

AC-DC Converters

**POWER
SOLVE**

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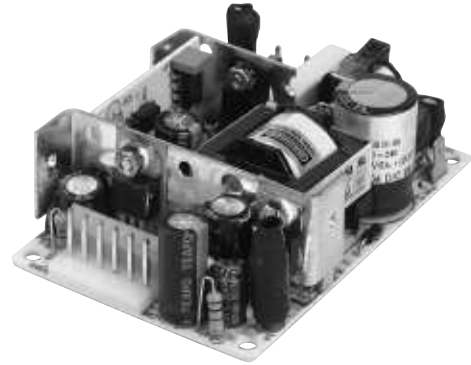
PPS40 Series

30/40 Watts

Single, Dual & Triple Outputs

Features

- Universal AC input
- Built-in EMI filter
- Optional 12V, 24V or 48V DC input
(Consult sales office for details)



Electrical Specification

INPUT

Input range	90~264 VAC, universal
Frequency	47~63Hz
Inrush current	25A typical, Cold start @ 25°C, 115 VAC
Efficiency	65% ~80% typical at full load
EMI filter	FCC Class B conducted, CISPR 22 Class B conducted, EN55022 class B conducted
Line regulation	± 0.5% typical

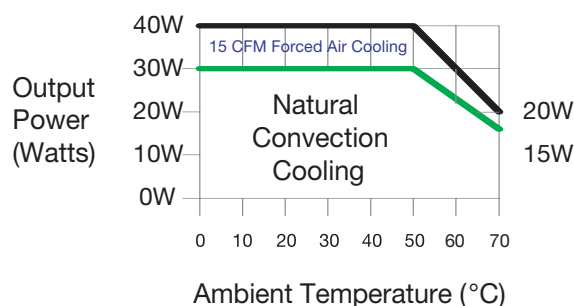
OUTPUT

Maximum power	40W with 15 CFM forced air cooling, 30W convection (See derating curve for convection cooling)
Peak power	50 Watts
Hold-up time	10ms typical at full load and 115 VAC nominal line
Overload protection	Short circuit protection
Overvoltage protection	Main output 20% to 40% above nominal output
Ripple/Noise	± 1% Max. @ full load
Output adjust	± 10% main output

ENVIRONMENTAL

Operating temperature	0 to 50°C ambient; derate each output at 2.5% per degree from 50°C to 70°C
Humidity	Operating; non-condensing, 5% to 95%
Vibration	10~55 Hz at 1G 3 minutes period, 30 minutes along X, Y and Z axis
Storage temperature	-40 to 85°C
Temperature coefficient	± 0.05% per degree C
MTBF demonstrated	>100,000 hours at full load and 25°C ambient conditions
EMI & EMC	FCC part 15, Class B CISPR 22 / EN55022, Class B VCCI, Class 2 CE, EN 61000-3-2 (Class A) and -3; EN 61000-4-2, -3, -4, -5, -6 and -11
Safety approval	UL, cUL, TUV EN60950

Power Derating Curve



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MODEL	OUTPUT 1	OUTPUT 2	OUTPUT 3	TOTAL REGULATION	RIPPLE & NOISE Pk-Pk
PPS40-10	5V 8A (6A)			+/-3%	+/-1%
PPS40-11	12V 3.3A (2.5A)			+/-3%	+/-1%
PPS40-12	15V 2.6A (2A)			+/-3%	+/-1%
PPS40-13	24V 1.6A (1.4A)			+/-3%	+/-1%
PPS40-14	48V 0.8A (0.7A)			+/-3%	+/-1%
PPS40-15*	3.3V 9.6A (8A)			+/-5%	+/-1.5%
PPS40-16	28V 1.4A (1.1A)			+/-3%	+/-1%
PPS40-20*	+5V 6A (4.5A)	+12V 1A (0.7A)		+/-5% both outputs	+/-1% both outputs
PPS40-21*	+5V 6A (4.5A)	+48V 0.25A (0.2A)		+/-5% both outputs	+/-1% both outputs
PPS40-22*	+5V 6A (4.5A)	-5V 2A (1.5A)		+/-5% +5V, +/-10% -5V	+/-1% both outputs
PPS40-23*	+12V 1.6A (1.3A)	-12V 1.6A (1.3A)		+/-5% +12V, +/-10% -12V	+/-1% both outputs
PPS40-24*	+15V 1.3A (1A)	-15V 1.3A (1A)		+/-5% +15V, +/-10% -15V	+/-1% both outputs
PPS40-25*	3.3V 5A (4A)	+5V 1.5A (1A)		+/-5% both outputs	+/-1% both outputs
PPS40-30*	+5V 5A (4A)	+12V 0.75A (0.5A)	-5V 1.2A (1A)	O/P 1&2 +/-5%, O/P 3 +/-10%	+/-1% all outputs
PPS40-31*	+5V 5A (4A)	+12V 0.75A (0.5A)	-12V 0.5A (0.4A)	O/P 1&2 +/-5%, O/P 3 +/-10%	+/-1% all outputs
PPS40-32*	+5V 5A (4A)	+15V 0.5A (0.4A)	-15V 0.5A (0.4A)	O/P 1&2 +/-5%, O/P 3 +/-10%	+/-1% all outputs
PPS40-33*	+5V 4A (3A)	+15V 1A (0.7A)	-5V 1A (0.7A)	O/P 1&2 +/-5%, O/P 3 +/-10%	+/-1% all outputs
PPS40-34*	+5V 4A (3A)	+15V 0.8A (0.6A)	-12V 0.7A (0.5A)	O/P 1&2 +/-5%, O/P 3 +/-10%	+/-1% all outputs
PPS40-35*	+5V 4A (3A)	+24V 0.5A (0.4A)	-12V 0.7A (0.5A)	O/P 1&2 +/-5%, O/P 3 +/-10%	+/-1% all outputs
PPS40-36*	+5V 4A (3A)	+12V 0.75A (0.5A)	-12V 1A (0.8A)	O/P 1&2 +/-5%, O/P 3 +/-10%	+/-1% all outputs
PPS40-37*	+5V 4A (3A)	+12V 0.75A (0.5A)	+24V 0.5A (0.4A)	O/P 1&2 +/-5%, O/P 3 +/-10%	+/-1% all outputs
PPS40-38*	+5V 2.4A (2A)	+12V 1.2A (1A)	+48V 0.3A (0.2A)	O/P 1&2 +/-5%, O/P 3 +/-10%	+/-1% all outputs

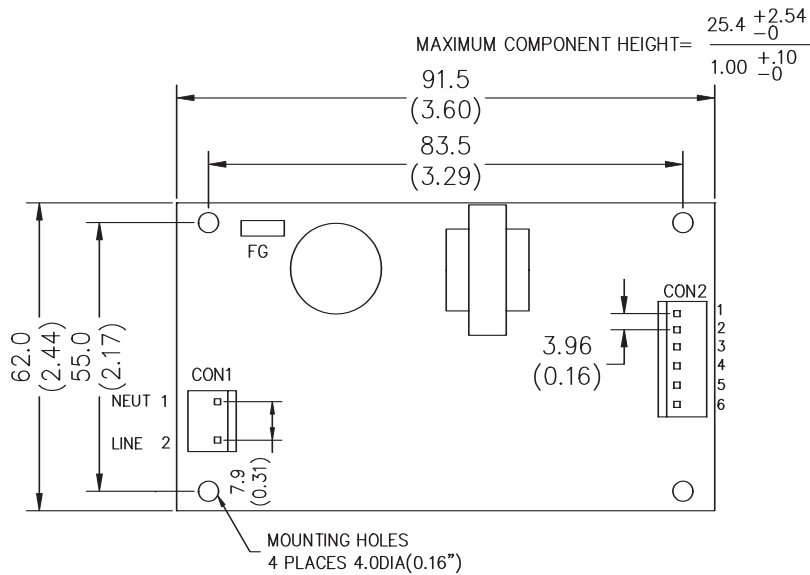
Note:

CONVECTION COOLING: Current ratings in () are maximum continuous output with convection cooling. Maximum total power is 30 Watts under these conditions.

PEAK POWER: 50 watts for <30 seconds with a maximum of 10% duty cycle

RIPPLE & NOISE: Maximum peak to peak noise expressed as a percentage of output voltage, 20 MHz bandwidth, input at nominal line voltage, 0.1uF and 47uF capacitor on outputs.

LOAD REGULATION: Load test conditions are from minimum, 50% and 100% load conditions on each output. *Minimum loading of 10% required on all outputs, to achieve regulation specified.



CON1= MOLEX#09-65-2038(OR EQUIVALENT)
(MATING CONECT.=MOLEX#09-50-3031)
CON2= MOLEX#09-65-2068(OR EQUIVALENT)
(MATING CONECT.=MOLEX#09-50-3061)
ALL MATING TERMINAL=MOLEX#08-50-0106(OR EQUIVALENT)

TOLERANCE : $\frac{\text{mm} \pm 0.5}{(\text{inch}) \pm 0.02}$

UNIT: $\frac{\text{mm}}{(\text{inch})}$

CON1 (CONNECTORS) CONFIGURATION

AC	1	2
INPUT	NEUT	LINE

CON2 (CONNECTORS) CONFIGURATION

Multiple	1	2	3	4	5	6
Output	V2(NC)	RET		V1		V3(NC)

CON1(CONNECTORS) CONFIGURATION

DC	1	2
INPUT	-	+