

Datasheet of AF*-THA Series

Technical Data	AF3K-THA	AF4K-THA	AF4.99K-THA	AF5K-THA	AF6K-THA	AF8K-THA	AF9.99K-THA	AF10K-THA	AF12K-THA	AF14.99K-THA	AF15K-THA	AF17K-THA
PV Input												
Max. DC Input Power (kW)	5	6	7.5	7.5	9	12	15	15	18	22.5	22.5	25.5
Max. PV Voltage (V)						1000						
Rated DC Input Voltage (V)						400						
DC Input Voltage Range (V)						150-1000						
MPPT Voltage Range (V)						150-850						
Full MPPT Range(V)						200-850						
Start-up Voltage (V)						160						
Max. DC Input Current (A)			20*2			20+32		32*2			40*2	
Max. Short Current(A)			30*2			30+48		48*2			60*2	
No. of MPPT Tracker / Strings			2/2			2/3		2/4			2/4	
Battery Port												
Battery Type						Li-ion/lead-acid						
Battery Nominal Voltage (V)	200	200	200	200	250	200	250	250	300	350	350	400
Battery Voltage Range (V)						150-600						
Max. Charge/Discharge Current (A)			30				50				60	
Max. Charge/Discharge Power (kW)	3	4	4.99	5	6	8	9.99	10	12	14.99	15	17
Charging Curve						3 Stages						
AC Grid												
Nominal AC Voltage (V)						3P+PE/3P 133/230						
Nominal AC Frequency (Hz)						50						
Max. AC Output Current (A)	10.5	13.5	17	17	21.5	27	30	30	32	40	40	48
Nominal AC Output Power (kW)	3	4	4.99	5	6	8	9.99	10	12	14.99	15	17
Max. AC Input/Output Apparent Power (kVA)	4.5 / 3.3	6 / 4.4	7.5 / 4.99	7.5 / 5.5	9 / 6.6	12 / 8.8	12 / 9.99	15 / 11	18 / 13.2	22.5 / 14.99	22.5 / 16.5	25.5 / 18.7
Power Factor						1 (-0.8-0.8) adjustable						
Current THD (%)						<3%						
AC Load Output (Back-up)												
Nominal Output Voltage (V)						3P+PE/3P 133/230						
Nominal Output Frequency (Hz)						50						
Nominal Output Current (A)	7.6	10.1	12.6	12.6	15.1	20.1	25.1	25.1	30.1	37.6	37.6	42.7
Nominal Output Power (kVA)	3	4	4.99	5	6	8	<3%	9.99	10	12	14.99	15
Switching Time (ms)						<10						
Efficiency												
Europe Efficiency	97.5%	97.5%	97.5%	97.5%	97.5%	97.5%	97.8%	97.8%	97.8%	98.0%	98.0%	98.1%
Max. Efficiency	98.0%	98.2%	98.2%	98.2%	98.3%	98.3%	98.3%	98.3%	98.3%	98.5%	98.5%	98.5%
Battery Charge/Discharge Efficiency						98.00%						
Protection												
Reverse Polarity Protection						Yes						
Over Current / Voltage Protection						Yes						
Anti-islanding Protection						Yes						
AC Short-circuit Protection						Yes						
Leakage Current Detection						Yes						
Ground Fault Monitoring						Yes						
Grid Monitoring						Yes						
Enclosure Protect Level						IP65						
Protective class						Class I						
Overvoltage category						OVC III (AC Main), OVC II (PV)						
General Data												
Topology						Transformerless						
Cooling Concept	Natural Convection					Intelligent Fan						
Relative Humidity						0-100%						
Operating Temperature Range (°C)						-25 to 60 °C						
Operating Altitude (m)						<4000						
Noise Emission (dB)						<40						
Standby Consumption (W)						<5						
Display & Communication Interfaces						LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G						