KACO
new energy.

blueplanet
100 NX3/125 NX3

MULTI-MPPT STRING INVERTERS
COMMERCIAL AND INDUSTRIAL
PHOTOVOLTAIC SYSTEMS

The inverters for the industrial PV revolution.

- 100 and 125 kVA for complex rooftops (incl. retrofit)
- 8/10 MPPTs for flexible PV array design (2 strings per MPPT)
- Up to 200% DC oversizing
- Arc fault detection and interruption
- SPD AC Type 2 / DC Type 1+2 pluggable and replaceable acc. to IEC 61643
- Superior efficiencies due to SiC technology
- Global MPP tracking
- AC Daisy Chaining
- Reactive power at night possible
- Cyber security technology
- Very late temperature derating
- Integrated section switches

Technical Data.

DC input data	100 NX3 M8	125 NX3 M10
Max. recommended PV generator power	200 000 W	250 000 W
MPP range	550 – 850 V	550 – 850 V
Operating range	200 – 1 000 V	200 – 1 000 V
Rated DC voltage / start voltage	620 V / 250 V	620 V / 250 V
Max. no-load voltage	1 100 V	1 100 V
Max. input current	30 A per tracker	30 A per tracker
Max. short circuit current $I_{sc\,max}$	37.5 A per tracker	37.5 A per tracker
Max. Number of MPP tracker	8	10
Connection per tracker	2	2
AC output data		
Rated output	100 000 VA	125 000 VA @ 400V 120 000VA @ 380V
Max. power	100 000 VA	125 000 VA
Line voltage	400 V (3P+(N)+PE)	400 V (3P+(N)+PE)
Voltage range (Ph-Ph)	300 – 460 V	300 – 460 V
Rated frequency (range)	50 Hz / 60 Hz (45 – 65 Hz)	50 Hz / 60 Hz (45 – 65 Hz)
Rated current	3 x 144.3 A	3 x 180.4 A
Max. current	3 x 182.0 A	3 x 182.0 A
Reactive power / cos phi	0.80 ind. – 0.80 cap.	0.80 ind. – 0.80 cap.
Max. total harmonic distortion (THD)	≤ 3 %	≤ 3 %
Number of grid phases	3	3
General data		
Max. efficiency	99.0%	99.1%
Europ. efficiency	98.8%	98.7%
Standby consumption	4.8 W	4.8 W
Circuitry topology	transformerless	transformerless
Mechanical data		
Display	LEDs	LEDs
Control units	webserver, supports mobile devices	
Interfaces	Ethernet (Modbus TCP SunSpec), RS485 (Modbus RTU SunSpec) USB, Wifi (via Wifi Stick)	
Fault signalling relay	potential-free NOC max. 30 V / 1 A	
DC connection	PV connector (Phoenix, assembly without special tools)	
AC connection	cable lug, max. 240 mm² (0.372 in²) Cu or Al	
Ambient temperature	-25 °C – +60 °C [1]	-25 °C – +60 °C [1]
Humidity	0 – 100 %	0 – 100 %
Max. installation elevation (above MSL)	3 000 m	3 000 m
Min. distance from coast	C4 protection class	C4 protection class
Cooling	temperature controlled fan	temperature controlled fan
Protection class	IP66	IP66
Noise emission	≤ 60 db (A)	≤ 60 db (A)
H x W x D	740 mm x 1023 mm x 330 mm	740 mm x 1023 mm x 330 mm
Weight	<85kg	<85kg
Certifications		
Safety &EMC	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	
Grid connection rule	overview see homepage / download area	

[1] Power derating at high ambient temperatures

Versions	B	M	MF	L
AC surge protection	Type 2	Type 2 pluggable (Type 1+2 upgradeable)	Type 2 pluggable (Type 1+2 upgradeable)	Type 2 pluggable (Type 1+2 upgradeable)
DC surge protection	Type 2	Type 1+2 pluggable	Type 1+2 pluggable	Type 1+2 pluggable
Arc fault detection and interruption	-	-	-	Acc. to IEC 63027 region A

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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