

# Phoenix Inverters

180VA – 750 VA    230V/50Hz and 110V/60Hz

[www.victronenergy.com](http://www.victronenergy.com)



**Phoenix Inverter  
12/750**

### SinusMax – Superior engineering

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 optimized 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 SinusMax 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 computers and low power electric tools.

### To transfer the load to another AC source: the automatic transfer switch

For our lower power models we recommend the use of our Filax Automatic Transfer Switch. The Filax features a very short switchover time (less than 20 milliseconds) so that computers and other electronic equipment will continue to operate without disruption.



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### LED diagnosis

Please see manual for a description.

### Remote on/off switch

Connector for remote on off switch available on all models.

### Remote control panel (750VA model only)

Connects to the inverter with a RJ12 UTP cable (length 3 meter, included).

### DIP switch for 50/60Hz selection (750VA model only)

### DIP switches for Power Saving Mode (750VA model only)

When operating in Power Saving Mode, the no-load current is reduced to 1/3 of nominal. In this mode the inverter is switched off in case of no load or very low load, and switches on every two seconds for a short period. If the output current exceeds a set level. The inverter will continue to operate. If not, the inverter will shut down again. The on/off level can be set from 15W to 85W with DIP switches.

### Available with three different output sockets

Please see pictures below.



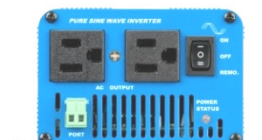
**Phoenix Inverter  
12/750 with Schuko socket**



**Phoenix Inverter 12/350  
with IEC-320 sockets**



**Phoenix Inverter 12/180  
with Schuko socket**



**Phoenix Inverter 12/180  
with Nema 5-15R sockets**

Phoenix Inverter	12 Volt 24 Volt 48 Volt	12/180 24/180	12/350 24/350 48/350	12/750 24/750 48/750
Cont. AC power at 25 °C (VA) (3)		180	350	750
Cont. power at 25 °C / 40 °C (W)		175 / 150	300 / 250	700 / 650
Peak power (W)		350	700	1400
Output AC voltage / frequency (4)	110VAC or 230VAC +/- 3% 50Hz or 60Hz +/- 0,1%			
Input voltage range (V DC)	10,5 - 15,5 / 21,0 - 31,0 / 42,0 - 62,0			
Low battery alarm (V DC)	11,0 / 22 / 44			
Low battery shut down (V DC)	10,5 / 21 / 42			
Low battery auto recovery (V DC)	12,5 / 25 / 50			
Max. efficiency 12 / 24 / 48 V (%)		87 / 88	89 / 89 / 90	91 / 93 / 94
Zero-load power 12 / 24 / 48 V (W)		2,6 / 3,8	3,1 / 5,0 / 6,0	14 / 14 / 13
Zero-load power in Power Saving mode		n. a.	n. a.	3 / 4 / 5
Protection (2)	a - e			
Operating temperature range	-20 to +50°C (fan assisted cooling)			
Humidity (non condensing)	max 95%			

#### ENCLOSURE

Material & Colour	aluminium (blue Ral 5012)			
Battery-connection	1)	1)	Screw terminals	
Standard AC outlets	IEC-320 (IEC-320 plug included), Schuko, or Nema 5-15R			
Other outlets (at request)	United Kingdom, Australia/New Zealand			
Protection category	IP 20			
Weight (kg / lbs)	2,7 / 5,4		3,5 / 7,7	2,7 / 5,4
Dimensions (hxwx in mm) (hxwx in inches)	72x132x200 2.8x5.2x7.9		72x155x237 2.8x6.1x9.3	72x180x295 2.8x7.1x11.6

#### ACCESSORIES

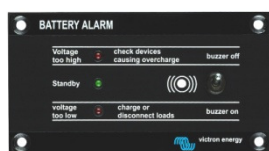
Remote control panel	n. a.	n. a.	Optional	
Remote on-off switch	Two pole connector			RJ12 plug
Automatic transfer switch	Filax			

#### STANDARDS

Safety	EN 60335-1			
Emission Immunity	EN55014-1 / EN 55014-2			

- 1) Battery cables of 1.5 meter (12/180 with cigarette plug)  
 2) Protection key:  
 a) output short circuit  
 b) overload  
 c) battery voltage too high  
 d) battery voltage too low  
 e) temperature too high

- 3) Non linear load, crest factor 3:1  
 4) Frequency can be set by DIP switch (750VA models only)



### Battery Alarm

An excessively high or low battery voltage is indicated by an audible and visual alarm, and a relay for remote signalling.

### Remote Control Panel

(750VA models only)  
 RJ12 UTP cable to connect to the inverter is included (length: 3 meter).

### BMV-600 Battery Monitor

The BMV-600 Battery Monitor features an advanced microprocessor control system combined with high resolution measuring systems for battery voltage and charge/discharge current. Besides this, the software includes complex calculation algorithms to exactly determine the state of charge of the battery. The BMV-600 selectively displays battery voltage, current, consumed Ah or time to go. The monitor also stores a host of data regarding performance and use of the battery.