

KACO new energy

Powador 5000xi

Less is More: No Transformer, Lots of Power.

The Powador 2500xi – 5000xi transformerless string inverters.

Inverters without transformers offer a higher degree of efficiency. And KACO specialises in transformerless inverters.

This means: All of our single-phase units in the 00xi series operate with a full bridge without a step-up converter. According to the principle of pulse width modulation, four IGBT power switches emulate the sinusoidal voltage curve of the public power grid. This is also known as an H4 bridge and self-commutated units. However, the input voltage must be greater than the peak line voltage for it to be used. All KACO transformerless inverters are purposely equipped with a wide MPP range of 350 V to 600 V. The

no-load voltage is 800 V, which simplifies the work of installers as the installation is laid out. This is also true of the integrated DC disconnector. Screw terminals make connecting to the grid easy. That makes it possible for you to connect installations with several inverters to the grid without additional measures.

All Powador inverters with an output up to and including 8 kW operate with purely passive, silent convection cooling. The heat that is lost is, to a great degree, dissipated via the heat sink on the rear of the unit. The rest of the heat is radiated from the surface of the aluminium housing. No fans, no problems, long life.

Highlights

- Integrated DC disconnector
- Integrated AC/DC-sensitive residual current protection
- Integrated potential-free fault signal
- S0 interface for control of large displays
- Highest degree of efficiency due to purely transformerless technology
- Pure convection cooling
- Easy installation due to mounting plate and housing doors
- MPP controller



Powador 5000xi

PV max. generator output	Electrical data	5000xi
MPP range 350 V 600 V No-load voltage 800 V Max. input current 18.0 A Number of strings 3 Number of MPP controllers 1 Inverse polarity protection integrated Overload protection integrated Output variables Rated output 5500 W Max. output 6000 W Supply voltage acc. to local requirements Safety cut-out acc. to local requirements Rated current 23.9 A Max. current 26.0 A Rated frequency 50 Hz / 60 Hz Cos phi ≈ 1 Number of grid phases 1 Distortion factor for rated output 43 % General electrical data Max. efficiency 96.3 % European efficiency 95.3 % Standby consumption 11 W Night consumption 0 W Min. grid feed approx. 35 W Switching plan self-inverted, transformerless Network monitoring acc. to local requirements Mechanical data Display LCD 2 x 16 characters Control units 2 buttons for display control Interfaces RS232 / RS485, S0 Fault signalling relay potential-free NOC max. 30 V / 1 A PCB terminals within the device (max. cross section: 10 mm²) Cable supply via cable connections (DC-connection M132) Ambient temperature -20 ° C +60 ° C * Temperature monitoring -25 ° C temperature-dependent impedance matching > 85 ° C cut-out Temperature monitoring -25 ° C temperature-dependent impedance matching > 85 ° C cut-out Temperature monitoring -25 ° C temperature-dependent impedance matching > 85 ° C cut-out Temperature mission -25 ° C temperature-dependent impedance matching -25 ° C cut-out Temperature mission -25 ° C temperature-dependent impedance matching -25 ° C cut-out Temperature mission -25 ° C temperature-dependent impedance matching -25 ° C cut-out Temperature mission -25 ° C temperature-dependent impedance matching -25 ° C cut-out Temperature mission -25 ° C temperature-dependent impedance matching -25 ° C cut-out Temperature mission -25 ° C temperature-dependent impedance matching -25 ° C cut-out Temperature mission -25 ° C temperature-dependent impedance matching -25 ° C cut-out Temperature mission -25 ° C temperature-dependent impedance matching -25 ° C temperature-dependent impedance matching -25 ° C te	Input variables	
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Night consumption Min. grid feed approx. 35 W Switching plan Self-inverted, transformerless acc. to local requirements Mechanical data Display LCD 2 x 16 characters Control units Interfaces RS232 / RS485, S0 Fault signalling relay Connections PCB terminals within the device (max. cross section: 10 mm²) Cable supply via cable connections (DC-connection M16, AC-connection M32) Ambient temperature -20 °C +60 °C * Temperature monitoring Cooling free convection / no fan Protection class PC-switch Aluminium	European efficiency	95.3 %
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Switching plan self-inverted, transformerless Acc. to local requirements Mechanical data Display LCD 2 x 16 characters Control units 2 buttons for display control Interfaces RS232 / RS485, S0 Fault signalling relay potential-free NOC max. 30 V / 1 A Connections PCB terminals within the device (max. cross section: 10 mm²) Cable supply via cable connections (DC-connection M16, AC-connection M32) Ambient temperature -20 °C +60 °C * Temperature monitoring reconvection / no fan Protection class IP54 Noise emission Consumption of the convection of the	Night consumption	0 W
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Display Control units 2 buttons for display control RS232 / RS485, S0 Fault signalling relay Connections PCB terminals within the device (max. cross section: 10 mm²) Cable supply via cable connections (DC-connection M16, AC-connection M32) Ambient temperature -20 °C +60 °C * Temperature monitoring > 75 °C temperature-dependent impedance matching > 85 °C cut-out Cooling Protection class IP54 Noise emission Casing Aluminium	Network monitoring	acc. to local requirements
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Fault signalling relay Connections PCB terminals within the device (max. cross section: 10 mm²) Cable supply via cable connections (DC-connection M16, AC-connection M32) Ambient temperature -20 °C +60 °C * 75 °C temperature-dependent impedance matching > 85 °C cut-out Free convection / no fan Protection class Protection class IP54 Noise emission Casing Aluminium	Control units	2 buttons for display control
PCB terminals within the device (max. cross section: 10 mm²) Cable supply via cable connections (DC-connection M16, AC-connection M32) Ambient temperature -20 °C +60 °C * > 75 °C temperature-dependent impedance matching > 85 °C cut-out Cooling free convection / no fan Protection class IP54 Noise emission Casing Aluminium	Interfaces	RS232 / RS485, S0
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Cable supply via cable connections (DC-connection M16, AC-connection M32) Ambient temperature -20 °C +60 °C * > 75 °C temperature-dependent impedance matching > 85 °C cut-out Cooling Free convection / no fan Protection class IP54 Noise emission Cosing Aluminium	Connections	PCB terminals within the device
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Temperature monitoring > 75 °C temperature-dependent impedance matching > 85 °C cut-out		
> 85 °C cut-out free convection / no fan Protection class IP54 Noise emission C-switch Casing Aluminium	Ambient temperature	-20 °C +60 °C *
Protection class IP54 Noise emission < 35 dB (A) (noiseless) DC-switch integrated Casing Aluminium	Temperature monitoring	
Noise emission < 35 dB (A) (noiseless) DC-switch integrated Casing Aluminium	Cooling	free convection / no fan
DC-switch integrated Casing Aluminium	Protection class	IP54
Casing Aluminium	Noise emission	< 35 dB (A) (noiseless)
	DC-switch	integrated
H x W x D 600 x 340 x 220 mm	Casing	Aluminium
11 A VV A D 000 A 2-70 A 2-20 HIIII	H x W x D	600 x 340 x 220 mm

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

KACO new energy.

Your retailer

30 kg

Weight