DATASHEET Single Phase Hybrid / AC Inverter KH7 / KH8 / KH9 / KH10 / KH10.5 KA7 / KA8 / KA9 / KA10 / KA10.5





KSERIES SINGLE PHASE INVERTER

Harness the power of the sun day and night with the ground-breaking range of Hybrid & AC inverters from FOX. Full of advanced features and compatible with our very own range of high-voltage batteries, the hybrid range from FOX is a new class of Inverter.



Remote Monitoring

Monitor your system

remotely via smartphone

app or web portal.

FOX storage solutions are available with advanced and intuitive app based remote control and monitoring functionality.

IP65 Rated

Engineered to last with maximum flexibility. Suitable for outdoor installation.



Flexible configuration, plug and play set-up, built-in fuse protection.



High Voltage

Connects to high-voltage

batteries for maximum

round-trip efficiency.

BATTERY EXPANSION EASY UPGRADE

Expand your system easily by simply adding additional batteries. Eight batteries can be installed in series, providing up to 32.8kWh of storage capacity.

> For more about the FOX range, visit: WWW.FOX-ESS.COM



TECHNICAL SPECIFICATIONS

Model	KH7 KA7		KH8 KA8	KH9 Ka9	KH10 KA10	KH10.5 KA10.5
ELECTRICAL CHARACTERISTICS						
Battery Type				Li-Ion		
Battery Voltage Range [V]				85-450		
Recommended Battery Voltage [V]				300VDC 50		
Max. Charge Current [A] Max. Discharge Current [A]				50		
Communication Interfaces				CAN/ RS485		
Reverse Connect Protection				YES		
NPUT PV (FOR KH ONLY)						
Max. Recommended DC Power [W]	9100		10400	11700	13000	15000
Max. DC Voltage [V]				600		
Norminal DC Operating Voltage [V]				360		
Max. Input Current (Input A / Input B) [A] Max. Short Circuit Current (Input A / Input B) [A]		16/16/16 20/20/20			16/16/16 20/20/20	
Max. Inverter Backfeed Current to the Array [mA]		20/20/20		0	20/20/20/20	
MPPT Voltage Range [V]				80-500		
Start-up Voltage [V]				75		
No. of MPP Trackers		3			4	
Strings Per MPP Tracker				1		
DC Disconnection Switch				Optional		
OUTPUT AC Norminal AC Power [VA]	7000		8000	9000	10000	10500
Max. Apparent AC power [VA]	7700		8800	9900	10500	10500
Rated Grid Voltage (AC Voltage Range) [V]				220/230/240 (180 to 270)		
Rated Grid Frequency [Hz]				50/60,±5		
Norminal AC Current [A]	30.4		34.8	39.1	43.5	45.7
Max. AC Current [A]	33.5		38.3	43.0	45.7	45.7
Displacement Power Factor				0.8 Leading to 0.8 Lagging < 3%		
Total Harmonic Distortion (THDi, Rated Power)				\$ 3%		
Max AC Power [VA]	14000		16000	18000	18000	18000
Max. AC Current [A]	60.9		69.6	78.3	78.3	78.3
Rated Grid Voltage (AC Voltage Range) [V]				220/230/240 (180 to 270)		
Rated Grid Frequency [Hz]				50/60,±5		
EPS OUTPUT (WITH BATTERY)						
Max. EPS Power [VA]	7000		8000	9000	10000	10500
EPS Rated Voltage [V], Frequency [Hz]				230VAC. 50/60		
Max. EPS Current [A] EPS Peak Power [W]	30.4	10000 20-	34.8	39.1	43.5	45.7
Switch Time [s]		10000, 30s		< 20ms	12000, 6 0s	
Total Harmonic Distortion (THDv, Linear Load)				<2%		
Parallel Operation				Yes @max10PCS		
EFFICIENCY						
MPPT Efficiency				99.90%		
Euro-efficiency				97.40%		
Max. Efficiency Max. Battery Charge Efficiency (PV to BAT) (@Full Load)				97.80%		
Max. Battery Charge / Discharge Efficiency (BAT to AC)	(@Full Load)			98.50% 97.00%		
PROTECTION	(tar an coudy			37.00%		
PV Reverse Polarity Protection				YES		
Battert Reverse Protection				YES		
Anti-islanding Protection				YES		
Output Short Protection				YES		
Leakage Current Protection				YES		
Insulation Resistor Detection				YES		
Over-current Protection / Over-temperature Protection				YES		
Over Voltage Category AC/DC Surge Protection				III (AC side), II (DC side)		
AC/DC surge Frotection AFCI Protection				Type II / Type II Optional		
POWER CONSUMPTION						
Standby Consumption [W] (Ldle)				< 15		
STANDARD						
				IEC62109-1 / -2 / IEC62040 / IEC 62477	,	
Safety				EN 61000-6-1 / EN 61000-6-2 / EN 61000-6		
				/ EN50549-1 / CEI 0-21 / VDE-AR-N 4105		
EMC		G98 /	G99 / AS4777.2	/ EN50549-1/ CELU-21/ VDE-AR-N 4105		
EMC Cetification ENVIRONMENT LIMIT		G98 /	G99 / AS4777.2			
EMC Cetification ENVIRONMENT LIMIT Ingress Protection		G98 /	G99 / AS4777.2	IP65		
EMC Cetification ENVIRONMENT LIMIT Ingress Protection Protective Class		G98 /	G99 / AS4777.2	IP65 Class I		
EMC Cetification ENVIRONMENT LIMIT Ingress Protection Protective Class Operating Temperature Range [°C]		G98 /	G99 / AS4777.2	IP65 Class I -25 +60°C (Derating at +45°C)		
EMC Cetification ENVIRONMENT LIMIT Ingress Protection Protective Class Operating Temperature Range [°C] Humidity [%]		G98 /	G99 /AS4777.2	IP65 Class I		
EMC Cetification ENVIRONMENT LIMIT Ingress Protection Protective Class Operating Temperature Range [°C] Humidity [%] Altitude [m]		G98 /	G99 / AS4777.2	IP65 Class I -25 +60°C (Derating at +45°C) 0∼95 (Non-condensing)		
EMC Cetification ENVIRONMENT LIMIT Ingress Protection Protective Class Operating Temperature Range [°C] Humidity [%] Altitude [m] Storage Temperature [°C]		G98 / ·	G99 / AS4777.2	IP65 Class I -25 +60°C (Derating at +45°C) 0~95 (Non-condensing) <2000		
EMC Cetification ENVIRONMENT LIMIT Ingress Protection Protective Class Operating Temperature Range [°C] Humidity [%] Altitude [m] Storage Temperature [°C] Noise Emission (Typical) [dB]		G98 / ·	G99 (AS4/77.2	IP65 Class I -25 +60°C (Derating at +45°C) 0~95 (Non-condensing) <2000 -40 +70°C		
EMC Cetification ENVIRONMENT LIMIT Ingress Protection Protective Class Operating Temperature Range [°C] Humidity [%] Altitude [m] Storage Temperature [°C] Noise Emission (Typical) [dB] DIMENSION AND WEIGHT		G98 / ·	G99 (AS4/7/.2	IP65 Class I -25 +60°C (Derating at +45°C) 0~95 (Non-condensing) <2000 -40 +70°C		
EMC Cetification ENVIRONMENT LIMIT Ingress Protection Protective Class Operating Temperature Range [°C] Humidity [%] Altitude [m] Storage Temperature [°C] Noise Emission (Typical) [dB] DIMENSION AND WEIGHT Demensions (W * H * D) [mm] Weight [kg]		G98 / ·	G99 (AS4/77.2	IP65 Class I -25 +60°C (Derating at +45°C) 0~95 (Non-condensing) <2000 -40 +70°C <30		
EMC Cetification ENVIRONMENT LIMIT Ingress Protection Protective Class Operating Temperature Range [°C] Humidity [%] Altitude [m] Storage Temperature [°C] Noise Emission (Typical) [dB] DIMENSION AND WEIGHT Demensions (W * H * D) [mm] Weight [kg] Cooling Concept		G98 / ·	G99 /AS4/7/.2	IP65 Class I -25 +60°C (Derating at +45°C) 0~95 (Non-condensing) <2000 -40 +70°C <30 450*527*203mm 29Kg Natural		
Safety EMC Cetification ENVIRONMENT LIMIT Ingress Protection Protective Class Operating Temperature Range [°C] Humidity [%] Altitude [m] Storage Temperature [°C] Noise Emission (Typical) [dB] DIMENSION AND WEIGHT Demensions (W * H * D) [mm] Weight [kg] Cooling Concept Topology Communication		G98 / ·		IP65 Class I -25 +60°C (Derating at +45°C) 0~95 (Non-condensing) <2000 -40 +70°C <30 450*527*203mm 29Kg		

* More technical characteristics are available on demand and customized.