

DSP Flexipower

1 Phase In - 1 Phase Out / 3kVA - 10kVA

3 Phase In - 1 Phase Out / 10 kVA

- On-Line Double Conversion Technology
- Real Digital Signal Processor (DSP) Controller
- Power Factor Correction
- High output power factor
- Parallel redundant operation up to 4 units (excluding 3kVA)
- Integrated Manual Bypass (excluding 3kVA)
- Low total harmonic distortion (THD) level
- Transformerless Design
- High Performance with the PWM Sinewave Topology
- Cold Start Function
- Intelligent Battery Management System extends the life time of batteries
- Overload, Overheat & Short Circuit Protections
- Emergency Shutdown Control through EPO
- User Friendly Multi-Functional LED/LCD Display Panel
- Energy Saving Mode (ECOMODE)
- RS232 Communication Port & Management Software
- Internal SNMP, Dry contact and RS485 card options
- Possible to operate as 50Hz/60Hz Frequency Converter
- Extended Back up time with External Battery Cabinet



TECHNICAL SPECIFICATIONS

MODEL	FP1103	FP1105	FP1106	FP1108	FP1110	FP3110
Power (kVA)	3	5	6	8	10	10
Power (kW)	2.4	4.5	5.4	7.2	9	9
INPUT						
Phase Configuration	1Ph + N + PE					3Ph + N + PE
Nominal Voltage	220V/230/240V					380V/400V/415V
Minimum Voltage	160 V					180 V
Maximum Voltage	288 V					280 V
Frequency	± 5 Hz		45 - 65 Hz			
Power Factor	0.99					
OUTPUT						
Power Factor	0.8					0.9
Phase Configuration	1Ph + N + PE					
Nominal Voltage	220V / 230 / 240V (adjustable)					
Wave Form	Pure Sine Wave					
Total Harmonic Distortion at 100% linear load	<3%					
Frequency	50Hz or 60Hz (adjustable)					
Frequency Tolerance (free running)	±0.2 %					
Static Voltage Regulation (0%-100% load)	<1%					
Crest Factor	3:1					
Transfer Time	0 sec					
Overload	30 sec @ (106%-120%) 10 sec @ (120%-150%)	2min @ (100%-120%) 30sec @ (120%-150%)			Transfers to Bypass @150%	
Total Efficiency	≥90%		≥92%			
BATTERY						
Type	Maintenance-free lead acid batteries					
Recharge Time (for Internal Battery)	4-6h up to 90%					
Quantity per String	6pcs 12V Batteries	20 pcs 12V Batteries				
Voltage	72 VDC	240VDC				
Internal Batteries (Optional)	7Ah, 9Ah					
Cold Start	Present					
DISPLAY						
LED + LCD Display	Line Mode, Back up Mode, Eco Mode, Bypass Supply, Battery Low, Battery Bad/Disconnect, Overload, UPS Fault, Interruption during transfer					
LCD Display	Input Voltage, Input Frequency, Output Voltage, Output Frequency, Load%, Battery Voltage, Internal Temperature					
Self Diagnostics	Upon Power On, Front Panel Setting and Through Software Control, 24h routine Check					
PROTECTION						
Overload Protection	Bypass transfer time is calculated by simulating a temperature related model of a fuse					
Short Circuit Protection	Acts as the ideal current source during the short circuit time					
Other Protection	Against excessive (heat, voltage, current) intense battery discharge					
COMMUNICATION						
Interface (Communication ports)	Standard RS232 port and optional RS485, Internal SNMP, Dry Contact Cards					
ENVIRONMENT						
Operating Temperature	0 °C... + 40 °C					
Proposed Temp. to extend battery life	20 - 25 °C					
Humidity	0 - 95% (non-condensing)					
Audible Noise at 1 m	<50 dB				<52 dB	
Protection Class	IP 20					
PHYSICAL SPECIFICATIONS						
Dimensions(mm) (HxWxD)	449x226x454	585x254x710				
Weight - without battery (kg)	19	30	38	45		
STANDARDS						
Standards	EN62040-1-1 (Safety); EN62040-2 (EMC)					
ACCESSORIES						
Optional	Internal&External SNMP, Dry Contact Board, Monitoring and Management Software, Internal Battery Holder Apparatus, Additional Charging Set					