

UNIVERSAL INPUT HARMONIC CORRECTION AC-DC SINGLE & MULTIPLE OUTPUT N+1 REDUNDANCY AND SHARING INTERNAL SWITCHING POWER SUPPLIES 400 WATTS APS400VP SERIES



FEATURES

- ACCOMMODATES UNIVERSAL AC SOURCES
- MEETS IEC1000-3-2 HARMONIC CORRECTION
- HOT SWAP & CURRENT SHARING
- OR-ING DIODES FOR N+1 REDUNDANCY
- MEETS UNIVERSAL SAFETY STANDARDS
- EMI MEETS EN55022 CLASS B
- CE MARKING COMPLIANCE

SPECIFICATIONS

INPUT SPECIFICATIONS:

Input Voltage: Typ. 90-264 VAC with PFC
Input Connector: IEC320-3P & On/Off Switch
Input Frequency: 47-63Hz
Inrush Current: ≤30A @ 230 Vac by active inrush current limiter circuit
Input Current: 5.8A @ 115Vac / 2.6A @ 230Vac
Dielectric Withstand: Meets IEC950
EMI: Meets EN 55022 / FCC CLASS B
Hold-up Time: Typ. 7.2-12mS @ 115Vac and 35-42mS @ 230Vac
Power OK Signal: Available on V01 & V03
Power Factor Correction: Meets Harmonic Correction per IEC1000-3-2; typ. PF 0.92 to 0.98
Over Temperature Protection: By Thermostat
Power Disable: Pin P3-2/open = shut-down
Pin P3-2/short = Operation
Power On LED Indicator: Installed
Earth Leakage: Less than 0.5mA @ 230Vac
Oberload Protection: Fully protected against output overload and short circuit. Consult factory for OLP settings

OUTPUT SPECIFICATIONS:

Output Voltage: See RATINGS CHART
Output Currents: See RATINGS CHART
Output Wattage: Typical 3560 to 400 Watts
Output Connector: B-S/S-T/Molex MLX5045
Line Regulation: Typ. 0.1%
Load Regulation: Main O/P V01 ± 1.0% typ.
Aux. V02 typ. 1-2% (Magnetic Amp)
Aux. V03 typ. ±3% (Couple Common Choke)
Noise & Ripple: Typ. 1% peak to peak
OVP: Built-in on main output
Remote Sensing: Available on VO1 and VO2 rails
Redundancy: Available for N+1 Redundancy Operation for sharing the load
Current Sharing: 3rd wire Current Sharing on V01 & V02 rails
Or-ing Diode: Installed at V01, VO2 and VO3
Adjustability: Available at VO1 and VO2
Output LED Indicator: Installed on VO1, VO2 and VO3

GENERAL SPECIFICATIONS

Efficiency: Typ. 65 to 70%
Switching Frequency: Fixed frequency at 56k Hz
Circuit Topology: PWM Fixed Frequency Forward Circuit
Transient Response: Output voltage returns in less than 3mS following a 25% load change 5% maximum deviation
Safety Agencies: UL1950/ EN60950 Class I.
Power Density: 2.64Watts / Cubic Inch
Hot Swappable: Available
Operation Temperature: 0-50°C convection with 30CFM air cooling for full load
Storage Temperature: -20 to +85°C
Temperature Coefficient: 0.04% per °C
Cooling: Free air convection 35 CFM forced cooling air flow recommended for full load
MTBF: 180,000 hours at full load and 25°C by HDBK-217F
Construction: Metal Box Enclosure



VOLTAGE / CURRENT RATINGS CHART

SINGLE OUTPUT

MODEL NO.	Main O/P @★#=#◆	
	TYP	VOLT
APS400VP-033850	85.0A	3.3V
APS400VP-050700	70.0A	5.0V
APS400VP-120300	30.0A	12.0V
APS400VP-150250	25.0A	15.0V
APS400VP-240160	16.0A	24.0V
APS400VP-280140	14.0A	28.0V
APS400VP-360110	11.0A	36.0V
APS400VP-480085	8.5A	48.0V

DUAL OUTPUT

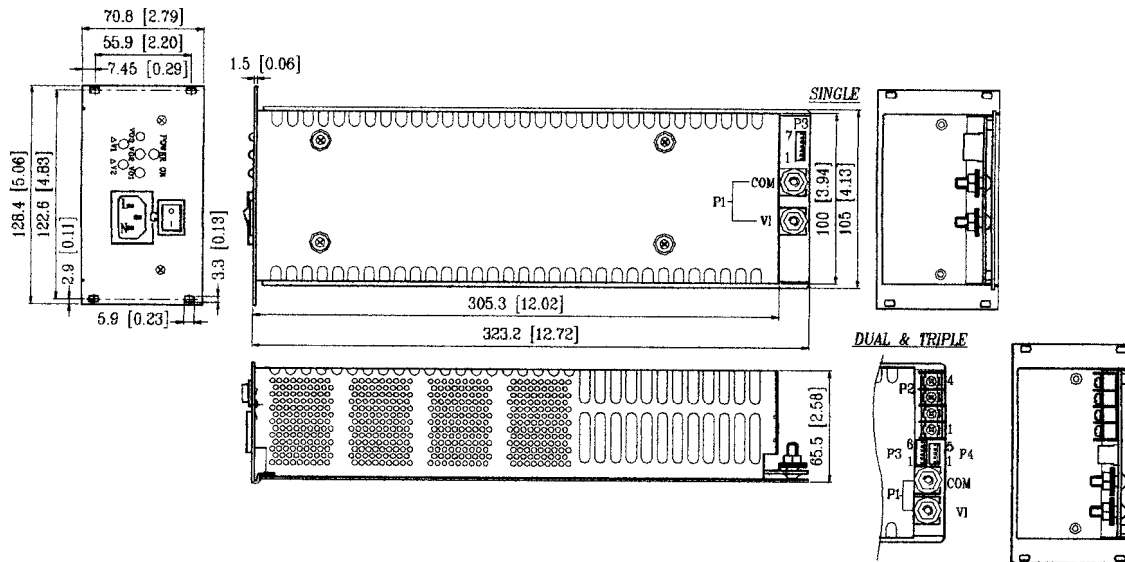
MODEL NO.	MAIN O/P V01 @★#=#◆		O/P V02 @★#=#◆▲◇	
	TYP	VOLT	TYP	VOLT
APS400DVP-033E	55.0A	+3.3V	20.0A	5V
APS400DVP-033I	55.0A	+3.3V	10.0A	12V
APS400DVP-033K	55.0A	+3.3V	8.0A	15V
APS400DVP-033M	55.0A	+3.3V	5.0A	24V
APS400DVP-050I	70.0A	+5.0V	10.0A	12V
APS400DVP-050K	70.0A	+5.0V	8.0A	15V
APS400DVP-050M	70.0A	+5.0V	5.0A	24V

TRIPLE OUTPUT

MODEL NO.	Main O/P V01 @★#=#◆		AUX. O/P V02 =◆▲◇		AUX. O/P V02 ◆◇	
	TYP	VOLT	TYP	VOLT	TYP	VOLT
APS400TVP-033EI	70.0A	+3.3V	25.0A	5.0V	3.0A	12.0V
APS400TVP-033II	70.0A	+3.3V	10.0A	12.0V	3.0A	12.0V
APS400TVP-050DI	50.0A	+5.0V	25.0A	3.3V	3.0A	12.0V
APS400TVP-050II	50.0A	+5.0V	10.0A	12.0V	3.0A	12.0V
APS400TVP-050IE	50.0A	+5.0V	10.0A	12.0V	3.0A	5.0V
APS400TVP-050MI	50.0A	+5.0V	5.0A	24.0	3.0A	12.0V
APS400TVP-05KKK	50.0A	+5.0V	8.0A	15.0V	3.0A	15.0V

Symbols: “★” OVP built-in. “@” Adjustable. “◇” Floating (or isolated) output. “#” Remote sensing.
 “●” Installed with Post Regulator. “▲” Installed with magnetic amplifier. “=” Active load sharing.
 “◆” Installed with O-ring diode.

MECHANICAL DIMENSIONS: MM (INCHES) WEIGHT: 2,400G (85 OZ)



INPUT & OUTPUT CONNECTORS PIN ASSIGNMENT

ASSIGNMENT	AC INPUT			SINGLE O/P		DUAL & TRIPLE O/P							ASSORTED SIGNALS									
	AC-L	AC-N	AC-G	VO1	DC-COM	VO1	DC-COM	+VO2	-VO2	+VO3	-VO3	+VO1#	-VO1#	+VO1-	-VO1-	+VO2#	-VO2#	+VO2-	-VO2-	Power Good	Power Disable	DC COM
CNTR & PIN#	L	N	G	P1-V1	P1-COM	P1-V1	P1-COM	P2-4	P2-3	P2-2	P2-1	P3-4	P3-6	P3-3	P3-5	P4-4	P4-3	P4-2	P4-5	P4-1	P3-2	P3-1

Mating connector: P1 & P2 No-needed. P3 & P4 Molex MLX5051.