

Power Conversion System



Key Inverter Design Parameters

- Inverter leverages complex space vector modulation algorithm for improved controller and quicker response improving system performance.
- Inverter features DC isolators to protect equipment in the event of a short-circuit in the DC Block.
- DC Pre-charge to balance voltages on both sides before connection.
- Ultra-fast fuses on the DC-side to prevent damages to the batteries.
- Fully operational PQ curve for active and reactive power.
- Inverter overload to withstand 150% or even 175%
- Floating DC system to extend service life of the batteries.

Bankability

- Independent Engineer Evaluated Products with bankability records.
- More than 1.2 GW of installed inverters world-wide.
- MTBF greater than 100,000 hours.
- Life expectancy for 25 years with proper preventive maintenance.



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Input Data			
Max Input Voltage	840 —1250 V	840 —1250 V	840 —1250 V
Batteries Max Current @ 50C	1000 A DC switch	(2) 1000 A DC Switch	(3) 1000 A DC Switch
Battery Short Circuit Current	75 kAIC DC switch	(2) 75 kAIC DC switch	(3) 75 kAIC DC switch
Battery Input Number	1 fuse protection	2 fuse protection	3 fuse protection
Insulation Fault Detection	Yes	Yes	Yes
Output Data			
Output Voltage	585 V	585 V	585 V
AC Output Power @ 50C	810.5 kVA	1,621 kVA	2,432 kVA
Max Operating Current @ 50C	800 A	1600 A	2400 A
Frequency	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz
Power Factor	Adjustable (1 at nominal power)		
THD	< 3%		
Maximum Efficiency (Max / Min Vdc)	98.0 / 98.9%		
Controls	Control Logic and DSP, SVM Technology		
Communication	RS 485, Ethernet		
Operating Temperature	-20 C to 50 C		
Relative Humidity	0—100%		
Dimensions (H x W x D) mm	2,300 x 950 x 1,780	2,300 x 1,920 x 1,780	2,300 x 2,870 x 1,780
Weight	2,500 kg	3,000 kg	4,500 kg
Altitude	1000 m	1000 m	1000 m
Ingress Protection (IP)	IP54		

DC Block



PCS



Transformer

