

DHP MODELS: 150-3000 AMPERES

Product Features



- ▶ System Output: DC or Low Frequency Pulse (LFP).
- ▶ Current outputs from 150-3000 amperes.
- ▶ Up to (10) units may be connected in parallel for increased output.
- ▶ Voltage outputs from 9-48 volts.
- ▶ Multiple options for control interfaces.
- ▶ Small package size: switch mode technology.
- ▶ Rugged, environmentally-sealed, stainless steel enclosure.

Product Overview

The Diamond DHP Series power supply is based on switch mode technology. The control interface features digital encoders and meters to set and read back current and voltage. Sub-menus are accessible through the encoders to set ampere time or real-time cycles, output tolerance requirements, and more.

- ▶ Real Time Cycle (RTC) Control
- ▶ Ampere Time Cycle (ATC) and Time Totalizer
- ▶ Constant current, constant voltage, and cross-over regulation modes
- ▶ Low Frequency Pulse (LFP) Output Capability:
 - DC to 200 Hz pulses (at an 80% duty cycle)
 - Minimum Pulse Width: 4 ms ON, 1 ms OFF
- ▶ FrontPanel+ Host Control Program for process set-up generation, process storage/data logging, and creation of arbitrary waveforms
- ▶ RS485 port for serial control
- ▶ Electronic overload, over-temperature, and short circuit protection
- ▶ Forced air cooled

Performance Specifications

- ▶ Line Regulation: +/- 0.5% of setting or +/- 0.05% of maximum rating
- ▶ Load Regulation: +/- 0.5% of setting or +/- 0.05% of maximum rating
- ▶ Operating Temperature: 0-40 C
- ▶ Ripple: No more than 1% RMS of maximum rated output voltage
- ▶ Typical Pulse Rise Time: < 1.5 milliseconds
- ▶ Typical Pulse Fall Time: < 1.5 milliseconds
- ▶ Efficiency: > 90% at full output capability

Options

- ▶ Analog interface board: 4-20mA, 0-5V, or 0-10V
- ▶ Advanced Touchscreen Control:
 - QVGA color touchscreen
 - Integrated multi-function control program
- ▶ Periodic reverse output
- ▶ Emergency Stop compatibility interface

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Model	Voltage (DC)	Current (Amps)	Voltmeter Resolution	Amp Meter Resolution	AC Input Options	Size
9 Volts						
DHP9-150	0-9	0-150	0.01 V	0.1 A	B	17"H x 10.5"W x 23"D
DHP9-300	0-9	0-300	0.01 V	0.1 A	A, B	17"H x 10.5"W x 23"D
DHP9-500	0-9	0-500	0.01 V	0.1 A	A, B	17"H x 10.5"W x 23"D
DHP9-600	0-9	0-600	0.01 V	0.1 A	A, B	17"H x 10.5"W x 23"D
DHP9-1000	0-9	0-1000	0.01 V	1 A	A, B	17"H x 10.5"W x 23"D
12 Volts						
DHP12-200	0-12	0-200	0.01 V	0.1 A	A, B	17"H x 10.5"W x 23"D
DHP12-300	0-12	0-300	0.01 V	0.1 A	A, B	17"H x 10.5"W x 23"D
DHP12-400	0-12	0-400	0.01 V	0.1 A	A	15.7"H x 10.5"W x 28"D
DHP12-500	0-12	0-500	0.01 V	0.1 A	A, B	17"H x 10.5"W x 23"D
DHP12-600	0-12	0-600	0.01 V	0.1 A	A, B	17"H x 10.5"W x 23"D
DHP12-750	0-12	0-750	0.01 V	0.1 A	A, B	17"H x 10.5"W x 23"D
DHP12-1500	0-12	0-1500	0.01 V	1 A	A, B	15.7"H x 17"W x 28"D
DHP12-3000	0-12	0-3000	0.01 V	1 A	A, B	34"H x 17"W x 28"D
18 Volts						
DHP18-250	0-18	0-250	0.01 V	0.1 A	A, B	17"H x 10.5"W x 23"D
DHP18-300	0-18	0-300	0.01 V	0.1 A	A	17"H x 10.5"W x 23"D
DHP18-500	0-18	0-500	0.01 V	0.1 A	B	17"H x 10.5"W x 23"D
DHP18-1000	0-18	0-1000	0.01 V	1 A	A, B	15.7"H x 17"W x 28"D
DHP18-2000	0-18	0-2000	0.01 V	1 A	A, B	34"H x 17"W x 28"D

Minimum Suggested Setting: 10% of maximum rated output

AC Input Options:

A: 180-264 VAC, 50-60 Hz, 1 or 3 Phase

B: 342-528 VAC, 50-60 Hz, 3 Phase

Specifications subject to change without notification

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Model	Voltage (DC)	Current (Amps)	Voltmeter Resolution	Amp Meter Resolution	AC Input Options	Size
24 Volts						
DHP24-200	0-24	0-200	0.01 V	0.1 A	A, B	17"H x 10.5"W x 23"D
DHP24-400	0-24	0-400	0.01 V	0.1 A	A, B	17"H x 10.5"W x 23"D
DHP24-750	0-24	0-750	0.01 V	1 A	A, B	15.7"H x 17"W x 28"D
DHP24-1000	0-24	0-1000	0.01 V	1 A	A, B	34"H x 17"W x 28"D
DHP24-1500	0-24	0-1500	0.01 V	1 A	A, B	34"H x 17"W x 28"D
30 Volts						
DHP30-600	0-30	0-600	0.01 V	1 A	A, B	15.7"H x 17"W x 28"D
DHP30-1200	0-30	0-1200	0.01 V	1 A	A, B	34"H x 17"W x 28"D
36 Volts						
DHP36-1000	0-36	0-1000	0.01 V	1 A	B	34"H x 17"W x 28"D
48 Volts						
DHP48-375	0-48	0-375	0.01 V	0.1 A	A, B	15.7"H x 17"W x 28"D
DHP48-750	0-48	0-750	0.01 V	0.1 A	A, B	34"H x 17"W x 28"D

AC Input Options:

- A:** 180-264 VAC, 50-60 Hz, 1 or 3 Phase
B: 342-528 VAC, 50-60 Hz, 3 Phase

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