

## REFU*sol* 020K-SCI

Breaking through thresholds



- SiC Technology
- Highest efficiency (98.7 %)
- Light & compact
- Outdoor (IP65)
- Maintenance free

The 008K–020K three-phase inverters are the tried and tested partners of the photovoltaics sector. They deliver very high efficiency levels, run reliably and demonstrate their high technological maturity day after day. As experienced developers, however, we are always setting ourselves new goals. The threshold between high and maximum performance can only be crossed by those who overcome technical limitations. In developing the REFU*sol* 020K-SCI we have taken this step towards absolute maximum output. Equipped with special materials like silicon carbide and a raft of **optimized features**, the REFU*sol* 020K-SCI

can do everything that bit better than its cousins. With a peak efficiency of 98.7%, it's extremely quiet and we have increased its power to 20 kW AC. With its wide input voltage range from 490 to 800 V, fast and precise **MPP tracking** and its light weight of just under 40 kg the REFU*sol* 020K-SCI sets the standard in the category up to 20 kW. The REFU*sol* 020K-SCI is cutting edge technology at its most refined – a high-end inverter for system operators who want to achieve the maximum yield from their PV system.



<b>TECHNICAL DATA</b>		<b>REFUsoL 020K-SCI</b>
Item no.		807R020
<b>DC DATA</b>		
Recommended max. PV power, kWp		24.0
MPPT range, V		490 ... 800
DC start voltage, V		350
Max. DC voltage, V		1000
Max. DC current, A		41.5
MPP tracker		1
Number of DC connections		6 x MC4
DC isolator		Yes
<b>AC DATA</b>		
Rated AC power, kVA		20
Max. AC power (Cos Phi=1), kW		20
AC power supply connection		L1, L2, L3, N, PE
Rated power factor / range		1 / 0.9i ... 0.9c
Rated voltage AC, V		400
Voltage range AC, V		320 ... 460
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, %		98.7
European efficiency, %		98.5
Feed-in starting at, W		20
Internal consumption in night operation, W		< 0.5
<b>FEATURES</b>		
Cooling		Natural convection
Ambient temperature, °C		-25 ... +60
Relative ambient humidity, %		0 ... 100
Site altitude, m		4000*
Noise level, dBA		< 35
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
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		40

\*Observe derating of the DC voltage.

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

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