



Modified wave 500 watt voltage inverter
12 volt dc to 230 volt 50Hz ac
Part 0-856-05

Warnings



Read all instructions before attempting to install or use the inverter.
High voltage, 230 volts ac, is generated by this unit.
Do not use with wet hands or near water.
This unit is only suitable for 12 volt electrical systems with negative earth.
To supply 230 volt 50 Hz loads of <500 watts.
Do not connect to any other ac power source.



Installation Instructions

1. Disconnect all battery leads, -ve leads first, before installing the inverter.
2. Locate a suitable position for the inverter and fit securely. The site chosen should be:
 - (a) Well ventilated.
 - (b) Not exposed to direct sunlight or heat source.
 - (c) Away from water or moisture.
 - (d) Out of reach of children.
 - (e) Away from any flammable or heat sensitive substance.
3. Connect the black 12 volt -ve terminal to the negative side of the supply source and the red 12 volt +ve terminal to a fused positive supply source. Use a minimum of 10.0mm² cable and keep all cable runs as short as possible.

Operating Instructions

3. Ensure that the inverter is supplied by a 12-14 volt dc negative earth system and that the load requires <500 watts at 230 volt 50Hz ac.
4. Plug the appliance into the inverter and then turn on the inverter's power switch. The LED will illuminate to indicate ac power is present, then switch on the appliance. Always turn on the inverter before turning on the load.
5. Switch off the inverter when not in use or when heavy current is drawn from the dc supply, e.g. when starting an engine from the same supply source.
6. If the inverter beeps, but is still supplying ac output, this indicates a low supply voltage; switch off the inverter to preserve battery voltage. If left on the inverter will automatically shut down when the supply voltage falls to approximately 10.0 ± 0.5 volts.



Modified wave 500 watt voltage inverter
12 volt dc to 230 volt 50Hz ac
Part 0-856-05

Warnings



Read all instructions before attempting to install or use the inverter.
High voltage, 230 volts ac, is generated by this unit.
Do not use with wet hands or near water.
This unit is only suitable for 12 volt electrical systems with negative earth.
To supply 230 volt 50 Hz loads of <500 watts.
Do not connect to any other ac power source.



Installation Instructions

1. Disconnect all battery leads, -ve leads first, before installing the inverter.
2. Locate a suitable position for the inverter and fit securely. The site chosen should be:
 - (a) Well ventilated.
 - (b) Not exposed to direct sunlight or heat source.
 - (c) Away from water or moisture.
 - (d) Out of reach of children.
 - (e) Away from any flammable or heat sensitive substance.
3. Connect the black 12 volt -ve terminal to the negative side of the supply source and the red 12 volt +ve terminal to a fused positive supply source. Use a minimum of 10.0mm² cable and keep all cable runs as short as possible.

Operating Instructions

3. Ensure that the inverter is supplied by a 12-14 volt dc negative earth system and that the load requires <500 watts at 230 volt 50Hz ac.
4. Plug the appliance into the inverter and then turn on the inverter's power switch. The LED will illuminate to indicate ac power is present, then switch on the appliance. Always turn on the inverter before turning on the load.
5. Switch off the inverter when not in use or when heavy current is drawn from the dc supply, e.g. when starting an engine from the same supply source.
6. If the inverter beeps, but is still supplying ac output, this indicates a low supply voltage; switch off the inverter to preserve battery voltage. If left on the inverter will automatically shut down when the supply voltage falls to approximately 10.0 ± 0.5 volts.

Troubleshooting

If the inverter beeps or does not appear to be functioning properly, check the following:

- (i) Low dc supply voltage, supply voltage $<10.5 \pm 0.5$ volts.
- (ii) Low dc voltage shutdown, supply voltage $<10.0 \pm 0.5$ volts.
- (iii) Overload shutdown, check load requirement is <500 watts.
- (iv) Thermal shutdown, switch off, allow the inverter to cool down and reduce load.
- (v) Wiring, terminals and connections.

Specifications

DC input voltage	12 volts (12 - 15 volts)
AC output voltage	230 volts
Output frequency	50 Hz
Output waveform	Modified wave
Continuous output power	500 watts
Surge output power	1500 watts
Efficiency	90%
No load current	< 0.95 amps
Input 100% load current draw (@ 12 volt supply)	46.3 amps
Output 100% load current draw	2.18 amps
Battery low voltage alarm	10.5 ± 0.5 volts
Battery low voltage shutdown	10.0 ± 0.5 volts
Alarm and thermal shutdown	$55 \pm 5^{\circ}\text{C}$
Dimensions	l 240 x w 303 x h 76mm
Weight	3.16 Kg

Troubleshooting

If the inverter beeps or does not appear to be functioning properly, check the following:

- (i) Low dc supply voltage, supply voltage $<10.5 \pm 0.5$ volts.
- (ii) Low dc voltage shutdown, supply voltage $<10.0 \pm 0.5$ volts.
- (iii) Overload shutdown, check load requirement is <500 watts.
- (iv) Thermal shutdown, switch off, allow the inverter to cool down and reduce load.
- (v) Wiring, terminals and connections.

Specifications

DC input voltage	12 volts (12 - 15 volts)
AC output voltage	230 volts
Output frequency	50 Hz
Output waveform	Modified wave
Continuous output power	500 watts
Surge output power	1500 watts
Efficiency	90%
No load current	< 0.95 amps
Input 100% load current draw (@ 12 volt supply)	46.3 amps
Output 100% load current draw	2.18 amps
Battery low voltage alarm	10.5 ± 0.5 volts
Battery low voltage shutdown	10.0 ± 0.5 volts
Alarm and thermal shutdown	$55 \pm 5^{\circ}\text{C}$
Dimensions	l 240 x w 303 x h 76mm
Weight	3.16 Kg