KACO new energy.

blueplanet 105 TL3

String inverter for commercial and industrial PV systems.



Well-combined.

Cost-saving due to 400 V line voltage and integrated section switches

Optimised for PV modules with 1000 V and 1500 V

Highest efficiency and overload capacity through silicon carbide technology

High power density for easy handling and logistics

Lean commissioning and updates via remote services

Decentralised design or ‚Virtual Central' concept possible

EUPD RESEARCH TOP BRAND PV INVERTERS EUROPE 2021

Technical Data

DC input data	105 TL3
Max. recommended PV generator power	157 500 W
MPP range	591 – 1 300 V
Operating range	563 – 1 450 V
Rated DC voltage / start voltage	620 V / 675 V
Max. no-load voltage	1 500 V
Max. input current	183 A
Max. short circuit current $I_{sc\ max}$	300 A
Number of MPP tracker	1
Connection per tracker	1 - 2
AC output data	
Rated output	99 900 VA
Max. power	105 000 VA
Line voltage	380 V (3P+PE) 400 V (3P+PE) 415 V (3P+PE)
Voltage range (Ph-Ph)	285 – 478 V
Rated frequency (range)	50 Hz / 60 Hz (45 – 65 Hz)
Rated current	3 x 144.5 A
Max. current	3 x 152.0 A
Reactive power / cos phi	0 – 100 % Snom / 0,30 ind. – 0,30 cap.
Max. total harmonic distortion (THD)	≤ 3 %
Number of grid phases	3
General data	
Max. efficiency	98.9 %
Europ. efficiency	98.6 %
CEC efficiency	98.5 %
Standby consumption	< 10 W
Circuitry topology	transformerless
Mechanical data	
Display	LEDs
Control units	webserver, supports mobile devices
Interfaces	Ethernet (Modbus TCP, Sunspec), RS485 (KACO-protocol), USB, optional: 4-DI
Fault signalling relay	potential-free NOC max. 30 V / 1 A
DC connection	cable lug, max. 240 mm² (0.372 in²) Cu or Al
AC connection	cable lug, max. 240 mm² (0.372 in²) Cu or Al
Ambient temperature	-25 °C – +60 °C [1]
Humidity	0 – 100 %
Max. installation elevation (above MSL)	3 000 m
Min. distance from coast	500 m
Cooling	temperature controlled fan
Protection class	IP66 / NEMA 4X
Noise emission	59.2 db (A)
H x W x D	719 x 699 x 460 mm
Weight	78.2 kg
Certifications	
Safety	IEC 62109-1/-2, EN 61000-6-1/-2/-4, EN 61000-3-11/-12, EN 55011 group 1, class A EN 62920 Emission class A / Immunity class A UL62109-1, UL1741 Sup SA/SB, CSA-C22.2 No.107.1, CSA-C22.2 No.62109-1, CSA-C22.2 No.62109-2
Grid connection rule	overview see homepage / download area

[1] Power derating at high ambient temperatures

Versions	S	XL
Number of DC inputs	1 - 2	1 - 2
DC switch	-	✓
DC SPD	Type 1 + 2	Type 1 + 2
AC SPD	○	○
RS485 interface SPD	○	○
Ethernet interface SPD	○	○
PID Set	○	○

standard = ✓ upgradeable = ○

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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.
This current version replaces all older versions. Download the most current version at: www.kaco-newenergy.com