



AVIATION

MARINE

TRANSPORTATION

MILITARY

## 6kVA-800kVA

The result of extensive experience acquired in the UPS industry, the TIATO SFC400 Series is distinguished by the use of technologically advanced components and for excellent reliability, ease of maintenance and ease of operation.

Thanks to integrated input/output transformer to ensure the galvanic isolation of the load from mains disturbances under all conditions, the output voltage is adjustable between 200V and 220V and TIATO SFC400 Series are ideal for aviation, naval and military applications.

The TIATO SFC400 series has been designed to minimise the impact on the mains or on the generator located upstream, thanks to the low harmonic content at the input and the progressive start of the rectifier.

These features make them especially compatible with generators. TIATO SFC400 series is also available as UPS with battery back-up on request.

## TIATO Static Frequency Converter

Watteries range of Static Frequency Converters are designed and built for the harshest conditions and to provide high reliable power supply converting 50Hz/60Hz supply to 400Hz equipment and to different voltages. Using state-of-the-art IGBT technology with DSP (Digital Signal Processors) controls we convert the input AC power through a IGBT PFC sine-wave rectifier to DC and then to an AC sine-wave IGBT inverter to produce a full sine-wave output at the new frequency and voltage.

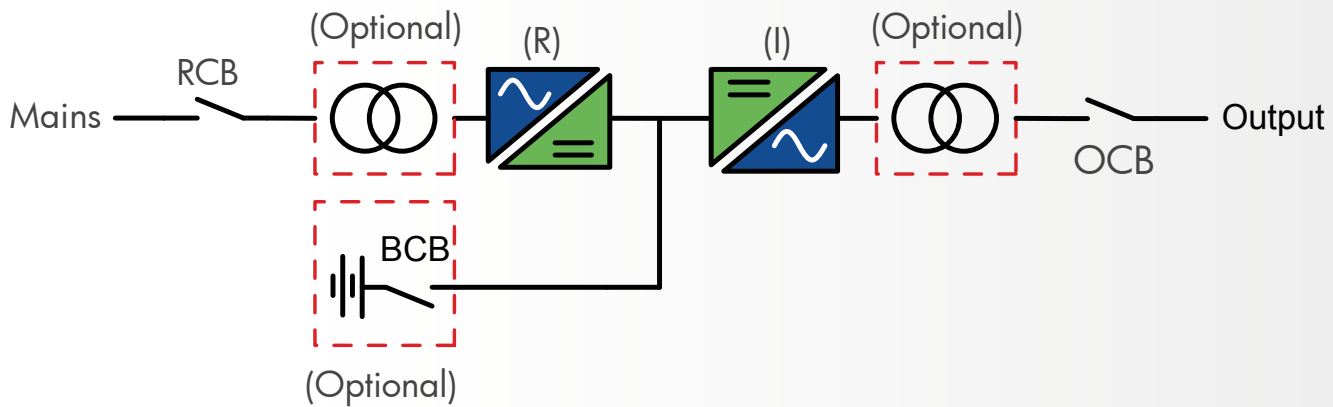


### Optional Product Accessories

- Isolation Transformer (Input/Output)
- IP21, IP31/IP42 or IP54 on Request
  - VRLA Battery Integration
  - Parallel Kit
  - 12 Pulse Rectifier Version (D)
- 5th or 11th Harmonic Filter (HC)
  - Top Cable Entry



### TIATO SFC Block Diagram



MODEL															
Rated Power	6kVA	10kVA	15kVA	20kVA	40kVA	80kVA	100kVA	160kVA	200kVA	250kVA	400kVA	500kVA	600kVA	800kVA	
Active Power	5.4kW	9kW	13.5kW	18kW	36kW	72kW	90kW	144kW	180kW	225kW	360kW	450kW	540kW	720kW	
<b>INPUT</b>															
Nominal Voltage	380/400/415 VAC 3 P+N (Optional 220/380 VAC -37% +22% 3 P+N+PE)														
Voltage Tolerance	-20% +20%														
Frequency	50/60Hz (Selectable)														
Frequency Tolerance	±10%														
Total Harmonic Distortion (THDi)	3%<														
Power Factor	>0.99														
Soft Start	0 -100% in 120s (Selectable)														
<b>OUTPUT</b>															
Power Factor	0.9 (1 Optional)														
Nominal Voltage	200V/208V/215V/220V (3P+N)														
Voltage Tolerance	Static ±1, Dynamic ±3														
Frequency	400Hz														
Voltage Distortion (THDv)	Linear Load <1% / Non-Linear Load <3%														
Crest Factor	3:1														
Overload Capability	110% for 60 minutes, 125% for 10 minutes, 150% for 1 minute														
Efficiency	Up to 96%														
<b>OVERALL SPECIFICATIONS</b>															
Operating Temperature	0°C/+40°C														
Storage Temperature	-15°C/+45°C														
Enclosure Protection Class	IP20 (Higher classes are optional up to IP54)														
Humidity	0-95%														
Altitude	<1000m Correction Factor: 1, <2000m Correction Factor: 0.92, <3000m Correction Factor: 0.84														
Noise	<54dBA			<60dBA			<65dBA			<70dBA					
Cooling	Forced-air														
Communications	RS232 (Standard), RS485, MOD-Bus, J-Bus, Web, Tel-Net, GPRS, CAN-Bus, SNMP (Optional)														
Standards	Safety: IEC/EN 62040-1 EMC: IEC/EN 62040-2 Environmental Aspects: IEC/EN 62040-4 Test&Performance: IEC/EN 62040-3 IEC62103/EN 50178 Protection Degree: IEC 60529 Marine Classifications (On request): DV, DNV, GL, ABS, CCS (++) Marking: CE														

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