



6kVA-800kVA

The result of extensive experience acquired in the UPS industry, the TIATO SFC 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 380V and 480V and SFC Series are ideal for marine, ports, aviation, defence, transportation and mining applications.

The TIATO SFC 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 SFC is also available as UPS with battery back-up on request.



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

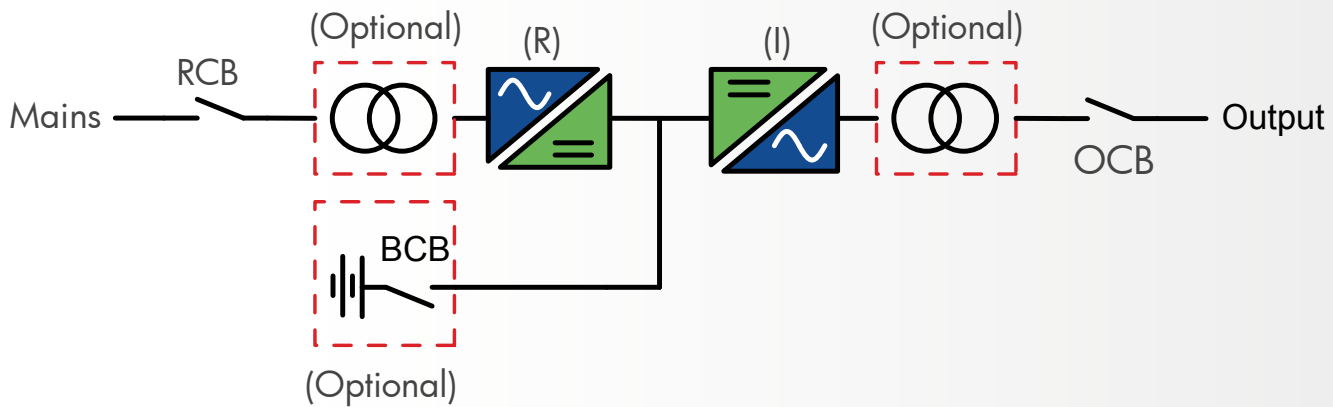
TIATO Static Frequency Converter

Watteries range of Static Frequency Converters are designed and built for the harshest conditions and to provide high reliable power supply converting 50Hz supply to 60Hz 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.



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
INPUT														
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)													
OUTPUT														
Power Factor	0.9 (1 Optional)													
Nominal Voltage	380V-480V (Or any voltage by output transformer)													
Voltage Tolerance	Static ±1, Dynamic ±3													
Frequency	50/60Hz ±0,01% Accuracy													
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%													
OVERALL SPECIFICATIONS														
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													

Watteries Energy & Power Solutions

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