

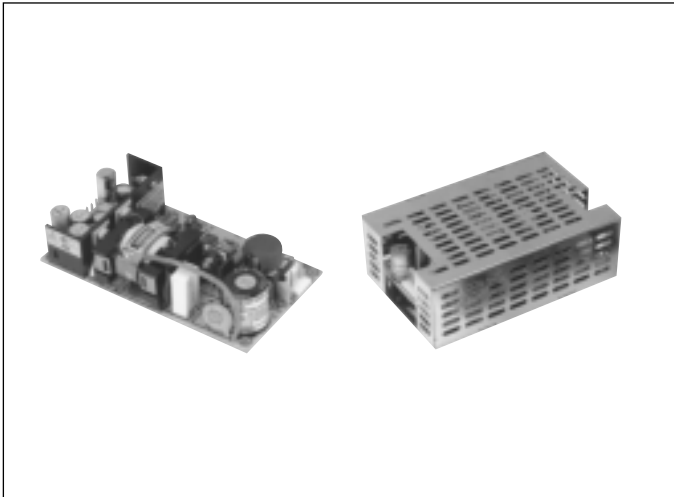
DC/DC Converters

XPiQ inc.

Intelligent Design Quality Product



**40 Watts
PD40 Series**



- Low Cost
- 100% Burn-In
- Small Size, Light Weight
- Three Wide Input Voltage Ranges
10-30 VDC, 20-60 VDC, 30-90 VDC
- Overvoltage Protection
- Overcurrent Protection

Specification

All specifications typical at nominal line, full load and 25°C

Input

- Input Voltage*
- 10 to 30 VDC (PD40 "L" series)
 - 20 to 60 VDC (PD40 "M" series)
 - 30 to 90 VDC (PD40 "H" series)
- Input Current*
- 2.5A (rms) for 24 VDC
 - 1.3A (rms) for 48 VDC
 - 0.84A (rms) for 72 VDC

Output

- Output Voltage/Current*
- See rating chart
- Ripple*
- 1% peak to peak maximum
- Overvoltage Protection*
- Provided on output #1 only, set at 112-132% of its nominal output voltage
- Overcurrent Protection:*
- All outputs protected in short circuit conditions
- Temperature Coefficient:*
- All outputs $\pm 0.04\%/^{\circ}\text{C}$ maximum

General

- Efficiency*
- 65% minimum
- Hold-up time*
- 10 msec
- Line Regulation*
- $\pm 0.5\%$ max
- Isolation Voltage*
- 1000 VDC from input to output

Environmental

- Operating Temperature*
- 0°C to +70°C*
- Storage Temperature*
- -40°C to +85°C
- MTBF*
- 100,000 hours
- Weight*
- 300 grams - PCB
 - 500 grams - enclosed

* Derate linearly from 100% load at 50°C to 50% load at 70°C



OUTPUT VOLTAGE & CURRENT RATINGS

PD 40

Model	Output #1				Output #2				Output #3				Maximum Output Power ²
	Vnom	Imin	I _{max}	Tol.	Vnom	Imin	I _{max}	Tol.	Vnom	Imin	I _{max}	Tol.	
PD40-10	5V	0.0A	8.0A	1%									40W
PD40-12	12V	0.0A	3.5A	1%									40W
PD40-13	15V	0.0A	3.0A	1%									40W
PD40-14	24V	0.0A	2.0A	1%									40W
PD40-25	+5V	0.5A	3.0A	3%	+24V	0.1A	1.0A	5%					40W
PD40-30	+5V	0.5A	3.0A	3%	+12V	0.2A	2.0A	5%	-5V	0A	0.8A	5%	40W
PD40-31	+5V	0.5A	3.0A	3%	+12V	0.2A	2.0A	5%	-12V	0A	0.8A	5%	40W
PD40-32	+5V	0.5A	3.0A	3%	+15V	0.2A	2.0A	5%	-15V	0A	0.8A	5%	40W

Notes

1. All multi-output units may be operated at no load without damage. At no load, output tolerance increases to 10%.
2. Maximum output power for 10-30 VDC input range is 70% of that shown above.
3. Suffix codes for mechanical format and input range as follows:
 Input voltage range L: .10-30 VDC² Mechanical format: A: PCB only
 M: .20-60 VDC C: Enclosed
 H: .30-90 VDC

Example: PD40-31MC (20-60 VDC input range/Enclosed).

Pin Chart

MODEL	PIN	1	2	3	4	5	6
PD40-10 PD40-13	PD40-12 PD40-14	OUTPUT #1	OUTPUT #1	OUTPUT #1	RETURN	RETURN	RETURN
PD40-25		OUTPUT #2	OUTPUT #1	OUTPUT #1	COMMON RETURN	COMMON RETURN	N.C.
PD40-30 PD40-32	PD40-31	OUTPUT #2	OUTPUT #1	OUTPUT #1	COMMON RETURN	COMMON RETURN	OUTPUT #3

Mechanical Details

OPEN PCB "A"

0.157 [4.0] DIA. MOUNTING HOLE (4 PL.)

DC INPUT P1

DC OUTPUT P2

2.55 [64.0]

3.00 [76.2]

0.20 [5.0]

4.55 [115.8]

5.00 [127.0]

0.20 [5.0]

1.34 [34.0]

1.46 [37.0]

ENCLOSED "C"

Mounting Hole, Threaded Insert For #6-32 (6 PL.)

2.76 [70.0]

0.31 [8.0]

0.04 [1.0]

3.43 [87.0]

0.94 [24.0]

3.54 [90.0]

5.43 [138.0]

INPUT

P2

0.94 [24.0]

0.04 [1.0]

1.89 [48.0]

4.33 [110.0]

Dimensions shown in inches (mm)/Tolerance ± 0.02 (0.5) maximum
 Input connector mates with Molex housing 09-50-3041 and Molex 2878 series crimp terminal
 Output connector mates with Molex housing 09-50-3061 and Molex 2878 series crimp terminal

