Technical data PIKO 5.5

- 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 \((\cos \varphi = 1)\) kWp 6.1
- Rated input voltage \((U_{DC,r})\) V 680
- Max. input voltage \((U_{DC_{\text{max}}})\) V 1000
- Min. input voltage \((U_{DC_{\text{min}}})\) V 160
- Start-up input voltage \((U_{DC_{\text{start}}})\) V 180
- Max. MPP voltage \((U_{\text{MPP}_{\text{max}}}})\) V 800
- Min. MPP voltage for DC rated output in single tracker mode \((U_{\text{MPP}_{\text{min}}}})\) V 530
- Min. MPP voltage for DC rated output in two-tracker mode \((U_{\text{MPP}_{\text{min}}}})\) V 265
- Max. input current \((I_{DC_{\text{max}}})\) A 11
- Max. input current with parallel connection \((I_{DC1+DC2})\) A 22
- Number of DC inputs 2
- Number of independent MPP trackers 2

### Output side (AC)

- Rated output, \(\cos \varphi = 1\) (\(P_{AC,r}\)) kW 5.5
- Max. output apparent power, \(\cos \varphi_{\text{eff}}\) kVA 5.5
- Max. output voltage \((U_{AC_{\text{max}}})\) V 264.5
- Min. output voltage \((U_{AC_{\text{min}}})\) V 184
- Rated output current A 8
- Max. output current \((I_{AC_{\text{max}}})\) A 8
- Short-circuit current (peak / RMS) A 12.5 / 8.8
- Grid connection 3/N/PE, AC, 400V
- Rated frequency \((f_{r})\) Hz 50
- Max. grid frequency \((f_{\text{max}})\) Hz 51.5
- Min. grid frequency \((f_{\text{min}})\) 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

- Max. total night-time consumption (own requirements standby) W 1.8
- Max. night-time consumption of communication board W 1.7

### Efficiency

- Max. efficiency % 97.7
- European efficiency % 96.3
- 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 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
- Degree of contamination 3
- Environmental category (outdoor installation) ✓
- Environmental category (interior installation) ✓
- UV resistance ✓
- Minimum cable cross-section of AC connecting line mm² 1.5
- Minimum cable cross-section of DC connecting line mm² 4
- Max. fusing on output side B16, C16
- Operator protection (EN 62109-2) RCCB Typ B
- Electronic disconnection device integrated ✓
- Height mm 385 (15.16 in)
- Width mm 500 (19.69 in)
- Depth mm 236 (9.29 in)
- Weight kg 25.5 (56.22 lb)
- Cooling principle - convection –
- Cooling principle - regulated fans ✓
- Max. air throughput m³/h 84
- Noise emission dBA 52
- 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 5.5

![Efficiency characteristics graph](image)

- \(U_{DC,r} = 680\) V
- \(U_{\text{MPP}_{\text{max}}}} = 800\) V
- \(U_{\text{MPP}_{\text{min}}}} = 265\) V

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