

General Purpose (DC to DC)



Description:

DXX-906 series is a 65 watts, DC to DC switching power supply. It is designed for general purpose, telecommunication application and motorcar purpose.

Model available:

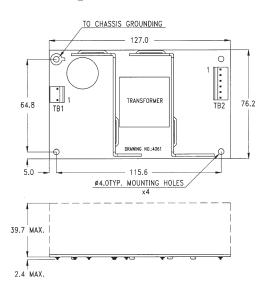
- D48-9061 for 5V/6A, 12V/2.5A, -12V/0.3A
- D24-9061 for 5V/6A, 12V/2.5A, -12V/0.3A

General Specifications:

Input voltage	+36 VDC to $+72 VDC$ for D48-9061
	+18VDC to +32VDC for D24-9061
Inrush current	less than 10A at nominal input
Efficiency	higher than 70% at rated load
Short circuit protection	latch off
Over voltage protection	crowbar
Operating temperature .	0°C to +50°C
Cooling	free air convection for D48-9061
	10 CFM for D24-9061

Storage temperature20°C to $+85^{\circ}$ C
Humidity up to 95% non condensing
EMI radiation FCC docket 20780 curve "B"
EN 55022 "B"
EMS IEC 801-2 Level 3 8KV air discharge
IEC 801-3 Level 3 3V/M
IEC 801-4 Level 3 2KV
Safety meet UL 60950
CSA C22.2 No. 950

Mechanical Specifications:



Notes

- 1. Dimensions shown in mm as left. Tolerance specified is ± 0.4 mm.
- 2. Size: 76.2 x 127 x 39.7 (mm)
- 3. Packing

Net weight: 280 g approx. / unit

Gross weight: 12 kg approx. / carton, 36 units / carton Carton size (mm): 339 (L) x 339 (W) x 327 (H)

4. Connector:

TB1-DC Input : using Molex 5277-02A or equivalent TB2-DC output : using Molex 5273-06A or equivalent

5. Pin Assignment:

	DXX-9061							
DC	input	DC output						
1	+V	1	+12V					
2	NC	2	+5V					
3	0V	3	+5V					
		4	GND					
		5	GND					
		6	-12V					

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EN 60950-1

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Output Specifications

MODEL NO.	OUTPUT RAIL	LOAD MIN. RATED MAX.		VOLTAGE ACCURACY	RIPPLE NOISE	LINE REG.	LOAD REG.	
D48-9061	+5V	0A	6A	8A	+4.90V~+5.05V	1%	±1%	±3%
	+12V	0A	2.5A	4A	+11.40V~+12.60V	1%	±2%	±3%
	-12V	0A	0.3A	0.5A	-11.40V~-12.60V	1%	±2%	±5%
D24-9061	+5V	0A	6A	8A	+4.95V~+5.05V	1%	±1%	±3%
	+12V	0A	2.5A	4A	+11.40V~+12.60V	1%	±2%	±3%
	-12V	0A	0.3A	0.5A	-11.40V~+12.60V	1%	±2%	±5%

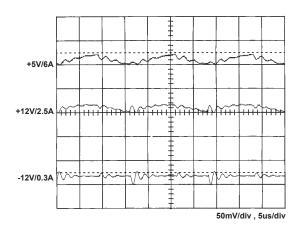
Notes:

- 1. Each output can provide up to max. load separately. Continuous staying in more than total output power is not allowed.
- 2. At factory, in 60% rated load condition, each output is checked to be within voltage accuracy.
- 3. Line regulation is defined by changing $\pm 10\%$ of input voltage from nominal line at rated load.
- 4. Load regulation is defined by changing ±40% of measured output load from 60% rated load at another output set to 60% rated load.
- 5. Ripple & noise is measured by using 15MHz bandwidth limited oscilloscope and terminated each output with a 0.47uF capacitor at rated load and nominal line.
- 6. Hold up time is measured from the end of the last charging pulse to the time which the main output drops down to low limit of main output at rated load and nominal line.
- 7. Efficiency is measured at rated load and nominal line.

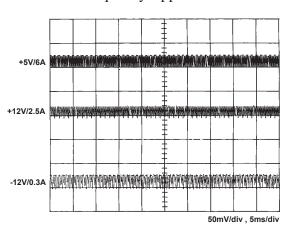
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Performance for D48-9061:

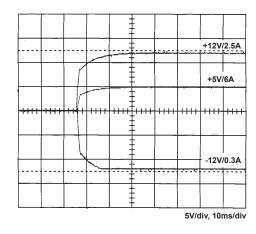
1. Switching frequency ripple



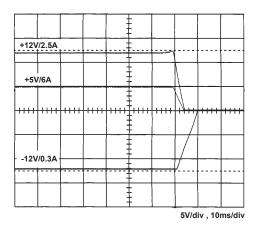
2. Line frequency ripple



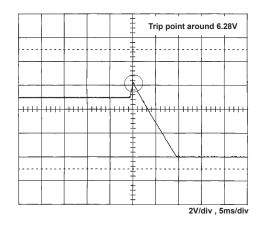
3. Output turn on wave form



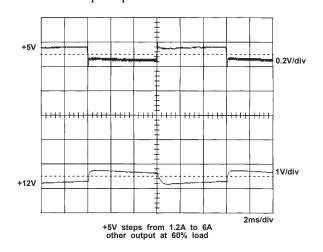
4. Output turn off wave form



5. Over voltage protection



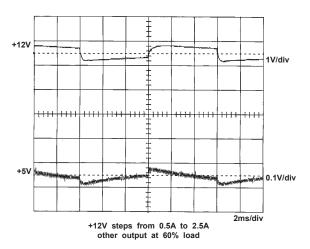
6. +5V step response



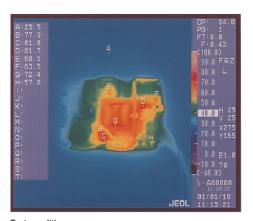
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7. +12V step response



8. Thermal profile



Test conditions : Input : +48VDC output : +5V/6A, +12V/2.5A, -12V/0.3A Ambient : 25.5°C