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Data Sheet

August 14, 2026

AMETEK / ELGAR / SORENSEN

Ametek / Elgar / Sorensen DCS33-33EM1M47 1 kW Power Supply

The Ametek / Elgar / Sorensen DCS33-33EM1M47 is a 1 kW power supply designed for a variety of applications. This power supply provides a stable and reliable source of DC power, featuring precise voltage and current control. Ideal for laboratory testing, industrial automation, and research and development, this unit ensures consistent performance and protection against overvoltage and overcurrent conditions.

**MODEL****Ametek / Elgar /
Sorensen DCS33-
33EM1M47****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****DCS33-33EM1M47****LISTING**<https://aumictechlabs.com/products/dcs33-33em1m47-3/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Ametek / Elgar / Sorensen DCS33-33EM1M47 is a 1 kW programmable switching DC power supply engineered for development, system integration, and burn-in testing. High-frequency switching regulator topology delivers high power density in a compact, low-profile chassis. The unit operates in both constant voltage and constant current modes with automatic crossover, providing stable, continuously variable output across any volt/amp combination within rated limits. Front-panel ten-turn potentiometers enable precise adjustment with simultaneous digital readout of voltage and current. Remote sensing compensates for lead losses, while remote

programming capability supports bench and automated test environments. Built-in overvoltage protection (OVP) and shutdown circuitry safeguard connected equipment.

Technical Specifications

Output Ratings

Maximum output voltage: 0–33 VDC (note: M47 variant may limit to 28 VDC)
Maximum output current: 0–33 ADC Output power: 1 kW continuous at any combination within rated limits
Constant Voltage Mode Line and load regulation: 0.2% Output ripple (RMS): 10 mV
Output noise (peak-to-peak): 100 mV Transient response time: 500 μ s typical Temperature coefficient: 0.02%/°C Voltage drift: 0.05% V_{max} typical Programming constant: 151.5 Ω /V or 0–10 V = 0–100% V_o / 0–5 V = 0–100% V_o Constant Current Mode Line and load regulation: 0.2% Output ripple (RMS): 10 mA Temperature coefficient: 0.03% Current drift: 0.05% I_o Max typical Programming constant: 151.5 Ω /A

Input Power

AC input voltage: Selectable 115/230 VAC or 100–132/200–250 VAC AC input current: 10/20 A Frequency: 50/60 Hz or 47–63 Hz switchable Phase: Single phase Installation category: II Indoor use rated

Key Features

Remote sensing for lead-loss compensation Overvoltage protection (OVP) and shutdown Parallel/series stacking for extended voltage or current capability Ten-turn potentiometers for fine voltage and current control Simultaneous dual-channel digital display

Typical Applications

Component and subsystem development, burn-in testing, equipment characterization, and laboratory power distribution where stable, programmable DC output and high regulation accuracy are required.

Compatibility & Integration

Remote programming interface enables integration into automated test systems and production environments. Flexible AC input selection accommodates global utility standards.

DCS3333EM1M47 Characteristics / Specifications

PARAMETER	VALUE
Model	DCS 33-33E
Output Voltage	0 to 33 V
Output Current	0 to 33 A
Output Power	1000 W class 33 V times 33 A equals 1089 W rating on some lists
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	10 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
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
Modes	CV/CC
Operating temperature	Full Rating: 0 C to 50 C

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Full Rating: 0 C to 50 C
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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
Modes	CV/CC Notes From Sorensen/Elgar DCS Series 1 kW datasheet column for DCS 33-33E and option list including M1/M9C/M47. Queue SKU DCS33-33EM1M47 is M1 plus M47.

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	
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Weight	8.6 kg
Series Platform	DCS 1 kW
Option M1: factory 115 VAC input 1 kW units	
Option M9C: internal IEEE 488 / RS-232	
Option M47 On Queue Unit: fixed 28.5 VDC output no front panel meters	
Modes: CV/CC	
Notes	
From Sorensen/Elgar DCS Series 1 kW datasheet column for DCS 33-33E and option list including M1/M9C/M47.	

Queue SKU DCS33-33EM1M47 is M1 plus M47.

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.