

**K A C O**

new energy.

Data sheet

blueplanet  
10.0 TL3

## Small size, light weight, great features, best value!

KACO new energy is pleased to introduce our updated small three phase inverter for commercial projects. This updated inverter offers the convenience of all-in-one features like an integrated AFCI detector, multiple MPPT channels, AC and DC over-current protection, and an AC and DC disconnection means with lock-out-tag safety; representing a range of installer time saving features never before seen from a leading global inverter manufacturer.

Speed is the key to reducing installation time and labor cost. This new line of inverters uses advanced, lightweight materials and improved power density to decrease your installation time by allowing for simple handling procedures in the field and reducing the amount of additional equipment that must be installed near the inverter.

All-in-one communications is now a standard feature from KACO new energy. The blueplanet 10.0 TL3 includes SunSpec compliant ModBus TCP interfaces for 3rd party monitoring as well as support for our legacy of KACO branded monitoring interfaces. Each inverter comes standard

with RJ45 and RS485 ports without the need to install any daughter cards. The 97.5% CEC efficiency rating and ultra-high accuracy MPPT tracking makes this unit the best choice for maximum yield on your projects.

The blueplanet 10.0 TL3 is available now with certification for USA and Canada. Both 480 Vac and 600 Vac models are available; 600 Vac for Canada only. With five different feature packages, customers can get exactly the right inverter for your project. Installers, Designers, Owners, and End Customers know they are getting the best product for their project, every time.

Deliberate, dynamic, decision. Welcome to the Age of Ultra.

Available now.

2 MPP-Trackers

Wide MPP range

Five option packages

Light weight

Tool-less DC/AC conductor terminations

Multiple communication options standard - no daughter cards req.

Several versions specifically designed for use in Canada

# Technical data

## blueplanet 10.0 TL3 M2 WM OD

| Electrical data  | USK8 & USKA  | USK3, USK9, & USKE | CAP8 & CAPA                               | CAP3, CAP9, & CAPE |
|--|--|--------------------|---|--------------------|
| <b>DC electrical spec.</b>   |  |                    |   |                    |
| DC max input voltage (V)   | 600  | 600                | 600                                       | 600                |
| DC max peak power operating range (V)                                | 280 - 550  | 280 - 550          | 280 - 550                                 | 280 - 550          |
| DC operating range (V)   | 200 - 600  | 200 - 600          | 200 - 600                                 | 200 - 600          |
| DC min start voltage (V)   | 250  | 250                | 250                                       | 250                |
| DC max operating current (A)   | 2 X 18.6 A   | 2 X 18.6 A         | 2 X 18.6 A                                | 2 X 18.6 A         |
| DC max short circuit current p/channel (A)                           | 2 X 37.0 A   | 2 X 37.0 A         | 2 X 45.0 A                                | 2 X 45.0 A         |
| Max input source backfeed current (A)                                | 0  | 0                  | 0   | 0                  |
| DC in. overload protection   | Yes, Voltage and Current during operation  |                    |   |                    |
| DC in. terminals/conductor size p/channel (w/out PSD)                | USK8: MC4 10 - 12 AWG<br>USKA: 4 - 18 AWG  |                    | CAP8: MC4 10 - 12 AWG<br>CAPA: 4 - 18 AWG |                    |
| <b>AC electrical spec.</b>   |  |                    |   |                    |
| AC max continuous output power (W)                                   | 10,000   | 10,000             | 10,000                                    | 10,000             |
| CEC weighted eff (%)   | 97.5   | 97.5               | 97.5                                      | 97.5               |
| AC nominal voltage/ operating range L to Neutral (VAC)               | 480 / 243 to 304   | 480 / 243 to 304   | 600 / 305 to 381                          | 600 / 305 to 381   |
| AC continuous output current (A)                                     | 12.1   | 12.1               | 9.7                                       | 9.7                |
| Frequency nominal / range (Hz)                                       | 60 / 60.5 to 59.3  |                    |   |                    |
| Power factor   | >.99   |                    |   |                    |
| Total harmonic distortion  | <5%  |                    |   |                    |
| Standby losses (W)   | <1.5   |                    |   |                    |
| AC short circuit protection  | None   |                    |   |                    |
| AC in. terminals/conductor L1-L2-L3-N (w/out PSD)                    | L1-L2-L3 N: 4 - 18 AWG   |                    | L1-L2-L3 N: 4 - 18 AWG                    |                    |
| AC max out. fault current (A), RMS, & duration ms                    | 625 A (P - P), 18.25 A (RMS), 36.5 ms  |                    |   |                    |
| Utility connection   | WYE 4 wire (A,B,C,N)   |                    |   |                    |
| <b>Communications &amp; user interface</b>                           |  |                    |   |                    |
| User interface   | Graphical user interface with 3 LED status indicators                                      |                    |   |                    |
| Connectivity   | (Ethernet - USB - RS485 - S0 output)   |                    |   |                    |
| <b>Certifications &amp; Safety</b>                                   |  |                    |   |                    |
| UL / IEEE / CSA / FCC  | UL 1741 2nd Ed 2010 / UL 1998 / CSA C22.2No 107.1 / IEEE 1547 / FCC Class B                |                    |   |                    |
| Internal AFCI  | AFCI compliant with UL1699B provided with US38, US39, US3D models                          |                    |   |                    |
| Fault signal relay   | Normal open contact (requires external voltage source)                                     |                    |   |                    |
| DC polarity safeguard  | Short circuit diode  |                    |   |                    |
| GFDI compliant w/NEC 690.35 for use with ungrounded PV system arrays | UL1741 listed for residual ground fault current isolation monitor and interrupter function |                    |   |                    |

# Technical data

## blueplanet 10.0 TL3 M2 WM OD

| Optional PSD data   | USK8 & USKA  | USK3, USK9, & USKE                     | CAP8 & CAPA                              | CAP3, CAP9, & CAPE                     |
|---|--|--|--|--|
| <b>PV system disconnect - Only Models, ---3, ---9, &amp; ---E E</b> |  |  |  |  |
| Integrated AC/DC disconnect   | Yes/Yes  |  |  |  |
| AC Disconnection means  | Rotary switch accessible from exterior of enclosure with no tools required   |  |  |  |
| AC Disconnection ratings  | 20A; 600 Vac; Break L1, L2, L3   |  |  |  |
| AC over current protection devices (OCPD)                           | Current limiting inverter, OCPD provided by system integrator<br>---E models come with 30A, 600 Vac midget class fuses |  |  |  |
| AC LOTO Provision   | LOTO in OPEN   |  |  |  |
| AC input terminals/<br>conductor size L1-<br>L2-L3/N (w/PSD)        | L1-L2-L3: 8 - 14 AWG<br>N+PE: 4 - 16 AWG   |  | L1-L2-L3: 8 - 14 AWG<br>N+PE: 4 - 16 AWG |  |
| DC Disconnection means  | Rotary switch accessible from exterior of enclosure with no tools required   |  |  |  |
| DC Disconnecton ratings   | 25 A, 4 pole, Load Break, Pos and Neg  |  |  |  |
| DC Over current protection devices (OCPD)                           | Current Limiting Inverter<br>1000 Vdc, 15A fuses provided on units w/optional PSD                                      |  |  |  |
| DC LOTO Provision   | LOTO in OPEN   |  |  |  |
| DC input terminals/<br>conductor size, per<br>channel               | 2 Pos. & 2 Neg.<br>4 - 16 AWG  |  | 2 Pos. & 2 Neg.<br>4 - 16 AWG            |  |
| <b>Mechanical Data</b>  |  |  |  |  |
| Mechanical integration  | Wall Mount   |  |  |  |
| Enclosure construction  | Powder coated cast AL for inverter, powder coated AL for optional PSD  |  |  |  |
| Unit Weight (lb/kg)   | 88 / 40  | 100 / 45                               | 88 / 40                                  | 100 / 45                               |
| Unit dims HxWxD<br>(In/mm)  | 27.2 x 16.5 x 7.9 /<br>690 x 420 x 200   | 37.0 x 16.5 x 7.9 /<br>940 x 420 x 200 | 27.2 x 16.5 x 7.9 /<br>690 x 420 x 200   | 37.0 x 16.5 x 7.9 /<br>940 x 420 x 200 |
| Operating temp. range<br>(F/C)                                      | USA models: (-13 to 140 / -25 to 60)<br>Canada models: (-22 to 140 / -30 to 60)  |  |  |  |
| Storage temp. range (F/C)   | (-22 to 158 / -30 to 70)   |  |  |  |
| Noise emissions   | <55 db (A)   |  |  |  |
| Humidity %  | 0 to 95 non condensing   |  |  |  |
| Enclosure rating<br>Inverter/PSD                                    | NEMA 4   |  |  |  |
| Cooling   | Forced convection with variable speed fan  |  |  |  |
| Altitude (ft/m)   | 6500 / 2000  |  |  |  |

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