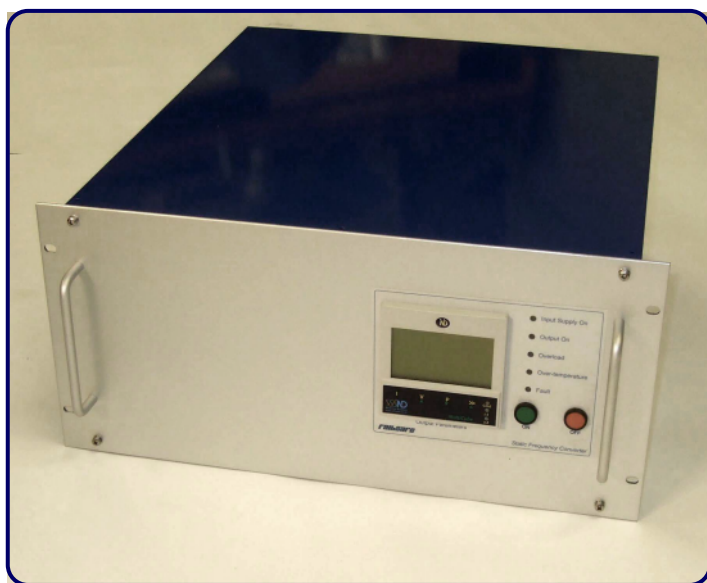


# 19" Rack Mount 400Hz Static Frequency & Phase Converters: 1 phase to 3 phase

400Hz



- Models from 1.5 to 4KVA
- Single-Phase Input, 3-Phase Output
- Power factor corrected input (PFC)
- Sinusoidal, Isolated Output
- Comprehensive Digital Output Display
- Low Acoustic Noise
- 2-Year Warranty
- Military Variants Available
- Def-Stan 61-5(4), Stanag 1008

## Cost-Effective, Compact and Dependable:

SFC 3000 series static frequency converters offer the most cost-effective and flexible way of providing an aircraft quality, 400Hz utility supply for 19" rack-mount installations. SFC 3000 series converters **only require a single-phase input**, but generate a **3-phase**, fully aircraft compatible, 400Hz output. This means that they may be used in workshops and development laboratories where only a domestic type single-phase supply is available.

## Compact, 19" Rack Mounting:

Extremely compact electronics allows the SFC3000 range to be packaged in 19" rack-mountable chassis. Chassis are 510mm deep, and pre-fitted with fixings for telescopic slides.



The LCD readout provides extensive information

## Simplicity in Operation .....

'Two button' operation means minimal Operator training. No special set-up is required.

## .....Yet Sophistication in Display:

An accurate digital readout makes all major parameters available for review - these include output Voltage, Amps, Kw, Kva, Hz and power factor. SFC 3000 models also have facilities for remote On/Off control and remote status indication (via MODBUS RS485 or volt-free contacts).

## Variable Output Voltage and Frequency:

All models may be ordered with continuously variable output voltage and frequency. The output voltage is variable by +/-15% about the nominal, and the frequency +/-5% about the nominal (380-420Hz). Control is via front panel knobs

## Applications:

SFC 3000 series machines are suitable for static installations within plant rooms, hangars, workshops and laboratories. They should be installed within a standard 19" cabinet, which should have adequate cooling arrangements (normally forced). SFC 3000 units may be used in continuous duty applications.

## High MTBF, Low MTTR:

An oversized rectifier and robust IGBT based inverter offer high reliability, while modular construction and a simple lay-out means that access for maintenance and repair is very straight forward.

## Warranty:

All Failsafe equipment is supplied with a 2-year warranty.

# SFC 3000 - Technical Specifications

## INPUT:

- Input Voltage..... 230V, 1ph, +/- 10% (115V by request) (3ph by request)
- Input Frequency..... 50, +/- 6% (60Hz by request)
- Input Current Harmonics..... IEC 1000-3-4
- Input Power Factor..... >0.98
- Rectifier Inrush..... 10 second walk-in, max current < In x 1.2
- Input Connections..... 2m lead with 13A UK or Shuko or EN60309/2 etc
- Input Protection..... Fuse, rear panel

## OUTPUT:

- Output Voltage..... 115/200V or 120/208V, 3-Phase + N
- Output Voltage Regulation..... Steady-state: +/-2%, dynamic 0-100% step load: +/-5% recovering to steady-state within 10mS
- Total Harmonic Distortion..... <3% linear load
- Output Frequency..... 400Hz +/- 0.1%, quartz generated
- Output Phase Angle Accuracy..... 120 deg. +/- 1%
- Permissible Load Power Factor..... -0.6 to 1
- Output is galvanically isolated from input . (the output neutral may be bonded to earth).

## SECURITY:

- Permissible Overload..... 110% @ 10 min, 150% @ 5s, 200% @ 1 s
- Output Overvoltage Cutout.....130V L-N on any one phase
- Output Undervoltage Cutout..... 100V L-N on any one phase
- Thermal Overload..... Thermal sensors located in rectifier, inverter and output transformer.

## INTERFACE:

- Optional RS485 or RS422 *MODBUS* high speed communications port allows the output parameters of the converter to be remotely monitored.

## ENVIRONMENT & EQUIPMENT:

- Ambient Temperature Range..... -10 to 40 deg C
- Humidity..... <90%, non-condensing
- Altitude..... All specifications quoted at < 2000m above sea level
- Acoustic Noise..... < 50dBA @ 1m
- Overall Efficiency..... 85 to 91% model dependant
- EMC..... Better than EN55-022B
- Cabinet..... Zinc plated steel, powder coated
- Front Panel..... 5U x 19", anodised aluminium
- Cabinet Protection..... IP21
- Meters..... Digital readout for output Amps, Volts (both ph-to-ph and ph-to-neutral), Hz, Kw and power factor for each phase.
- CE marked

## DIMENSIONS:

- Up to 4KVA ..... 19" x Height 5U x Depth 510mm, ventilation at rear.
- 6 to 8KVA ..... 19" x Height 10U x Depth 510mm, ventilation at rear.

## OPTIONS:

- Other input and output voltages and frequencies
- Variable output voltage and frequency
- Remote On/Off and remote status.

Model	3001	3002	3004	6-8KVA
Power	1.5KVA	2.5KVA	4KVA	
Weight Kg	20	26	34	Contact



A UK designed and manufactured device.