

# AC-DC Converters

**POWER  
SOLVE**

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PPS80 Series

60/80 Watts

Single, Dual, Triple & Quad Outputs



## Features

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

## Electrical Specification

### INPUT

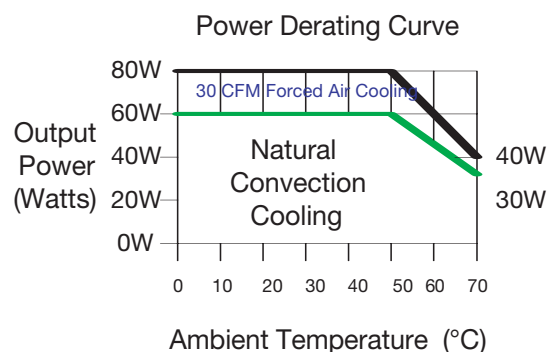
Input range	90~264 VAC, universal
Frequency	47~63Hz
Inrush current	35A typical, Cold start @ 25°C, 115 VAC
Efficiency	65%~80% typical at full load
EMI filter	FCC Class B conducted, CISPR 22 Class B conducted, EN55022 class B Conducted
Line regulation	±0.5% typical

### OUTPUT

Maximum continuous power	60W convection cooled. See derating curve
Peak power	100 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 adjustment	±10% output 1

### 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



Derate by further 25% with optional cover fitted

Powersolve Electronics Ltd. Units 8A, Arnhem Road, Newbury, RG14 5RU. England

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MODEL	OUTPUT 1	OUTPUT 2	OUTPUT 3	OUTPUT 4	TOTAL REGULATION
PPS80-10	5V 16A (12A)				±3%
PPS80-11	12V 6.6A (5A)				±3%
PPS80-12	15V 5.3A (4A)				±3%
PPS80-13	24V 3.3A (2.5A)				±3%
PPS80-14	48V 1.7A (1.3A)				±3%
PPS80-15	36V 2.2A (1.7A)				±3%
PPS80-17*	3.3V 16A (12A)				±5%
PPS80-20*	+5V 8A (6A)	+12V 4A (3A)			±5% both outputs
PPS80-21*	+5V 8A (6A)	+24V 1.7A (1.3A)			±5% both outputs
PPS80-22*	+5V 8A (6A)	-5V 8A (6A)			±5% +5V, ±10% -5V
PPS80-23*	+12V 3.3A (2.5A)	-12V 3.3A (2.5A)			±5% +12V, ±10% -12V
PPS80-24*	+15V 2.7A (2A)	-15V 2.7A (2A)			±5% +15V, ±10% -15V
PPS80-25*	+3.3V 10A (7.5A)	+12V 4A (3A)			±5% both outputs
PPS80-26*	+12V 4A (3A)	+24V 1.3A (1A)			±5% both outputs
PPS80-27Y*	+5V 8A (6A)	+15V 3.2A (2.4A)			±5% both outputs
PPS80-28*	+12.5V 4.5A (4.5A)	+16V 1.5A (0.45A)			±5% both outputs
PPS80-29*	+3.3V 12A (8A)	+5V 6A (4A)			±5% both outputs
PPS80-30*	+5V 8A (6A)	+12V 5A (3.7A)	-5V 1A (0.8A)		O/P 1&2 ±5%, O/P 3 ±10%
PPS80-31*	+5V 8A (6A)	+12V 2.9A (2.2A)	-12V 0.5A (0.4A)		O/P 1&2 ±5%, O/P 3 ±10%
PPS80-32*	+5V 8A (6A)	+15V 2.2A (1.6A)	-15V 0.5A (0.4A)		O/P 1&2 ±5%, O/P 3 ±10%
PPS80-33*	+5V 10A (7.5A)	+15V 1.6A (1.2A)	-5V 1A (0.8A)		O/P 1&2 ±5%, O/P 3 ±10%
PPS80-34*	+5V 10A (7.5A)	+15V 1.6A (1.2A)	-12V 0.5A (0.4A)		O/P 1&2 ±5%, O/P 3 ±10%
PPS80-35*	+5V 7A (5.2A)	+24V 1.6A (1.2A)	-12V 0.5A (0.4A)		O/P 1&2 ±5%, O/P 3 ±10%
PPS80-36*	+5V 7A (5.2A)	+12V 3.2A (2.4A)	-12V 0.5A (0.4A)		O/P 1&2 ±5%, O/P 3 ±10%
PPS80-37*	+5V 7A (5.2A)	+12V 2.8A (2A)	+24V 0.5A (0.4A)		O/P 1&2 ±5%, O/P 3 ±10%
PPS80-38*	+15V 2A (1.5A)	-15V 2A (1.5A)	+5V 4A (3A)		O/P 1&2 ±5%, O/P 3 ±10%
PPS80-39*	+12V 1.5A (1.1A)	-12V 1.5A (1.1A)	+28V 1.6A (1.2A)		O/P 1&2 ±5%, O/P 3 ±10%
PPS80-40*	+5V 8A (6A)	+12V 2.6A (2A)	-12V 0.5A (0.4A)	-5V 0.5A (0.4A)	O/P 1&2 ±5%, O/P 3&4 ±10%
PPS80-41*	+5V 8A (6A)	+12V 2.2A (1.6A)	-5V 0.8A (0.6A)	-12V 0.8A (0.6A)	O/P 1&2 ±5%, O/P 3&4 ±10%
PPS80-42*	+5V 8A (6A)	+12V 1.3A (1A)	-15V 0.8A (0.6A)	+15V 0.8A (0.6A)	O/P 1&2 ±5%, O/P 3&4 ±10%
PPS80-43*	+5V 4.5A (3.3A)	+12V 2A (1.5A)	-12V 0.8A (0.6A)	+15V 1.6A (1.2A)	O/P 1&2 ±5%, O/P 3&4 ±10%
PPS80-44*	+5V 4.5A (3.3A)	+12V 0.8A (0.6A)	-12V 0.8A (0.6A)	+48V 0.8A (0.6A)	O/P 1&2 ±5%, O/P 3&4 ±10%
PPS80-45Y*	+5V 8A (6A)	+12V 0.8A (0.6A)	-12V 0.8A (0.6A)	+24V 0.8A (0.6A)	O/P 1&2 ±5%, O/P 3&4 ±10%
PPS80-46Y*	+5V 8A (6A)	+15V 0.8A (0.6A)	-15V 0.8A (0.6A)	+48V 0.8A (0.6A)	O/P 1&2 ±5%, O/P 3&4 ±10%
PPS80-47Y*	+5V 4A (3A)	+12V 1.4A (1.1A)	-12V 1.4A (1.1A)	+36V 0.8A (0.6A)	O/P 1&2 ±5%, O/P 3&4 ±10%
PPS80-48Y*	+5V 8A (6A)	+15V 0.8A (0.6A)	-15V 0.8A (0.6A)	+24V 0.8A (0.6A)	O/P 1&2 ±5%, O/P 3&4 ±10%
PPS80-49Y*	+3.3V 7A (6A)	+5V 5A (3.5A)	+12V 2.5A (2A)	-5V 1A (1A)	O/P 1&2 ±5%, O/P 3&4 ±10%

**Note:**

CONVECTION COOLING: Current ratings in ( ) are maximum continuous output with convection cooling.

Maximum total power is 60 Watts under these conditions.

PEAK POWER: 100 watts for <30 seconds 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.

**Powersolve Electronics Ltd. Units 8A, Arnhem Road, Newbury, RG14 5RU. England**

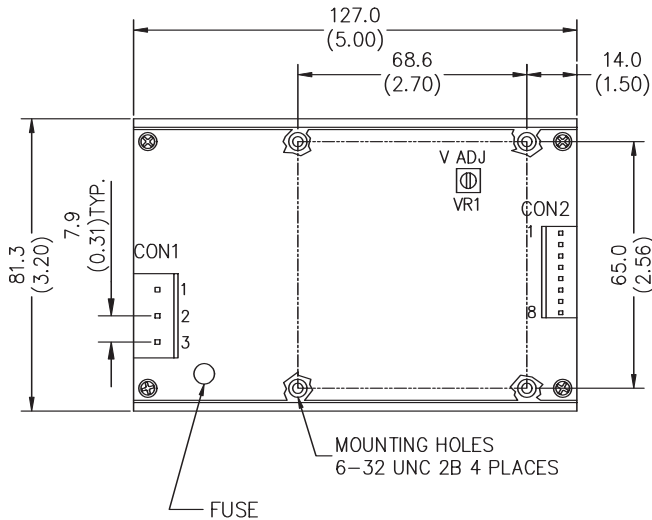
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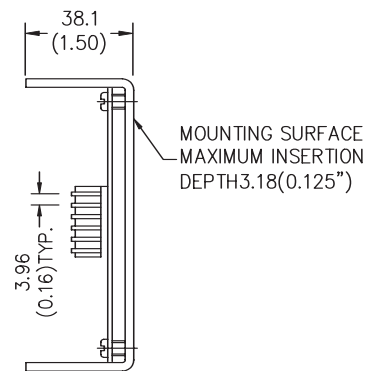


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PPS80



CON1= MOLEX#09-65-2058(OR EQUIVALENT)  
(MATING CONECT.=MOLEX#09-50-3051)  
CON2= MOLEX#09-65-2088(OR EQUIVALENT)  
(MATING CONECT.=MOLEX#09-50-3081)  
ALL MATING TERMINAL=MOLEX#08-50-0106(OR EQUIVALENT)



CON1 (CONNECTORS) CONFIGURATION

1	2	3
FG	NEUT(-)	LINE(+)

CON2 (CONNECTORS) CONFIGURATION FOR V4 ISOLATED

Multiple	1	2-3	4-5	6	7	8
Output	V2	V1	RET	V3	V4	V4RET

CON2 (CONNECTORS) CONFIGURATION FOR V4 POSITIVE

Multiple	1	2-3	4-5	6	7	8
Output	V2	V1	RET	V3	V4(+)	RET

CON2 (CONNECTORS) CONFIGURATION FOR V4 NEGATIVE

Multiple	1	2-3	4-5	6	7	8
Output	V2	V1	RET	V3	RET	V4(-)

CON2 (CONNECTORS) CONFIGURATION

Single	1-3	4-6	7-8
Output	V1(+)	RET(-)	NC

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

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