



an EnerSys® company

Alpha® Inverter Module 2500

For installation in AMPS HP2 Systems



- Revolutionary technology offers 95% efficiency and Telecom-grade reliability
- Hot swappable 2.5kVA/2kW AC power module allows optimal scalability and flexibility
- Separate AC and DC inputs provide application flexibility, reduced total cost of ownership and increased system reliability
- Up to 4 high power density modules per inverter shelf
- Up to 30 modules per 68kVA N+1 system

Alpha® Inverter Module 2500 provides pure sine wave power to critical loads despite power disturbances such as harmonics, surges, glitches, voltage fluctuations, etc.

Unlike traditional inverters, the Alpha Inverter features AC-AC conversion that double filters and isolates the AC input, and static switching for disturbance free transfers between input sources. The overall efficiency is increased to 95% without compromising the quality and stability of the output wave form. The compact size enables the delivery of 2.5kVA/2kW of AC power in limited space.

The hot swappable inverter module is the building block of a highly reliable inverter system utilizing touch safe -48VDC battery bus. Each module can utilize either AC or DC sources or both, eliminating the need for a system level static switch is single point of failure. Transfer between sources is 100% seamless with zero transfer time. The module design allows gradually incrementing system capacity as the load demands increase.

Alpha® Inverter Module 2500 for installations in AMPS80 HP2 Systems

P/N: 014-201-20

Electrical	
AC Output	
Power Rating:	2500VA/2000W
Waveform:	Pure sine wave
Efficiency:	95% AC-to-AC mode, 91% DC to AC mode
Admissible Load Power Factor:	Full power rating from 0 inductive to 0 capacitive
Transfer Time:	Zero transfer time
Nominal Voltage:	120VAC
Voltage Accuracy:	±2%
Nominal Current Frequency:	60Hz (same as input frequency)
Frequency Accuracy:	0.03%
THD (Resistive Load):	<1.5%
Transient Load Recovery Time:	0.4 ms
Soft Start Time:	20s to 40s depending on the number of modules installed
Crest Factor at Nominal Power:	3:1
Short Circuit Overload Capacity:	10 x In for 20msec (AC-to-AC mode) with magnitude control and management
Short Circuit Current After Clear Up Capacity:	2.1 In during 15s and 1.5 In after 15s
Short Term Overload Capacity:	150% for 15 seconds
Permanent Overload Capacity:	110%
MTBF	>240,000hrs (MIL-217-F)
AC Input:	
Nominal AC Voltage:	120VAC
AC Voltage Range:	100 - 138VAC (without derating, can be disabled)
Input Power Factor:	>99%
Synchronization Range:	57 - 63Hz
Brownout:	80-100VAC use DC source contribution if need be (can be disabled)

DC Input:	
Nominal DC Voltage:	48VDC
Nominal Current:	56A (at 40VDC and 2000W output)
Maximum Input Current (for 15s):	84A
Maximum DC Voltage Range (max):	40 - 60VDC (user adjustable)
Voltage Ripple:	<2mV
Mechanical	
Dimensions:	mm: 88.9H x 102W x 43.5D inches: 3.5H x 4W x 1.713D
Weight:	4.3kg (9.6lbs)
Material (casing)	Coated steel - ALU Zinc
Environmental	
Temperature:	Operating: -20 to 40°C (-4 to 104°F) Storage: -40 to 70°C (-40 to 158°F)
Relative Humidity:	Up to 95%, non-condensing
Operating Altitude:	Up to 1500m (4900ft) above sea level
Heat Dissipation:	360BTU per hour in AC-to-AC mode; 675BTU per hour in DC-to-AC mode
Agency Compliance	
Safety:	UL 1778 Recognized
Immunity:	EN 61000-4
Emissions:	EN 55022 (Class A)
RoHS:	Compliant



an EnerSys® company

Alpha Technologies Services, Inc. USA: 3767 Alpha Way, Bellingham, WA 98226 Canada: 7700 Riverfront Gate, Burnaby, BC V5J 5M4
Toll Free North America: +1 800 322 5742 Outside US: +1 360 647 2360 Technical Support: +1 800 863 3364
For more information visit www.alpha.com

© 2020 Alpha Technologies Services, Inc. All Rights Reserved. Trademarks and logos are the property of Alpha Technologies Services, Inc. and its affiliates unless otherwise noted. Subject to revisions without prior notice. E. & O.E.

09/2020
#0470036-00 REV C