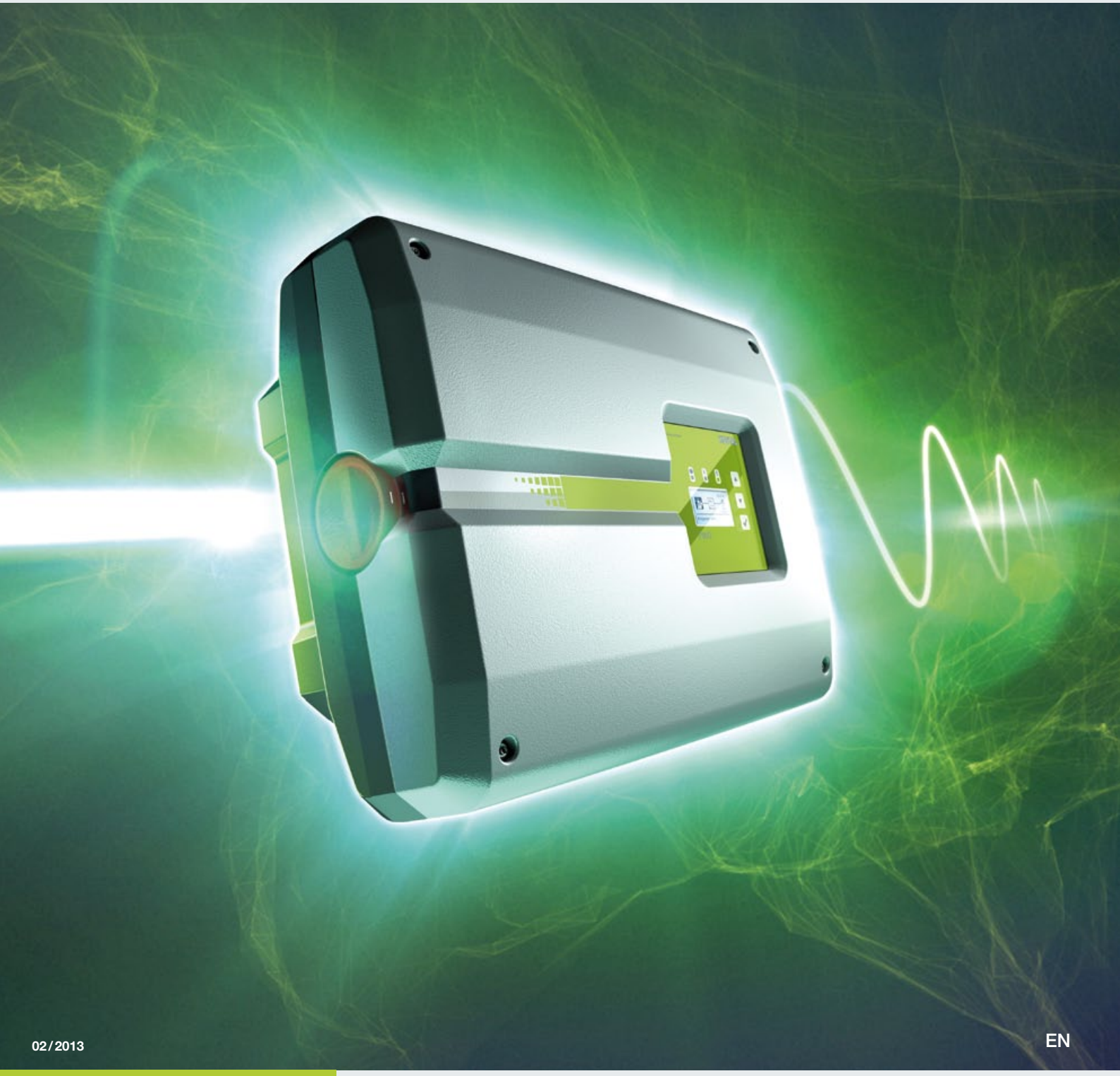
SOLAR ELECTRIC

KOSTAL



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Smart connections.

# Data sheet

## PIKO 3.0

3.0

# Technical data PIKO 3.0

- Single-phase feed-in
- Transformerless converting
- An ergonomically designed casing for easy handling
- Broad input voltage range
- Integrated switch contact for internal consumption control
- Integrated robust electronic DC switch
- Integrated data logger and web server for system monitoring
- Various communication interfaces integrated as a standard: 2 x Ethernet (integrated switch), RS485, S0, 4 x analogue inputs (e.g. for ripple control receivers)
- Graphic display with 3-button operating concept

## Input side (DC)

| | | |
|---|---|---|
| Inverter type | | PIKO 3.0 |
| Max. PV power | kW | 4.3 |
| Rated input voltage (Udc,r) | V | 400 |
| Max. input voltage (Udcmax) | V | 900 |
| Min. input voltage (Udcmin) | V | 160 |
| Start input voltage (Udcstart) | V | 180 |
| Max. MPP voltage (Umppmax) | V | 730 |
| Min. MPP voltage with DC rated output in single-tracker operation (Umppmin) | V | 270 |
| Min. MPP voltage with DC rated output in dual-tracker or parallel operation (Umppmin) | | – |
| Max. input current (Idcmax) | A | 12.5 |
| Max. input current with parallel connection | A | – |
| Number of DC inputs | | 1 |
| Number of independent MPP trackers | | 1 |

## Output side (AC)

| | | |
|---|---|---|
| Rated output, cos ϕ = 1 (Pac,r) | kW | 3 |
| Max. output apparent power cos ϕ, adj | kVA | 3 |
| Max. output voltage (Uacmax) | V | 264.5 |
| Min. output voltage (Uacmin) | V | 184 |
| Rated output current | A | 13 |
| Max. output current (Iacmax) | A | 13.7 |
| Short-circuit current (peak) | A | 26.4 |
| Grid connection | | 1 / N / PE, AC, 230 V |
| Rated frequency (fr) | Hz | 50 |
| Setting range of the power factor cos ϕac,r | | 0,9…1…0,9 |
| Max. total harmonic distortion | % | ≤ 3 |

## Device properties

| | | |
|---|---|---|
| Max. night-time consumption of inverters | W | 0.1 |
| Max. night-time consumption of communication board | W | 1.6 |

## Degree of efficiency

| | | |
|---|---|---|
| Max. efficiency | % | 96.2 |
| European efficiency rate | % | 95.5 |

## Warranty

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

This manual is subject to technical changes and printing errors.
You can find current information at www.kostal-solar-electric.com.

Manufacturer: KOSTAL Industrie Elektrik GmbH, Hagen, Germany

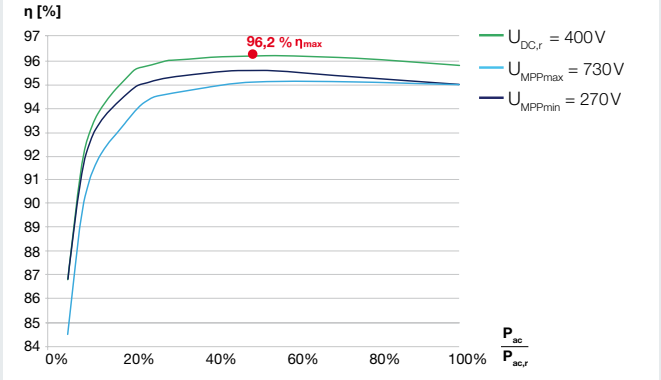
## System data

| | | |
|---|---|---|
| Topology: Without galvanic separation - transformerless | | ✓ |
| Internal protection according to IEC 60529 | | IP 55 |
| Protection class according to IEC 62103 | | I |
| Surge category according to IEC 60664-1 Input side (PV generator) | | II |
| Surge 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 | $mm^2$ | 1.5 |
| Minimum cable cross-section of DC connecting line | $mm^2$ | 4 |
| Min. fusing on output side | | B16, C16 |
| Operator protection | | RCCM type B 30mA |
| Electronic disconnection device integrated | | ✓ |
| Height | mm | 385 |
| Width | mm | 500 |
| Depth | mm | 222 |
| Weight | kg | 22 |
| Cooling principle - convection | | ✓ |
| Cooling principle - regulated fans | | – |
| Max. air throughput | $m^3/h$ | – |
| Max. noise emission | dBA | < 33 |
| Ambient temperature | °C | -20…60 |
| Max. installation altitude above sea level | m | 2000 |
| Relative humidity (non-condensing) | % | 0…95 |
| Connection technology at input side - MC 4 | | ✓ |
| Connection technology at output side - spring-loaded terminal strip | | ✓ |

## Various interfaces

| | | |
|---|---|---|
| Ethernet RJ45 | | 2 |
| RS485 | | 1 |
| S0 | | 1 |
| Analogue inputs | | 4 |

## Efficiency rate characteristic curves PIKO 3.0

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## Contact


KOSTAL Solar Electric GmbH
Hanferstr. 6
79108 Freiburg
Germany

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

www.kostal-solar-electric.com


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