

- Power levels : 1200VA , 2000VA , 3000VA , 5000VA
- Input voltages : 12V , 24V , 48V
- High quality pure sinewave output
- High surge capability
- Built in computer interface
- Parallel operation for increased power
- 3 Phase operation



Description

Pure sine wave output the Sinemax Technology

Developed for professional duty, the Phoenix range of inverters is suitable for the widest range of applications. The design criteria have been to produce a true sine wave inverter with optimised efficiency but without compromise in performance. Employing hybrid HF technology, the result is a top quality product with compact dimensions, light in weight and capable of supplying power, problem-free, to any load.

Extra start-up power

A unique feature of the SineMax technology is very high start- up power. Conventional high frequency technology does not offer such extreme performance. Phoenix inverters, however, are well suited to power up difficult loads such as refrigeration compressors, electric motors and similar appliances.

Automatic transfer switch

To transfer the load to another AC source an automatic transfer switch is necessary. There are two options available, one is an external transfer switch such as our FLX series or it can be built in. For a built in transfer switch our Multiplus inverter/chargers are the best choice. If the charger function is not required it can be disabled, leaving an inverter with a transfer switch. Computers and other electronic equipment will continue to operate without disruption because the MultiPlus features a very short switchover time (less than 20 milliseconds).

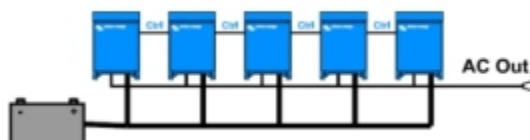
Computer interface

All models have a RS-485 port. All you need to connect to your PC is our MK2 interface (see under accessories). This interface takes care of galvanic isolation between the inverter and the computer, and converts from RS-485 to RS-232. A RS-232 to USB conversion cable is also available. Together with our free software all parameters of the inverters can be customised. This includes output voltage and frequency, over and under voltage settings and programming the relay. This relay can for example be used to signal several alarm conditions, or to start a generator. The inverters can also be connected to other computerised monitoring and control systems. New applications of high power inverters

Parallel operation and 3-phase operation capability

Up to 6 units inverters can operate in parallel to achieve higher power output. Six 24/5000 units, for example, will provide 24kW / 30kVA output power. Operation in 3-phase configuration is also possible.

Up to six units can be connected in parallel



Specifications

Phoenix Inverter	12 Volt 24 Volt 48 Volt	C 12/1200 C 24/1200	C 12/1600 C 24/1600	C 12/2000 C 24/2000	12/3000 ⁽³⁾ 24/3000 ⁽³⁾ 48/3000 ⁽³⁾	12/5000 ⁽³⁾ 24/5000 ⁽³⁾ 48/5000 ⁽³⁾
Input voltage range (V DC)		9,5 - 17,0 19,5 - 33,0	9,5 - 17,0 19,5 - 33,0	9,5 - 17,0 19,5 - 33,0	9,5 - 17,0 19,5 - 33,0 38,0 - 66,0	9,5 - 17,0 19,5 - 33,0 38,0 - 66,0
Cont. output power at 25°C (VA) ⁽⁴⁾		1200 1200	1600 1600	2000 2000	3000 3000 3000	5000 5000 5000
Cont. power at 25°C / 40°C (W)		1000 / 900 1000 / 900	1300 / 1200 1300 / 1200	1600 / 1450 1600 / 1450	2500 / 2000 2500 / 2000 2500 / 2000	4000 / 3000 4000 / 3000 4000 / 3000
Peak power (W)		2400 2400	3000 3000	4000 4000	6000 6000 6000	8000 9000 9000
Max. efficiency 12 / 24 / 48 V (%)		92 / 94	92 / 94	92 / 94	92 / 94 / 95	92 / 94 / 95
Zero-load power 12 / 24 / 48 V (W)		8 / 10	8 / 10	9 / 11	15 / 15 / 16	20 / 25 / 25
Zero-load power in AES mode (W)		5 / 8	5 / 8	7 / 9	10 / 10 / 12	15 / 20 / 20
Zero-load power in Search mode (W)		2 / 3	2 / 3	3 / 4	4 / 5 / 5	5 / 5 / 6
Programmable relay				Yes		
RS485 interface				Yes		
Protection ⁽²⁾				a - g		
Common Characteristics ⁽¹⁾		Output: 230V ± 2% / 50/60Hz ± 0,2% (switch selectable) Operating temperature range: -20 to +50 °C (fan assisted cooling) Humidity (non condensing) : max 95%				
ENCLOSURE						
Material & Colour		aluminium (blue Ral 5012)				
Battery-connection		battery cables of 1.5 meter		M8 bolts	2+2 M8 bolts	2+2 M8 bolts
230 V AC-connection		G-ST18i plug	G-ST18i plug	Spring-clamp	Screw terminals	Screw terminals
Protection category		IP 21				
Weight (kg)		10	10	12	18	30
Dimensions (hwxwd in mm)		375x214x110	375x214x110	520x255x125	362x258x218	444 x 328 x 240
ACCESSORIES						
Remote panel		Phoenix Inverter Control Panel (PIV)				
Remote on-off switch		Two pole connector				
STANDARDS						
Safety		EN 60335-1				
Emission / Immunity		EN 55014-1 / EN 55014-2				
Automotive Directive		2004/104/EC	2004/104/EC		2004/104/EC	

1) Can be adjusted to 60Hz, and to 240V

2) Protection

- a. Output short circuit
- b. Overload
- c. Battery voltage too high
- d. Battery voltage too low
- e. Temperature too high
- f. 230 V AC on inverter output
- g. Input voltage ripple too high

3) Suitable for parallel and 3-phase operation

4) Non linear load, crest factor 3:1

5) Programmable relay which can be set for general alarm, DC under voltage or genset start signal function (MK2 interface and VEConfigure software needed)