

Phoenix Inverters

180VA – 1200VA 230V/50Hz and 110V/60Hz

www.victronenergy.com



Phoenix Inverter 12/180

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.



Phoenix Inverter 12/800 with Schuko socket

LED diagnosis

Please see manual for a description.

Remote on/off switch

Connector for remote on/off switch available on all models.

DIP switch for 50/60Hz selection (48/350 model only)

Available with different output sockets

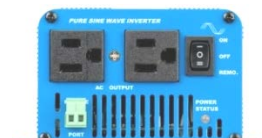
Please see pictures below.



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 12/800 with IEC-320 socket



Phoenix Inverter 12/800 with Schuko socket



Phoenix Inverter 12/800 with BS 1363 socket



Phoenix Inverter 12/800 with AN/NZS 3112 socket



Phoenix Inverter 12/800 with Nema 5-15R socket

| Phoenix Inverter | 12 Volt 24 Volt 48 Volt | 12/180 24/180 | 12/350 24/350 48/350 | 12/800 24/800 48/800 | 12/1200 24/1200 48/1200 |
|-----------------------------------|-------------------------------|---|----------------------------|--|-------------------------------|
| Cont. AC power at 25°C (VA) (3) | | 180 | 350 | 800 | 1200 |
| Cont. power at 25°C / 40°C (W) | | 175 / 150 | 300 / 250 | 700 / 650 | 1000 / 900 |
| Peak power (W) | | 350 | 700 | 1600 | 2400 |
| Output AC voltage / frequency (4) | | 110 VAC or 230 VAC +/- 3% 50 Hz or 60 Hz +/- 0,1% | | | |
| Input voltage range (V DC) | | 10,5 - 15,5 / 21,0 - 31,0 / 42,0 - 62,0 | | 9,2 - 17,3 / 18,4 - 34,0 / 36,8 - 68,0 | |
| Low battery alarm (V DC) | | 11,0 / 22 / 44 | | 10,9 / 21,8 / 43,6 | |
| Low battery shut down (V DC) | | 10,5 / 21 / 42 | | 9,2 / 18,4 / 36,8 | |
| Low battery auto recovery (V DC) | | 12,5 / 25 / 50 | | 12,5 / 25 / 50 | |
| Max. efficiency (%) | | 87 / 88 | 89 / 89 / 90 | 91 / 93 / 94 | 92 / 94 / 94 |
| Zero load power (W) | | 2,6 / 3,8 | 3,1 / 5,0 / 6,0 | 6 / 5 / 4 | 6 / 5 / 6 |
| Zero load power in search mode | | n. a. | n. a. | 2 | 2 |
| Protection (2) | | a - e | | | |
| Operating temperature range | | -40 to +50°C (fan assisted cooling) | | | |
| Humidity (non-condensing) | | max 95% | | | |

ENCLOSURE

| | | | | | |
|---|---|---------------------------|-------------------------------------|-------------------------------------|----|
| Material & Colour | aluminium (blue Ral 5012) | | | | |
| Battery-connection | 1) | 1) | 1) | 1) | 1) |
| Standard AC outlets | 230V: IEC-320 (IEC-320 plug included), CEE 7/4 (Schuko) 120V: Nema 5-15R | | | | |
| Other outlets (at request) | BS 1363 (United Kingdom) AN/NZS 3112 (Australia, New Zealand) | | | | |
| Protection category | IP 20 | | | | |
| Weight (kg / lbs) | 2,7 / 5,4 | 3,5 / 7,7 | 6,5 / 14,3 | 8,5 / 18,7 | |
| Dimensions (hwxwd in mm) (hwxwd in inches) | 72x132x200 2.8x5.2x7.9 | 72x155x237 2.8x6.1x9.3 | 104 x 194 x 305 4.1 x 7.6 x 12.0 | 104 x 194 x 305 4.1 x 7.6 x 12.0 | |

ACCESSORIES

| | | | | | |
|---------------------------|--------------------|--|--|--|--|
| Remote on-off switch | Two pole connector | | | | |
| Automatic transfer switch | Filax | | | | |

STANDARDS

| | | | | | |
|-------------------|---|--|--|--|--|
| Safety | EN 60335-1 | | | | |
| Emission Immunity | EN 55014-1 / EN 55014-2 / EN 61000-6-2 / EN 61000-6-3 | | | | |

- 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 (48/350 model only)



Battery Alarm

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



BMV-700 Battery Monitor

The BMV-700 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-700 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.