

UP WITH ECONOMY, DOWN WITH COSTS. The transformerless three-phase inverter blueplanet 29.0 TL3 LV



blueplanet 29.0 TL3 LV



Input voltage up to 1100 V for flexibility and safety in the DC design



Large cable cross-sections possible for copper and aluminium cables



Compact and lightweight for wall mounting



Cost-saving DC and AC input configurations



Wide MPP range for flexible string design



Adjustable cos phi from 0.3 ind. to 0.3 cap. for special reactive power requirements



Up to 240 % inverter oversizing possible



Made in Germany

Technical Data

DC input data	blueplanet 29.0 TL3 LV
Max. recommended PV generator power	70 000 W
MPP range	360 - 900 V
Operating range	360 - 1050 V
Rated DC voltage/start voltage	410 V/460 V
Max. no-load voltage	1 100 V
Max. input current	85 A
Max. short circuit current $I_{sc\ max}$	190 A
Number of MPP tracker	1
Connection per tracker	S/B/M: 1; XL: 6
AC output data	
Rated output	29 000 VA @ 138 V/240 V 29 000 VA @ 127 V/220 V 27 500 VA @ 120 V/208 V
Max. power	30 100 VA
Line voltage	138 V/240 V (3/N/PE; 3/PEN) 127 V/220 V (3/N/PE; 3/PEN) 120 V/208 V (3/N/PE; 3/PEN)
Voltage range (Ph-Ph)	166 - 346 V
Rated frequency (range)	50 Hz/60 Hz (42 - 68 Hz)
Rated current	3 x 69.8 A @ 240 V 3 x 76.1 A @ 220 V 3 x 76.5 A @ 208 V
Max. current	3 x 76.5 A
Reactive power/cos phi	0 - 100 % $S_{max}/0.30\ ind. - 0.30\ cap.$
Max. total harmonic distortion (THD)	≤ 1.6 %
Number of grid phases	3
General data	
Max. efficiency	97.3 %
CEC efficiency	97.0 %
Europ. efficiency	96.9 %
Standby consumption	2.5 W
Circuitry topology	transformerless
Mechanical data	
Display	graphical display + LEDs
Control units	4-way navigation + 2 buttons
Interfaces	Ethernet, USB, RS485, optional: 4-DI
Fault signalling relay	potential-free NOC max. 30 V/1 A
DC connection	S/B/M: max. 120 mm ² cable plug, Cu/Al XL: DC plugs (SUNCLIX)
AC connection	screw terminals, max. 95 mm ² , Cu/Al
Ambient temperature	-20 °C ... +60 °C ¹⁾
Humidity	0 - 100%
Max. installation elevation (above MSL)	3 000 m
Min. distance from coast	2 000 m/500 m (OD+ version)
Cooling	forced convection
Protection class	IP65
Noise emission	< 61 db(A)
H x W x D	760 x 500 x 425 mm
Weight	70 kg (S), 71 kg (B/M), 73 kg (XL)
Certifications	
Safety	IEC 62109-1/-2, EN 61000-6-1/-2/-3, EN 61000-3-11/-12
Grid connection rule	overview see homepage/download area

¹⁾ Power derating at high ambient temperatures

Versions	S	B	M	XL
Numbers of DC input	1	1	1	6
DC switch	-	✓	✓	✓
String protection PV+	-	-	-	✓
DC surge protection	-	-	○	Type 1 + 2
AC surge protection	-	-	○	○
OD+	★	★	★	★

standard = ✓ upgradeable = ○ optional = ★

Profitability and reliability that you can see inside the blueplanet 29.0 TL3 LV.



