

UNIVERSAL INPUT AC TO DC PCB OPEN FRAME SINGLE & MULTIPLE OUTPUT INTERNAL SWITCHING POWER SUPPLIES 30-35 WATT APS33VI SERIES



FEATURES:

- ACCOMMODATES UNIVERSAL AC SOURCES IN THE WORLD
- PCB OPEN FRAME FORMAT
- DESIGNED TO MEET UNIVERSAL SAFETY STANDARDS
- EMI/RFI MEET CISPR PUB. 22 CLASS B & FCC CLASS B
- CE MARKING COMPLIANCE

SPECIFICATIONS

INPUT SPECIFICATIONS:

Input Voltage: Typ. 85-264VAC
Input Connector: Molex 5273 V-H TYPE
Input Frequency: 47-63Hz
(Consult factory for 440Hz. operation)
Inrush Current: 20A peak at 264VAC
Input Current: 0.6A@115VAC, 0.3A @ 230VAC
Dielectric Withstand: Meets IEC950
3,000VAC-Output/Input
EMI/RFI: Meets CISPR PUB. 22 class B
Hold-up Time: 10mS@110VAC, 50mS @230VAC
Overshoot: On turn-on, turn off or power failure, no voltage spike
Power Failure Signal: Not available
No Load Operation: No damage at no load
Earth Leakage: Less than 0.25mA @ 230VAC

OUTPUTS SPECIFICATIONS:

Output Voltage: See RATINGS CHARTS
Output Currents: See RATINGS CHARTS
Output Connector: Molex 5273 V-H type
Line Regulation: VO1 typ. $\pm 0.1\%$
VO2 $\pm 0.5\%$ & VO3 $\pm 0.1\%$ typ.
Load Regulation:
Main O/P VO1 typ. $\pm 1.0\%$
Aux. O/P VO2 typ. $\pm 3.0\%$, stacked on
VO3 typ. $\pm 2.0\%$, with PR.
Noise & Ripple: VO1 50 mV peak to peak
VO2 & VO3 typ. 120mV peak to peak
OVP: VO1 MAIN O/P only @ +6.2V $\pm 0.4V$
Adj.: VO1 MAIN O/P only, -10% to OVP
Overload Protection: 125-150% max. power
Max. cont. output power: 30 Watt

GENERAL SPECIFICATIONS:

Efficiency: Typ. 70%
Switching Frequency: 40-150KHz
Circuit Topology: Free running flyback circuit
Transient Response: Output voltage returns in less than 3mS following a 50% load change

Operating Temperature: 0-50°C
Storage Temperature: -20 to +85°C
Temperature Coefficient: 0.04% per °C
Cooling: Free air convection
Construction: Open frame PCB version
Safety Standard: UL1950/EN60950 Class II

OUTPUT VOLTAGE/CURRENT RATING CHARTS

SINGLE OUTPUT:

MODEL NO.	MAIN O/P VO1 @ ★ TYP. VOLT. PEAK		
APS33VI-10	6.0A	5V	7.0A
APS33VI-11	2.7A	12V	3.0A
APS33VI-12	2.2A	15V	3.0A
APS33VI-13	1.4A	24V	2.0A

DUAL OUTPUT:

MODEL NO.	MAIN O/P VO1@ ★ TYP. VOLT. PEAK			AUX.+VO2 † or-VO3 • TYP. VOLT. PEAK		
APS33VI-20	5.5A	+5V	6.0A	1.0A	- 5V	1.0A
APS33VI-21	4.0A	+5V	5.0A	1.0A	+12V	1.0A
APS33VI-22	4.0A	+5V	5.0A	0.8A	+15V	1.0A
APS33VI-23	4.0A	+5V	5.0A	0.5A	+24V	1.0A

TRIPLE OUTPUT:

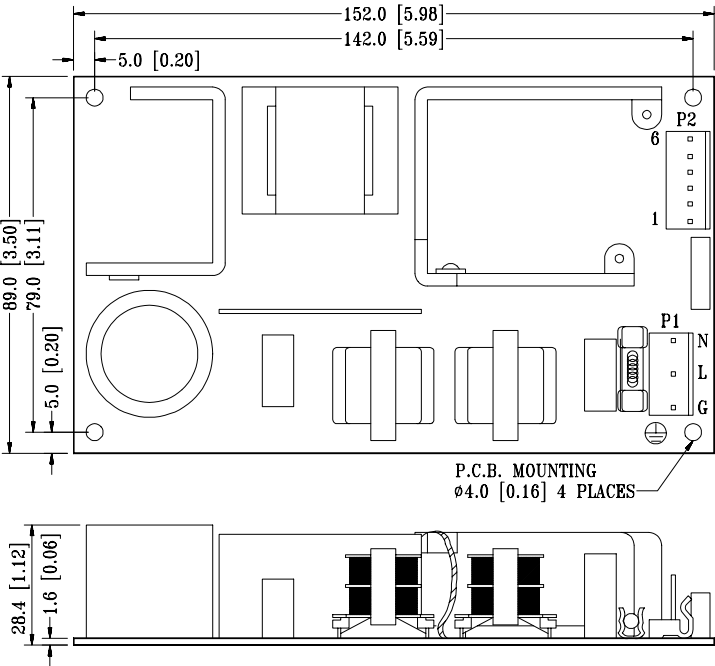
MODEL NO.	MAIN O/P VO1@ ★ TYP. VOLT. PEAK			AUX.O/P VO2 † TYP. VOLT. PEAK			AUX.O/P VO3 • TYP. VOLT. PEAK		
APS33VI-30	3.0A	+5V	4.0A	1.0A	+12V	1.0A	0.5A	-12V	1.0A
APS33VI-31	3.0A	+5V	4.0A	1.2A	+12V	1.0A	1.0A	-5V	1.0A
APS33VI-32	3.0A	+5V	4.0A	0.5A	+24V	0.5A	0.5A	-12V	1.0A
APS33VI-33	3.0A	+5V	4.0A	1.0A	+15V	1.0A	0.2A	-15V	0.5A

Symbols: "★" OVP built-in. "@Adjustable. "†" Stacked on main O/P. "•" Installed with Post Regulator(PR).

Remark: (1)At least 20% of typical main output current is required to maintain stated regulation.

(2)Peak output,less than 60 Sec.,Peak current can't be drawn from all output at the same time.

MECHANICAL DIMENSIONS: MM (INCHES) WEIGHT: 311 g (10.97 Oz.)
POWER DENSITY: 1.44W/Cubic Inch



INPUT & OUTPUT CONNECTORS PIN ASSIGNMENT

INPUT CONNECTOR P1

PIN NO	ASSIGNMENT
P1-L	AC-LINE
P1-N	AC-NEUTRAL
P1-G	AC-GROUND

Mating: Molex 5196 or equivalent.

SINGLE OUTPUT CONNECTOR P2

PIN NO.	ASSIGNMENT
P2-1,2,3	VO1 +
P2-4,5,6	DC COMMON

DUAL & TRIPLE OUTPUT CONNECTOR P2

PIN NO.	ASSIGNMENT
P2-1	VO1 +
P2-2,3	DC COMMON
P2-4	VO2 +
P2-5	VO3 -
P2-6	VO3 +

Mating: Molex 5196 or equivalent.