SOLAR ELECTRIC

KOSTAL

Smart connections.

Data sheet

PIKO 3.0 MP

3.0

Technical data PIKO 3.0 MP

- Single-phase feed-in
- Transformerless conversion
- Wide input voltage range
- Long life cycle thanks to effective cooling technology
- Standard integrated communication package with data logger, web server and solar
- Simple menu-guided operation and installation
- Light weight
- Convenient connection area and integrated DC switch
- Energy meters can be integrated

Input side (DC)

Max. PV power (cos φ = 1)	kWp	3.8
Rated input voltage ($V_{DC,r}$)	V	380
Max. input voltage (V_{DCmax})	V	600
Min. input voltage (V_{DCmin})	V	125
Start-up input voltage ($V_{DCstart}$)	V	150
Max. MPP voltage (V_{MPPmax})	V	500
Min. MPP voltage for DC rated output in single tracker mode (V_{MPPmin})	V	270
Min. MPP voltage for DC rated output in two-tracker mode (V_{MPPmin})	V	–
Max. input current (I_{DCmax})	A	11.5
Max. input current with parallel connection (input DC1+DC2)	A	–
Number of DC inputs		1
Number of independent MPP trackers		1

Output side (AC)

Rated output, cos φ = 1 ($P_{AC,r}$)	kW	3.0
Max. output apparent power, cos φ, adj	kVA	3.0
Max. output voltage (V_{ACmax})	V	276
Min. output voltage (V_{ACmin})	V	185
Rated output current	A	13
Max. output current (I_{ACmax})	A	14
Short-circuit current (peak / RMS)	A	42/14
Grid connection		1~, AC, 230V
Rated frequency (f_r)	Hz	50
Max. grid frequency (f_{max})	Hz	65
Min. grid frequency (f_{min})	Hz	45
Setting range of the power factor cos $\varphi_{AC,r}$		0.95 ...1... 0.95
Power factor for rated power (cos $\varphi_{AC,r}$)		1
Max. total harmonic distortion	%	<2

Device properties

Standby consumption	W	<4

Efficiency

Max. efficiency	%	98
European efficiency	%	97.7
MPP adjustment efficiency	%	99.7

Warranty

Warranty (years)		5
Warranty extension optional (years)		10/20

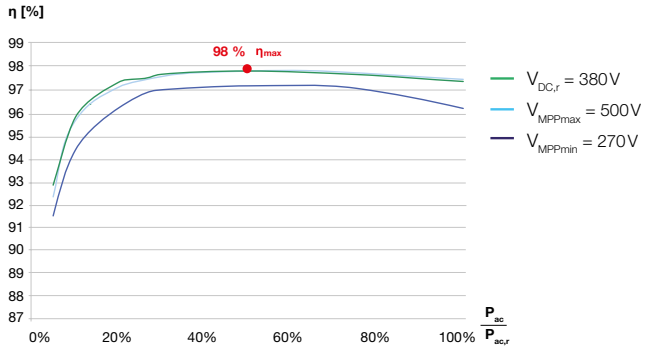
System data

Topology: Without galvanic separation - transformerless		✓
Internal protection according to IEC 60529		IP 21
Protective class according to IEC 62103		II
Overvoltage category according to IEC 60664-1 Input side (PV generator)		II
Overvoltage category according to IEC 60664-1 Output side (grid connection)		III
Pollution Degree		3
Environmental category (outdoor installation)		–
Environmental category (interior installation)		✓
UV resistance		–
Minimum cable cross-section of AC connecting line	mm^2	2.5
Minimum cable cross-section of DC connecting line	mm^2	2.5
Max. fusing on output side		B16
Operator protection (EN 62109-2)		RCMU/RCCB Typ B
Electronic disconnection device integrated		✓
Height	mm	608
Width	mm	340
Depth	mm	222
Weight	kg	9.6
Cooling principle - convection		–
Cooling principle - regulated fans		✓
Max. air throughput	m^3/h	–
Max. noise emission	dBA	31
Ambient temperature	°C	-15…60
Max. installation altitude above sea level	m	2000 (6562 ft)
Relative humidity	%	0…95
Connection technology at input side - Phoenix Contact SUNCLIX		✓
Connection technology at output side - Plug Wieland RST25i3		✓

Interfaces

Ethernet (RJ45)		1
RS485 (RJ45)		2
Modbus RTU (RJ10)		1
Analogue inputs		–
PIKO BA Sensor Interface		–

Efficiency characteristics of PIKO 3.0 MP



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Contact

KOSTAL Solar Electric GmbH
Hanferstr. 6
79108 Freiburg i. Br.
Germany

Tel. +49 761 477 44 - 100
Fax +49 761 477 44 - 111

www.kostal-solar-electric.com

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