

Three-Phase Grid-Connected PV Inverter

EA5KTSI / EA8KTSI / EA10KTSI
/ EA13KTSI / EA16KTSI



Features

Profitable

- Highest efficiency recorded in the industry (max. 98.65%)
- High power density with a small footprint
- Low failure rate and quick fix to reduce power generation loss

Safe

- Fuseless design to avoid potential fire hazard caused by DC side faults
- Fanless design to avoid frequent fan failures leading to shutdown
- LVRT function, meeting global grid access requirements

Reliable

- Natural cooling; Protection rating IP 65
- Built-in AC and DC lightning protection module, all-round lightning protection
- Industrial-grade high quality components, ensuring a 25-year design life

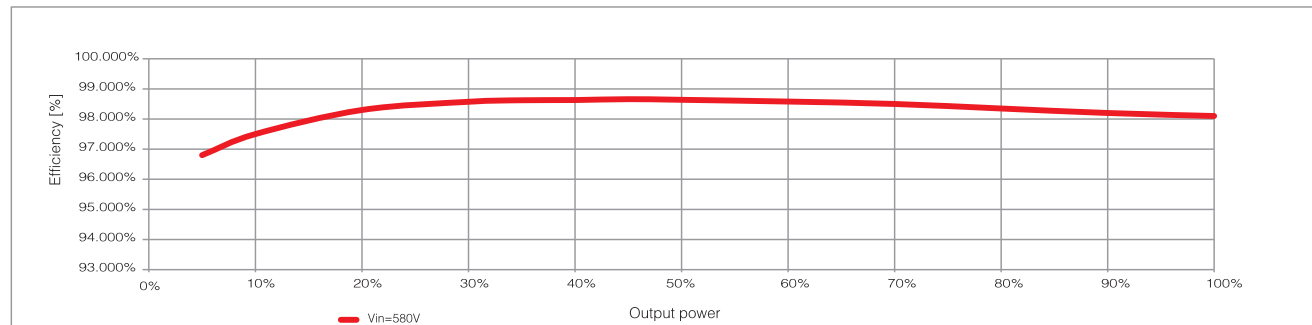
Smart Connected

- Inverter with Bluetooth communication connected to smart phone for an easy human-machine interaction and easy on-site installation and settings
- Remote maintenance and quick troubleshooting to ensure power generation

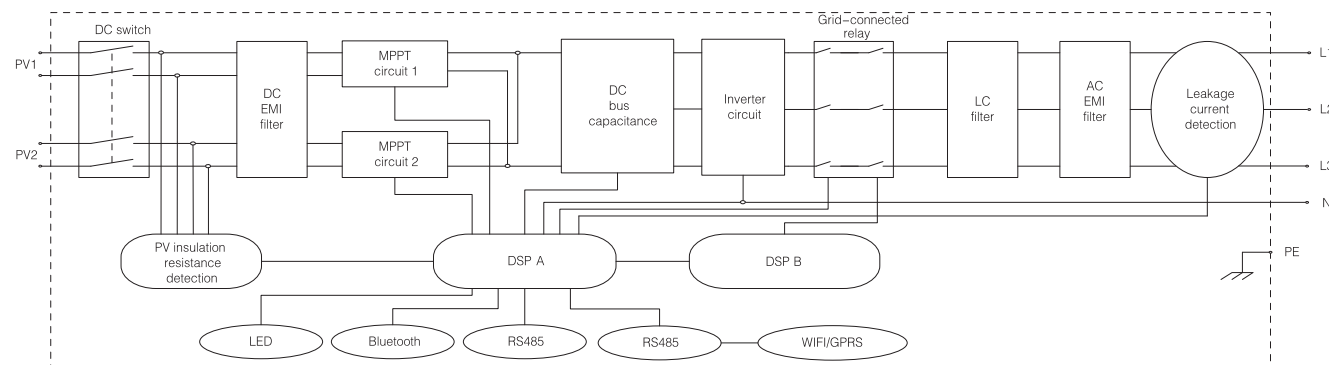
Compact & Contemporary Design

- Advanced industrial design concept, integrated die casting molding
- Aluminum alloy die casting enclosure, permanently anti-rust

Efficiency Curve



Schematic Diagram



Technical Data

MODEL	EA5KTSI	EA8KTSI	EA10KTSI	EA13KTSI	EA16KTSI
INPUT (DC)					
Max. input power	6.5 kW	10.4 kW	13 kW	16.9 kW	20.8 kW
Max. input voltage	1000 V				
Start-up voltage	180 V		250 V		
MPPT voltage range	120 – 950 V		200 – 950 V		
MPPT voltage range at full load	250 – 850 V	380 – 850 V	470 – 850 V	410 – 850 V	500 – 850 V
Max. input current	11 A / 11 A				11 A × 2 / 11 A
Max. short circuit current	12 A / 12 A				12 A × 2 / 12 A
Number of MPPTs	2				
Number of DC inputs	A:1 / B:1			A:2 / B:1	
OUTPUT (AC)					
Rated output power	5 kW	8 kW	10 kW	13 kW	16 kW
Max. active power	5 kW	8 kW	10 kW	13 kW	16 kW
Max. apparent power	5 kVA	8 kVA	10 kVA	13 kVA	16 kVA
Max. output current	7.3 A	11.6 A	14.5 A	18.9 A	23.2 A
Rated grid voltage	230 / 400 V, 3 W + N + PE				
Grid voltage range	176 – 276 V / 304 – 480 V				
Rated grid frequency	50 / 60 Hz				
Grid frequency range	45 – 55 Hz / 55 – 65 Hz				
THD	< 3% (rated power)				
Output current DC component	< 0.5% I _n				
Power factor	> 0.99 (rated power)				
Power factor adjustable	0.8 leading ~ 0.8 lagging				
EFFICIENCY					
Max. efficiency	98.65%				
European efficiency	98.2%				
PROTECTION					
DC switch	Available				
DC reverse polarity protection	Available				
Ground insulation resistance detection	Available				
Leakage current protection	Available				
Output overcurrent protection	Available				
Output overvoltage protection	Available				
Anti-islanding protection	Available				
DC surge protection	Class III lightning protection				
AC surge protection	Class III lightning protection				
PID prevention and restoration	Optional				
OTHERS					
	0 ~ 95% non-condensing				
Display	LED, Bluetooth				
Communication	RS485, Wi-Fi (optional), GPRS (optional)				
Safety Standard	NB / T 32004, IEC62109-1, IEC62109-2				
EMC standard	NB / T 32004, EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4				
Grid-connected standard	NB / T 32004, VDE0126-1-1, VDE-AR-N 4105				
Self-consumption at night	< 1 W				
Isolation	Transformerless				
IP rating	IP 65				
Operating temperature	-25°C ~ +60°C (> 45°C downgrading)				
Relative humidity	0 ~ 100% (non-condensing)				
Cooling	Natural cooling				
Altitude	4000 m (> 2000 m downgrading)				
Dimensions (W × D × H) (mm)	515 × 166 × 435				
Weight (kg)	25				

Disclaimer:

- These data in this document are tested under specified conditions. It may result in difference between actual results and these data due to some uncertain factors. The statement about this product is for reference only. It makes no representation or warranty.
- All specifications are subject to change without notice.