APS

A d v a n c e d   P o w e r   S o l u t i o n s

UNIVERSAL AC INPUT HARMONIC CORRECTION AC-DC QUAD OUTPUT ACTIVE CURRENT SHARING 250 WATTS CompactPCI SWITCHING POWER SUPPLIES APS250ACP SERIES

FEATURES:

- **250W 3U X 8HP EUROCARD PACKAGE**
- **MEETS IEC1000-3-2 HARMONIC CORRECTION**
- **INTERNAL OR-ING DIODES FOR N+1 REDUNDANCY**
- **HOT-SWAPPABLE**
- **THIRD-WIRE CURRENT SHARING**
- **EMI MEETS EN 55022 / FCC CLASS A**
- **CE MARKING COMPLIANCE**
- **FULLY COMPLIANT WITH PICMG**

SPECIFICATION

INPUT SPECIFICATION

Input Voltage: Typ. 90-264Vac
Power Factor Correction: Meets IEC1000-3-2 typ. 0.95-0.97
Input Connector: Positronic 47-pin PCIH47M400A1
Input Frequency: 47-63Hz
Inrush Current: Less than 30A @ 230Vac
Input Current: 2.8A @ 115Vac / 1.4A @ 230Vac
Dielectric Withstand: Meets IEC950 regulation
EMI: Meet EN55022 / FCC Class A
Hold-up Time: 5mS after power fail signal
Earth Leakage: Less than 0.5mA @ 230Vac
Remote ON/OFF: Available at [INH#] & [EN#] pins
Power Fail Signal: Available at [FAL#] pin
Status LED: <Green>=valid I/P voltage; <Amber> = fault
Thermal Protection (OTP): Installed NTC and thermostats for thermal sensor at [DEG#] pin
Power OK: Installed at all outputs
Leakage Current: Typ. 0.5A
Overload Protection (OLP): Fully protected against output overload or short circuit. Typical 120% Max. load

OUTPUT SPECIFICATION

Output Voltage: See Ratings Chart
Output Current: See Ratings Chart
Output Wattage: Typ. 250W continuous
Output Connector: Positronic 47-pin PCIH47M400A1
Line Regulation: Typ. 0.1%
Load Regulation: Typ. ±1-2%
Noise & Ripple: Typ. 1% ppk or 50mV which is greater
OVP: Built-in at all outputs
Adjustability: Available at VO1, 2 & 3
Output Trim: Electrical trim available at VO1/2.[ADJ #]
Remote Sensing: Available at VO1, VO2 & VO3
Hot-Swap: Available
N+1 Redundancy: Installed with internal OR-ing diodes at all outputs for N+1 redundancy operation
Current Sharing: Third-wire current sharing at VO1, 2 &3
Power OK Signal: Available for all output
Over Current Protection (OCP): Installed at each rail

GENERAL SPECIFICATION

Efficiency: Typ. 78-79%
Switching Frequency: 120KHz
Circuit Topology: Forward circuit
Transient Response: Typ. 3mS following 25% load change
Safety Standard: IEC60950
Construction: Eurocard 3U X 8HP X 160mm CompactPCI format. Front Panel with either Ordinary handle or Extractor handle

Operating Temperature: 0 to +50 °C at full load, with specified air flow
Storage Temperature: -40 to +85 °C
Temperature Coefficient: ±0.04% per °C
Cooling: At least 23 CFM(600 LFM) moving air is required to achieve full rating power 200W in a confined area
Power Density: 4.58 Watts/ Cubic Inch

Remark: All measurements are at nominal input, full load and +25°C unless otherwise specifications.

OUTPUT VOLTAGE/CURRENT RATINGS CHART

MODEL NO.	MAIN +VO1 @*#≡♦				AUX. +VO2 ▲@•#≡♦				AUX. +VO3 ▲≡#♦*@					AUX. –VO4 =●♦*■=				
	Min.	Typ.	**Volt**	Max.	Min.	Typ.	**Volt**	Max.	Min.	Typ.	**Volt**	Max.	Pk.	Min.	Typ.	**Volt**	Max.	Pk.
APS250ACP-490(E)	2.0A	25.0A	**+5V**	33.0A	0A	18A	**+3.3V**	33A	0A	5A	**+12V**	5.5A	6A	0A	0.5A	**-12V**	1A	1.5A
APS250ACP-490(O)	2.0A	25.0A	**+5V**	33.0A	0A	18A	**+3.3V**	33A	0A	5A	**+12V**	5.5A	6A	0A	0.5A	**-12V**	1A	1.5A

Symbol: "*" OVP built-in.　"@" Adjustable.　"#" Remote sensing.　"≡" 3rd-wire Load Sharing.　"=" Droop Current Sharing
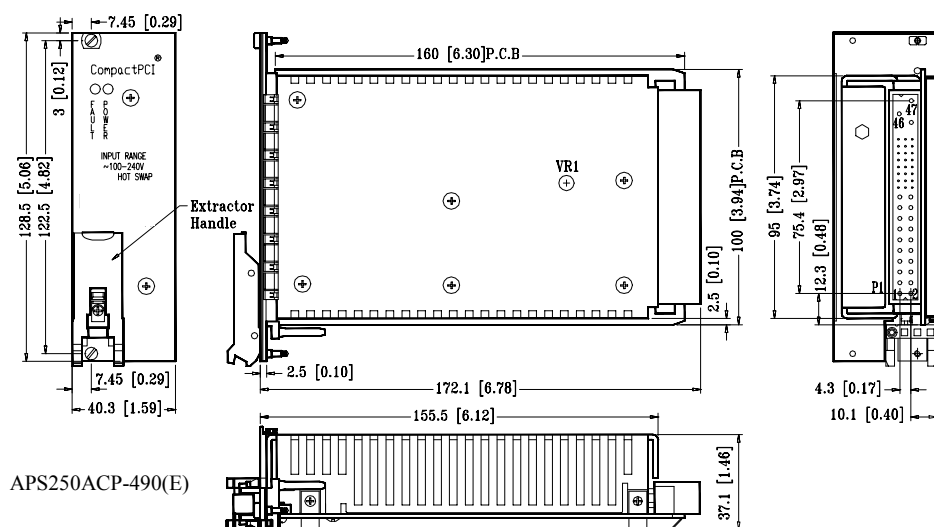
"♦" Installed with Or-ing diode.　"▲" Magnetic Amplifier.　"●" Post-regulator.　"■" Common Choke

Remark: Peak load less than 60sec. with duty cycle <10%. Max. load is the continuous operating load of each rail.
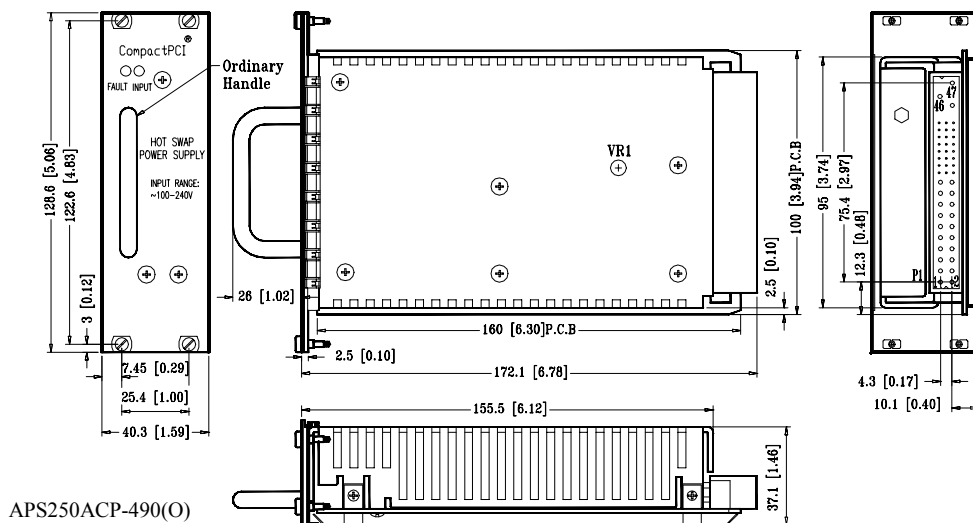
But the max. load of each rail can't be drawn from all outputs at the same time.

MECHANICAL DIMENSIONS: MM [INCHES]　　　　WEIGHT: 666.0 g (23.5 Oz.)

APS250ACP-490(E)

APS250ACP-490(O)

INPUT & OUTPUT CONNECTORS PIN ASSIGNMENT

ASSIGNMENT	AC INPUT			QUAD OUTPUT												STATUS/CONTROL			
	L	N	G	VO1	S+	S-	Adj.	C.S.	VO2	S+	Adj.	C.S.	VO3	S+	C.S	VO4	DC COM	EN#	DEG#	INH#	FAL#
CNTR &PIN #	47	46	45	1,2, 3,4	30	34	29	35	13,14, 15,16, 17,18	33	32	41	20	36	44	21	5,6,7,8,9, 10,11,12, 19,22,24	27	38	39	42

Mating connector: PCIH47F300A.