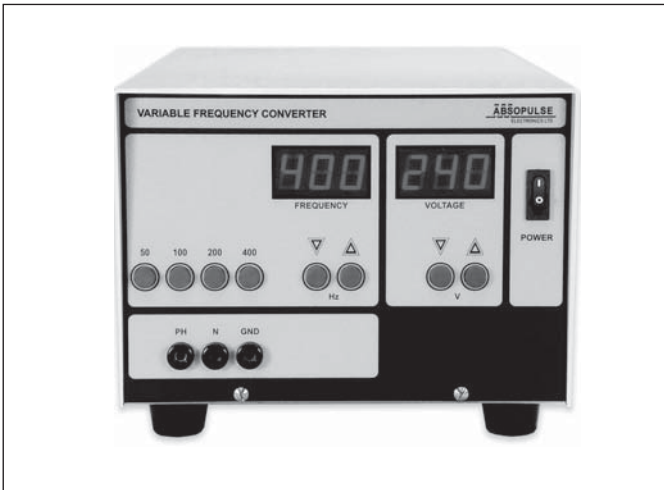


## VFC500 SERIES

### AC/AC Sine Frequency Converter: 500VA



#### Features

- Universal input 95 - 264VAC
- Output fully variable 0 - 264VAC
- Variable output frequency 47 - 410Hz
- 50Hz, 60Hz and 400Hz options
- Sinusoidal wave AC output
- Electronic protection
- Hot push buttons with auto stepping of voltage and frequency adjustment
- Digital meters for voltage and frequency
- Compact and lightweight

#### General Specifications

<b>Input Voltage:</b>	95 - 264VAC
<b>Input Frequency:</b>	47 - 410Hz
<b>Input Protection:</b>	Thermal fuse, inrush current limiting
<b>Isolation:</b>	Input - Output 2250VDC
<b>EMI:</b>	EN55022 Class A
<b>Output Voltage:</b>	0 - 250VAC fully adjustable
<b>Output Current:</b>	4A maximum
<b>Output Power:</b>	500 watts
<b>Output Frequencies:</b>	40 - 440Hz Wide Band 50, 100, 200, 400Hz (hot push buttons)
<b>Frequency Stability:</b>	±0.1%
<b>Output Waveform:</b>	Sinusoidal, less than 5% distortion at full load
<b>Load Regulation:</b>	±6% from 10% - 100% load
<b>Out Protection:</b>	Current limiting with short circuit protection. Thermal shutdown with auto recovery
<b>Efficiency:</b>	78%
<b>Load Crest Factor:</b>	Maximum 3.0 at 90% load
<b>Operating Temp:</b>	0°C to +50°C at full load
<b>Connections:</b>	Input: IEC socket Output: Banana sockets
<b>Dimensions/Weight:</b>	Bench Top: 187 x 141 x 330mm 4.2Kg Rack Mount: 3U x 19in. 6.0Kg

#### Description

The **VFC500** series Frequency Converters are designed for in Laboratory and many R&D applications, where there is a requirement for a variable output frequency.

The output voltage is also variable over the range 0 - 264VAC. The output frequency can be adjusted by 'Hot Push Buttons' in steps of 50, 100, 200 and 400Hz, plus further adjustment to set to required frequency range.

There are two mechanical styles, the standard bench mount unit and a rack mount style.

- **For more detailed information on the VFC500 series, visit our website.**

#### Options

<b>VFC500 - P1969:</b>	Bench Model
<b>VFC500 - 3U - P7061</b>	3 x 19in. Rack Mounting Model

Model	Output		Hz	Power VA
	V	A		
95 - 264VAC	0 - 120VAC	4A	40 - 440Hz	500VA
	0 - 264VAC	2A		



## VFC1000 - 2000 SERIES

AC/AC Sine Frequency Converter: 1KVA - 2KVA



### Features

- Input auto select from 115 - 230VAC
- Output fully variable 0 - 250VAC
- Variable output frequency
- Compact size, light weight
- 3U x 19in Rack Mounting
- Sinusoidal output wave form
- Digital meters for voltage and frequency
- Isolated floating output
- 1000 - 2000VA output power
- Electronic protection
- Suitable for a wide range of applications

### General Specifications

<b>Input Voltage:</b>	115 / 230VAC auto select
<b>Input Frequency:</b>	47 - 440Hz
<b>Input Protection:</b>	Thermal fuse, inrush current limiting
<b>Isolation:</b>	Input - Output 2250VDC
<b>Output VFC1000:</b>	0 ... 130VAC max 8A 0 ... 250VAC max 4A
<b>Output VFC2000:</b>	0 ... 130VAC max 15A 0 ... 250VAC max 8A
<b>Output Frequency:</b>	47 - 440Hz Hot push button: 50, 100, 200, 400Hz
<b>Output Waveform:</b>	Sinusoidal
<b>Harmonic Distortion:</b>	Total Harmonic Distortion less than 5% at full load
<b>Efficiency:</b>	78% at full load
<b>Load Regulation:</b>	Typically $\pm 5\%$
<b>EMI:</b>	EN55022 Class A
<b>Output Protection:</b>	Current limiting with short circuit protection. Thermal shutdown with auto recovery in case of insufficient air flow
<b>Load Crest Factor:</b>	Maximum 3.0 at 90% load
<b>Frequency Stability:</b>	$\pm 0.1\%$
<b>Operating Temp:</b>	0°C to + 50°C at full load
<b>Connections:</b>	Input terminal block Output binding posts
<b>Dimensions/Weight:</b>	3U x 19in x 15 Rack Mount assembly 14Kg

### Description

The **VFC1000 & VFC2000** series Frequency Converters are designed for in Laboratory and many R&D applications, where there is a requirement for a variable output frequency.

The output voltage is also variable over the range 0 - 250VAC. The output frequency can be adjusted by 'Hot Push Buttons' in steps of 50, 100, 200 and 400Hz, plus further adjustment to set to required frequency range.

• For more detailed information on the **VFC1000 - 2000 series**, visit our website.

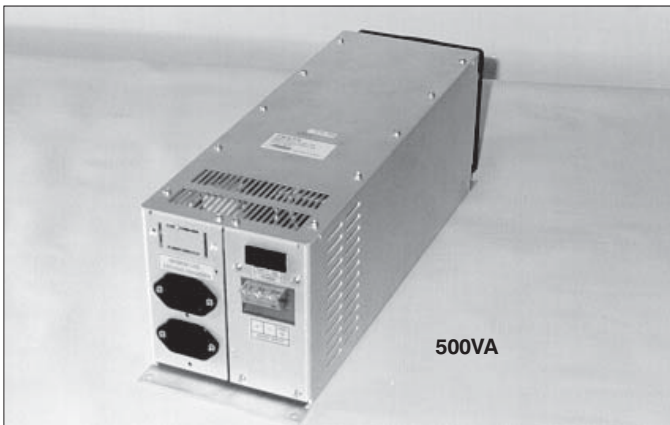
### Options

N/A

Model	Input	Output		Hz	Power VA
		V	A		
VFC1000	115-230VAC	0 - 130VAC	8A	47 - 440Hz	1000VA
	Auto Select	0 - 250VAC	4A		
VFC2000	115-230VAC	0 - 130VAC	15A	47 - 440Hz	2000VA
	Auto Select	0 - 250VAC	7.5A		

## FC SERIES

### 1-Phase - 1 Phase Frequency Converters: 500 - 5000 VA



#### Features

- Single phase input - output
- 50, 60 and 400Hz options
- 500 - 5000VA power level options
- Rack mount or wall mount mechanical styles
- Sinusoidal wave shape
- Electronic protection
- Neutral is grounded - floating optional

#### General Specifications

<b>Input Voltage:</b>	115VAC $\pm$ 15% or 230VAC $\pm$ 15%
<b>Input Frequency:</b>	50Hz, 60Hz, 400Hz options
<b>Output Voltage:</b>	115VAC/230VAC options
<b>Output Frequency:</b>	50Hz, 60Hz, 400Hz options
<b>Output Power:</b>	500 - 5000 VA
<b>Output Waveform:</b>	Sinusoidal
<b>Frequency Stability:</b>	$\pm$ 0.1%
<b>Distortion:</b>	Output Harmonic Distortion <5%
<b>EMI:</b>	EN55011 Class A conducted
<b>Immunity:</b>	EN61000-4
<b>Regulation:</b>	Load: $\pm$ 6% from 10% to 100% load step Line: $\pm$ 0.5% over input range
<b>Protection:</b>	Current limiting with short circuit protection. Self re-setting thermostat for thermal protection
<b>Load Crest Factor:</b>	Maximum 3.0 at 90% load
<b>Operating Temp:</b>	0°C to +50°C at rated load. Other options on request
<b>Cooling:</b>	Fan cooled
<b>Alarms:</b>	Output fail alarm - option
<b>Dimensions:</b>	FC500: 127 x 135 x 394mm FC1K: 192 x 135 x 394mm FC1.5K: 293 x 135 x 415mm FC2K: 293 x 135 x 415mm FC2.5K: 3U x 19in x 460mm FC3K: 6U x 19in x 460mm FC4K: 6U x 19in x 460mm FC5K: 6U x 19in x 460mm

#### Description

The **FC** series is a range of Frequency Converters that provide AC power conversion from 1-phase to 1-Phase, as well as frequency conversion.

The variety of voltage and frequency outputs cover world-wide standard voltage and frequencies for powering equipment in a range of Industrial, Avionics and Telecom applications.

The units provide true sinusoidal wave form and power levels from 500VA to 5KVA.

Units are manufactured to order and as such, can be customised to meet customers requirements and specifications.

- **For more detailed information on the FC series, visit our website.**

#### Options

<b>Alarms:</b>	Output Fail Alarm: voltage free relay contacts
<b>Remote inhibit:</b>	Remote ON/OFF
<b>Ruggedised:</b>	Conformal coating and ruggedisation for use in harsh environments
<b>Mechanical:</b>	Can design/manufacture to customer specified mechanical styles
<b>Regulation:</b>	$\pm$ 2%

FC	Power	Input	Output	Options
Series	500W = 500	A = 115V / 60Hz	A = 115V / 60Hz	AL = Output Alarm
	1000W = 1K			
	1500W = 1K5	E = 230V / 50Hz	E = 230V / 50Hz	
	2000W = 2K			
	2500W = 2K5	M = 115V / 400Hz	M = 115V / 400Hz	
	3000W = 3K			
	4000W = 4K			
	5000W = 5K			

## FTP SERIES

### 1-Phase to 3-Phase Frequency Converters: 1.5-6KVA



#### Features

- 1-phase to 3-phase Frequency Converters
- 1500VA to 6000VA power options
- 50, 60 and 400Hz options
- Sinusoidal wave shape
- Electronic protection
- Centre point (neutral) is floating and can be grounded
- Each output is floating from each other and can be connected in a “Y” configuration or left as three individual outputs
- Remote shutdown option
- Systems can be designed to customers requirements

#### General Specifications

<b>Input Voltage:</b>	115VAC 1- phase 60Hz, 400Hz 230VAC 1- phase 50Hz
<b>Input Protection:</b>	Thermal fuse. Inrush current limiting
<b>EMI:</b>	EN55022 Class A
<b>Output Voltage:</b> (Optional)	208VAC rms 3-phase 308VAC rms 3-phase 415VAC rms 3-phase The centre point (neutral) is floating, it can be grounded. Consult our office for other configurations.
<b>Output Frequencies:</b>	50, 60, 400Hz options
<b>Frequency Stability:</b>	±0.1%
<b>Output Waveform:</b>	Sinusoidal
<b>Distortion:</b>	Output voltage Harmonic Distortion less than 5% at full load.
<b>Line Regulation:</b>	±0.5%
<b>Load Regulation:</b>	±6% from 10% - 100% full load
<b>Output Protection:</b>	<ul style="list-style-type: none"> <li>• Current limiting with short circuit protection</li> <li>• Thermal shutdown with auto recovery</li> </ul>
<b>Efficiency:</b>	Typically 78% at nominal load
<b>Load Crest Factor:</b>	Maximum 3.0 at 90% load
<b>Operating Temp:</b>	0°C to +50°C at full load. Consult office for extended temperature options
<b>Dimensions/Weight:</b>	1500VA: 3U x 19in x 15in 19Kg 3000VA: 6U x 19in x 15in 22Kg 4500VA: 6U x 19in x 15in 40Kg 6000VA: 9U x 19in x 15in 40Kg

#### Description

The **FTP** series is a range of Frequency Converters that provide AC power conversion from 1-Phase to 3-Phase, as well as frequency conversion. The variety of 3-phase voltage and frequency outputs cover world-wide standard 3-phase voltages for powering equipment in a range of Industrial, Avionics and Telecom applications.

The units provide true sinusoidal wave form and power levels from 1.5KVA to 6KVA.

Units are manufactured to order and as such, can be designed to meet customers requirements and specifications.

- **For more detailed information on the FTP series, visit our website.**

#### Options

<b>Alarms:</b>	Output Fail Alarm: Voltage free relay contacts
<b>Remote Inhibit:</b>	Remote ON/OFF
<b>Ruggedised:</b>	Conformal coating and ruggedisation for use in harsh environments.
<b>Connections:</b>	Terminal block at rear of rack, other connections available on request.

FTP	Power	Input	Output	Options
Series	1500W = 1K5	A = 115V / 60Hz	A = 208V / 60Hz	AL = Alarm
	3000W = 3K	E = 230V / 50Hz	E = 415V / 50Hz	Output Alarm
	4500W = 4K5	M = 115V / 400Hz	M = 208V / 400Hz	
	6000W = 6K			

Input 1-phase	Output 3-phase V Hz	Power VA
115VAC 60/400Hz	208VAC 308VAC 415VAC	50, 60, 400Hz
230VAC 50Hz	208VAC 308VAC 415VAC	50, 60, 400Hz
		1500VA 3000VA 4500VA 6000VA
		1500VA 3000VA 4500VA 6000VA

## FTT SERIES

### 3-Phase to 3-Phase Frequency Converters: 1.5-6KVA



#### Features

- 3-phase to 3-phase Frequency Converters
- 1500VA to 6000VA power options
- 50, 60 and 400Hz options
- Sinusoidal wave shape
- Electronic protection
- Centre point (neutral) is floating and can be grounded
- Each output is floating from each other and can be connected in a "Y" configuration or left as three individual outputs
- Remote shutdown option
- Systems can be designed to customers requirements

#### General Specifications

<b>Input Voltage:</b>	208VAC 3- phase 50Hz, 60Hz, 400Hz 380VAC 3- phase 50Hz, 60Hz, 400Hz 415VAC 3-phase 50Hz, 60Hz, 400Hz
<b>Input Protection:</b>	Thermal fuse. Inrush current limiting
<b>EMI:</b>	EN55022 Class A
<b>Output Voltage:</b> (Options)	208VAC rms 3-phase 380VAC rms 3-phase 415VAC rms 3-phase The centre point (neutral) is floating, it can be grounded. Consult our office for other configurations.
<b>Output Frequencies:</b>	50, 60, 400Hz options
<b>Frequency Stability:</b>	±0.1%
<b>Output Waveform:</b>	Sinusoidal
<b>Distortion:</b>	Output voltage Harmonic Distribution less than 5% at full load.
<b>Line Regulation:</b>	±0.5%
<b>Load Regulation:</b>	±6% from 10% - 100% full load
<b>Output Protection:</b>	<ul style="list-style-type: none"> <li>• Current limiting with short circuit protection</li> <li>• Thermal shutdown with auto recovery</li> </ul>
<b>Efficiency:</b>	Typically 78% at nominal load
<b>Load Crest Factor:</b>	Maximum 3.0 at 90% load
<b>Operating Temp:</b>	0°C to +50°C at full load. Consult office for extended temperature options
<b>Dimensions/Weight:</b>	19in Rack Mount Units Model dependent, consult office

#### Description

The **FTT** series is a range of Frequency Converters that provide AC power conversion from 3-Phase to 3-Phase, as well as frequency conversion. The variety of 3-phase voltage and frequency inputs and outputs cover world-wide standard 3-phase voltages for powering equipment in a range of Industrial, Avionics and Telecom applications.

The units provide true sinusoidal wave form and power levels from 1.5KVA to 6KVA.

Units are manufactured to order and as such, can be designed to meet customers requirements and specifications.

- **For more detailed information on the FTT series, visit our website.**

#### Options

<b>Alarms:</b>	Output Fail Alarm: Voltage free relay contacts
<b>Remote Inhibit:</b>	Remote ON/OFF
<b>Ruggedised:</b>	Conformal coating and ruggedisation for use in harsh environments.
<b>Connections:</b>	Terminal block at rear of rack.

Input 3-phase	Output 3-phase V	Hz	Power VA
208VAC 60/400Hz	208VAC 308VAC 415VAC	50, 60, 400Hz	1500VA 3000VA 4500VA 6000VA
380VAC 415VAC 50Hz	208VAC 308VAC 415VAC	50, 60, 400Hz	1500VA 3000VA 4500VA 6000VA

FTP	Power	Input	Output	Options
Series	1500W = 1K5	A = 208V / 60Hz	A = 208V / 60Hz	AL = Alarm Output Alarm
	3000W = 3K0	E = 415V / 50Hz	E = 415V / 50Hz	
	4500W = 4K5	M = 208V / 400Hz	M = 208V / 400Hz	
	6000W = 6K0			