mS before loss of regulation
Current Monitor	0.5 ~ 3VDC represents 0% to 100% output current
Current Share	10% accuracy and up to 4units
LED Indicator	Green = Power On / Amber= Fault
Fan Output	12V @ 400mA

### APPROVALS:

Emissions	EN55022 "B", FCC Part 15 Subject J Class B
Safety Approvals	UL/cUL 60950-1 TUV EN60950-1 CE Mark (LVD)

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### Output Specifications:

Model:	Vout	Max Output Current	Factory Setpoint Range	Max Output Power
APS500Rx-03	3.3V	80.0A	2 ~ 3.3V	264 Watts
APS500Rx-05	5.0V	80.0A	5 ~ 6V	400 Watts
APS500Rx-12	12V	41.67A	12 ~ 14V	500 Watts
APS500Rx-15	15V	33.33A	15 ~ 19V	500 Watts
APS500Rx-24	24V	20.83A	20 ~ 26V	500 Watts
APS500Rx-36	36V	13.89A	27 ~ 36V	500 Watts
APS500Rx-40	40V	12.50A	37 ~ 47V	500 Watts
APS500Rx-48	48V	10.42A	48 ~ 56V	500 Watts

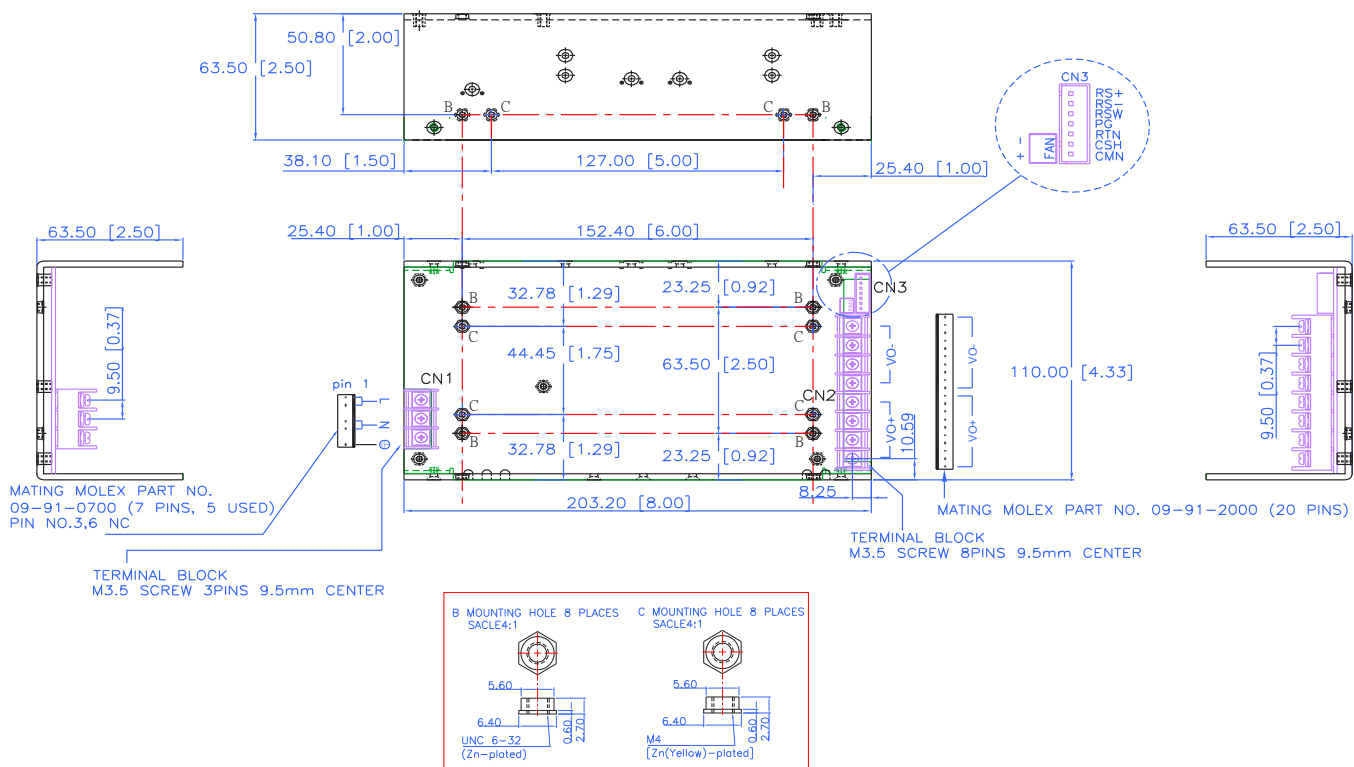
- Replace "x" in Model Number to Designate Desired Mechanical Package:

U = U-Frame Package      E = Enclosed Type + Add Suffix to designate Input Connector: "A" = Terminal Block | "B" = IEC-320 with Switch

- Consult APS for any Output Voltage within the specified Factory Setpoint Ranges above (All safety approvals are maintained)
- Default Connections are Terminal Block (no suffix required):
  - Add the Suffix "C" to designate Molex Output Connector for Enclosed Models
  - Add the Suffix "T" to designate Terminal Block Input / Molex Output Connector for U-Frame Models
  - Add the Suffix "H" to designate Molex Input & Output Connectors for U-Frame Models
- Add the Suffix "I" to designate current share option (remote sense function disabled with this option).

AC Input Connector (CN1): E Type: IEC320 or equivalent Snap-in mounting type or DINKLE Terminal block Part No. DT-35-A02W-03 (3 pin). U & F Type: Mating Molex Part No. 09-91-0700 or equivalent (7 pin, 5 used) or Howder Terminal block Part No. HD-121-3P. Output Connector (CN2): Mating Molex Part No. 09-91-2000 (20 pin) or Howder Terminal block Part No. HD-121-8P (8 pin). Output Pin Assignment: Optional two type - Molex: VO+ ( Pins 1-10 ), VO- ( Pins 11-20 ); Howder: VO+ ( Pins 1-4 ), VO- ( Pins 5-8). Logic signal connectors (CN3): Mating JST XHP-7 or equivalent (CHYAO SHIUNN JS-2001-07). Fan Drive: 12VDC/400mA Mating JST XHP-2 or equivalent (CHYAO SHIUNN JS-2001-02). Mounting Inserts: 6-32, M4 Places individually with maximum penetration 0.2 inch on bottom side and 0.25 inch on both side.

### MECHANICAL DRAWING: TYPE "U" (U-FRAME):



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### MECHANICAL DRAWING: TYPE "E" (END-MOUNT FAN)

