KACO new energy.

Data sheet

Powador
XP200-HV TL
XP250-HV TL
XP350-HV TL
XP500-HV TL
XP550-HV TL NEW

Extremely powerful. Extremely flexible. Transformerless technology.

The central inverters Powador XP200-HV TL to XP550-HV TL.

The central inverters Powador XP200-HV TL to XP550-HV TL are the transformerless units within the Powador XP series. 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 due to the use of a secondary backup power supply for the control board, and 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. All Powador XP central inverters conform to the German Medium and Low Voltage Directives.

Technical data

Powador XP200-HV TL | XP250-HV TL | XP350-HV TL | XP500-HV TL | XP550-HV TL

Electrical data	XP200-HV TL	XP250-HV TL
Input variables		
Max. recommended PV generator power	240 kW	300 kW
MPP range	450 V … 830 V	450 V … 830 V
No-load voltage	1 000 V*	1 000 V*
Max. input current	467 A	611 A
Ripple voltage	< 3 %	< 3 %
Ripple current	< 4 %	< 4 %
Output variables		
Rated output	200 kVA	250 kVA
Voltage to external transformer	3 x 290 V (+/- 10 %)	3 x 290 V (+/- 10 %)
Rated frequency	50 Hz / 60 Hz	50 Hz / 60 Hz
Rated current	398 A	498 A
cos phi	0.80 inductive ... 0.80 capacitive	0.80 inductive ... 0.80 capacitive
Distortion factor	< 3 % at rated output power	< 3 % at rated output power
General electrical data		
Max. efficiency	98.2 %	98.1 %
European efficiency	97.8 %	97.8 %
Consumption	< 1 % of rated output power	< 1 % of rated output power
Standby consumption	< 100 W	< 100 W
Auxiliary power supply	230 V	230 V
Grid monitoring	acc. to local requirement	acc. to local requirement
Mechanical data		
Display	TFT LCD Touchscreen	TFT LCD Touchscreen
Interfaces	2 x 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	2 x 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
Cooling	fan (max. 4 040 m³/h)	fan (max. 4 040 m³/h)
Protection class	IP21	IP21
Noise emission	< 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
CE-conformity	yes	yes
H x W x D	2 120 x 2 400 x 870 mm	2 120 x 2 400 x 870 mm
Weight	1 170 kg	1 370 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

XP350-HV TL	XP500-HV TL	XP550-HV TL NEW
420 kW	600 kW	660 kW
450 V … 830 V	550 V … 830 V	550 V … 830 V
1 000 V*	1 100 V**	1 100 V**
856 A	1 091 A	1 200 A
< 3 %	< 3 %	< 3 %
< 4 %	< 4 %	< 4 %
350 kVA	500 kVA	550 kVA
3 x 290 V (+/- 10 %)	3 x 370 V (+/- 10 %)	3 x 370 V (+/- 10 %)
50 Hz / 60 Hz	50 Hz / 60 Hz	50 Hz / 60 Hz
697 A	780 A	858 A
0.80 inductive ... 0.80 capacitive	0.80 inductive ... 0.80 capacitive	0.80 inductive ... 0.80 capacitive
< 3 % at rated output power	< 3 % at rated output power	< 3 % at rated output power
98.3 %	98.5 %	98.5 %
98.0 %	98.2 %	98.2 %
< 1 % of rated output power	< 1 650 W	< 1 650 W
< 100 W	< 110 W	< 110 W
230 V	230 V	230 V
acc. to local requirement	acc. to local requirement	acc. to local requirement
TFT LCD Touchscreen	TFT LCD Touchscreen	TFT LCD Touchscreen
2 x 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	2 x 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	2 x 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
-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
fan (max. 5 460 m³/h)	fan (max. 6 660 m³/h)	fan (max. 6 660 m³/h)
IP21	IP21	IP21
< 70 dB (A)	< 70 dB (A)	< 70 dB (A)
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
yes	yes	yes
2 120 x 2 400 x 870 mm	2 120 x 2 400 x 870 mm	2 120 x 2 400 x 870 mm
1 430 kg	1 656 kg	1 656 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
** To protect the hardware, the inverter starts up only at voltages < 1000 V

Powador
XP200-HV TL | XP250-HV TL
XP350-HV TL | XP500-HV TL
XP550-HV TL

- Maximum flexibility due to transformerless design
- Load-adaptive pulse-width modulation
- Continuous, remote monitoring
- Conforms to the German Medium and Low Voltage Directives

www.kaco-newenergy.de

EN 5000302-04-130307

Your retailer