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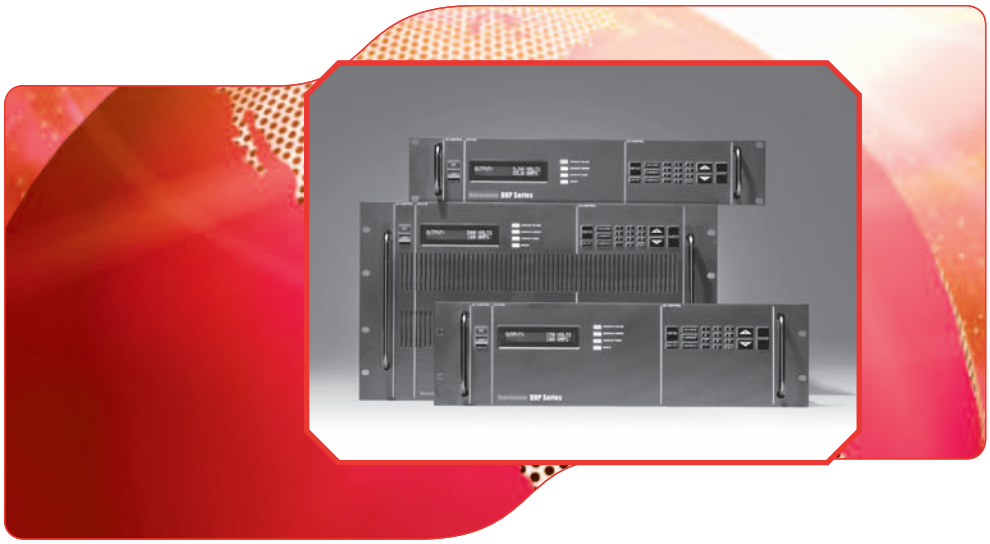
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Find the *Ametek / Elgar / Sorensen DHP 50-265M2* at our website: ***Click HERE***



DHP Series:
DC High Power Programmable Supplies

The DHP Family contains over 80 models ranging in output power from 2 kW to 20 kW in a single chassis. The 2 kW and 3 kW models are housed in a thin 2U (3.5" high), (19" wide) rackmount chassis. Programmable output voltages range from 5V to 400 VDC, delivering up to 3,000 amperes. This family has three operational modes, constant-voltage, constant-current and constant-power.

The DHP Family uses second generation control technology for improved programmability and performance. This technology allows 9 auto sequence steps, each step can be up to 99,999 seconds in duration. Combining all the steps allows a maximum auto-step program 27.7 hours long. Various voltages, currents and durations can be programmed for each step.

This family has standard analog and a variety of combinations of IEEE-488.2, RS 232 and/or isolated analog input control interface options.

All models come with the standard Sorensen 5-year warranty and CE Mark.

- **Modular Design**
  The series has a unique modular design that results in three rackmount profiles according to output power

- **Unique Controls and Commands**
  - Power-Off Memory: Enabling the input power and pushing the LAST SET button will restore the supply settings
  - External Shutdown: An external shut down to inhibit the output
  - Up/down arrows control voltages, step changes and current

- **Digital Displays**
  - Power supply rating
  - Output power, voltage and current
  - All power, voltage and current set points and limits
  - Present and highest AC input voltage
  - Present and highest air inlet temperature
  - Power and auto-step sequence settings
  - Calibration set-up
  - Remote operation set-up
  - Diagnostics fault status summary

- **Protection and Safety**
  - Safe Power-Up: In the local mode, the output is disabled for additional safety at power up
  - Front Panel Lockout: Most front panel controls are disabled when operated remotely
  - Overvoltage, over-temperature, surge limit, soft start, brown out and short circuit protection current limit fold back.

- **CE Mark**

- **5 Year Warranty**

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DHP: Common Specifications

Output

Voltage and Current

Voltage, Current, and Ripple: See Tables

Regulation (Line or Load)

Voltage: 0.1% of maximum rated output
Current: 0.5% of maximum rated output

Transient Response: 2 ms to steady state output voltage (within 2% of Vmax) for 30% step load change

Stability: ±0.05% maximum rating per 8 hours after a 30 minute warm-up time at fixed line, load and temperature

Efficiency: 80% minimum at full load

Temperature Coefficient: 0.02%/°C of rated output voltage; 0.03%/°C of rated output current

Input

Voltage and Frequency

2-3 kW: 190-253 VAC, 47-63 Hz, single phase, 2-wire plus ground

5-20 kW: 190-253 VAC, 47-63 Hz, three phase, 3-wire plus ground, Delta or Wye input may be used (Wye does not require the neutral connection)

General

Operating Temperature:
0°C to +50°C, no derating

Storage Temperature: -20°C to 70°C

Cooling: Internal fan

Front Panel Controls: Keypad to select/adjust voltage, current and power with non-volatile memories to store commonly used parameters

Displays and Indicators: Back lit LCD alphanumeric display and LEDs

Built-in Protection: Overtemperature, brown out, turn on surge limit, slow start, overvoltage (OVP resettable without recycling power)

Remote Sense: The maximum line drop is 3% per line or 1V for 5-15V units, 3V for all others

Remote Control/Monitor (Rear Panel): On/off control via contact closure, 6-120 VDC, 12-240 VAC, TTL or CMOS switch, output voltage and current monitor, (0-10 volt) OVP limit set, summary fault status

Internal Programming: 9 memories are on-board for auto-step programming. Each step can be 1 second to 99,999 seconds or 27.78 hours long.

Remote Digital Control

Programming Resolution:
Voltage: 0.3% of full scale;
Current: 0.3% of full scale;
Overvoltage Protection: 0.5% of full scale (full scale is 110% of maximum output voltage)

Programming Accuracy:
Voltage: 0.10% + 0.3% of maximum output voltage;
Current: 0.3% + 0.3% of maximum output current*;
Overvoltage Protection: 0.5% + 0.5% of maximum output voltage

Readback Resolution: Voltage and Current: 0.3% of full scale

Readback Accuracy:
Voltage: 0.10% + 0.3% of full scale output voltage;
Current: 0.3% + 0.3% of full scale output current*

Soft Calibration: Calibration via front panel without removing chassis covers

Software: LabVIEW® driver for M9D/M85, programs can be downloaded at no cost at: **www.elgar.com**

Regulatory Compliance: CE mark, TÜV CUL (NRTL) mark

Dimensions

Case I: 2U or 3-1/2" (88 mm) H x 19" (482 mm) W x 18" (457 mm) D

Case II: 3U or 5-1/4" (133 mm) H x 19" (482 mm) W x 22" (558 mm) D

Case III: 5U 10-1/2" (266 mm) H x 19" (482 mm) W x 22" (558 mm) D

Weight: Maximum
Case I: 45 lbs. (22 kg)
Case II: 80 lbs. (55 kg)
Case III: 160 lbs. (73 kg)

Shipping Weight: Maximum
Case I: 48 lbs. (23 kg)
Case II: 120 lbs. (73 kg)
Case III: 200 lbs. (91 kg)

Options & Accessories

Remote Interface Options

M8: RS 232 internal remote serial interface

M9D: Internal IEEE-488.2 interface

M10: Both IEEE-488.2 and RS 232

M11: RS 232 and isolated analog programming

M12: IEEE-488.2 and isolated analog programming

M14: IEEE-488.2, RS 232 and isolated analog programming

M51: Isolated analog programming

Input Voltage Options

M1:** 360-440 VAC, 47-63 Hz, three phase, 3-wire plus ground, Delta or Wye may be used

M2:** 432-528 VAC, 47-63 Hz, three phase, 3-wire plus ground, Delta or Wye may be used

M3: 190-253 VAC, 47-63 Hz, three phase, 3-wire plus ground, Delta or Wye may be used (3 kW models only)

* *After 30 minutes operation with fixed line, load and temperature*
** *Applies to all models 6 kW or greater*

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Model	Output DC		Ripple (RMS) Typical	Case
	Volts	Amps		
2 kW to 3 kW				
DHP 5-325	0-5	0-325	10 mV	I
DHP 8-250	0-8	0-250	10 mV	I
DHP 8-350	0-8	0-350	10 mV	I
DHP 10-200	0-10	0-200	10 mV	I
DHP 10-300	0-10	0-300	10 mV	I
DHP 15-130	0-15	0-130	10 mV	I
DHP 15-200	0-15	0-200	10 mV	I
DHP 20-100	0-20	0-100	10 mV	I
DHP 20-150	0-20	0-150	10 mV	I
DHP 30-66	0-30	0-66	10 mV	I
DHP 30-100	0-30	0-100	10 mV	I
DHP 40-50	0-40	0-50	10 mV	I
DHP 40-75	0-40	0-75	10 mV	I
DHP 50-40	0-50	0-40	10 mV	I
DHP 50-60	0-50	0-60	10 mV	I
DHP 60-33	0-60	0-33	10 mV	I
DHP 60-50	0-60	0-50	10 mV	I
DHP 80-25	0-80	0-25	25 mV	I
DHP 80-37	0-80	0-37	25 mV	I
DHP 100-20	0-100	0-20	25 mV	I
DHP 100-30	0-100	0-30	25 mV	I
DHP 120-16	0-120	0-16	25 mV	I
DHP 120-25	0-120	0-25	25 mV	I
DHP 150-13	0-150	0-13	25 mV	I
DHP 150-20	0-150	0-20	25 mV	I
DHP 200-10	0-200	0-10	25 mV	I
DHP 200-15	0-200	0-15	25 mV	I
DHP 250-8	0-250	0-8	25 mV	I
DHP 250-12	0-250	0-12	25 mV	I
DHP 300-6.6	0-300	0-6.6	25 mV	I
DHP 300-10	0-300	0-10	25 mV	I
DHP 400-5	0-400	0-5	25 mV	I
DHP 400-7.5	0-400	0-7.5	25 mV	I

Model	Output DC		Ripple (RMS) Typical	Case
	Volts	Amps		
5 kW to 20 kW*				
DHP 5-1000	0-5	0-1000	10 mV	II
DHP 5-1500	0-5	0-1500	10 mV	II
DHP 5-2000	0-5	0-2000	15 mV	III
DHP 5-2500	0-5	0-2500	15 mV	III
DHP 5-3000	0-5	0-3000	15 mV	III
DHP 8-800	0-8	0-800	10 mV	II
DHP 8-1200	0-8	0-1200	10 mV	II
DHP 8-1600	0-8	0-1600	15 mV	III
DHP 8-2000	0-8	0-2000	25 mV	III
DHP 8-2400	0-8	0-2400	25 mV	III
DHP 10-660	0-10	0-660	10 mV	II
DHP 10-1000	0-10	0-1000	10 mV	II
DHP 10-1300	0-10	0-1300	15 mV	III
DHP 10-1650	0-10	0-1650	25 mV	III
DHP 10-2000	0-10	0-2000	25 mV	III
DHP 12.5-530	0-12.5	0-530	10 mV	II
DHP 12.5-800	0-12.5	0-800	10 mV	II
DHP 12.5-1060	0-12.5	0-1060	15 mV	III
DHP 12.5-1325	0-12.5	0-1325	25 mV	III
DHP 12.5-1600	0-12.5	0-1600	25 mV	III
DHP 15-440	0-15	0-440	10 mV	II
DHP 15-660	0-15	0-660	10 mV	II
DHP 15-880	0-15	0-880	15 mV	III
DHP 15-1100	0-15	0-1100	25 mV	III
DHP 15-1320	0-15	0-1320	25 mV	III

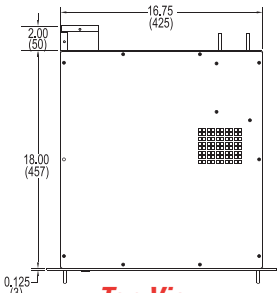
Model	Output DC		Ripple (RMS) Typical	Case
	Volts	Amps		
5 kW to 20 kW (continued)*				
DHP 20-330	0-20	0-330	10 mV	II
DHP 20-500	0-20	0-500	10 mV	II
DHP 20-665	0-20	0-665	15 mV	III
DHP 20-830	0-20	0-830	25 mV	III
DHP 20-1000	0-20	0-1000	25 mV	III
DHP 25-265	0-25	0-265	10 mV	II
DHP 25-400	0-25	0-400	10 mV	II
DHP 25-520	0-25	0-520	15 mV	III
DHP 25-650	0-25	0-650	25 mV	III
DHP 25-800	0-25	0-800	25 mV	III
DHP 30-220	0-30	0-220	10 mV	II
DHP 30-330	0-30	0-330	10 mV	II
DHP 30-440	0-30	0-440	15 mV	III
DHP 30-550	0-30	0-550	25 mV	III
DHP 30-660	0-30	0-660	25 mV	III
DHP 40-166	0-40	0-166	10 mV	II
DHP 40-250	0-40	0-250	10 mV	II
DHP 40-330	0-40	0-330	15 mV	III
DHP 40-415	0-40	0-415	25 mV	III
DHP 40-500	0-40	0-500	25 mV	III
DHP 50-133	0-50	0-133	10 mV	II
DHP 50-200	0-50	0-200	10 mV	II
DHP 50-265	0-50	0-265	15 mV	III
DHP 50-330	0-50	0-330	25 mV	III
DHP 50-400	0-50	0-400	25 mV	III

**Note: For high power models 60V and above see SGI Series.*

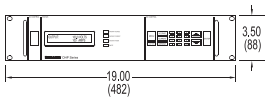
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Case I

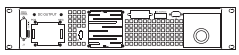
Dimensions in inches (millimeters)



Top View



Front View

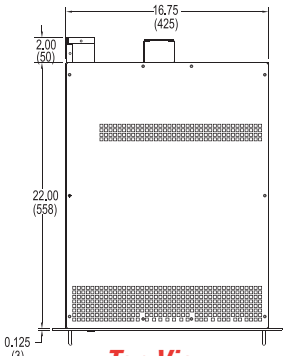


Rear View

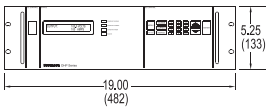
Input Connections
#8-32 Threaded Studs

5-60 Volt Models Output Connections	80-400 Volt Models Output Connections
J1 for Remote Sense	J3 for Remote Sense
Copper Bus Bars, Nickel Plated	Two position terminal block
Dimensions: 1.5" x 0.75"x 0.18"	#10-32 screws
Space Between Bus Bars: 2.125"	
Holes in Bus Bar: 0.375"	

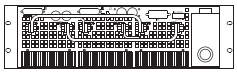
Case II



Top View



Front View

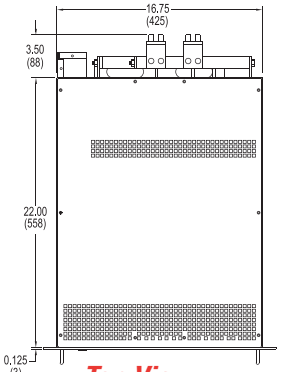


Rear View

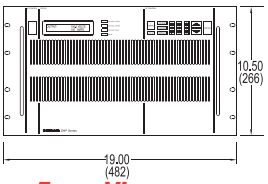
Input Connections
#10-32 Threaded Studs

Output Connections
5-50 Volt Models
Copper Bus Bars, Nickel Plated
Holes in Bus Bar: 0.390"

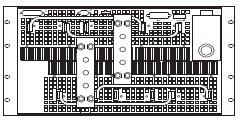
Case III



Top View



Front View



Rear View

Input Connections
#10-32 Bronze Threaded Studs

Output Connections
5-50 Volt Models
Copper Bus Bars, Nickel Plated
Holes in Bus Bar: 0.410"

Options & Accessories:

Voltage Options	
M1*	360-440 VAC, 47-63 Hz, 3 Phase, 3-wire plus ground
M2*	432-528 VAC, 47-63 Hz, 3 Phase, 3-wire plus ground
M3**	190-253 VAC, 47-63 Hz, 3 Phase, 3-wire plus ground (3 kW only)
Remote Interface Options	
M8	RS 232
M9D	IEEE-488.2
M10	RS 232 and IEEE-488.2
M11	RS 232 and Isolated Analog Programming
M12	IEEE-488.2 and Isolated Analog Programming
M14	RS 232, IEEE-488.2 and Isolated Analog Programming
M51	Isolated Analog Programming

** Applies to all models 5 kW or greater* ***3 kW only*

J1 Connector			
1	Remote Output Enable	14	TTL/CMOS On/Off Control
2	Remote Return for Pins 1 and 14	15	Remote Voltage Programming Input
3	Remote OVP Programming Input	16	Remote Current Programming Input
4	Voltage Return for Pins 9, 15 or 21	17	Fault State
5	Remote On/Off	18	Shutdown Fault
6	Circuit Common	19	Output Voltage Monitor
7	Current Monitor Output	20	Voltage Return for Pins 9, 15 or 21
8	Local Voltage Control Monitor	21	Voltage Control Resistance
9	Remote Voltage Programming Input	22	Current Control Resistance
10	Remote Current Programming Input	23	Current Return for Pins 10, 16 or 22
11	Local Current Control Monitor	24	Circuit Common
12	Remote Sense –	25	Current Return for Pins 10, 16 or 22
13	Remote Sense +		

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