

REFUsol 023K-460 VAC

String inverters for medium voltage systems



- 460 VAC for medium voltage applications
- Highest efficiency (98.3%)
- Easy installation
- Outdoor (IP65)
- Maintenance free

The transformerless REFUsol 023K string inverter with 460 VAC complements the product range between the 008K-020K string inverters with 400 VAC and the high-power REFUsol 333K central inverter with 690 VAC. With an output voltage of 460 V and an input voltage range from 575 to 850 V, the REFUsol 023K-460 VAC is the perfect choice for medium voltage applications in **large-scale PV plants**. It has an efficiency level of more than 98%.

Like the other inverters in the REFUsol product line, the REFUsol 023K-460 VAC also works with the fast and precise REFUsol MPP tracking system. The data-logger, RS485

interface and Ethernet connection make data communication easy. It can be quickly and easily configured via the network – with our REFUconnect solution even wirelessly. You can analyze the power budget of the systems being operated using the web-based evaluation tool REFUlog. Here you can focus fully on parameters, curves and values as there is no need to worry about maintaining the 023K-460 VAC. It functions with maintenance-free convection cooling.

TECHNICAL DATA**REFUsol
023K-460VAC**

Item no.	808R023
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DC DATA

Recommended max. PV power, kWp	27.6
MPPT range, V	575 ... 850
DC start voltage, V	350
Max. DC voltage, V	1000
Max. DC current, A	41
MPP tracker	1
Number of DC connections	6 x MC4
DC isolator	Yes

AC DATA

Rated AC power, kVA	23
Max. AC power (Cos Phi=1), kW	23
AC power supply connection	L1, L2, L3, N, PE
Rated power factor / range	1 / 0.9i ... 0.9c
Rated voltage AC, V	460
Voltage range AC, V	368...529
Rated frequency / frequency range, Hz	50, 60 / 45 ... 65
Max. AC current, A	3 x 29.2
Max. distortion factor THD, %	1.8
Max. efficiency, %	98.3
European efficiency, %	98.1
Feed-in starting at, W	50
Internal consumption in night operation, W	< 0.5

FEATURES

Cooling	Natural convection
Ambient temperature, °C	-25 ... +55
Relative ambient humidity, %	0 ... 100
Site altitude, m	4000*
Noise level, dBA	< 45
Internal overvoltage protection (EN 61643-11)	Type 3
Protection class (IEC 62103)	I
Overvoltage category (EN 60664-1)	DC: II, AC: III
Environmental classifications IEC 721-3-4	4K4H
Environment classification	4K4H acc. to DIN IEC 721-3-4
Certificates	Current certificates can be found on our website
Automatic disconnection	Acc. to VDE 0126-1-1

GENERAL DATA

Interfaces	Ethernet, RS485, temperature and irradiation sensor
Protection class (IEC 60529)	IP65
Dimensions w x h x d, mm	535 x 601 x 277
Weight, kg	38.4

*Derating der DC-Spannung beachten

Subject to modification. Technical specifications are subject to change without notice.

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