

UNIVERSAL INPUT HARMONIC CORRECTION AC-DC SINGLE & MULTIPLE OUTPUT INTERNAL SWITCHING POWER SUPPLIES 100 WATT APS105VP SERIES



FEATURES:

- ACCOMMODATES UNIVERSAL AC SOURCES
- MEET IEC1000-3-2 HARMONIC CORRECTION
- DESIGNED TO MEET UNIVERSAL SAFETY STANDARDS
- EMI MEETS CISPR EN55022 / FCC CLASS B
- CE MARKING COMPLIANCE

SPECIFICATIONS

INPUT SPECIFICATIONS:

Input Voltage: Typical 90-264Vac
Input Connector: V-M connector
Input Frequency: 47-63Hz
Inrush Current: 65A @ 230Vac
Input Current: 1.3A @ 115Vac; 0.63 @ 230Vac
Dielectric Withstand: Meet IEC950
3,000Vac-Output/Input
1,500Vac-Input/GND
500Vac-Output/GND
EMI: Meet CISPR EN55022 / FCC Class B
Hold-up Time: 35mS @ 115Vac; 35mS @ 230Vac
Power Fail Signal: Available
Power Factor Correction: Installed
Earth Leakage: Less than 0.5mA @ 230Vac

OUTPUTS SPECIFICATIONS:

Output Voltage: See RATINGS CHARTS
Output Currents: See RATINGS CHARTS
Output Connector: V-M connector.
Line Regulation: Main O/P $\pm 1.0\%$ typical
Load Regulation: Main O/P VO1 $\pm 2.0\%$ typical
Aux. O/P VO2 $\pm 5.0\%$ typical
Aux. O/P VO3 & VO4 $\pm 7.0\%$ typical
Noise & Ripple: Typical 1% peak to peak.
OVP: built-in on main output
Remote Sensing: Available
Adjustability: From -10% to OVP point
Overload Protection: If output power over 135%, OLP reduces all output voltages to a safe dissipation level & protects against short circuit at any O/P.

GENERAL SPECIFICATIONS:

Efficiency: Typical 79 to 81%
Switching Frequency: 75KHz
Transient Response: Output voltage returns in less than 3mS following a 50% load change
Safety Standard: IEC950/UL1950 Class I
Power Density: 3.8 Watt / Cubic Inch
Circuit Topology: Fixed Freq. Forward Circuit

Operating Temperature: 0-50°C at full load and 50-70°C at half load by derating linearly 2.5% per °C
Storage Temperature: -20°C to +85°C
Temperature Coefficient: 0.04% per °C
Cooling: At least 25 cfm direct forward air flow required to achieve full power rating
Construction: U-bracket format **Industrial Grade**



in Application

OUTPUT VOLTAGE/CURRENT RATING CHARTS

SINGLE OUTPUT:

MODEL NO.	MAIN VO1 O/P @ ★#	TYP.A VOLT. PEAK A
APS105VP-19	25.0A 3.3V	30.0A
APS105VP-10	20.0A 5V	23.0A
APS105VP-11	8.5A 12V	9.8A
APS105VP-12	7.0A 15V	8.0A
APS105VP-13	4.5A 24V	5.0A
APS105VP-14	4.0A 28V	4.6A
APS105VP-15	3.0A 36V	3.4A

DUAL OUTPUT

MODEL NO.	MAIN O/P VO1 @ ★#	TYP.A VOLT. PEAK	AUX. O/P VO2 ■	TYP.A VOLT. PEAK A
APS105VP-290	15.0A 3.3V	20.0A	8.0A 5.0V	10.0A
APS105VP-291	15.0A 3.3V	20.0A	4.0A 12.0V	6.0A
APS105VP-292	15.0A 3.3V	20.0A	3.0A 15.0V	5.0A
APS105VP-20	10.0A 5V	15.0A	10.0A 5.0V	15.0A
APS105VP-21	10.0A 5V	15.0A	4.0A 12.0V	6.0A
APS105VP-22	10.0A 5V	15.0A	3.0A 24.0V	3.0A
APS105VP-23	12.0A 5V	15.0A	2.0A 15.0V	5.0A
APS105VP-24	4.0A 12.0V	6.0A	4.0A 12.0V	6.0A
APS105VP-25	3.4A 15.0V	5.0A	3.4A 15.0V	5.0A

TRIPLE OUTPUT:

MODEL NO	MAIN O/P VO1 ★ @ #	TYP. VOLT. PEAK	AUX. O/P VO2 ■	TYP. VOLT. PEAK	AUX. O/P VO3 ■	TYP. VOLT. PEAK
APS105VP-393	12.0A +3.3V	15.0A	3.4A +12.0V	5.0A	0.8A -12.0V	1.0A
APS105VP-394	12.0A +3.3V	15.0A	2.8A +15.0V	4.0A	0.6A -15.0V	1.0A
APS105VP-30	10.0A +5.0V	15.0A	3.4A +12.0V	5.0A	0.6A -12.0V	1.0A
APS105VP-31	10.0A +5.0V	15.0A	3.4A +12.0V	5.0A	1.0A -5.0V	1.0A
APS105VP-32	10.0A +5.0V	15.0A	1.5A +24.0V	2.5A	0.8A -12.0V	1.0A
APS105VP-33	10.0A +5.0V	15.0A	2.5A +15.0V	4.0A	0.6A -15.0V	1.0A

QUAD OUTPUT:

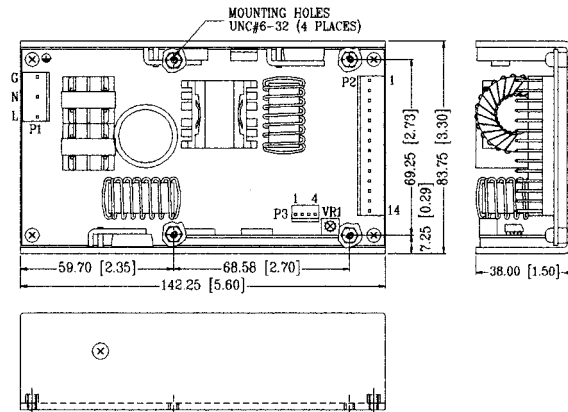
MODEL NO	MAIN O/P VO1 ★ @ #	TYP. VOLT. PEAK	AUX. O/P VO2 ■	TYP. VOLT. PEAK	AUX. O/P VO3 ■	TYP. VOLT. PEAK	AUX. O/P ± VO4	TYP. VOLT. PEAK
APS105VP-490	12.0A +3.3V	15.0A	3.0A +12.0V	5.0A	1.0A -12.0V	1.0A	1.0A 5.0V	1.0A
APS105VP-491	12.0A +3.3V	15.0A	2.5A +15.0V	4.0A	1.0A -15.0V	1.0A	1.0A 5.0V	1.0A
APS105VP-492	12.0A +3.3V	15.0A	3.0A +12.0V	5.0A	0.6A -12.0V	1.0A	0.6A 12.0V	1.0A
APS105VP-493	12.0A +3.3V	15.0A	2.5A +15.0V	4.0A	0.5A -15.0V	1.0A	0.5A 12.0V	1.0A
APS105VP-494	12.0A +3.3V	15.0A	1.5A +24.0V	2.5A	0.6A -12.0V	1.0A	0.6A 12.0V	1.0A
APS105VP-40	10.0A +5.0V	15.0A	3.0A +12.0V	5.0A	0.6A -12.0V	1.0A	0.6A 12.0V	1.0A
APS105VP-41	10.0A +5.0V	15.0A	3.0A +12.0V	5.0A	1.0A -5.0V	1.0A	1.0A 5.0V	1.0A
APS105VP-42	10.0A +5.0V	15.0A	1.5A +24.0V	2.5A	0.6A -12.0V	1.0A	0.6A 12.0V	1.0A
APS105VP-43	10.0A +5.0V	15.0A	2.5A +15.0V	4.0A	0.5A -15.0V	1.0A	0.5A 15.0V	1.0A

Symbols: "★" OVP Built-in; "@" Adjustable; "#" Remote Sensing; "■" Coupled filter inductor.

Remark: (1) At least 20% of typical main output current is required to maintain stated regulations.
 (2) Peak output, less than 60 sec with duty cycle <5%, peak current can't be drawn from all output at the same time.

MECHANICAL DIMENSIONS: MM (INCHES)

WEIGHT: 503.0g (17.74)



INPUT & OUTPUT CONNECTORS PIN ASSIGNMENT

ASSIGNMENT	AC INPUT			SINGLE OUTPUT		DUAL OUTPUT		TRIPLE OUTPUT			QUAD OUTPUT			ASSORTED SIGNAL								
	ACL	ACN	ACG	VO1	DCCOM	VO1	VO2	DCCOM	VO1	VO2	VO3	DCCOM	VO1	VO2	VO3	+VO4	-VO4	DCCOM	S	#S	DCCOM	FFA
CONTR&PIN#	P1-3	P1-2	P1-1	P2-1,2,3,4,5	P2-6,7,8,9,10	P2-1,2,3	P2-8,9	P2-4,5,6,7	P2-1,2,3	P2-8,9	P2-11	P2-4,5,6,7	P2-1,2,3	P2-8,9	P2-11	P2-14	P2-13	P2-4,5,6,7	P3-1	P3-2	P3-3	P3-4