

Three-Level Inverter (Built-in Transformer)

PHX 100K-M/T / 250K-M/T / 250K-TF



EA100KL-M/T / EA250KL-M/T / EA250KTF PV Grid-connected Inverter adopt modular three-level SVPWM technology. They are featured with high frequency, high power density, small footprint, optional various communications and built-in transformer design. They are ideal for distributed PV grid-connected power stations.

Features

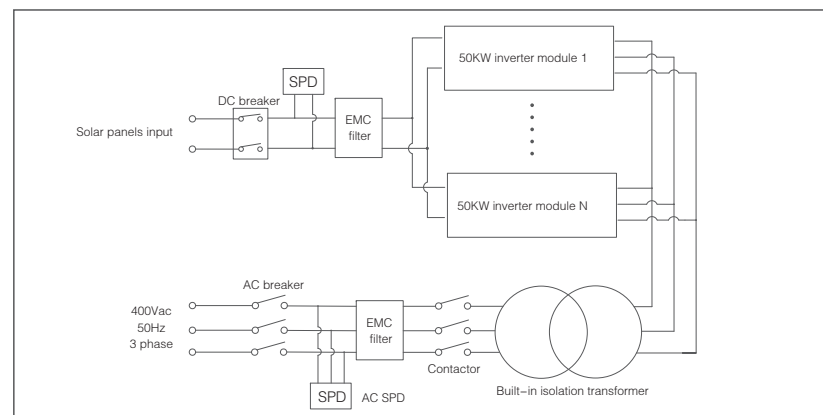
- Advanced modular three-level SVPWM technology
- Maximum efficiency up to 98.5 (w/o transformer)
- Wide MPPT range (500V ~ 850V) with effective MPPT algorithms
- Modular design, front accessible maintenance with less time (less than 10 min)
- Auto separate failed module from the system to improve reliability
- Low voltage, ZVRT (Zero voltage ride through) test
- Advanced Anti-islanding technology
- Independent air dusts design to adapt to dust environment
- Smart startup & hibernation function
- Night SVG function, responding to the grid dispatching order whole day.
- Adjustable active power, power factor range 0.9 (leading) to 0.9 (lagging).
- TUV, CE, CQC certification

Safety

Effective protection functions: overvoltage, short-circuit, islanding, overtemperature and overcurrent protection etc.

Standards complied: EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4, EN61000-3-2, EN61000-3-3, EN60164-1-1, EN55022, EN50178, EN45011

Principle diagram



100KW N = 2, 250KW N = 5

Technical Data

MODEL	PHX 100K-M/T	PHX 250K-M/T	PHX 250K-TF
DC SIDE			
Max. DC voltage	1000 Vdc		
MPPT voltage range	500 ~ 850 Vdc		
Max. DC power	110 KW	275 KW	275 KW
Max. input current	220 A	550 A	550 A
Number of MPP inputs	1	5	1
AC SIDE			
Rated output power	100 KW	250 KW	250 KW
Max. output power	110 KW	275 KW	275 KW
Max. output current	158 A	397 A	397 A
Rated grid voltage	400 Vac		
Grid voltage tolerance	340 ~ 460 Vac		
Rated grid frequency	50 Hz / 60 Hz		
Grid frequency tolerance	47 ~ 51.5 Hz / 57 ~ 61.5 Hz		
THD	< 3% (rated power)		
Power factor	0.9 (leading) ~ 0.9 (lagging)		
SYSTEM			
Max. efficiency	97%		
Europe efficiency	96.5%		
IP rating	IP 20		
Self-consumption (at night)	< 30 W		
Ambient temperature	-25°C ~ + 55°C (above 50°C derating)		
Cooling	Air cooling		
Relative humidity	0 ~ 95% non-condensing		
Altitude	6000 m (above 3000 m derating)		
DISPLAY AND COMMUNICATIONS			
Display	LCD (touch screen)		
Standard communication	RS485		
Optional communication	Ethernet / USB		
OTHERS			
Dimensions (W × D × H) (mm)	600 × 800 × 2000	1200 × 800 × 2000 800 × 800 × 2000 (transformer cabinet)	1200 × 800 × 2000 800 × 800 × 2000 (transformer cabinet)
Packaged dimensions (W × D × H) (mm)	700 × 900 × 2070	1300 × 930 × 2070 (inverter) + 900 × 920 × 2000 (transformer cabinet)	1300 × 930 × 2070 (inverter) + 900 × 920 × 2000 (transformer cabinet)
Net weight (kg)	520	470 + 770	470 + 770
Gross weight (kg)	550	500 + 800	500 + 800

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 subject to change without notice.