

K A C O



new energy.

All-in-one solutions for decentralised solar power plants.

With the new blueplanet 50.0 TL3 INT inverter.



Up with economy, down with costs: New blueplanet 50.0 TL3 INT.

The compact, wall-mounted 50 kVA inverter weighs in at just 71 kilograms, is easily transported and is easy to hang up and take down. On the AC side, the connection cross-section has been enlarged to 95 mm² so that you can connect either commonplace copper cables or the more cost-effective, easier to lay aluminium sector cables. At any rate, the energy transfer is optimised ensuring that the extraordinary European efficiency level of over 98% asserts itself all the way to the grid.

The inverters come in three versions and are specifically geared towards your respective cost strategy:

- The Basic version offers you everything you need if you are installing string collectors and overvoltage protection externally. There are no double costs in store for you.
- Rely on the M version if you intend to use external string collectors. Sockets for the DC and the AC side plug-and-play combined arrestors are already fitted.

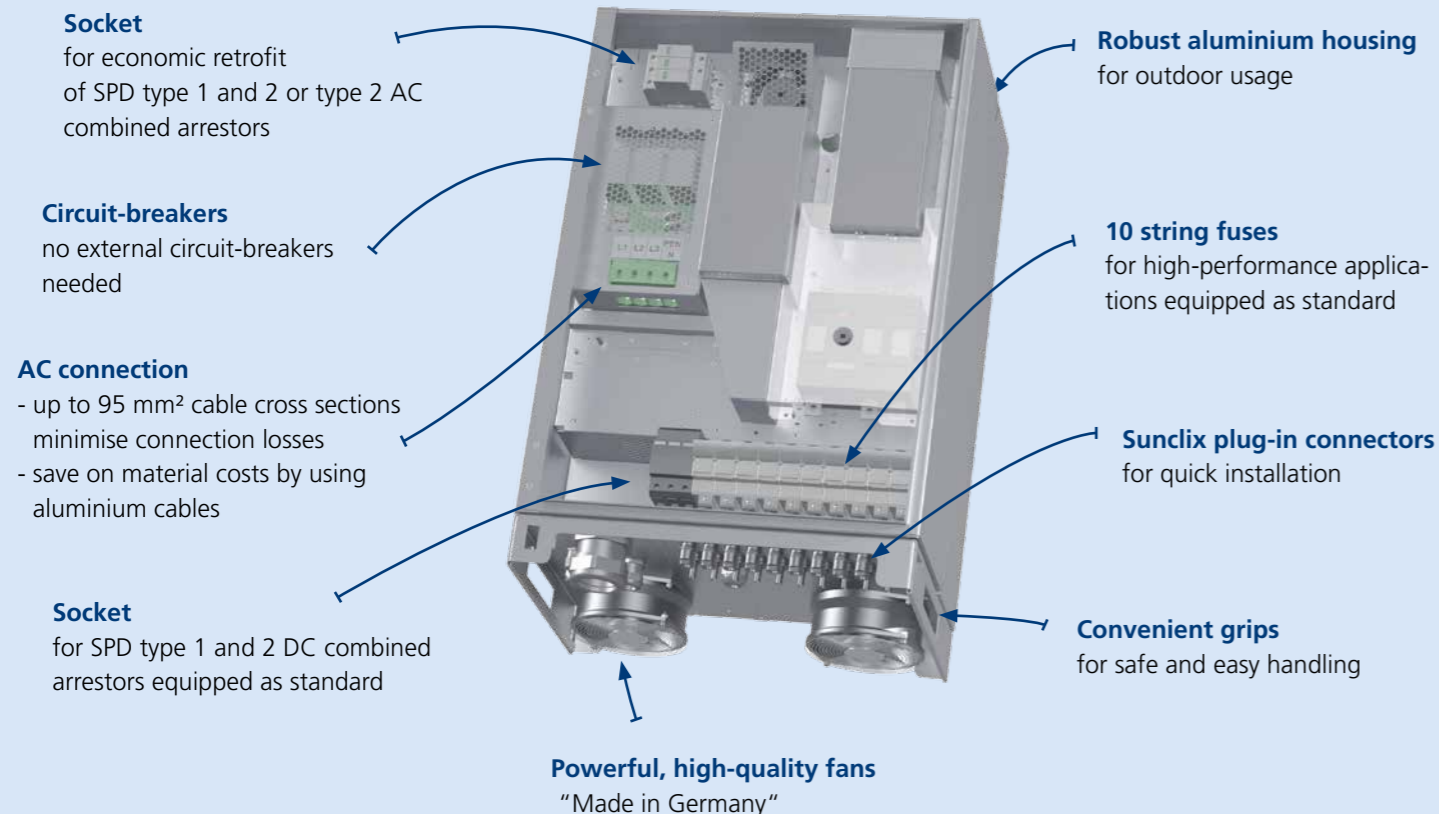
- The XL version comes fitted with 10 string fuses and includes the DC side type 1 and 2 combined arrestor, as well as the socket for the AC side plug-and-play combined arrestor.

The DC-switch is of course preinstalled in all versions. The DC cabling is especially easy in the XL version thanks to the Phoenix Contact Sunclix plug-in connectors.

Optimise your TCO with these additional features:

- Wide MPP range from 580 V to 900 V for longer strings
- Input voltage up to 1,100 V for flexibility and safety in the DC design
- Adjustable cos phi from 0.3 ind. to 0.3 cap. for special reactive power requirements
- Up to 40% inverter oversizing possible
- IP65 aluminium housing for outdoor installation and usage
- External coupler circuit-breakers unnecessary if used with Powador-protect

Profitability and reliability that you can see: Inside the blueplanet 50.0 TL3 INT XL.



Efficient planning, reliable performance: All-in-one solutions with the blueplanet 50.0 TL3 INT.

Our perfectly harmonised components stand for lean planning, highest availability and low maintenance costs in solar power plants of 1 MW and above. The packages include the blueplanet 50.0 TL3 INT inverter, AC and DC combiners, as well as the compact transformer station with low-loss transformer, switchgear unit and low voltage distribution. We can also provide you with customised offers for monitoring and power plant control.

The blueplanet 50.0 TL3 INT combined with Powador-protect also provides you with a uniquely economic solution for implementing grid and system protection: no external circuit-breaker couplers are needed, meaning that material, as well as installation and operating costs are drastically reduced.



Technical description: 2 MVA solution.

Inverters	40 x blueplanet 50.0 TL3 INT installed in PV park Nominal power: 50 kVA MPPT range: 580 V - 900 V Max. AC current (I _{max}): 3 x 72.4 A Max. DC open circuit voltage V _{oc} / Max. DC current (I _{max}): 1100 V / 90 A
DC combiner, internal XL version	Input: 10 x SUNCLIX DC plug-in connectors 6 mm ² (+) / 10 x spring-type terminal 6 mm ² (-) / 1 x DC SPD type 1+2 / PV fuses 1100V DC (15 A) included
Generator junction box, external Mini-Argus B-DE-BP50	Max. rated voltage 1100V Max. current rating: 100 A 10 x fuse holder 12 A (positive pole) 10 x spring-type terminal up to 10 mm ² (negative pole)
Low voltage sub-distribution	Low voltage sub-distribution for connecting 5 inverters Rated voltage: 400 V _{AC} Max. rated current: 500 A _{AC} 3 - 5 x NH00 fuse strip holder 100 A output inverter 1 x NH00 fuse strip holder 63 A output overvoltage protection 1 x type II overvoltage protection
Compact transformer station	
Low voltage distribution panel	Rated voltage: 400 V Rated current: 2 900 A Line fuse: 1 x circuit-breaker 3 200 A Outputs: 8 x NH03 fuse strip holder 500 A Overvoltage protection type II
Medium voltage switchgear	Gas insulated SIEMENS switchgear unit type 8DJH-24 RRT
Medium voltage transformer	Efficient, environmental-friendly oil transformer corresponding to Ecodesign Directive Rated voltage: 20 kV / 0.4 kV Nominal power: 2 000 kVA
Station housing (L x W x H) mm	Concrete (3 550 x 2 800 x 2 780) / steel (3 000 x 2 300 x 2 640)

Expert knowledge, smooth support, reliable service.

From initial consulting to commissioning with KACO new energy you always have a team of experts at your sites to help you achieve the best configuration and highest yields with reliable power plant solutions. KACO new energy is the right partner to make solar power work for you. The

KACO group has been serving world-wide power electronics markets with "Made in Germany" technology for over 100 years. Today, the company is one of the most trusted suppliers in the PV business and has an installed base of more than 600.000 inverters.

