



Data sheet
blueplanet
50.0TL3

Up with economy, down with costs.

The transformerless, three-phase inverter blueplanet 50.0 TL3.

Save on costs, not on quality: designed to achieve maximum economic efficiency, the blueplanet 50.0 TL3 packs the further developed configuration of the proven Powador 60.0 TL3 into a highly compact, wall-mounted format, and still only weighs 73 kg.

The strengths of the device are revealed in uniformly designed solar power stations, such as those in open spaces and industrial facilities, which are geared towards maximum economic efficiency and have an uncomplicated design.

The blueplanet 50.0 TL3 is easy to transport, saves on storage costs and can be

conveniently mounted and removed. The high system voltage of 1100 V allows for

- longer strings
- more flexibility in DC design
- a higher level of safety when used in colder climate zones

The AC side can be connected to larger cable cross sections of up to 95 mm², meaning reduced cabling loss and there is no need for AC sub-distribution.

As is customary of KACO new energy, there is also the option of an integrated string collector with surge protection in order to keep wiring costs and efforts to a minimum.

All that comes packed into a housing designed for outdoor use. Furthermore, an effective cooling system with vertical ventilation reliably protects the internal components from high temperatures.

Available in Q1/2016.



blueplanet 50.0TL3

Outdoor housing

Mounting by means of a
mounting plate

1100 V system voltage

Cost-saving DC input configurations
available

Large cable cross-sections on the AC
side for reduced cabling loss and less
installation work

Electrical data	50.0 TL3
DC input	
MPP range@Pnom	580 V ¹⁾ ... 900 V
Operating range	580 V ¹⁾ ... 1050 V
Min. DC voltage/start voltage	570 V / 670 V
No-load voltage	1100 V
Max. input current	90 A
Number of MPP trackers	1
Number of strings	1 / 10 (integrated string combiner)
AC output	
Rated output (@230V / 220V)	50000 VA
Line voltage	400 V / 230 V; 380 V / 220 V; 415 V / 240 V (3 / N / PE or 3 / PEN)
Rated current	3 x 72,4 A @ 230 V
Max. current	3 x 75,8 A
Rated frequency	50 Hz / 60 Hz
cos phi	0.30 inductive ... 0.30 capacitive
Number of grid phases	3
General electrical data	
Max. efficiency	98.3 % (preliminary)
European efficiency	98.0 % (preliminary)
Standby consumption	1.5 W
Topology	transformerless
Mechanical data	
Display	graphical display + LEDs
Control units	4-way navigation + 2 buttons
Interfaces	2 x Ethernet, USB, RS485
Fault signalling relay	potential-free NOC max. DC 30 V / 1 A
Connections	AC: 95 mm ² ALU sectors DC connection 1 string: max. 150 mm ² cable plug DC connection 10 strings: DC plugs (SUNCLIX)
Ambient temperature	-20 °C ... +60 °C ²⁾
Cooling	forced convection / speed controlled fan
Protection class	IP65
Noise emission	<69 db(A)
H x W x D	760 x 500 x 425 mm
Weight	73 kg
Certifications	
Safety	IEC 62109-1/-2, EN 61000-6-1/-2/-3, EN 61000-3-11/-12
Grid compliance	overview: see homepage/download area
Versions	
B	1 string input / DC switch
M	1 string input / DC switch AC SPD base / DC SPD base
XL	10 string inputs / DC switch / DC plus string fuses/ Type 1+2 DC surge protection / AC SPD base

Conforms to the country-specific standards and regulations according to the country version that has been set.
¹⁾ 570V@380V/220V; 600V@415V/240V ²⁾ Power derating at high ambient temperatures.

Your retailer

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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.
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