

## REFU sol 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 REFU sol 023K string inverter with 460 VAC complements the product range between the 008K–020K string inverters with 400 VAC and the high-power REFU sol 333K central inverter with 690 VAC. With an output voltage of 460 V and an input voltage range from 575 to 850 V, the REFU sol 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 REFU sol product line, the REFU sol 023K-460 VAC also works with the fast and precise REFU sol 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 REFU connect solution even wirelessly. You can analyze the power budget of the systems being operated using the web-based evaluation tool REFU log. 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.

<b>TECHNICAL DATA</b>		<b>REFUso! 023K-460 VAC</b>
Item no.		808R023
<b>DC DATA</b>		
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
<b>AC DATA</b>		
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
<b>FEATURES</b>		
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
<b>GENERAL DATA</b>		
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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