SOLAR ELECTRIC

KOSTAL

Smart connections.

Data sheet

PIKO 10

10

Technical data PIKO 10

- 3-phase feed-in
- Transformerless converting
- Integrated electronic DC switch
- Broad input voltage range
- Standard integrated communication package with data logger, web server, solar portal and the following interfaces: 2x Ethernet, RS485, S0, 4x analogue inputs (e.g. for ripple control receivers or PIKO Sensor)
- PIKO BA Sensor can be connected for the measurement of building consumption and for dynamic active power control
- Integrated switch contact for self-consumption optimisation
- Smart Home-ready, EEBus 1.0-ready

Input side (DC)

Max. PV power (cos φ = 1)	kWp	10.8
Rated input voltage ($V_{DC,r}$)	V	680
Max. input voltage (V_{DCmax})	V	1000
Min. input voltage (V_{DCmin})	V	160
Start-up input voltage ($V_{DCstart}$)	V	180
Max. MPP voltage (V_{MPPmax})	V	800
Min. MPP voltage for DC rated output in single tracker mode (V_{MPPmin})	V	527
Min. MPP voltage for DC rated output in two-tracker mode (V_{MPPmin})	V	sym: 290 / 290 unsym: 390 / 250
Max. input current (I_{DCmax})	A	sym: 18 / 18 unsym: 20 / 10
Max. input current with parallel connection (input DC1+DC2)	A	36
Number of DC inputs		2
Number of independent MPP trackers		2

Output side (AC)

Rated output, cos φ = 1 ($P_{AC,r}$)	kW	10
Max. output apparent power, cos φ, adj	kVA	10
Max. output voltage (V_{ACmax})	V	264.5
Min. output voltage (V_{ACmin})	V	184
Rated output current	A	14.6
Max. output current (I_{ACmax})	A	16.2
Short-circuit current (peak / RMS)	A	25 / 16.6
Grid connection		3N~, AC, 400 V
Rated frequency (f_r)	Hz	50
Max. grid frequency (f_{max})	Hz	51.5
Min. grid frequency (f_{min})	Hz	47.5
Setting range of the power factor cos $\varphi_{AC,r}$		0.80…1…0.80
Power factor for rated power (cos $\varphi_{AC,r}$)		1
Max. total harmonic distortion	%	3

Device properties

Standby consumption	W	1,8

Efficiency

Max. efficiency	%	97.7
European efficiency	%	97.1
MPP adjustment efficiency	%	99.9

Warranty

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

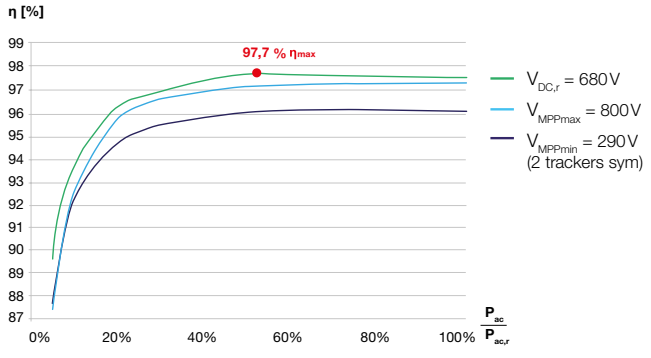
System data

Topology: Without galvanic separation - transformerless		✓
Internal protection according to IEC 60529 housing / fan		IP 65 / IP 55
Protective class according to IEC 62103		I
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		4
Environmental category (outdoor installation)		✓
Environmental category (interior installation)		✓
UV resistance		✓
Minimum cable cross-section of AC connecting line	mm^2	4
Minimum cable cross-section of DC connecting line	mm^2	4
Max. fusing on output side		B25, C25
Operator protection (EN 62109-2)		RCCB Typ B
Electronic disconnection device integrated		✓
Height	mm	445 (17.52 in)
Width	mm	580 (22.83 in)
Depth	mm	248 (9.76 in)
Weight	kg	37.5 (82.67 lb)
Cooling principle - convection		–
Cooling principle - regulated fans		✓
Max. air throughput	m^3/h	2x48
Noise emission	dBA	43
Ambient temperature	°C	-20…60 (-4…140 °F)
Max. installation altitude above sea level	m	2000 (6562 ft)
Relative humidity	%	4…100
Connection technology at input side - MC 4		✓
Connection technology at output side - spring-loaded terminal strip		✓

Interfaces

Ethernet RJ45		2
RS485		1
S0		1
Analogue inputs		4
PIKO BA Sensor Interface		1

Efficiency characteristics of PIKO 10



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