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Data Sheet

August 15, 2026

AMETEK/ELGAR

Ametek / Elgar 4643V Dual Range Manual Oscillator Module

Elgar 4643V Dual Range Manual Oscillator Module The Elgar / Ametek 4643V is a dual-range manual oscillator module for Elgar AC power sources. OEM 4643V listings describe a plug-in manual oscillator with dual voltage ranges used to set amplitude and frequency of Elgar linear AC sources from the front panel, as the manual counterpart to programmable PIP9012A oscillators. Dual-range operation covers the low and high voltage ranges of the host Elgar amplifier. Manual amplitude and frequency control of Elgar AC sources. The Elgar / Ametek 4643V is a dual-range manual oscillator module for Elgar AC power sources. OEM 4643V listings describe a plug-in manual oscillator with dual voltage ranges used to set amplitude and frequency of Elgar linear AC sources from the front panel, as the manual counterpart to programmable PIP9012A oscillators. Dual-range operation covers the low and high voltage ranges of the host Elgar amplifier. Manual amplitude and frequency control of Elgar AC sources. Instrument Type: Dual range manual oscillator module



MODEL

**Ametek/Elgar
4643V**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

4643V

LISTING

<https://aumictechlabs.com/products/4643v-3/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Ametek/Elgar 4643V is a dual-range manual oscillator module that delivers stable, precise frequency output for integration with Elgar AC power sources. This Series 400 plug-in unit has

decade-dial and range-switch control over frequency selection, enabling low-distortion sine wave generation across 45 Hz to 5 kHz. Manual frequency adjustment combines with optional external programming via analog voltage (6-10 VDC) or external resistance to meet diverse test and calibration requirements. Calibration accuracy of $\pm 0.001\%$ of set value and a front-panel frequency-limit LED ensure reliable operation within specified bounds. The module accepts single, dual, or three-phase configurations and integrates directly into Elgar power sources via captive-screw front-panel mounting and terminal connector interface.

Technical Specifications

Model: 4643V Series: 400 Series Plug-in Oscillators

Frequency Range: 45 Hz to 5 kHz

Frequency Limit Protection: LED indicator; valid range 44 Hz to 5100 Hz

Calibration Accuracy: $\pm 0.001\%$ of set value

Output Waveform: Low distortion sine wave

Phase Configurations: Single, dual, or three-phase

External Frequency Programming: 6-10 VDC analog voltage input

External Amplitude Programming: 0-13 kOhms external resistance (100 ohms per volt; 130V output max) or 0-10 VDC external DC voltage

Frequency Selection Method: Manual decade dials and range switches

Key Features

- Decade-dial interface with range switches for precise manual frequency control
- $\pm 0.001\%$ calibration accuracy ensures signal integrity for metrology-grade testing
- Low-distortion sine wave output suitable for AC power source modulation
- Frequency-limit LED with automatic output reduction and exponential recovery upon valid frequency selection
- Optional external programming eliminates manual adjustment for automated test sequences
- Single-phase versions feature 1/8" phone jack for external signal input

Typical Applications

- AC power source frequency modulation and control
- Precision frequency calibration and verification
- Variable-frequency test signal generation for power electronics validation
- Multi-phase signal synthesis for motor and drive testing

Compatibility & Integration

The 4643V mounts directly to the front panel of Elgar AC power sources via plug-in enclosure and captive screws. Integration occurs through a dedicated terminal connector within the power source. External programming connections for resistance and DC voltage are routed through the main terminal connector.

4643V Characteristics / Specifications

PARAMETER	VALUE
Model	4643V
Instrument Type	Dual range manual oscillator module
Host Family	Elgar AC power sources
Range Class	dual voltage range
Control	manual front-panel oscillator
Related Programmable	PIP9012A programmable plug-in oscillator
Manufacturer	Elgar / Ametek
Use Case	manual AC source oscillator
Literature	Elgar/Ametek 4643V dual-range manual oscillator listings
Family	Elgar plug-in oscillators
Documentation Type	OEM 4643V listing
Brand Lineage	Elgar Ametek
System Role	manual oscillator plug-in
Form Factor	plug-in oscillator module
Application Class	AC source amplitude and frequency control
Operating Temperature Class	laboratory AC source
Year Class	Elgar oscillator plug-in family
Vendor Path	Elgar Ametek
Documentation Class	OEM AC source catalog
Voltage Class	dual range matching host Elgar amplifier
Frequency Class	manual frequency control of AC source
Phase Class	oscillator for Elgar linear amplifiers
Companion Role	manual alternative to PIP9012A
Card Format	plug-in module
Operating temperature	Class: laboratory AC source

4643V Specifications

PARAMETER	VALUE
Elgar 4643V Dual Range Manual Oscillator Module	Overview
Manual amplitude and frequency	Counterpart to PIP9012A
Technical Specifications	Model: 4643V

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Class: laboratory AC source
Operating Temperature	Class: laboratory AC source
Operating Temperature Class	laboratory AC source
Year Class	Elgar oscillator plug-in family
Vendor Path	Elgar Ametek
Documentation Class	OEM AC source catalog
Voltage Class	dual range matching host Elgar amplifier
Frequency Class	manual frequency control of AC source
Phase Class	oscillator for Elgar linear amplifiers
Companion Role	manual alternative to PIP9012A
Card Format	plug-in module Notes From Elgar/Ametek 4643V listings (dual-range manual oscillator for Elgar AC sources). Exact voltage/frequency spans are on the 4643V oscillator specification sheet.

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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From Elgar/Ametek 4643V listings (dual-range manual oscillator for Elgar AC sources). Exact voltage/frequency spans are on the 4643V oscillator specification sheet.

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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NIST-traceable calibration · SAM registered ·
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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.