

UNIVERSAL INPUT HARMONIC CORRECTION AC TO DC MULTIPLE OUTPUT LOAD SHARING 200 WATTS INTERNAL SWITCHING POWER SUPPLIES APS200VP SERIES



FEATURES:

- ACCOMMODATES UNIVERSAL AC SOURCES
- MEETS IEC1000-3-2 HARMONIC CORRECTION
- DESIGNED TO MEET UNIVERSAL SAFETY
- EMI/RFI MEET CISPR PUB. 22 CLASS B
- +5V STAND-BY GREEN POWER
- CE MARKING COMPLIANCE

SPECIFICATIONS

INPUT SPECIFICATIONS:

Input Voltage: Typ. 85-265VAC
Input Connector: V-M connector
Input Frequency: 47-63Hz
Inrush Current: Max. 33A @ 230VAC
Input Current: 1.0A@230VAC / 2.25A@115VAC
Dielectric Withstand: Meets IEC950;
3,000VAC-Outp./Inp.; 1,500VAC-Inp./GND; 500VAC-Outp./GND
EMI/RFI: Meets CISPR PUB. 22 Class B
Hold-up Time: 18ms @ 115VAC
Power Fail Signal: Optional
DC OK Signal: Installed at output VO1 and VO2
Power Factor Correction: per IEC1000-3-2
Remote Inhibit: Installed – Enable – active high
Over Temperature Protection: 90°C Thermostat
Optional for shutdown or auto-recovery

OUTPUTS SPECIFICATIONS:

Output Voltage: See RATINGS CHARTS
Output Currents: See RATINGS CHARTS
Centering: Initial setting on all auxiliary
Outputs 50% typical load;±5%typ. ±3% optional
Line Regulation: Main & Aux. ±0.1% typical
Load Regulation: Main VO1 & Aux. VO2 ±1% typical
Aux. VO3,4,5 ±3.0% typical with P.R.
Noise & Ripple: Typical 1% peak to peak
OVP: Installed on VO1; optional for VO@ and VO5
Remote Sense: Installed on VO1 and VO2
Load Share: Active current share; available VO1 rail
Adjustability: Available for VO1 and VO1
Overload Protection: Set from 115 to 150% of max. power.
Fully protected against overload and short circuit
Output Power: 150Watt with Convection cooling
200Watt with 300 lfm (30cfm) forced air
Earth Leakage: Less than 0.75mA

GENERAL SPECIFICATIONS:

Efficiency: Typical 67 to 70%
Switching Frequency: Fixed freq. at 70KHz
Circuit Topology:
PWM fixed-frequency forward circuit
Transient Response: Output voltage returns in
less than 3ms following a 50 %load change
Safety Standard: IEC950 / UL1950 Class I
Power Density: 3.0 Watt per Cubic Inch
Operating Temperature: 0-50°C at full load;
de-rate output power linearly to 70°C at 2.5% per °C
Storage Temperature: -55 to +85°C
Temperature Coefficient: 0.03 % per °C typical
Cooling: 30 CFM air-flow is required for full power
Long Term Stability: After 15 minutes warm-up
0.1% for 8 hours
Construction: U-bracket construction format

OUTPUT VOLTAGE/CURRENT RATING CHARTS

DUAL OUTPUT

MODEL NO.	MAIN VO1 O/P @ ★# =			AUX. VO2 O/P @ ★# =		
	Typ. A	Volt	Peak A	Typ. A	Volt	Peak A
APS200VP-290B	30.0A	+3.3V	30.0A	15.0A	+5.0V	15.0A
APS200VP-291	30.0A	+3.3V	30.0A	5.0A	+12.0V	6.0A
APS200VP-292	30.0A	+3.3V	30.0A	4.0A	+15.0V	5.0A
APS200VP-293	30.0A	+3.3V	30.0A	2.5A	+24.0V	3.0A
APS200VP-20	25.0A	+5.0V	30.0A	10.0A	+5.0V	15.0A
APS200VP-21	25.0A	+5.0V	30.0A	5.0A	+12V	6.0A
APS200VP-22	25.0A	+5.0V	30.0A	4.0A	+15V	5.0A
APS200VP-23	25.0A	+5.0V	30.0A	2.5A	+24V	3.0
APS200VP-290A	25.0A	+5.0V	30.0A	15A	+3.3V	15.0

TRIPLE OUTPUT

MODEL NO.	MAIN VO1 O/P @ ★# =			AUX. VO2 O/P @ ★# =▲			AUX. VO3 O/P ◇ ■ or●		
	Typ. A	Volt	Peak A	Typ. A	Volt	Peak A	Typ. A	Volt	Peak A
APS200VP-30	25.0A	+5.0V	30.0A	4.0A	+12.0V	6.0A	1.0A	12.0V	2.0A
APS200VP-31	25.0A	+5.0V	30.0A	4.0A	+12.0V	6.0A	2.0A	5.0V	2.0A
APS200VP-32	25.0A	+5.0V	30.0A	10.0A	+3.3V	15.0A	1.0A	12.0V	2.0A
APS200VP-33	25.0A	+5.0V	30.0A	10.0A	+3.3V	15.0A	1.0A	15.0V	2.0A

QUAD OUTPUT

MODEL NO.	MAIN VO1 O/P @ ★# =			AUX. VO2 O/P @ ★# ▲			AUX. VO3 O/P ◇ ■ or●			AUX. VO4 O/P ◇ ■ or●		
	Typ. A	Volt	Peak A	Typ. A	Volt	Peak A	Typ. A	Volt	Peak A	Typ. A	Volt	Peak A
APS200VP-40	20.0A	+5.0V	30.0A	4.0A	+12.0V	6.0A	3.0A	+12.0V	3.0A	3.0A	+12.0V	3.0A
APS200VP-41	20.0A	+5.0V	30.0A	4.0A	+12.0V	6.0A	3.0A	+5.0V	3.0A	3.0A	+5.0V	3.0A
APS200VP-42	20.0A	+5.0V	30.0A	2.0A	+24.0V	3.0A	3.0A	+12.0V	3.0A	3.0A	+12.0V	3.0A
APS200VP-43	20.0A	+5.0V	30.0A	3.5A	+150V	5.0A	3.0A	+12.0V	3.0A	3.0A	+12.0V	3.0A
APS200VP-490A	20.0A	+5.0V	30.0A	15.0A	+3.3V	20.0A	3.0A	+12.0V	3.0A	3.0A	+12.0V	3.0A
APS200VP-490B	20.0A	+3.3V	30.0A	15.0A	+5.0V	20.0A	3.0A	+12.0V	3.0A	3.0A	+5.0V	3.0A
APS200VP-491A	20.0A	+5.0V	30.0A	15.0A	+3.3V	20.0A	2.5A	+15.0V	3.0A	2.5A	+15.0V	3.0A
APS200VP-491B	20.0A	+3.3V	30.0A	15.0A	+5.0V	20.0A	2.5A	+15.0V	3.0A	2.5A	+15.0V	3.0A

PENTAD OUTPUT

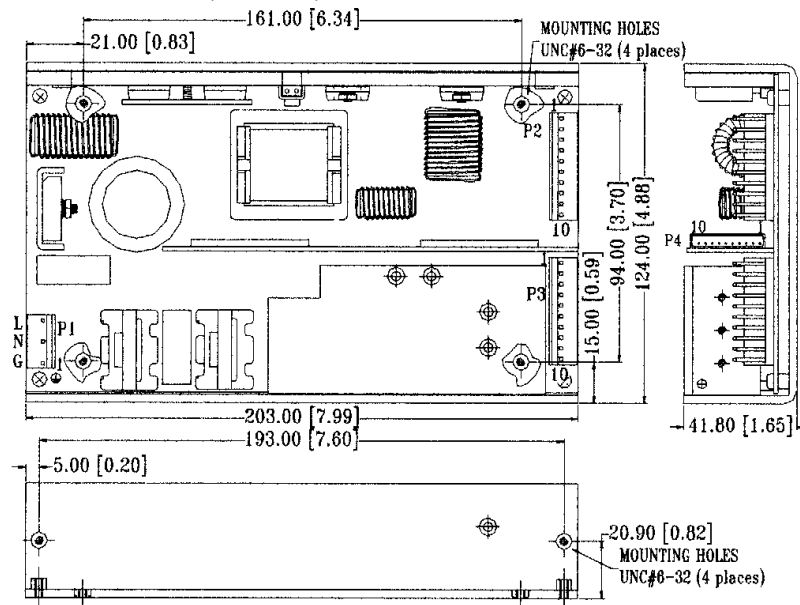
MODEL NO.	MAIN VO1 O/P @ ★# =			AUX. VO2 O/P @ ★# ▲			AUX. VO3 O/P ◇ ■ or●			AUX. VO4 O/P ◇ ■ or●			AUX. VO5 O/P ◇ ■ or●		
	Typ. A	Volt	Peak A	Typ. A	Volt	Peak A	Typ. A	Volt	Peak A	Typ. A	Volt	Peak A	Typ. A	Volt	Peak A
APS200VP-590	20.0A	+3.3V	25.0A	12.0A	+5.0V	15.0A	1.0A	+12.0V	2.0A	1.0A	+12.0V	2.0A	1.0A	+15.0V	2.0A
APS200VP-591	20.0A	+3.3V	25.0A	5.0A	+12.0V	6.0A	1.0A	+12.0V	2.0A	1.0A	+12.0V	2.0A	2.0A	+5.0V	2.0A
APS200VP-592	20.0A	+3.3V	25.0A	12.0A	+5.0V	15.0A	1.0A	+15.0V	2.0A	1.0A	+15.0V	2.0A	1.0A	+12.0V	2.0A
APS200VP-593	8.0A	+3.3V	10.0A	5.0A	+12.0V	6.0A	3.0A	+12.0V	3.0A	3.0A	+12.0V	3.0A	2.0A	+5.0V	2.0A

Symbols: "★" OVP built-in. "▲" Adjustable. "◇" Floating or (isolated) output "■" Coupled filter inductor "#" Remote sensing
 "●" Installed with Post Regulator (PR) "▲" Installed with magnetic amplifier. "—" Active circuit current sharing

Remark: (1) At least 20% of typical main output loading is required to maintain stated regulations
 (2) Peak output, less than 60sec. with 5% duty cycle Peak current can't be drawn from all output at the same time.
 (3) The total output power of APS200VP series with 300LFM forced air cooling can not exceed 200 Watt.

MECHANICAL DIMENSIONS: MM (INCHES)

WEIGHT: 1.202kg (42.40z)



INPUT & OUTPUT CONNECTORS PIN ASSIGNMENT

Assignment Con. & Pin	AC INPUT			QUAD / PENTAD OUTPUT								ASSORTED SIGNALS									
	AC Line	AC Neutral	AC GND	+VO1	DC Com	VO2	VO5	VO3	VO4	-VO3	-VO4	DC Com	Enable	PWR Fail	DC OK	+5VSB	VO1+S	VO1-S	VO1=	VO2+S	VO2-S
	P1-5	P1-3	P1-1	P2-1,2,3	P2-4,5,6,7	P2-8,9,10	P3-1,2	P3-3,4	P3-9,10	P3-5,6	P3-7,8	P4-5	P4-3	P4-1	P4-2	P4-4	P4-7	P4-8	P4-6	P4-10	P4-9