

UNIVERSAL INPUT AC TO DC OPEN FRAME CLASS II INTERNAL SWITCHING POWER SUPPLIES 30 WATT APS29VI SERIES



FEATURES:

- ACCOMMODATES UNIVERSAL AC SOURCES IN THE WORLD
- SMALL, COMPACT 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(vertical)
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: Meet IEC950
3,000VAC-Output/Input
EMI/RFI: Meet CISPR PUB.22 class B
& FCC CLASS B
Hold-up Time: 10mS@110VAC,50mS@230VAC
Overshoot: On turn-on, turn off or power failure,
no voltage spike
Power Failue 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 Connection: Molex 5273(vertical)
Line Regulation: VO1 typ.±0.1%
VO2 ±0.5% & VO3 ±0.1%typ.
Load Regulation:
Main O/P VO1 typ. ±1.0%
Aux.O/P VO2 typ. ±3.0%, stacked on
VO3 typ. ±1.0%,with P.R.
Noise & Ripple: VO1 50 mV peak to peak
VO2 & VO3 typ. 120mV peak to peak
OVP: VO1 MAIN O/P only,+6.2V ±0.4V
Adj.: VO1 MAIN O/P only, -10%till OVP
Overload Protection: 125-150% max. power
Max. cont. output power: 30 Watts

GENERAL SPECIFICATIONS:

Efficiency: Typ. 70%
Switching Frequency: 38K Hz
Circuit Topology:
Fixed frequency flyback circuit
Transient Response: Output voltage returns in
less than 3ms following a 50% load change

Operating Temperature: 0-45°C
Storage Temperature: -20 to +85°C
Temperature Coefficient: 0.04% /°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		
APS29VI-10	4.0A	5V	5.0A
APS29VI-11	1.5A	12V	1.5A
APS29VI-12	1.2A	15V	1.3A
APS29VI-13	0.8A	24V	1.0A

DUAL OUTPUT:

MODEL NO.	MAIN O/P VO1 @★ TYP. VOLT. PEAK			AUX. +VO2 † or -VO3 • TYP. VOLT PEAK		
APS29VI-20	3.0A	+5V	4.0A	0.2A	-5V	1.0A
APS29VI-21	2.6A	+5V	3.0A	0.5A	+/-12V	1.0A
APS29VI-22	2.6A	+5V	3.0A	0.4A	+/-15V	0.8A
APS29VI-23	2.6A	+5V	3.0A	0.25A	+ 24V	0.5A

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		
APS29VI-30	3.0A	+5V	5.0A	1.0A	+12V	1.0A	0.25A	-12V	1.0A
APS29VI-31	3.0A	+5V	5.0A	1.0A	+12V	1.0A	0.5A	-5V	1.0A
APS29VI-32	3.0A	+5V	5.0A	0.5A	+24V	0.5A	0.25A	-12V	1.0A
APS29VI-33	3.0A	+5V	5.0A	1.0A	+15V	1.0A	0.2A	-15V	0.5A

Symbols: "★"OVP built-in. "@"Adjustable. "+/-" Factory set. "•" Installed with Post Regulator (PR). "†"Stack on main output

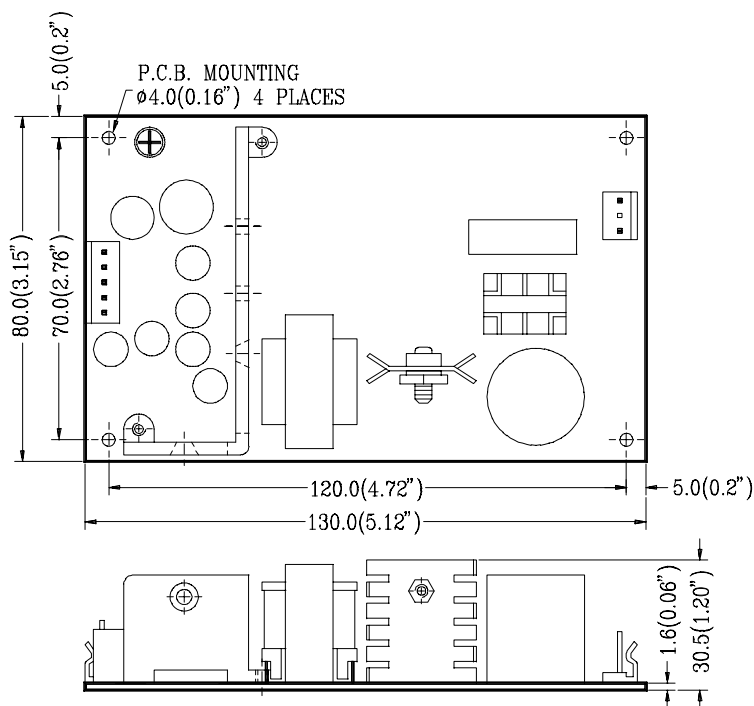
Remark: (1) At least 20% of typical main output current is required to maintain stated regulation.

(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: 190.5 g (6.72 Oz.)

POWER DENSITY: 1.50 W/Cubic Inch



INPUT & OUTPUT CONNECTORS PIN ASSIGNMENT

INPUT CONNECTOR P1

PIN NO.	ASSIGNMENT
P1-L	AC-LINE
P1-N	AC-NEUTRAL

Mating: Molex 5196 or equivalent.

OUTPUT CONNECTOR P2

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

Mating: Molex 5196 or equivalent .