E

KITS PV

Instantaneous photovoltaic self-consumption kits for installations connected to the grid



Description

PV KITS are designed to meet the needs of those customers who have to set up a self-consumption photovoltaic energy installation for a certain level of power, but do not know all of the elements that they need. With these kits, the user will be safe in the knowledge that these elements have been correctly selected and sized for their installation. **PV KITS** are compatible with and can incorporate **CDP** (Dynamic Power Controller) systems, which ensure 0 grid injection and come with the certificates that help to obtain legal authorisation for the installation. The kits comprise the following material:

- Photovoltaic modules (adapted to the power of each reference)
- Support structures to secure the photovoltaic modules to any type of roof
- Grid connection photovoltaic inverters.

Optionally, all KITS can be installed with the respective **CDP** protection and control electric panels. These panels include the protection elements for the DC side (**StringBox**) and the AC protection elements (**CombinerBox**), in addition to the control units:

- CDP-DUO (dynamic power controller for 0 injection).
- **CVM-MINI** power analyser (in case of three-phase installation)
- MC current measurement transformer.

The main advantages of these kits are:

- CIRCUTOR warranty for the whole kit
- Documentation, diagrams and technical assistance for all components.
- Reduction of the logistics chain and number of suppliers for each installation (1 supplier for the whole site instead of 1 supplier per component)
- Dimensioning study according to the user's consumption profile (modules, inverter, protections and structure)
- Solutions for all needs (more than 30 references to choose from)
- The electric panels facilitate the installation and reduce assembly time
- Monitoring with web server

Applications

Ideal for homes, offices, factories and any other type of building with daily consumption.

Technical features

| Photovoltaic modules | Туре | Polycrystalline modules | | | |
|-------------------------|------------------------|--|--|--|--|
| | Power | 280 Wp 17,2 % 1640 x 992 x 40 mm PV cycle, IEC 61215, IEC 61730 | | | |
| | Performance | | | | |
| | Dimensions | | | | |
| | Standards | | | | |
| Support structures | Types | Sloped or flat roof for horizontal or vertical | | | |
| | | modules, single or double rows. | | | |
| | Type of material | Anodised aluminium | | | |
| | | Stainless steel fasteners | | | |
| | Quality certificate | NBE-AE 88 | | | |
| Inverter connection | Туре | Single or three-phase | | | |
| to mains | Power | From 1.5 to 20 kW | | | |
| | European performance | rmance > 94.4% single-phase | | | |
| | | > 95.6% three-phase (5-15 kWn) | | | |
| | | > 97.8% three-phase (> 20 kWn) | | | |
| | Communications | RS-485 | | | |
| | Standards | VDE 0126-1-1, VDE AR-N4105, CEI 0-21, | | | |
| | | RD 1699:2011, G59/1-2, UNE 217001 IN | | | |
| AC / DC electric panels | DC protections | gPV rapid cut-off fuses with fuse carriers | | | |
| | | DC overvoltage protections | | | |
| | | Output isolator switches | | | |
| | AC protections | Circuit breaker with ultra-immunised type A RCCB | | | |
| | | Reverse current protection contactor | | | |
| | | AC overvoltage protections for each output | | | |
| | Control and monitoring | CDP, CVM-MINI power analyser | | | |
| | Quality certificate | Individual report test, certified electric panel | | | |
| | | with serial number for traceability | | | |
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References

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| Туре | Code | Network type | No. modules | PV power (Wp) | Number of inverters | Inverter power (Wp) | Total power (Wn) |
|-----------|---------|---------------------------|----------------|---------------|---------------------|---------------------|------------------|
| 1.5-S | E5K011. | Single-phase 230 V | 5 | 1.400 | 1 | 1.500 | 1.500 |
| 1.5-S-PRO | E5K012. | Single-phase 230 V | 6 | 1.680 | 1 | 1.500 | 1.500 |
| 2.5-S | E5K021. | Single-phase 230 V | 9 | 2.520 | 1 | 2.500 | 2.500 |
| 2.5-S-PRO | E5K022. | Single-phase 230 V | 10 | 2.800 | 1 | 2.500 | 2.500 |
| 3-S-T | E5K123. | Three-phase 3 x 230/400 V | 12 | 3.360 | 1 | 3.000 | 3.000 |
| 4.5-M | E5K130. | Three-phase 3 x 230/400 V | 15 | 4.200 | 3 | 1.500 | 4.500 |
| 5-S | E5K031. | Single-phase 230 V | 18 | 5.040 | 1 | 5.000 | 5.000 |
| 5-S-PRO | E5K032. | Single-phase 230 V | 20 | 5.600 | 1 | 5.000 | 5.000 |
| 5-S-T | E5K131. | Three-phase 3 x 230/400 V | 18 | 5.040 | 1 | 5.000 | 5.000 |
| 5-S-PRO-T | E5K132. | Three-phase 3 x 230/400 V | 20 | 5.600 | 1 | 5.000 | 5.000 |
| 6-M | E5K134. | Three-phase 3 x 230/400 V | 21 | 5.880 | 3 | 2.000 | 6.000 |
| 6-S | E5K033. | Three-phase 3 x 230/400 V | 22 | 6.160 | 1 | 6.000 | 6.000 |
| 6-S-PRO | E5K034. | Three-phase 3 x 230/400 V | 24 | 6.720 | 1 | 6.000 | 6.000 |
| 7.5-M | E5K133. | Three-phase 3 x 230/400 V | 30 | 8.400 | 3 | 2.500 | 7.500 |
| 9-M | E5K037. | Three-phase 3 x 230/400 V | 36 | 10.080 | 3 | 3.000 | 9.000 |
| 9-S | E5K038. | Three-phase 3 x 230/400 V | 32 | 8.960 | 1 | 8.000 | 8.000 |
| 9-S-PRO | E5K039. | Three-phase 3 x 230/400 V | 34 | 9.520 | 1 | 8.000 | 8.000 |
| 11-S | E5K043. | Three-phase 3 x 230/400 V | 40 | 11.200 | 1 | 10.000 | 10.000 |
| 11-S-PRO | E5K044. | Three-phase 3 x 230/400 V | 42 | 11.760 | 1 | 10.000 | 10.000 |
| 15-M | E5K051. | Three-phase 3 x 230/400 V | 60 | 16.800 | 3 | 5.000 | 15.000 |
| 15-M-PRO | E5K052. | Three-phase 3 x 230/400 V | 66 | 18.480 | 3 | 5.000 | 15.000 |
| 15-S | E5K054. | Three-phase 3 x 230/400 V | 60 | 16.800 | 1 | 15.000 | 15.000 |
| 20-S | E5K061. | Three-phase 3 x 230/400 V | 80 | 22.400 | 1 | 20.000 | 20.000 |
| 20-S-PRO | E5K062. | Three-phase 3 x 230/400 V | 84 | 23.520 | 1 | 20.000 | 20.000 |
| 25-M | E5K071. | Three-phase 3 x 230/400 V | 96 | 26.880 | 2 | 12.500 | 25.000 |
| 25-M-PRO | E5K072. | Three-phase 3 x 230/400 V | 102 | 28.560 | 2 | 12.500 | 25.000 |
| 30-M | E5K081. | Three-phase 3 x 230/400 V | 120 | 33.600 | 2 | 15.000 | 30.000 |
| 30-M-PRO | E5K082. | Three-phase 3 x 230/400 V | 126 | 35.280 | 2 | 15.000 | 30.000 |
| 40-M-PRO | E5K200. | Three-phase 3 x 230/400 V | 168 | 47.040 | 2 | 20.000 | 40.000 |
| 60-M-PRO | E5K210. | Three-phase 3 x 230/400 V | 252 | 70.560 | 3 | 20.000 | 60.000 |
| 80-M-PRO | E5K220. | Three-phase 3 x 230/400 V | 352 | 98.560 | 4 | 20.000 | 80.000 |
| 100-M-PRO | E5K223. | Three-phase 3 x 230/400 V | 420 | 117.600 | 5 | 20.000 | 100.000 |

For an order for a PV KIT to be accepted, it is necessary to specify the type of support structures and **MC** current transformer. Electrical wiring and MC4 connectors for the wiring of strings are not included.

The manufacturer's description of individual devices will only be detailed upon confirmation of the order for them.

Circutor