

MS-AE Specifications

Models	MS4024AE	MS4448AE
Inverter Specifications		
Input battery voltage range	18.0 to 33.8 VDC	36.0 to 67.6 VDC
Absolute maximum DC input	50 VDC	68 VDC
Nominal AC output voltage	120 / 240 VAC split phase	
AC output voltage accuracy	L-N: 120 VAC $\pm 5\%$, L-L: 240 VAC $\pm 5\%$ (\leq continuous power)	
Output frequency and accuracy	60 Hz $\pm 0.04\%$	
Total Harmonic Distortion (THD)	$< 5\%$	
Continuous power output (at 25° C with 12.5 VDC nominal)	4000 VA (L-L) (max 81% output imbalance from L-N)	4400 VA (L-L) (max 81% output imbalance from L-N)
Continuous AC output current	L-N: 22.0A/120VAC, L-L: 16.7A/240VAC	L-N: 25.0A/120VAC, L-L: 18.3A/240VAC
1 msec surge current (amps AC)	L-N: 120, L-L 195	L-N: 120, L-L 160
100 msec surge current (amps AC)	L-N: 72, L-L 92	L-N: 75, L-L 90
5 sec surge power (real watts)	5800	8500
30 sec surge power (real watts)	5200	6000
5 min surge power (real watts)	4800	5400
30 min surge power (real watts)	4500	4800
Maximum continuous input current	222 ADC	122 ADC
Inverter efficiency (peak)	93%	94%
AC Relay Transfer time (minimum)	16 msecs	
Search Mode current	0.3 ADC	0.2 ADC
HBCO / HBCI (High Battery Cut Out / In)	34.0 VDC / 33.2 VDC	68.0 VDC / 66.4 VDC
LBCO / LBCI (Low Battery Cut Out / In)	18.0 VDC (adjustable) / 25.0 VDC	36.0 VDC (adjustable) / 50.0 VDC
Output Waveform	Pure Sine Wave	
Charger Specifications		
Continuous charger output at 25° C	105 ADC	60 ADC
Charger efficiency	85%	
AC input frequency range	50 to 70 Hz	
AC input voltage range	L-N: 60 to 140 VAC (120 VAC nominal) L-L: 120 to 280 VAC (240 VAC nominal)	
Power factor	> 0.95	
Input current for continuous rated output	15 AAC (at 120 VAC) per leg	17.5 AAC (at 120VAC) per leg
General Features and Capabilities		
Transfer relay capability	2 legs at 30 AAC maximum per leg	
Five stage charging capability	Bulk, Absorb, Float, Equalize (requires remote) and Battery Saver™	
Battery temperature compensation	Standard with available temp sensor (battery temp 0 to 50° C)	
Internal cooling	0 to 120 cfm variable speed drive using dual 92mm brushless DC fans	
Over-current protection	with two overlapping circuits	
Over-temperature protection	on transformer, MOSFETs, and ambient temperature	
Corrosion protection	PCB's conformal coated, powder coated chassis/top, and stainless steel fasteners	
Safety Listings	ETL listed to ANSI / UL STD 1741 and CSA STD C22.2 No. 107.1-01	
Warranty	2 years parts and labor	
Environmental Specifications		
Operating temperature	-20° C to +60° C (-4° F to 140° F)	
Nonoperating temperature	-40° C to +70° C (-40° F to 158° F)	
Operating humidity	0 to 95% RH non-condensing	
Physical Specifications		
Unit Dimensions (h x w x d)	13.75" x 12.65" x 8.0" (34.9 cm x 32.1 cm x 20.3 cm)	
Shipping Dimensions (h x w x d)	18.5" x 17.5" x 12.5" (47 cm x 44.5 cm x 31.8 cm)	
Mounting	Shelf or wall (vents not allowed to face downward unless ME-CB is installed)	
Unit Weight	54.5 lbs (24.7 kg)	
Shipping Weight	58 lbs (26.3 kg)	
Max operating altitude	15,000' (4570 m)	
<i>Specifications subject to change without notice</i>		
<i>L-L = Line to Line, L-N = Line to Neutral</i>		