PRODUCT OVERVIEW

Elgar's plug-in oscillator product line is designed to provide the required output frequency for Elgar AC power sources. Plug-in oscillators also give users maximum flexibility and optimum price/performance for their specific application. The plug-in oscillators are an integral part of Elgar Linear AC power sources.

Both the RC phase shift oscillators and crystal controlled precision oscillators provide users with variable or fixed frequency capabilities and a low distortion sine wave output to meet a variety of application needs. All are available in single, dual, or three-phase configurations.

400 SD

FEATURES AND BENEFITS

RC PHASE SHIFT OSCILLATORS (FIXED OR VARIABLE)

These oscillators provide a lower cost alternative when the application doesn't require the frequency accuracy of crystal control. They're the best selection when continuous sweep frequency is required.

CRYSTAL CONTROLLED PRECISION OSCILLATORS (FIXED OR VARIABLE)

These oscillators provide variable frequency capability via front panel decade switches. They offer frequency selection capability via internal DIP switches in fixed frequency models. In addition, they feature precision frequency resolution of 0.01 Hz, calibration accuracy of ±0.001%, and optional programmable amplitude via external resistor or external DC programming.

400 SERIES

CE 400 Series fixed frequency RC phase shift oscillators operate at 50, 60, or 400 Hz. All are available in single, dual or three-phase configurations. They are the low cost alternative for applications which require ±0.1% accuracy. Single phase versions include a 1/8" phone jack for Ext. input.

400 SD/400 SDE SERIES

CE 400 SD and 400 SDE (CE) Series allows manual selection of output frequency with decade dials and range switches. The frequency range is 45 Hz to 5 kHz. Optionally, output voltage can be externally programmed with resistance of 0-13 kOhms for a 0-full scale output voltage or with DC voltage of 0-10 VDC for a 0-full scale output voltage. They offer precision frequency resolution of .01/.1/1 Hz and calibration accuracy of ±0.001% of set value.

400 SP/400 SPE SERIES

CE 400 SP and 400 SPE (CE) Series allows selection of any fixed frequency from 45 Hz to 5 kHz with DIP switches located behind the blank front panel. Optionally, output voltage can be externally programmed in the same manner as the 400 SD.

400 CV SERIES

400 CV Series RC oscillators give users a continuously variable frequency capability with a low distortion sine wave output to meet a variety of applications, including ramps to manually simulate motor generators. The 400 CV Series is available in two frequency ranges (45-75 Hz and 300-500 Hz) and in single, dual or three-phase configurations. Optionally, output voltage and frequency can be externally programmed with an analog voltage of 0-10 VDC for amplitude and 6-10 VDC for frequency.

400 SR

400 SR signal routing plug-ins are used for multiple power source applications to route the proper signal from the master oscillator to the proper slave power source(s).

400A

400A plug-ins are used to allow an external source, such as an arbitrary waveform generator, to provide the waveform input to the power source.

CE

RC Phase Shift Oscillators

Type	Model	Phase	Frequency Range (Hz)	Calibration Accuracy	Phase Angle	Freq. Temp. Coefficient
Variable Frequency Continuous Dial	401 CV	1	45-75 & 300-500	±0.25%	—	±0.02%/°C
	402 CV	2	45-75 & 300-500	±0.25%	90±1°	±0.02%/°C
	403 CV	3	45-75 & 300-500	±0.25%	120±1°	±0.02%/°C
*Fixed Frequency	451-.1	1	50	±0.1%	—	±0.015%/°C
	452-.1	2	50	±0.1%	90±1°	±0.015%/°C
	453-.1	3	50	±0.1%	120±1°	±0.015%/°C
	461-.1	1	60	±0.1%	—	±0.015%/°C
	462-.1	2	60	±0.1%	90±1°	±0.015%/°C
	463-.1	3	60	±0.1%	120±1°	±0.015%/°C
	441-.1	1	400	±0.1%	—	±0.015%/°C
	442-.1	2	400	±0.1%	90±1°	±0.015%/°C
	443-.1	3	400	±0.1%	120±1°	±0.015%/°C

* All single phase Oscillators have mini phone jack for external signal source

Crystal Controlled Precision Oscillators

Model	Programming	Sensing	Voltage/Frequency
Variable Frequency 45-5000 Hz 400 SD Series: 401 SD Single-Phase 402 SD Dual-Phase 403 SD Three-Phase Fixed Frequency 45 Hz to 5 kHz * 400 SP Series: 401 SP Single-Phase 402 SP Dual-Phase 403 SP Three-Phase	(0) No external programming (1) External resistance prog. 0 to 13 kOhm for 0 to FS (2) External voltage prog. 0 to 10 VDC for 0 to FS (3) External voltage prog. 0 to 13 VDC for 0 to 130V output (4) External voltage prog. 0 to 26 VDC for 0 to 260V output	(0) No remote sense with servo control (1) 1ø remote sense with servo control (2) 2ø remote sense with servo control (3) 3ø remote sense with servo control (4) 3ø open DELTA (5) 3ø open DELTA remote sense with servo control	(1) 0 to 130V output of power source (2) 0 to 260V output of power source (3) 0 to 32V output of power source (4) 0 to 65V output of power source (5) Frequency range of 400 SD extended to 15 Hz to 10 kHz (6) Frequency range of 400 SD extended to 15 Hz to 5 kHz (7) Frequency range of 400 SD extended to 45 Hz to 10 kHz

*SP Series fixed frequency preset by internal Dip switches
Freq. Temp. Coefficient 3 PPM/C°
Frequency Calibration Accuracy ±0.001% ±1° 45 Hz to 2 kHz add ±1° per kHz above 2 kHz

Signal Routing Modules

400 SR Ext. Source Input	Signal routing plug-in. Used in multiple power source applications (e.g.,1500 SL-3 consisting of three units, three-phase)
400 A	Plug-in contains a mini-phone jack to allow a drive signal connection from an external source.