

ORENSEN (AMETEK)

DHP 40-75

The Sorensen DHP 40-75 is a highly reliable, 3 kW programmable DC power supply belonging to the Digital High Power (DHP) Series from AMETEK Programmable Power. Featuring a unique modular design in a 3U rackmount profile, it delivers up to 40 V and 75 A. It is equipped with comprehensive digital displays, robust remote analog/digital control options, power-off memory (LAST SET), and extensive protective mechanisms, making it ideal for high-power industrial, test, and laboratory applications.

SPECIFICATIONS

General

Interfaces	GPIB (IEEE-488) and RS-232 (standard); Analog remote control (optional)
Display	Digital displays showing voltage, current, output power, AC input voltage, air inlet temperature, and diagnostics

Physical

Power Supply	190-250 VAC, 3-phase, 47-63 Hz (optional 380/415/460/480 VAC available)
Operating Temperature	0 to 50 °C °C
Dimensions (W×H×D)	483 mm × 133 mm × 559 mm mm
Weight	15 kg kg

Output Ratings

Number of Channels	1
Rated Output Voltage	0 to 40 V
Rated Output Current	0 to 75 A
Rated Output Power	3000 W

Load and Line Regulation

Voltage Line Regulation	0.1% of max rated voltage
Voltage Load Regulation	0.1% of max rated voltage
Current Line Regulation	0.1% of max rated current
Current Load Regulation	0.1% of max rated current

User Controls and Interface

Power-Off Memory	Restores last settings upon input power enable
External Shutdown	Dedicated input to inhibit output remotely
Front Panel Controls	Up/down arrow keys for voltage, current, and step-change adjustments
Display Readouts	Output power, voltage, and current; set points/limits; AC input voltage; air inlet temperature; sequence settings; calibration and remote setup; fault diagnostic summary

Protection and Safety

Protection Features	Overcurrent, overvoltage, over-temperature, surge limit, soft start, brown out, and short-circuit protection
Front Panel Lockout	Disables manual front panel controls during remote operations

AC Input Specifications

AC Input Voltage Range	190 to 250 VAC (standard)
AC Input Phase Configuration	3-phase, 3-wire plus ground
AC Input Frequency Range	47 to 63 Hz

Physical Specifications

Form Factor	3U Rackmount
Dimensions (W x H x D)	19 in x 5.25 in x 22 in (483 mm x 133 mm x 559 mm)

Control & Programming

Analog Programming Input Options	0-5 V, 0-10 V, 0-5 k Ω , or 0-10 k Ω (user-selectable)
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Output Specifications

Remote Sense Compensation	Up to 5 V total line drop (2.5 V per line)
Voltage Ripple (RMS)	20 mV
Voltage Ripple (Peak-to-Peak)	100 mV
Current Ripple (RMS)	150 mA

Performance

Transient Recovery Time	1 ms typical (to within 1% of V _{max} for a 50% to 100% load step)
Voltage Temperature Coefficient	0.02% of maximum voltage per °C
Current Temperature Coefficient	0.03% of maximum current per °C

Environmental

Storage Temperature	-40 to +85 °C
Operating Humidity	0 to 90% RH (non-condensing)

Safety & Isolation

Output to Chassis Isolation	700 VDC
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Programming & Readback

Analog Programming Accuracy (Voltage)	±0.5% of maximum rated output voltage
Analog Programming Accuracy (Current)	±1.0% of maximum rated output current

Physical & General

Cooling	Forced air cooling with internal fan
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TECHNOLOGY

Switch-mode (PWM) DC Power Supply

APPLICATIONS

Programmable DC power source for automated test equipment (ATE), industrial burn-in, and high-power laboratory testing

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.