

Ekyrail Enterprises inc.			
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Sujet :		INVERTER 300VA SINE WAVE	

Inverter 300va

True Sine-wave

The model 300 is a true sine wave inverter operating from 74Vdc (56 to 85 Vdc) with an absolute maximum input voltage of 90Vdc. It outputs 117Vac true sine wave at 60 Hz $\pm 0.05\%$ with a total harmonic distortion of less than 2%. The load regulation is $\pm 6\text{Vac}$ from no load to 100% load and $\pm 1\text{ Vac}$ over the full input voltage range. The efficiency is 85% at rated load of 300VA or 2.6Arms.

The unit is completely self-protected from indefinite short circuits. The unit will supply 12Arms into a short circuit for 2 seconds after which it will shut off. After 30 seconds the unit will restart, if the short has cleared the unit will start according to the load conditions however if still shorted it will output 12Arms for 2 seconds and shut down. This sequence can be repeated indefinitely without damage.

The unit has an overload capability of 8Arms for 5 seconds. If the unit is supplying greater than 4Arms after 5 seconds, the unit will shut down for 4.5 minutes and then restart. If the output drops below 4Arms before the 4.5 seconds has elapsed then the unit will continue to operate.

This new generation of inverters can be hookup in parallel for more power output.



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Specification:

Input

Voltage 74 Vdc nominal , 56 to 89 Vdc
 Current 4.05 Amperes @74 Vdc and 300 VA load

Output

Voltage 117 Vac \pm 5% over full operating range
 Power 300 Va nominal , 450 Va (max) (10 minutes)
 Current limit 8 Amperes rms
 Load regulation 5% from no load to max load
 Waveform Sinusoidal (THD <2%)
 Frequency 60 Hz \pm 1 Hz
 Load power factor 0.7 lead to 0.7 lag
 Efficiency \geq 85% at nominal load

Indicators

DC input On when voltage present and within operating range
 Flashing when voltage present and over or under range
 AC output ON when available
 Flashing when not available due to over temperature
 OFF when overcurrent

Protection

Over-current Cut-off after 2 seconds, automatic reset after 30 seconds
 Input overvoltage Shutdown above 90 Vdc
 Input undervoltage Shutdown at 56 Vdc
 Restart at 58 Vdc
 Overload Output thermally protected
 Input reverse polarity Protected
 Input protection Fuse, surge suppression and filter.
 Isolation Transformer, floating output

Environment

Operating temp. -40°F to 160°F (-40°C to 71°C)
 Storage temp. -40°F to 185°F (-40°C to 85°C)
 Dimension 10.5''D 7.25'' L 5.38 '' H
 Weight 10 Lbs (4.5 kg)



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