

MajorFC Frequency Converters - 500 VA to 50 kVA, Single Phase

MajorFC Series, single phase frequency converters are high quality, low noise units available in power levels from 500 VA to 50 kVA.

MajorFC units offer full sine wave output for a variety of military, industrial, and alternate energy applications.



Product Features

- Pure Sine Wave Output
- Sample Data Control System
- High Efficiency Units
- Lightweight
- Proven Reliability
- FET and IGBT Technology
- Ideal for:
 - ▶ AC Power Supply
 - ▶ Motor Controller
 - ▶ Power Oscillator
 - ▶ Power Converter
 - ▶ Military & Industrial Applications
 - ▶ Laboratory Quality AC Source

Options

1	Output Ammeter - add suffix (A).
2	Output Voltmeter - add suffix (V).
3	Output Frequency Meter - add suffix (F).
4	Elapsed Time Meter - add suffix (ET).
5	Extended Temperature Range, -25°C to +55°C - add suffix (M).
6	Extended Humidity Range - add suffix (H).
7	Overtemperature Protection - add suffix (T).
8	Dual Input Voltage Range for Service at Either 115VAC or 230VAC -add suffix (C).
9	Dual Input Voltage Range for Service at Either 115VAC or 230VAC -add suffix (E).
10	400 Hz Input - add suffix (HZ).
11	60/50 Hz Output - add suffix (3/4).
12	Slides - add suffix (S).
13	Military Type Connectors - add suffix (MS).
14	Output waveshape less than 2% THD.

Product Specifications

Input	
Voltage	115 VAC ±10%, single phase for units 2000 VA and below. 200 V single phase, or 208 V three phase for units above 2000 VA. Other inputs available. Contact MajorPower.Com
Frequency	47 - 65 Hz. 47 - 420 Hz input is available.
Output	
Voltage	Adjustable 100 to 130 Volts. Voltage adjust is internal for fixed frequency models, in the front panel for adjustable frequency model. 220 VAC for 50 Hz units. Other ranges available.
Voltage Regulation	Less than 2% for combined no load to full load change and rated input voltage change.
Frequency	Rated output frequency for each model is shown on chart. For adjustable frequency models, adjustment is on the front panel. (Custom output frequencies are available.)
Efficiency	Between 70 - 80% (typical 75%). At least 70% from 40% of full load to full load.
Configuration	Input to output is transformer isolated and floating. Either side may be grounded.
Protective Circuits	All models are equipped with automatic overload protection, including short circuit. Automatic reset upon overload removal. Circuit breaker or fuse on the input and fuse on the output. Automatic shutdown for input over-voltage, undervoltage.
Meters	Output voltmeter, ammeter, frequency meter & elapsed time meter offered as options. Adjustable frequency models include digital voltage and frequency meters.
Frequency Stability	Oscillator included. Fixed frequency oscillators are crystal controlled with a stability of ±0.05%. Adjustable oscillators are RC controlled and have a stability of ±0.25%.
Power	Rated output power for each model is shown on chart opposite model number.
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 0 lead to 0 lag at full rated output without damage.
Peak Output Current	110%, subcyclic reset.
Duty Cycle	Continuous duty at full rated output.
Environmental	
Ambient Temp Range	Operating 0° to 40°C. Non operating -20° to +85°C. Extended temperature range available as an option.
Ambient Humidity	±95% to 25°C, ±75% to 40°C and ±45% to 50°C
Mechanical	
Input and Output Terminations	Rear mounted barrier strips provided. Rear mounted MS connectors and mates provided for all 400 Hz and 350-450 Hz output units (4000 VA or less). MS connectors optional.
Construction	Units less than 6KVA are standard 19" Rackmount. Larger units are cabinet models.

Model Selection Guide

Model	Output Power (VA)	Output Frequency	Dimensions	Weight (lbs)
MajorFC.5K	500	50/60/45-65/400/350-450	3½H x 19W x 19D	40
MajorFC.6K	600	400/350-450	3½H x 19W x 19D	45
MajorFC1K	1000	50/60/45-65/400/350-450	8¾H x 19W x 20D	70
MajorFC2K	2000	50/60/45-65/400/350-450	12¼H x 20W x 20D	130
MajorFC3K	3000	50/60/45-65/400/350-450	21H x 19W x 20D	180
MajorFC4K	4000	50/60/45-65/400/350-450	21H x 19W x 20D	210
MajorFC6K	6000	50/60/45-65/400/350-450	30H x 24W x 30D	550
MajorFC10K	10000	50/60/45-65/400/350-450	30H x 24W x 30D	775
MajorFC15K	15000	50/60/45-65	63H x 24W x 30D	1100
MajorFC20K	20000	50/60/45-65/400/350-450	63H x 24W x 30D	1100
MajorFC30K	30000	50/60/45-65/400/350-450	63H x 24W x 30D	1400
MajorFC50K	50000	50/60/45-65	82H x 24W x 30D	2500

Some options may alter dimensions offered on this table