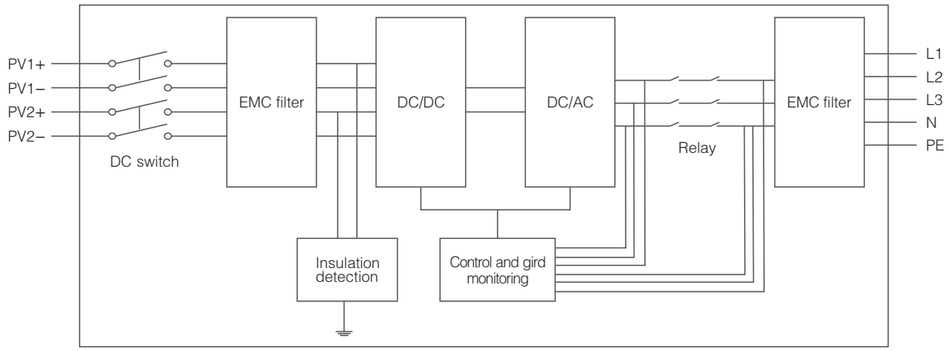
Three–phase Grid–connected PV Inverter

PHX 13K / 15K / 17K / 20K–TL

Features

- Economy, high efficiency, high reliability and long life circle
- Smaller and lighter, 20KTL weights only 45 kg
- External inductor, reducing machine temperature and extending device lifetime
- LCD screen with four buttons, easy to operate, user friendly
- Ethernet, Wi–Fi or GPRS data communication technology, one power station needs only one monitoring equipment.
- All–round remote control for users, installers, distributors and manufacturer, real–time operation status accessible, quick response against fault
- VDE–AR–N 4105 and BDEW certified, adjustable active and reactive power, with LVRT function
- Optional built–in lightning protection module, no need for external lightning protection box
- With anti–shading function, suitable to all kinds of complicated installation environment

Principle diagram



Technical Data

MODEL	PHX 13K–TL	PHX 15K–TL	PHX 17K–TL	PHX 20K–TL
INPUT (DC)				
Max. input power	13500 W	15600 W	17800 W	21200 W
Max. input voltage	1000 V	1000 V	1000 V	1000 V
Nominal DC voltage	640 V	640 V	640 V	640 V
Operating MPPT voltage range	250 ~ 800 V	250 ~ 800 V	250 ~ 850 V	250 ~ 850 V
Full–load MPPT voltage range	400 ~ 800 V	400 ~ 800 V	440 ~ 850 V	480 ~ 850 V
Starting voltage	300 V	300 V	300 V	300 V
Turn–off voltage	250 V	250 V	250 V	250 V
Max. input current (A/B)	22 A / 11 A	22 A / 11 A	22 A / 22 A	22 A / 22 A
Max. short–circuit current of each MPPT	25 A / 15 A	25 A / 15 A	25 A / 25 A	25 A / 25 A
Number of MPP trackers	2	2	2	2
Number of DC connection	A:3 / B:3	A:3 / B:3	A:3 / B:3	A:3 / B:3
DC connection type	MC4 connector	MC4 connector	MC4 connector	MC4 connector
OUTPUT (AC)				
Max. output power	13000 VA	15000 VA	17000 VA	19200 VA
Rated output power	13000 W	15000 W	17000 W	19200 W
Rated grid voltage	3 / N / PE; 220 / 380 V 3 / N / PE; 230 / 400 V 3 / N / PE; 240 / 415 V			
Rated grid frequency	50 Hz / 60 Hz			
Max. output current	20.0 A	23.0 A	26.0 A	29.0 A
Grid voltage range	185 ~ 276 V			
Grid frequency range	45 ~ 55 Hz / 55 ~ 65 Hz			
Power factor	0.9i…1…0.9c			
THD	< 2%			
Feed in starting power	60 W			
Self–consumption (at night)	< 1 W			
Standby consumption	< 12 W			
AC connection type	Plug–in connector			
EFFICIENCY				
Max. efficiency	98.0%	98.0%	98.1%	98.2%
Europe efficiency	97.5%	97.5%	97.6%	97.8%
MPPT efficiency	99.9%	99.9%	99.9%	99.9%
PROTECTIONS				
DC insulation monitoring	Yes			
DC switch	Optional			
Residual current monitoring unit (RCMU)	Integrated			
Grid monitoring with anti–islanding	Yes			
Protection class	I (according to IEC 62103)			
Overvoltage category	PV II / Mains III (according to IEC 62109–1)			
REFERENCE STANDARD				
Safety standard	EN 62109, AS / NZS 3100			
EMC standard	EN 61000–6–1, EN 61000–6–2, EN 61000–6–3, EN 61000–6–4, EN 61000–3–11, EN 61000–3–12			
Grid standard	VDE–AR–N–4105, VDE 0126–1–1, PEA, C10/11, G59/3, AS4777, CEI0–21			
GENERAL DATA				
Data communication interfaces	RS485 (Wi–Fi, GPRS optional)			
Computer communication	RS485 (USB)			
Display	TFT graphic display			
Isolation type	Transformerless			
Cooling	Natural cooling			
Noise Level	< 45 dB			
Operating temperature	– 25°C ~ + 60°C (> 45°C derating)			
Relative humidity	0 ~ 98% non–condensing			
Max. altitude	2000 m			
IP rating	IP 65 (according to IEC 60529)			
Installation method	Wall–mounted			
Dimensions (W × D × H) (mm)	575 × 248 × 650			
Packaged dimensions (W × D × H) (mm)	720 × 384 × 750			
Net weight (kg)	44.5	44.5	45	45
Gross weight (kg)	52	52	52.5	52.5

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.