

DATASHEET

Single Phase Hybrid / AC Inverter

KH7 / KH8 / KH9 / KH10 / KH10.5 KA7 / KA8 / KA9 / KA10 / KA10.5



K SERIES

SINGLE PHASE INVERTER

Harness the power of the sun day and night with the ground-breaking range of Hybrid & AC inverters from Fox ESS.

Full of advanced features and compatible with our very own range of high-voltage batteries, the hybrid range from Fox ESS is a new class of Inverter.





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



Easy Installation

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



High Voltage

Includes high-voltage batteries for maximum round-trip effciency.



IP65 Rated

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



Remote Monitoring

Monitor your system remotely via smartphone app or web portal.



BATTERY EXPANSION EASY UPGRADE



Expand your system easily by simply adding additional batteries. Seven batteries can be installed in series, providing up to 33.24kWh of storage capacity.

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









BitCompany Company C	Model	KH7 KA7		KH8 KA8	KH9 KA9	KH10 KA10	KH10.5 KA10.5
Electron 1997 - 1997 199	ELECTRICAL CHARACTERISTICS						
Second							
Mac Contrago Current							
Non-District Production 1907 1908 19							
New York Control (1997) 1990 19	9				50		
INSERT FOR CORE NOTES 1970	Communication Interfaces				CAN / RS485		
March Recommendate Of Proper (N)	Reverse Connect Protection				YES		
	INPUT PV (FOR KH ONLY)						
Section of Concerting Vertical (1) Section Section	Max. Recommended DC Power [W]	10500		12000		15000	15000
Main Paul Control Control (Paul A) Final (Paul II) May 18 18 18 18 18 18 18 18	-						
None Section for an activated (open a fig. open at)			1 1 1		360	1 1 1 13	
Max. Proceed Scale Sca							
Marth Marting Bongs			20 / 20 / 20		0	20 20 20 20	
Stort Service Stort Servic							
No. Of Mark Principals Mar							
String Den Processor wheth			3		,,,	4	
Communication should Communication Commu			_		1		
Normania AC Devoes (Pol.) 700 8000 8000 9	-				Optional		
March Apparent AC Device [Ma] 7000 8000 900	OUTPUT AC						
Recent Cold And Seque (20 - Value Seque Seque (16 - 270) Recent Cold And Seque (16 - 270) Recent Cold And Courser (A)				8000			10500
Michael Sanifa (Finegramery (Me) 100.04 3.0 3.0 4.5 4.0 4.		7700		8800		10500	10500
Nomine A Courient A							
Mart ALC Lammit		20.4		242		40.5	
Displacement Proces Color Sequence							45.7
Note March March		33.5		ა გ.პ		45./	47.7
MAC AC Power (Ve)	•						
Man. AC Pumm [VA] Ma00 M8000 M							
Retail of Art Vehoge AC Vehoge ACV Veh		14000		16000	18000	18000	18000
Read and requency	Max. AC Current [A]	60.9		69.6	78.3	78.3	78.3
PRODUIT (WITH EATTERY) 7000 8000 0000 100000 1000000 1000000 1000000 100000000	Rated Grid Voltage (AC Voltage Range) [V]				220 / 230 / 240 (180 ~ 270)		
Note: 1815 Notes Val. 1	Rated Grid Frequency [Hz]				50 / 60, ±5		
MER Active Violating Viola	EPS OUTPUT (WITH BATTERY)						
Max. PSC Current A 318 38.4 40.9 40.5 40.0	Max. EPS Power [VA]	7000		8000	9000	10000	10500
PER Peach Rower							
Switch Time [ms] 120		31.8		36.4	40.9		47.7
Total I stamparic Distortion (THDx, Linear Load)			10000, 60s			12000, 60s	
Parallel Operation Yes ⊕maxIOPCS FFTCIENCY Segment (Parallel Control) (R) 99.90 Euro-efficiency (R) 97.80 Max Efficiency (Py to BA1) (@Full Load) (R) 98.50 Max Entery Change (Pischarge (Pischarge (Pitcharge) (Py to BA1) (@Full Load) (R) 98.50 Max Entery Change (Pischarge (Pischarge (Pitcharge) (Parallel Control) (R) 98.50 PROTECTION YES Blatter Reverse Protection YES Blatter Reverse Protection YES Leakage Current Protection YES Substitution Resister Detection YES Over Voltage Cottagery If (AC Bide), If (DC Bide) Over Voltage Cottagery If (AC Bide), If (DC Bide) Over Voltage Cottagery If (AC Bide), If (DC Bide) OVER YORK COSUMPTION Optional Standard Protection YES Standard Protection YES <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>							
EFFORENCY 99.90 MOPT Efficiency [%] 97.40 Max. Efficiency [%] 97.80 Max. Efficiency (PV to BAT) (@Full Lood) [%] 98.50 Max. Bottery Change [fficiency (BAT to AC) (@Full Lood) [%] 98.50 Max. Bottery Change [fficiency (BAT to AC) (@Full Lood) [%] 97.00 PROTECTION V Reverse Poticity Protection YES Botter Reverse Protection YES Auth-Islanding Protection YES Output Short Protection YES Unclude Current Protection YES Installation Resistator Detection YES Installation Resistator Detection YES Ower-current Protection YES Ower-current Protection YES More Contract Protection YES Mover-current Protection YES Over-current Protection YES Standard Transport of Protection YES Standard Transpo							
MPP Efficiency	•				Tes Williaxiol Cs		
Richard					99 90		
Max. Efficiency [%] 97.80 Max. Battery Charge of Discharge Efficiency (Pv to BAT) (@Full Load) [%] 95.00 PROTECTION PV Reverse Polarity Protection YES Botter Reverse Protection YES Barter Reverse Protection YES Leokage Current Protection YES Leokage Current Protection YES Over voltage Category III (Ac side), II (Oc side) Over voltage Category III (Ac side), II (Oc side) Over Voltage Category III (Ac side), II (Oc side) Over Voltage Category II (Ac side), II (Oc side) Over Voltage Category II (Ac side), II (Oc side) Over Voltage Category II (Ac side), II (Oc side) Over Voltage Category II (Ac side), II (Oc side) Over Voltage Category II (Ac side), II (Oc side) Stack I (Yes the Color) Optional POWER CONSUMPTION III (Ac side), II (Oc side) Stack I (Yes the Color) (Al Section Side) EMD I (Section Side) EMD I (Section Side) EMD I (Section Side) EMD	, , ,						
Max Bottery Charge Efficiency (RAT to AC) (@Full Load) [%] 98.50 PROTECTION YES Baltant Reverse Protection YES Baltant Reverse Protection YES Anti-Islanding Protection YES Anti-Islanding Protection YES Output Short Protection YES Leakage Current Protection YES Leakage Current Protection / Over-temperature Protection YES Over Votage Category III (AC side), II (DC side) VoE/ Course Protection YES Over Votage Category III (AC side), II (DC side) AC/DC Surge Protection YES II (Type of II (Type							
PROTECTION YES PV Reverse Polacitiy Protection YES Battert Reverse Protection YES Anti-Islanding Protection YES Output Short Protection YES Insulation Resistor Detection YES Over-current Protection / Over-temperature Protection YES Over-current Protection / Over-temperature Protection / Over-temperature Protection / YES YES Over Voltage Category III (Ac side), II (Oc side) Star (Dy Consumption Yes YES Standards YES YES <t< td=""><td></td><td></td><td></td><td></td><td>98.50</td><td></td><td></td></t<>					98.50		
EV Reverse Polarity Protection YES Batter Reverse Protection YES Anti-Islanding Protection YES Output Short Protection YES Leckage Current Protection YES Insulation Resistor Detection YES Over- current Protection / Over-temperature Protection YES Over- Current Protection / Over-temperature Protection YES Over- Voltage Category III (AC side), II (Cs side) AC/DC Surge Protection Type II / Type II AC/D Surge Protection Type II / Type II AC/D Surge Protection Type II / Type II AC/D Surge Protection Protection Standby Consumption [W] (Litile) 45 STANDAD STANDAD Stardby Surgery IEC62109-1 / IEC62109-2 / IEC 62477-1 EMC EN 61000-6-1 / EN 61000-6-3 Celtification G99 /AS4772 / ENS0549-1 / EC 0-21 / NRS 097-2-1 and so on ENVIRONMENT LIMIT IEC62109-1 / EN 62109-2 / IEC 6247-1 Impress Protection IP66 Protective Cases Class I Operating Temperature Range [**C] -20	Max. Battery Charge / Discharge Efficiency (BAT to AC) (@Ful	l Load) [%]			97.00		
Batter Reverse Protection YES Anti-islanding Protection YES Leckage Current Protection YES Issuitation Resistor Detection YES Over-current Protection / Over-temperature Protection YES Over-current Protection / Over-temperature Protection YES Over Voltage Category III (AC side), II (CC side) AC/OC Surge Protection Optional AFCI Protection Optional AFCI Protection Optional STANDARD ***** **TOTAL PROVED **** **TOTAL PROVED	PROTECTION						
Anti-islanding Protection	PV Reverse Polarity Protection				YES		
Output Short Protection YES Leakage Current Protection YES Insulation Resistor Detection / Over-temperature Protection YES Over-current Protection / Over-temperature Protection YES Over-voltage Category III (Ac side), III (Oc side) AC/DC Surge Protection Type II / Type II AFCI Protection Optional POWER CONSUMPTION 45 STANDARD IEC62109-1 / IEC62109-2 / IEC 62477-1 EMC B 161000-6-1 / EN 61000-6-2 / EN 61000-6-3 Cettifaction G99 /AS4777.2 / EN50549-1 / CEI 0-21 / NRS 097-2-1 and so on ENVIRONIENT LIMIT IP65 Ingress Protection IP65 Protective Class Class I Operating Temperature Range [PC] -25—40 (Derating at +45) Humidity [M] 0 - 95 (Non-condensing) Altitude [m] <2000	Battert Reverse Protection				YES		
Leakage Current Protection Insulation Resistor Detection YES Over-current Protection Over-temperature Protection YES Over-Voltage Category III (AC side), II (DC side) AC/DC Surge Protection Type II / Type II ACCI Protection Optional Optional POWER CONSUMPTION VES Standby Consumption [W] (Lide) IEC62109-1 / IEC62109-2 / IEC 62477-1 EMC EN 61000-6-1 / EN 61000-6-2 / EN 61000-6-3 Cettification G99 /AS4777.2 / EN50549-1 / CEI 0-21 / NRS 097-2-1 and so on ENVIRONMENT LIMIT IP65 Ingress Protection IP65 Operating Temperature Range [*C] -25+60 (Derating at +45) Humidity [%] -95 (Non-condensing) Altitude [m] <2000 Storage Temperature [*C] -40+70 Noise Emission (Typical) [dB] -30 DIMENSION AND WEIGHT Storage Temperature [*C] -40+70 Dimensions (W * H * D) [mn] 450*-527*208 Weight [kg] 99 (KH) / 27.5 (KA) Cooling Concept Non-isolated Communication Meter(Optinal), WIF, 44 (Optional), DRM, USB, CT, RS485	-				YES		
Insulation Resistor Detection VES VE	•				YES		
Over-current Protection / Over-temperature Protection YES Over Voltage Category III (AC side), III (DC side) AC/DC Surge Protection Type II / Type II AFCI Protection Optional POWER CONSUMPTION IS Standby Consumption [W] (I.dle) IS STANDARD IEC62109-1 / IEC62109-2 / IEC 62477-1 EMC EN 61000-6-1 / EN 61000-6-2 / EN 61000-6-3 Cetification G99 /AS477.2 / EN50549-1 / CEI 0-21 / NRS 097-2-1 and so on ENVIRONMENT LIMIT IP65 Ingress Protection IP65 Protective Class Class I Operating Temperature Range [°C] -25+60 (Derating at +45) Humidity [%] 0.95 (Non-condensing) Altitude [m] < 2000	9						
Over Voltage Category III (AC side), II (DC side) AC/DC Surge Protection Type II / Type II AC/D Protection Optional POWER CONSUMPTION Standby Consumption [W] (Idle) STANDARD IEC62109-1 / IEC62109-2 / IEC 62477-1 EMC EN 61000-6-1 / EN 61000-6-2 / EN 61000-6-3 Cetification G99 / AS4777.2 / ENS0549-1 / CEI 0-21 / NRS 097-2-1 and so on ENVIRONMENT LIMIT IP65 Ingress Protection IP65 Protective Class Class I Operating Temperature Range [°C] -25+80 (Derating at +45) Humidity [%] -2000 Storage Temperature [°C] -40+70 Noise Emission (Typical) [dil] 30 DIMENSION AND WEIGHT 450*527*208 Weight [kg] 29 (KH) / 27.5 (KA) Cooling Concept Non-isolated Communication Meter(Optinal), WIF, 46 (Optional), DRM, USB, CT, RS485							
AC/DC Surge Protection Type II / Ty							
AFCI Protection POWER CONSUMPTION Standby Consumption [w] (Idle) STANDARD Safety Sefety							
POWER CONSUMPTION IS Standby Consumption [w] (Lidle) <15 STANDARD IEC62109-1 / IEC62109-2 / IEC 62477-1 EMC EN 61000-6-1 / EN 61000-6-2 / EN 61000-6-3 Cetification G99 / AS4777.2 / EN50649-1 / CEI 0-21 / NRS 097-2-1 and so on ENVIRONMENT LIMIT IP65 Protective Class Class I Operating Temperature Range [°C] -25	-						
Standay Consumption [W] (Idle) <15 STANDARD Safety IEC62109-1 / IEC62109-2 / IEC 62477-1 EMC EN 61000-6-1 / EN 61000-6-2 / EN 61000-6-3 Celdification 699 / SA4772 / EN50549-1 / CEI 0-21 / NRS 097-2-1 and so on ENVIRONMENT LIMIT IP65 Protective Class Class I Operating Temperature Range [°C] -25+60 (Derating at +45) Humidity [%] 0-95 (Non-condensing) Altitude [m] 42000 Storage Temperature [°C] -40+70 Noise Emission (Typical) [dB] 30 DIMENSION AND WEIGHT 450*527*208 Weight [kg] 29 (kH) / 27.5 (kA) Cooling Concept Notaria Topology Non-isolated Communication Meter(Optinal), WFI, 46 (Optional), DRM, USB, CT, RS485					Optional		
STANDARD Safety IEC62109-1 / IEC62109-2 / IEC 62477-1 EMC EN 61000-6-1 / EN 61000-6-2 / EN 61000-6-3 Cetification G99 / AS4777.2 / EN50549-1 / CE10-21 / NRS 097-2-1 and so on ENVIRONMENT LIMIT Ingress Protection IP65 Protective Class Class I Operating Temperature Range [°C] -25+60 (Derating at +45) Humidity [%] 0 - 95 (Non-condensing) Altitude [m] < 2000					<15		
Safety IEC62109-1 / IEC62109-2 / IEC 62477-1 EMC EN 61000-6-1 / EN 61000-6-2 / EN 61000-6-3 Cetification G99 / AS4777.2 / EN50549-1 / CEI 0-21 / NRS 097-2-1 and so on ENVIRONMENT LIMIT IP65 Ingress Protection IP65 Protective Class Class I Operating Temperature Range [°C] -25							
EMC EN 61000-6-1 / EN 61000-6-2 / EN 61000-6-3 Cetification G99 / AS4777.2 / EN50549-1 / CEI 0-21 / NRS 097-2-1 and so on ENVIRONMENT LIMIT IP65 Ingress Protection IP65 Protective Class I Class I Operating Temperature Range [°C] -25+60 (Derating at +45) Humidity [%] 0 - 95 (Non-condensing) Altitude [m] < 2000 Storage Temperature [°C] -40+70 Noise Entission (Typical) [dB] < 30 DIMENSION AND WEIGHT 450*527*208 Weight [kg] 29 (kH) / 27.5 (kA) Cooling Concept Natural Topology Non-isolated Communication Meter(Optinal), WIFI, 46 (Optional), DRM, USB, CT, RS485					IFC62109-1 / IFC62109-2 / IFC 62477-1		
Cetification G99 AS4777.2 EN50549-1 CEI 0-21 NRS 097-2-1 and so on ENVIRONMENT LIMIT Ingress Protection IP65 Protective Class Class I Operating Temperature Range [°C] -25 +60 (Derating at +45) Humidity [%] 0 ~ 95 (Non-condensing) Altitude [m] < 2000 Storage Temperature [°C] -40				F		-3	
ENVIRONMENT LIMIT Ingress Protection IP65 Protective Class Class I Operating Temperature Range [°C] -25+60 (Derating at +45) Humidity [%] 0 ~ 95 (Non-condensing) Altitude [m] <2000							
Protective Class							
Operating Temperature Range [°C] -25+60 (Derating at +45) Humidity [%] 0 ~ 95 (Non-condensing) Altitude [m] <2000					IP65		
Hunidity [%] 0 ~ 95 (Non-condensing) Altitude [m] < 2000							
Altitude [m] <2000							
Storage Temperature [°C] -40+70 Noise Emission (Typical) [dB] 30 DIMENSION AND WEIGHT Dimensions (W * H * D) [mm] 450*527*208 Weight [kg] 29 (kH) / 27.5 (kA) Cooling Concept Natural Topology Non-isolated Communication Meter(Optinal), WIFI, 4G (Optional), DRM, USB, CT, RS485							
Noise Emission (Typical) [dB] 430 DIMENSION AND WEIGHT 450*527*208 Dimensions (W * H * D) [mm] 450*527*208 Weight [kg] 29 (kH) / 27.5 (kA) Cooling Concept Natural Topology Non-isolated Communication Meter(Optinal), WIFI, 4G (Optional), DRM, USB, CT, RS485							
DIMENSION AND WEIGHT Dimensions (W * H * D) [mm] 450*527*208 Weight [kg] 29 (KH) / 27.5 (KA) Cooling Concept Natural Topology Non-isolated Communication Meter(Optinal), WIFI, 4G (Optional), DRM, USB, CT, RS485							
Dimensions (W * H * D) [mm] 450*527*208 Weight [kg] 29 (KH) / 27.5 (KA) Cooling Concept Natural Topology Non-isolated Communication Meter(Optinal), WIFI, 4G (Optional), DRM, USB, CT, RS485					<3U		
Weight [kg] 29 (KH) / 27.5 (KA) Cooling Concept Natural Topology Non-isolated Communication Meter(Optinal), WIFI, 4G (Optional), DRM, USB, CT, RS485					A50*527*200		
Cooling Concept Natural Topology Non-isolated Communication Meter(Optinal), WIFI, 4G (Optional), DRM, USB, CT, RS485							
Topology Non-isolated Communication Meter(Optinal), WIFI, 4G (Optional), DRM, USB, CT, RS485							
Communication Meter(Optinal), WIFI, 4G (Optional), DRM, USB, CT, RS485							
				Meter(T, RS485	
200 Display Bucklidit 1014 Character	LCD Display				Backlight 16*4 Character		

 $^{^{\}ast}$ More technical characteristics are avaliable on demand and customized. $^{||}$ The maxium generating power of each pv string is limited to 3300 watts.