

UNIVERSAL INPUT HARMONIC CORRECTION AC TO DC DUAL OUTPUT N+1 LOAD SHARING 180 WATTS INTERNAL SWITCHING POWER SUPPLIES APS180VP SERIES



FEATURES:

- ACCOMMODATES UNIVERSAL AC SOURCES
- N+1 LOAD SHARING
- MEETS IEC1000-3-2 HARMONIC CORRECTION
- DESIGNED TO MEET UNIVERSAL SAFETY
- EMI/RFI MEET CISPR PUB. 22 CLASS B
- CE MARKING COMPLIANCE

SPECIFICATIONS

INPUT SPECIFICATIONS:

Input Voltage: Typ. 85-265VAC

Input Connector:

AMP 643495-2 or MOLEX 5273-5A connector

Input Frequency: 47-63Hz

Inrush Current : Max. 30A @ 230VAC

Input Current: 1.11A@230VAC / 2.22A@115VAC

Dielectric Withstand: Meets IEC950

3,000VAC-Output/Input

1,500VAC-Input/GND

500VAC-Output/GND

EMI/RFI: Meets CISPR PUB. 22 class B

Hold-up Time: 30ms @ 115VAC

Power Fail Signal: Optional

Power Factor Correction:

Meets Harmonic Correction per IEC1000-3-2

Earth Leakage: Less than 500microAmp

OUTPUTS SPECIFICATIONS:

Output Voltage: See RATINGS CHARTS

Output Currents: See RATINGS CHARTS

Output Connector: AMP1-640445-0 & 640456-2
or MOLEX 5273-10A & 6410-2A

Centering: Initial setting on auxiliary

Outputs 50% typical load;±5%typ. ±2% optional

Line Regulation: Main ±0.1%;Aux.VO2 ±0.1% typical

Load Regulation: VO1 10% min. load required.

Main O/P VO1 ±1% typical

Aux. O/P VO2 ±5-7 % typ. stacked on VO1

Noise & Ripple: Typical 1% peak to peak

OVP: Main O/P only set @ 124% ±8% VO1

Remote Sense: Option

Load-Share Method: Or-ing diode on each output

Adjustability: VO1 O/P, from -10% to OVP

Overload Protection: If output power over 130 %, OLP reduces all output voltages to a safe dissipation level & protects against short circuit on all O/P.

GENERAL SPECIFICATIONS:

Efficiency: Typical 73 to 76%

Switching Frequency: Fixed freq. at 65KHz

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

Construction: L-bracket construction format

Power Density: 3.43 Watt per Cubic Inch

Operating Temperature: -20-50°C Industrial grade;

0-50°C Commercial grade; de-rate o/p power to 70°C

If with 20CFM Fan cooling 0-70°C

Storage Temperature: -20 to +85°C

Temperature Coefficient: 0.04 % per °C

Cooling: Recommended 25 CFM fan cooling.

Long Term Stability: After 20 minutes

warm-up, 0.1% for 8 hours

Over temperature Protection: By thermostat

OUTPUT VOLTAGE/CURRENT RATING CHARTS

DUAL OUTPUT

MODEL NO.	MAIN VO1 O/P @ ★#			AUX. VO2 O/P †		
	Typ. Amp	Volt	Peak Amp	Typ. Amp	Volt	Peak Amp
APS180VP-290	25.0A	+3.3V	30.0A	10.0A	+5.0V	12.0A
APS180VP-291	25.0A	+3.3V	30.0A	5.0A	+12.0V	7.0A
APS180VP-292	25.0A	+3.3V	30.0A	4.0A	+15.0V	6.0A
APS180VP-293	25.0A	+3.3V	30.0A	3.0A	+24.0V	5.0A
APS180VP-21	25.0A	+5.0V	30.0A	5.0A	+12V	7.0A
APS180VP-22	25.0A	+5.0V	30.0A	4.0A	+15V	6.0A
APS180VP-23	25.0A	+5.0V	30.0A	3.0A	+24V	4.0

Symbols: "★" OVP built-in. "@"Adjustable. "†"Stack on main output

"#" Remote sensing. "▲" Installed with magnetic amplifier.

Remark: (1) At least 20% of typical main output loading is required to maintain stated regulations

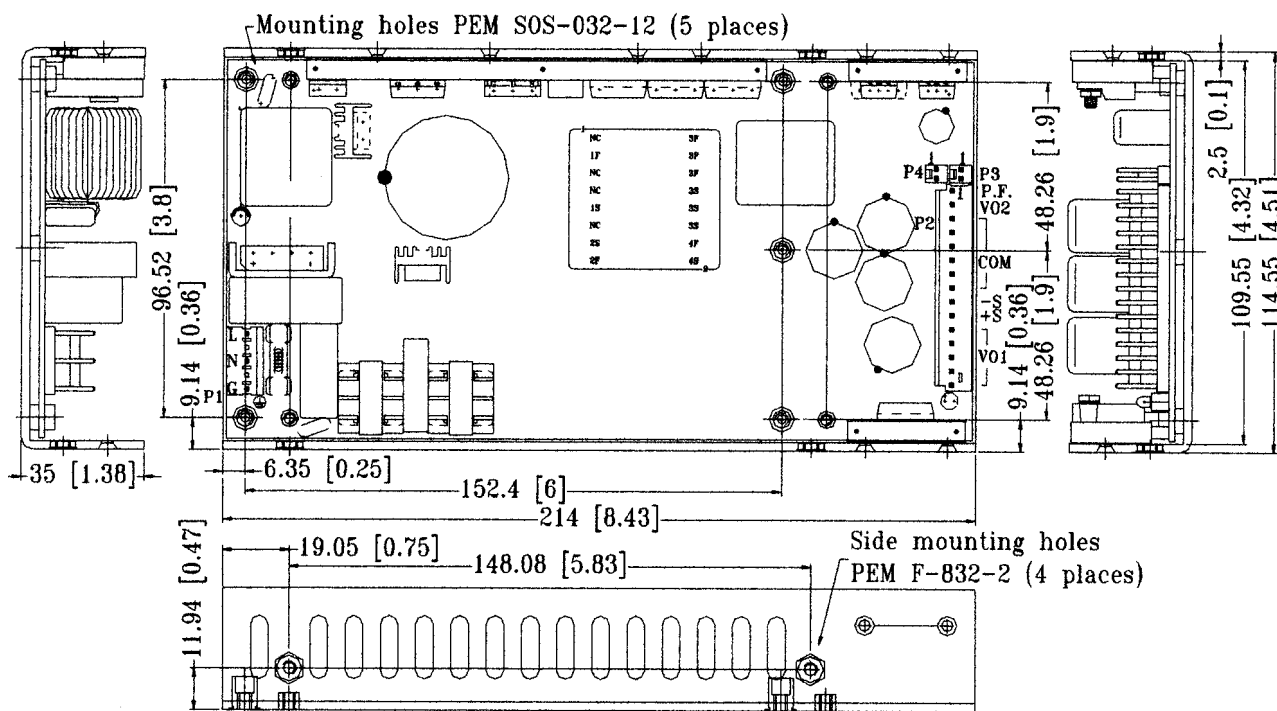
(2) Peak output, less than 60sec. With 5% duty cycle Peak current can't be drawn from all output at the same time.

MECHANICAL DIMENSIONS: MM (INCHES)

WEIGHT: 940g (33.1 Oz)

POWER DENSITY: 3.43 PER Cubic Inch.

L-Bracket construction



INPUT & OUTPUT CONNECTORS PIN ASSIGNMENT

ASSIGNMENT CNTR & PIN #	AC INPUT			DUAL OUTPUT				ASSORTED SIGNALS					
	AC-L	AC-N	AC-G	+VO1	VO2	DC-COM	PFS	+SENSING	-SENSING	FAN (-)	FAN (+)	FAN (-)	FAN (+)
	P1-5	P1-3	P1-1	P2-11,12,13,14,15	P2-2	P2-3,4,5,6,7,8	P2-1	P2-9	P2-10	P3-1,	P3-2	P4-1	P4-2

Remark: P1: AMP 640426-5 or MOLEX 5239-5A, P2:AMP 1-640427-0 or MOLEX 5239-10A,5195-10A ,
P3 & P4:AMP 640440-2 or MOLEX 2695-2A