KACO new energy.

Data sheet

Powador
XP100-HV
XP200-HV
XP250-HV

Extremely powerful. Extremely flexible.

The central inverters Powador XP100-HV to XP250-HV.

The central inverters of the Powador XP series are the first choice when it comes to usability and return on investment. State-of-the-art, DSP-based technology offers highest performance, reliability and efficiency. A digital interface enables user-friendly operation, maintainability and highly advanced monitoring and communication.

The unique control of power electronics clearly increases the switching efficiency of the power transistors: Depending on the input power that is currently present, one of several pulse-width modulation methods is used. This means higher levels of efficiency and better yields.

The Powador XP series guarantees highest reliability: The Powador XP200-HV and XP250-HV feature a secondary backup power supply for the control board. In addition, all Powador XP inverters are equipped with a highly efficient cooling system for critical components. The fans are monitored and operated based on load and ambient temperature.

The devices excel with a powerful, user-friendly digital interface. The "all-inclusive" concept allows convenient operation and monitoring without requiring any additional equipment. A clearly structured, large TFT LCD color touchscreen shows detailed operating data in several languages.

You can also monitor your plant via the internet. This feature allows permanent monitoring of all critical components. The error tracing function reports potential error statuses of the units immediately and sends diagrams that guarantee rapid localisation of the source of the error.

The Powador XP central inverters meet global standards – with just the push of a button the parameters can be adjusted to meet local rules and regulations. You can also select from a variety of menu languages independent of the country of installation. In addition, the central inverters Powador XP100-HV to XP250-HV come with a transformer and are ready for immediate use.

All Powador XP central inverters conform to the German Medium and Low Voltage Directives.

Technical data

Powador XP100-HV | XP200-HV | XP250-HV

Electrical data	XP100-HV	XP200-HV	XP250-HV
Input variables			
Max. recommended PV generator power	120 kW	240 kW	300 kW
MPP range	450 V … 830 V	450 V … 830 V	450 V … 830 V
No-load voltage	1 000 V*	1 000 V*	1 000 V*
Max. input current	245 A	467 A	611 A
Ripple voltage	< 3 %	< 3 %	< 3 %
Ripple current	< 4 %	< 4 %	< 4 %
Output variables			
Rated output	100 kVA	200 kVA	250 kVA
Supply voltage	400 V (+/- 10 %)	400 V (+/- 10 %)	400 V (+/- 10 %)
Rated frequency	50 Hz / 60 Hz	50 Hz / 60 Hz	50 Hz / 60 Hz
Rated current	153 A	304 A	380 A
cos phi	0.80 inductive ... 0.80 capacitive	0.80 inductive ... 0.80 capacitive	0.80 inductive ... 0.80 capacitive
Distortion factor	< 3 % at rated output power	< 3 % at rated output power	< 3 % at rated output power
General electrical data			
Max. efficiency	97.1 %	97.4 %	97.4 %
European efficiency	96.5 %	97.0 %	96.9 %
Consumption	< 1 % of rated output power	< 1 % of rated output power	< 1 % of rated output power
Standby consumption	< 40 W	< 100 W	< 100 W
Auxiliary power supply	230 V	230 V	230 V
Grid monitoring	acc. to local requirements	acc. to local requirements	acc. to local requirements
Mechanical data			
Display	TFT LCD Touchscreen	TFT LCD Touchscreen	TFT LCD Touchscreen
Interfaces	RS485 / Ethernet / USB 4 x analog input 1 x digital input 1 x S0 input 1 x digital output 1 x S0 output SD card	RS485 / Ethernet / USB 4 x analog input 1 x digital input 1 x S0 input 1 x digital output 1 x S0 output SD card	RS485 / Ethernet / USB 4 x analog input 1 x digital input 1 x S0 input 1 x digital output 1 x S0 output SD card
Ambient temperature	-20 °C … +50 °C full rated power, no derating	-20 °C … +50 °C full rated power, no derating	-20 °C … +50 °C full rated power, no derating
Cooling	fan (max. 2 420 m³/h)	fan (max. 5 240 m³/h)	fan (max. 5 240 m³/h)
Protection class	IP21	IP21	IP21
Noise emission	< 70 dB (A)	< 70 dB (A)	< 70 dB (A)
EMC	acc. to EN 61000-6-2 / EN 61000-6-4	acc. to EN 61000-6-2 / EN 61000-6-4	acc. to EN 61000-6-2 / EN 61000-6-4
CE-conformity	yes	yes	yes
H x W x D	2 120 x 1 200 x 920 mm	2 120 x 2 400 x 870 mm	2 120 x 2 400 x 870 mm
Weight	1 150 kg	1 920 kg	1950 kg

Conform to the country-specific standards and regulations according to what country version has been set.
* To protect the hardware, the inverter starts up only at voltages < 950 V

Powador
XP100-HV | XP200-HV
XP250-HV

- Ready for immediate use due to integrated transformer
- Load-adaptive pulse-width modulation
- Continuous, remote monitoring
- Conforms to the German Medium and Low Voltage Directives

www.kaco-newenergy.de

Your retailer

EN 5000297-03-120601

The text and figures reflect the current technical state at the time of printing. Subject to technical changes. Errors and omissions excepted.