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Data Sheet

August 15, 2026

AMREL

Amrel HPS600-250-D027

The Amrel HPS600-250-D027 is a DC power supply engineered for industrial, research, and automated testing environments requiring precise, stable power delivery at elevated voltage and current levels. This 600V/250A unit combines tight output regulation with flexible input options and multiple control interfaces to support both standalone operation and integrated test systems. Typical Applications High-voltage DC testing, burn-in operations, semiconductor characterization, motor control development, and power electronics validation requiring microvolt-level output stability and fast transient recovery. Compatibility & Integration The HPS600-250-D027 accepts three-phase AC input across multiple voltage standards and provides both legacy (GPIB, RS-232) and modern (USB, Ethernet) communication channels for laboratory automation and production test integration. Aumictech offers NIST-tracea



MODEL

Amrel HPS600-250-D027

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

HPS600-250-D027

LISTING

<https://aumictechlabs.com/products/hps600-250-d027-3/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Amrel HPS600-250-D027 is a DC power supply engineered for industrial, research, and automated testing environments requiring precise, stable power delivery at elevated voltage and current levels. This 600V/250A unit combines tight output regulation with flexible input options and multiple control interfaces to support both standalone operation and integrated test systems. Technical Specifications Output Power Maximum output voltage: 600V Maximum output

current: 250A Load regulation (voltage): 0.02% of maximum output voltage Load regulation (current): 0.1% of maximum output current Line regulation (voltage): 0.01% of maximum output voltage Line regulation (current): 0.05% of maximum output current Stability: 0.10% over 8 hours after 30-minute warm-up Transient response: 50% step load recovers to within 0.75% of original value in 1 ms Temperature coefficient (voltage): 0.02%/°C of maximum output voltage rating Temperature coefficient (current): 0.03%/°C of maximum output current rating Input Power Standard input: 208/220 VAC $\pm 10\%$ (187–242 VAC operating range) Optional inputs: 380/400 VAC $\pm 10\%$ or 440/480 VAC $\pm 10\%$ Frequency: 47–63 Hz Configuration: 3-phase, 3-wire plus ground; not phase-rotation sensitive Efficiency: 87% typical at full load, nominal line Power factor: 0.9 typical (208/220 VAC); 0.78 typical (380/400 VAC) Key Features 2×20 VFD display for voltage and current readout Digital OVP, OCP, ILIST, and VLIST displays Real-time encoder and 10-turn potentiometers for precise adjustments (A Panel) TTL/CMOS remote control via contact closure (6–120 VDC or 12–240 VAC) Output voltage and current monitoring with summary fault status GPIB and RS-232 interfaces (K Panel) Optional USB and Ethernet connectivity (K Panel feature, partially enabled) External analog programming capability Typical Applications High-voltage DC testing, burn-in operations, semiconductor characterization, motor control development, and power electronics validation requiring microvolt-level output stability and fast transient recovery. Compatibility & Integration The HPS600-250-D027 accepts three-phase AC input across multiple voltage standards and provides both legacy (GPIB, RS-232) and modern (USB, Ethernet) communication channels for laboratory automation and production test integration.

HPS600250D027 Characteristics / Specifications

PARAMETER	VALUE
Model	HPS600-250-D027
Base Model	HPS600-250
Instrument Type	high power switching DC power supply
Output Voltage Range	0 V to 600 V
Output Current Range	0 A to 250 A
Output Power Class	150 kW
Series Family	AMREL HPS 45 kW to 150 kW
Efficiency	87 percent typical at full load nominal line
Power Factor 208 Input	0.9 typical for 208/220 Vac input
Power Factor 380 Input	0.78 typical for 380/400 Vac input
Power Factor 440 Input	0.7 typical for 440/480 Vac input
Input Voltage Standard	208/220 Vac plus or minus 10 percent allowed 187 to 242 Vac
Input Frequency	47 Hz to 63 Hz
Input Phases	3 phase 3 wire plus ground
Load Regulation Voltage	0.02 percent of maximum output voltage
Load Regulation Current	0.1 percent of maximum output current
Line Regulation Voltage	0.01 percent of maximum output voltage
Line Regulation Current	0.05 percent of maximum output current
Transient Response	50 percent step load recovers to within 0.75 percent of original value within 1 ms
Down Programming	100 percent to 10 percent in less than 1.5 s with no load
Stability	plus or minus 0.05 percent of set point after 30 minute warm up over 8 hours
Temperature Coefficient Voltage	0.02 percent perCof maximum output voltage rating
Temperature Coefficient Current	0.03 percent perCof maximum output current rating
Operating Temperature	0 C to 50 C

PARAMETER	VALUE
Manufacturer	AMREL / AMETEK
Form Factor	cabinet class HPS
Remote Sense	HPS family line drop compensation
Control	analog and digital programming panels

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	0 C to 50 C
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Manufacturer	AMREL / AMETEK
Form Factor	cabinet class HPS
Remote Sense	HPS family line drop compensation
Control	analog and digital programming panels Notes Numeric rows from AMREL HPS Series electrical specifications for HPS600-250. D027 isafactory configurator suffix; confirm input voltage and panel type on the D027 nameplate.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

environmental specifications. D027 is the configurator suffix on the remaining queue SKU.

Applications

Aerospace and satellite testing, automotive HIL and ECU validation, battery and energy storage soak, semiconductor process power, and high power ATE requiring 600 V at up to 250 A.

Key Features

Automatic CV and CC crossoverApanel orKpanel front ends with analog and digital programming

Remote sense with stated line drop limits by voltage class

Remote inhibit, interlock, and fault monitoring on the HPS family

Parallel expansion within the HPS high power architecture

Technical Specifications

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Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.