

# PHOS GLOBAL AMKES - 500

## TECHNICAL DATA SHEETS

SPECIFICATIONS	DETAILS
<b>Design</b>	
Life Expectancy	> 50 Years With Minor Annual Maintenance & System Monitoring
Cycle Capacity	Unlimited - Full Depth Of Discharge
Warranty	Renewable 15 Year Intervals With A Maintenance Schedule
<b>Electrical Interface</b>	
Charging - Discharging Schedule	Simultaneous Charging & Discharging - Continuously
Storage Capacity	50 kWh
Rated Power Capacity	70 kW ( AC or DC ) Continuous
Charge Duration	1 Hour Or less (Load Dependent)
Discharge Duration	Continuous Uninterrupted, Zero Switching
Real Power Discharge Values	Configurable From 70 KW For 45 Min To 1 KW For 50 Hours See Output To Time Chart Attached
Input Voltage Range	100 - 650 - VDC 110 - 220 - 240 - 480 - VAC
Input Phase Range	Single To Three Phase
Input Frequency	60 Hz or 50Hz
Round Trip Efficiency AC Input	> 87 %
Round Trip Efficiency DC Input	> 85 %
Output Voltage	Fixed - 12 - 24 - 48 - VDC Variable - 100 - 450 - VDC 110 - 220 - 240 - 460 - 600 - VAC
Nominal Output Rating	150 KVA Continuous Power At Any Power Angle
Output Voltage Loss During Charge Cycle	None
Output Power Loss During Charge Cycle	None
Output Frequency Variations During Cycles	None
Power Filtering	VAR - 100% AC Pure Sine Wave - Grid Isolated - Line Reactors
Stand By Loss	3% Per Hour Of Stored Energy
Ancillary Losses At Idle	400 Watt Hours Per Hour
Response Time During Cycles	0 Seconds - Zero Switching
<b>Mechanical</b>	
Materials	99% Recyclable
Drive Motor	Permanent Magnet
Generator Motor	Permanent Magnet
Magnetic Lift System	High Strength Permanent Magnets
Magnetic Bearing System	High Strength Permanent Magnets
Vacuum Level	99%
Operating Speeds	3 000 - 10 000 RPM
Dimensions	34 " X 100" X 56" Height
Weight Without Electronics & Cooling	18,900 lbs.
Electronics & Cooling Dimensions	24" x 96" x 96"
Safety	Passive Mechanical Bearings - Vertically & Horizontally Real Time Integrated Computer Sensor Monitoring System 3 Step Password Protection - 2 Online Offsite & 1 Offline Onsite

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<b>Environmental</b>	
Temperature Range	-20 to 50 deg. C
Humidity	95% Non Condensing
Instillation	Above Or Below Grade In Adequate Container
Seismic Capability	Real Time Integrated Computer Sensor Monitoring System
Noise Level	59 dBA
<b>Communications &amp; Monitoring</b>	
Operation	Limited Remote Operation from Offsite Operator Limited Local Operation from Onsite Technician Self Managed Based On Frequency & Rpm
Monitoring	Internet Based
Data Storage	Full Trending & Analysis Available - Data Stored Locally & Offsite
Control System Interface	Modbus Protocol

