

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 ⁽¹⁾ / 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: · ① For single battery port connected, the maximum charge power is 25,500W. When two ports are used, the power can reach 45,000W.
· The range of output voltage and frequency may vary depending on different grid codes.
· Specifications are subject to change without advanced notice.

