



## FREQUENCY CONVERTERS

Outputs: Three Phase or Single Phase  
50, 60, 100, 200, 400 Hz  
VA Rating 500VA Single Phase to 200 kVA 3 Phase

Frequency Converters are custom built and are available with output frequencies of 50, 60, 100, 200 and 400 Hertz, digitally synthesized and crystal controlled for  $\pm 0.05\%$  accuracy. Variable output frequency units are available with the ranges of 45 to 65 Hertz or 350 to 450 Hertz. Custom frequencies are also available.

Models are available from 500VA, single-phase output and up to 200kVA, 3 phase output. Outputs are floating; transformer isolated from the input source and may be bonded or referenced to earth ground.

Please call or e-mail us (see below for contact information) for a formal quotation and available configuration options.

## ELECTRICAL SPECIFICATIONS FOR AC-AC FREQUENCY CONVERTERS

**Input Voltage:** 115VAC  $\pm 10\%$  single phase for units 1600VA and below. 208V three phase for units above 1600VA. Other inputs available. Consult factory.

**Input Frequency:** 47 to 65Hz. 47 to 420Hz input is available.

**Output Voltage:** Standard Voltage & Frequency

	1 $\emptyset$	3 $\emptyset$
50	220	380
60	120	208
400	115	200

Variable and fixed voltages & frequencies available.

**Voltage Regulation:** Less than  $\pm 2\%$  for combined no load to full load changes and rated input voltage changes. Voltage regulation also applies for three phase Frequency Converters regardless of load imbalances.

**Frequency Stability:** Oscillator included in the unit base price. Fixed frequency oscillators are crystal controlled with a stability of  $\pm 0.05\%$ . Adjustable oscillators are RC controlled and have a stability of  $\pm 0.25\%$ .

**Output Power:** Units are rated from 500VA 1 $\emptyset$  to 200kVA 3 $\emptyset$ . Consult factory for specific levels available. Maximum power per phase is 1/3 of the three-phase output.

**Meters:** Output volt and ammeters are standard on all models. Output frequency meter is standard on variable output frequency units. Other configurations available.

**Ambient Temperature Range:** Operating 0° to +40°C. Non-operating -20° to +85°C.

**Ambient Humidity Range:** Less than or equal to 95% to 25°C, less than or equal to 75% to 40°C and less than or equal to 45% to 50°C.

**Output Waveshape:** Sinewave less than 3% THD, 1% max. any single frequency. Less than 4% for non-linear loads such as computer power supplies.

**Load Power Factor:** 0.7 lead to 0.7 lag. Continuous zero lead to zero lag at full rated output without damage.

**Peak Output Current:** 110% of individual phase rms full load current rating.

**Duty Cycle:** Continuous duty at 100% full rated output VA.

Output Configuration: Isolated from ground, 2 wire single phase or 4 wire 3 phase wye. Can be ordered with earth bonding and other configurations.

**Isolation:** Input to output is transformer isolated.

**Protective Circuits:** All models are equipped with automatic overload protection. Automatic reset upon overload removal. Circuit breaker or fuse on the input and fuse on the output. Automatic shutdown for input overvoltage, undervoltage.

**Input and Output Terminations:** Rear mounted barrier strips provided. Rear mounted MS connectors and mates provided for all 400Hz output units (3500VA or less). MS connectors optional on all units.

**Construction:** Units less than 7.5kVA are standard 19" rack mount. Larger units are cabinet models.