

# 400Hz Static Frequency Converters

## SFC 6000 Series (Stationary Applications)



- Plant room/laboratory/production
- Models from 6 to 50KVA
- 115/200V, 400Hz, 3ph output
- Power factor corrected input (PFC)
- Comprehensive Front Panel Readout
- Highest Power Density Available
- Easy Manoeuvrability via Castors
- Low Acoustic Noise
- Optional Secondary 28VDC Output
- Hard wire or plug & socket

### Cost-Effective, Compact and Dependable:

SFC 6000 series static frequency converters offer the most cost-effective and flexible way of providing 400Hz for production line, laboratory, or plant room applications. By using the most advanced electronic design, SFC 6000 models are not only remarkably compact for their respective power ratings but also extremely quiet. This means that personnel may work in close proximity to them without the tiring noise normally associated with 400Hz converters.

### Pure Sinusoidal Output:

SFC 6000 have a galvanically isolated, sinusoidal output with very low THD, combined with a fast dynamic response. This allows the converter to handle virtually any type of load without difficulty and in continuous duty.

### Simplicity in Operation .....

'Two button' operation means minimal Operator training. An emergency stop is also fitted on larger models.

### .....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. Each may be displayed either for all three phases or several parameters for one particular phase.

### 28VDC Output:

All models may be ordered with an additional 28VDC output (up to 200 Amps). This may be used concurrently with the 400Hz output.

### Applications:

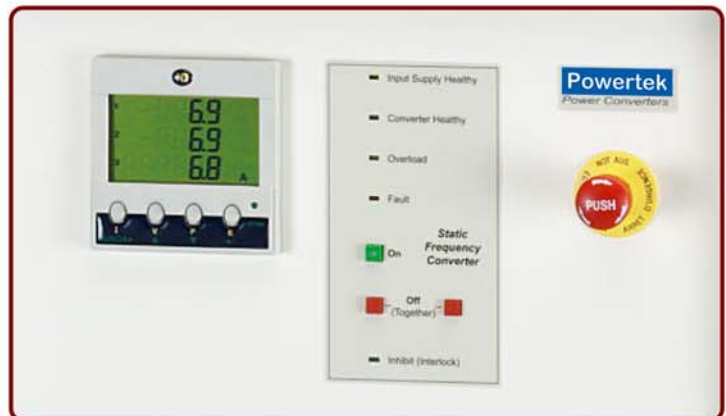
SFC 6000 series machines are suitable for static installations within plant rooms, hangars, workshops and R&D laboratories. They are used extensively on airborne equipment production lines, test and development laboratories, plant rooms and simulators. They are designed for internal use only - for external applications or hangar use see 8000 Series GPUs.

### 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.

### Technical Specification:

See overleaf.



The optional LCD readout provides extensive information

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**Powertek**  
Power Converters

# SFC 6000 - Technical Specifications

## INPUT:

- Input Voltage..... 360V to 460VAC +/- 10%, 3-Phase
- Input Frequency..... 50 or 60Hz, +/- 6%
- 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..... Hard wire or aircraft cables
- Input Protection..... Circuit breaker, 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

## SECURITY:

- Permissible Overload..... 10% @ 10 min, 50% @ 10 s, 150% @ 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

## 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 RAL 7032
- Cabinet Protection..... IP31 (IP45 available)
- Meters..... Digital readout for output Amps, Volts, Hz, Kw & KVA, each per phase
- Wheels..... 80mm Steel, Rubber tyres, front brakes
- Lifting Eyes..... Optional - 25mm eye

## DIMENSIONS (height includes castors):

- Up to 10KVA..... Height 770 x Width 310 x Depth 620mm
- 15 to 25KVA..... Height 880 x Width 360 x Depth 800mm
- 30, 40, 50KVA..... Height 1100 x Width 420 x Depth 850mm

## OPTIONS:

- Other input and output voltages and frequencies
- IP 54 cabinets
- Military variants
- Marine variants

Model	6006	6008	6010	6015	6020	6025	6030	6040
Power	6KVA	8KVA	10KVA	15KVA	20KVA	25KVA	30KVA	40KVA
Weight	45Kg	55Kg	63Kg	95Kg	120Kg	150Kg	190Kg	230Kg