



Smart
connections.

Data sheet

PIKO 20

20

Technical data PIKO 20



- 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 | 22.6 |
| Rated input voltage ($V_{DC,r}$) | V | 680 |
| Max. input voltage ($V_{DC,max}$) | V | 1000 |
| Min. input voltage ($V_{DC,min}$) | V | 160 |
| Start-up input voltage ($V_{DC,start}$) | V | 180 |
| Max. MPP voltage ($V_{MPP,max}$) | V | 800 |
| Min. MPP voltage for DC rated output in single tracker mode ($V_{MPP,min}$) | V | - |
| Min. MPP voltage for DC rated output in two-tracker mode ($V_{MPP,min}$) | V | 515 |
| Min. MPP voltage for DC rated output in three-tracker mode ($V_{MPP,min}$) | V | sym.: 345 / 345 / 345, unsym.: 450 / 450 / 250 |
| Max. input current ($I_{DC,max}$) | A | sym.: 20 / 20 / 20, unsym.: 20 / 20 / 10 |
| Max. input current with parallel connection (input DC1+DC2 / DC3) | A | 40 / 20 |
| Number of DC inputs | | 3 |
| Number of independent MPP trackers | | 3 |

Output side (AC)

| | | |
|---|-----|-----------------|
| Rated output, $\cos \varphi = 1$ ($P_{AC,r}$) | kW | 20 |
| Max. output apparent power, $\cos \varphi_{adj}$ | kVA | 20 |
| Max. output voltage ($V_{AC,max}$) | V | 264.5 |
| Min. output voltage ($V_{AC,min}$) | V | 184 |
| Rated output current | A | 29 |
| Max. output current ($I_{AC,max}$) | A | 32.2 |
| Short-circuit current (peak / RMS) | A | 51 / 36.5 |
| 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 | 2.15 |
|---------------------|---|------|

Efficiency

| | | |
|---------------------------|---|------|
| Max. efficiency | % | 98.0 |
| European efficiency | % | 97.3 |
| MPP adjustment efficiency | % | 99.9 |

Warranty

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

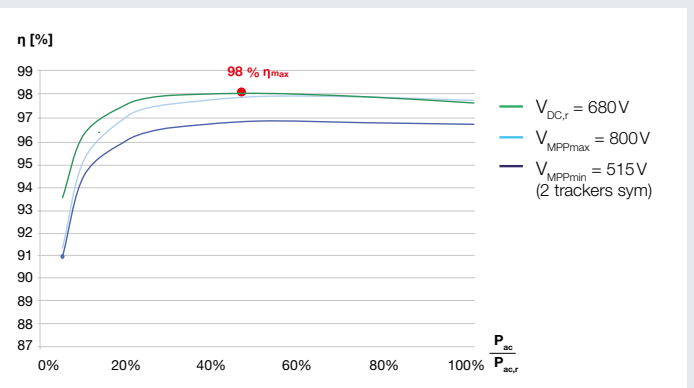
System data

| | | |
|---|-------------------|------------------------|
| Topology: Without galvanic separation - transformerless | | ✓ |
| Internal protection according to IEC 60529 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 | 6 |
| Minimum cable cross-section of DC connecting line | mm ² | 4 |
| Max. fusing on output side | | B40, C40 |
| Operator protection (EN 62109-2) | | RCCB Typ B |
| Electronic disconnection device integrated | | ✓ |
| Height | mm | 540 (21.26 in) |
| Width | mm | 700 (27.56 in) |
| Depth | mm | 265 (10.43 in) |
| Weight | kg | 48.5 (106.9 lb) |
| Cooling principle - convection | | - |
| Cooling principle - regulated fans | | ✓ |
| Max. air throughput | m ³ /h | 2x84 |
| Max. noise emission | dBA | 56 |
| 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 20



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Contact

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