

THREE PHASE HYBRID INVERTER

SE 12/15/20/25/30KHB

Application: Residential & Small-Medium C&I Use



EXCELLENT PERFORMANCE

- Maximum efficiency of 98.4% and battery efficiency of 98.0%
- Large MPPT current, compatible with high-power solar panels
- Supporting continuous overload capacity of 110% and unbalanced output
- Maximum battery charge/discharge current of 2*75A
- Advanced parallel function



HIGH RELIABILITY

- Key components from international renowned brands
- IP66 protection rating, ensuring adaptability to complex outdoor environment
- Multiple built-in protections, with optional AFCI



INTELLIGENT MAINTENANCE

- Quick commission via mobile app, 24/7 remote monitoring, configuration and upgrade
- Advanced energy management mechanism, with multiple built-in working modes and flexible customized settings



Model	SE 12KHB-D3	SE 15KHB-D3	SE 20KHB-D3	SE 25KHB-T3	SE 30KHB-T3
Efficiency					
Max. Efficiency (PV to AC)		98.2%			98.4%
Eur. Efficiency (PV to AC)			97.9%		
Max. Efficiency (BAT to AC)			98.0%		
Input (PV)					
Max. PV Input Power	30,000W	30,000W	30,000W	45,000W	45,000W
Max. PV Voltage			1000V		
Start-up Voltage			150V		
MPPT Voltage Range			160V-950V		
Max. Input Current per MPPT		32A/32A		32A/32A/32A	
Max. Short Circuit Current per MPPT		40A/40A		40A/40A/40A	
String per MPPT		2/2		2/2/2	
Nos. of MPPT		2		3	
Input/Output (BAT)					
Battery Type		Lithium-ion/Lead-acid			
Battery Voltage Range at Rated Power	230V-800V	285V-800V	380V-800V	190V-800V	230V-800V
Battery Voltage Range		120V-800V			
Max. Charge/Discharge Current		60A/60A		2*75A/2*75A	
Max. Charge/Discharge Power	30,000W/ 14,400W	30,000W/ 18,000W	30,000W/ 24,000W	45,000W/ 30,000W	45,000W/ 36,000W
Output (Grid)					
Nominal AC Output Power	12,000W	15,000W	20,000W	25,000W	30,000W
Max. AC Output Power	13,200VA	16,500VA	22,000VA	27,500VA	33,000VA
Max. AC Output Power (PF=1)	13,200W	16,500W	22,000W	27,500W	33,000W
Max. AC Output Current	3*20A	3*25A	3*33.3A	3*41.7A	3*50A
Max. Single Phase power	10,000VA	10,000VA	10,000VA	11,000VA	11,000VA
Max. Input Power	36,000VA	40,000VA		45,000VA	
Max. Input Current	3*54.5A	3*60.6A		3*68.2A	
Nominal Grid Voltage		380V/400V/415V, 3W+N+PE			
Grid Voltage Range		277V-520V (Adjustable)			
Nominal Grid Frequency		50Hz/60Hz			
Grid Frequency Range		45Hz-55Hz/55Hz-65Hz (Adjustable)			
Power Factor		> 0.99 @rated power (Adjustable 0.8 LD - 0.8 LG)			
THDI		<3% (Rated Power)			
Output (Back up)					
Nominal Output Power	12,000W	15,000W	20,000W	25,000W	30,000W
Nominal Output Current	3*18.2A	3*22.7A	3*30.3A	3*37.9A	3*45.5A
Peak Output Apparent Power (5min)	14,400VA	18,000VA	24,000VA	30,000VA	36,000VA
Peak Output Apparent Power (10s)	18,000VA	22,500VA	30,000VA	37,500VA	45,000VA
Nominal Output Voltage		380V/400V/415V, 3W+N+PE			
Nominal Output Frequency		50Hz/60Hz			
Transfer Time		<10ms (typical)			
THDV		<3% @100% R Load			
Protection					
Protection Category		Class I			
DC Switch		Yes			
Anti-islanding Protection		Yes			
AC Overcurrent Protection		Yes			
DC/AC Overvoltage Protection		DC Type II, AC Type III			
AC Short Circuit Protection		Yes			
DC Reverse Protection		Yes			
Surge Arrester		DC Type II, AC Type II			
Insulation Resistance Detection		Yes			
Leakage Current Protection		Yes			
AFCI		Optional			
General					
Max. Operation Altitude		4000m (>2000m derating)			
Ingress Protection Degree		IP66			
Operating Temperature Range		-25 C~60 C (>45 C derating)			
Relative Humidity		0~100%			
Cooling		Natural Cooling		Smart Fan Cooling	
Mounting Method		Wall bracket			
Dimensions (W*H*D)		660mm*596mm*235mm			
Weight		45Kg		55Kg	
PV Connection Way		MC4/H4			
HMI & COM					
Display		Bluetooth & APP + LED, LCD (optional)			
Communication Interface		RS485/CAN (for BMS), RS485, DRM/RS485 (for Meter), Optional: Wi-Fi/LAN, 3*DO, 2*DI			
Certification					
Safety		IEC 62109-1&2			
EMC		IEC/EN 61000			
Grid		VDE 4105, EN 50549-1, CEI 0-21, NRS 097-2-1, RD 1699/661/647/413, UNE 217002, AS 4777.2, C10/11, IEC 61727/62116			
Warranty		5 Years			

Remarks: · The range of output voltage and frequency may vary depending on different grid codes.
· Specifications are subject to change without advanced notice.

