

K A C O



new energy.

Data sheet

Powador

XP500-HV TL

outdoor

XP550-HV TL

outdoor



High output. High reliability. High protection.

The central inverters Powador XP500-HV TL outdoor and XP550-HV TL outdoor.

The Powador XP500-HV TL outdoor and the Powador XP550-HV TL outdoor have been especially conceived for outdoor use. With the protection class IP54 they do not require a separate enclosed room for installation. This means that both units offer an alternative to central inverter stations depending on the project requirements. The latest signal-processing technology offers maximum performance, efficiency and reliability. The fully digital controller makes operation and maintenance user-friendly and offers a multitude of options for monitoring and communications.

Our unique power electronics control increases the switching efficiency of the power transistors: Depending on the

input power currently present, one of several pulse-width modulation methods is used. This means higher levels of efficiency and better yields. The Powador XP series also offers maximum reliability: the internal power supply of the controller is designed redundantly and an extremely powerful cooling system protects sensitive components. The speed of the cooling fan is variably controlled depending on the load and ambient temperature.

The Powador XP500-HV TL outdoor and XP550-HV TL outdoor feature a powerful Human Machine Interface (HMI). It provides for local data logging via SD card as well as remote control and online monitoring via RS485 generic or Modbus TCP/IP protocol. The operation of all critical

components is continuously monitored and potential faults are reported immediately.

The Powador XP is an inverter for the world: country-specific settings can be activated at the press of a button.

Technical data

Powador XP500-HV TL outdoor | Powador XP550-HV TL outdoor

Electrical data	XP500-HV TL OD	XP550-HV TL OD
DC input		
MPP range	550 V ... 830 V	550 V ... 830 V
Operating range	550 V ... 1000 V	550 V ... 1000 V
No-load voltage	1 100 V ¹⁾	1 100 V ¹⁾
Max. input current	1 091 A	1 200 A
Number of DC inputs	6	6
AC output		
Rated output	500 kVA	550 kVA
Voltage to external transformer	3 x 370 V (+/- 10%)	3 x 370 V (+/- 10%)
Rated frequency	50 Hz / 60 Hz	50 Hz / 60 Hz
Rated current	780 A	858 A
cos phi	0 inductive ... 0 capacitive (adjustable)	0 inductive ... 0 capacitive (adjustable)
General electrical data		
Max. efficiency	98.7 %	98.7 %
European efficiency	98.3 %	98.3 %
Consumption	< 1 650 W	< 1 650 W
Standby consumption	< 110 W	< 110 W
Mechanical data		
Interfaces	2 x RS485 / Ethernet / Wi-Fi 1 x digital input / -output SD card	22 x RS485 / Ethernet / Wi-Fi 1 x digital input / -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. 6 940 m ³ /h)	fan (max. 6 940 m ³ /h)
Protection class	IP54	IP54
Noise emission	< 70 dB(A) ²⁾	< 70 dB(A) ²⁾
H x W x D	2 125 x 2 600 x 860 mm	2 125 x 2 600 x 860 mm
Weight	2 200 kg	2 200 kg
Extras		
Ground fault detection	yes	yes
Protection against moisture	integrated hygrostat and heating combination	
Emergency stop	yes	yes
Overvoltage protection DC / AC / Ethernet	yes	yes
Certifications		
Safety	IEC 62109-1/IEC 62109-2/EN 61000-6-2/EN 61000-6-4/EN 61000-3-3/EN 61000-3-12	
Grid compliance	BDEW, ... for more see homepage/download area	

Conform to the country-specific standards and regulations according to what country version has been set.
¹⁾ To protect the hardware, the inverter starts up only at voltages < 1000 V. ²⁾ Measured at a 10 m distance.



Powador
XP500-HV TL outdoor
XP550-HV TL outdoor

Highest efficiency

Maximum power density

Maximum flexibility due to
transformerless design

Load-adaptive pulse-width
modulation

Continuous, remote monitoring

Designed for outdoor use

Your retailer
