

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 14, 2026

AMETEK / ELGAR / SORENSEN

Ametek / Elgar / Sorensen DCS20-50E 1 kW Power Supply

The Ametek/Elgar/Sorensen DCS20-50E is a 1 kW programmable DC power supply for manufacturing test, component evaluation, burn-in, laboratory R&D, and process control. Built on high-frequency switching topology, it delivers stable DC power with adjustable voltage and current settings in a compact 1U chassis. Front-panel ten-turn potentiometers provide high-resolution control with simultaneous digital readout of output parameters. Typical Applications Manufacturing test, component burn-in, laboratory power delivery, R&D bench work, and process control systems requiring stable, regulated DC output. Compatibility & Integration Optional IEEE-488/RS-232, IEEE-488.2 GPIB, and LXI-compliant Ethernet interfaces enable remote programming and monitoring. Dimensions: 43 mm (H) × 482 mm (W) × 445 mm (D). Aumictech offers NIST-traceable calibration and repair for the Ametek / Elgar / Sorensen DCS20



MODEL

**Ametek / Elgar /
Sorensen DCS20-
50E**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

DCS20-50E

LISTING

[https://aumictechlabs.c
om/products/dcs20-50
e-3/](https://aumictechlabs.com/products/dcs20-50e-3/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Ametek/Elgar/Sorensen DCS20-50E is a 1 kW programmable DC power supply for manufacturing test, component evaluation, burn-in, laboratory R&D, and process control. Built on high-frequency switching topology, it delivers stable DC power with adjustable voltage and current settings in a compact 1U chassis. Front-panel ten-turn potentiometers provide high-resolution control with simultaneous digital readout of output parameters.

Technical Specifications

Output Voltage Range: 0 to 20 Vdc Line Regulation: 0.05% of rated output voltage Load Regulation: 0.1% of rated output voltage (0–100% load variation) Output Current Range: 0 to 50 A Line Regulation: 0.1% of rated output current Load Regulation: 0.2% of rated output current (0–100% load variation) Power and Performance Rated Output: 1 kW (1000 W) Ripple and Noise: Low Transient Response: Recovers in 500 μ s to 1% of steady-state output voltage for 70–100% load change Over-Voltage Protection: Adjustable Remote Sensing: Compensation up to 4 V per line Input Voltage (selectable): 100–132 Vac or 200–250 Vac, single phase Frequency: 47–63 Hz Current Draw: 15 A typical (100–132 Vac); 8 A typical (200–250 Vac)

Key Features Ten-turn potentiometers for voltage and current adjustment with high resolution Simultaneous digital display of voltage and current output Status indicators: overtemperature, remote programming, shutdown, OVP, local/remote mode, constant voltage/current operation Remote programming of voltage, current limit, and OVP with selectable constants Four analog control modes standard; isolated analog control and monitoring optional External TTL, AC, or DC shutdown input Remote start/stop and interlock support: TTL input or 12–250 VAC (12–130 VDC) or contact closure

Typical Applications Manufacturing test, component burn-in, laboratory power delivery, R&D bench work, and process control systems requiring stable, regulated DC output.

Compatibility & Integration Optional IEEE-488/RS-232, IEEE-488.2 GPIB, and LXI-compliant Ethernet interfaces enable remote programming and monitoring. Dimensions: 43 mm (H) $\times$ 482 mm (W) $\times$ 445 mm (D).

DCS2050E Characteristics / Specifications

PARAMETER	VALUE
Output Voltage	0 to 20 V
Output Current	0 to 50 A
Output Power	1000 W
Combined Line And Load Regulation Voltage Class	0.2 percent
Combined Line And Load Regulation Current Class	0.2 percent
Voltage Ripple RMS Typical	4 mV
Voltage Noise Peak To Peak Typical	60 mV
Current Ripple RMS Typical	25 mA
Transient Response Typical	500 us
Temperature Coefficient Voltage Typical	0.02 percent perCTemperature Coefficient Current Typical: 0.03 percent perCVoltage Drift Typical: 0.05 percent of Vmax
Current Drift Typical	0.05 percent of I _{max}
Voltage Resolution Typical	0.02 percent
Efficiency Typical	82 percent
AC Input 230 V Class Current Typical	8 A single phase
Meter Accuracy	1 percent of full scale plus 1 count
Remote Sense Drop Maximum	4 V per line
OVP Adjustment	5 to 110 percent of rated output
Operating Temperature Full Rating	0 C to 50 C
Derating Above 50 C	2 percent perCto 70 C
Size HxWxD	44 mm x 482 mm x 444 mm
Weight	8.6 kg
Series Platform	DCS 1 kW
Operating temperature	Full Rating: 0 C to 50 C

DCS2050E Specifications

PARAMETER	VALUE
Key Features	Continuous full power within V/I ratings
Analog remote programming standard	Optional IEEE 488.2 GPIB/RS-232 M9C and LXI Ethernet paths on family
Technical Specifications	Output Voltage: 0 to 20 V

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Full Rating: 0 C to 50 C
Operating Temperature	Full Rating: 0 C to 50 C
Operating Temperature Full Rating	0 C to 50 C
Derating Above 50 C	2 percent perCto 70 C
Size HxWxD	44 mm x 482 mm x 444 mm
Weight	8.6 kg
Series Platform	DCS 1 kW Notes Numeric rows from Sorensen/Elgar DCS Series 1 kW datasheet column for DCS 20-50E. Confirm M1 115 VAC input option and interface option codes against the unit faceplate.

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.

Specifications	
Specifications	
PARAMETER	VALUE
Output Voltage	0 to 20 V
Output Current	0 to 50 A
Output Power	1000 W
Combined Line And Load Regulation Voltage Class	0.2 percent
Combined Line And Load Regulation Current Class	0.2 percent
Voltage Ripple RMS Typical	4 mV
Voltage Noise Peak To Peak Typical	60 mV
Current Ripple RMS Typical	25 mA
Transient Response Typical	500 us
Temperature Coefficient Voltage Typical	0.02 percent perCTemperature Coefficient Current Typical: 0.03 percent perCVoltage Drift Typical: 0.05 percent of Vmax
Current Drift Typical	0.05 percent of Imax
Voltage Resolution Typical	0.02 percent
Efficiency Typical	82 percent
AC Input 230 V Class Current Typical	8 A single phase
Meter Accuracy	1 percent of full scale plus 1 count
Remote Sense Drop Maximum	4 V per line
OVP Adjustment	5 to 110 percent of rated output
Operating Temperature Full Rating	0 C to 50 C
Derating Above 50 C	2 percent perCto 70 C
Size HxWxD	44 mm x 482 mm x 444 mm
Weight	8.6 kg
Series Platform	DCS 1 kW
Notes	
Numeric rows from Sorensen/Elgar DCS Series 1 kW datasheet column for DCS 20-50E. Confirm M1 115 VAC input option and interface option codes against the unit faceplate.	

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

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 14, 2026

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