StecaGrid 20000 3ph and StecaGrid 23000 3ph StecaGrid 40000 3ph und StecaGrid 46000 3ph

For universal use

The three-phase StecaGrid inverters are perfect suited for commercial rooftop systems right through to megawatt parks.

They comply with all requirements for IP 65 protection: their housing provides reliable protection from dust and water, including high pressure washing. These systems can therefore be installed out in the open without any problem.

Plug & play installation

The StecaGrid inverters are easy to handle and compact. Installation is safe and easy with simple plug connections and low weight. Installation costs are minimised because the devices also remain closed during installation.

Easy operation

Operation and monitoring are easy, further facilitated by the graphic display, the integrated RS485 interface and an Ethernet connection. The integrated data-logger collects and records all important operating data.

High efficiency

Even at low irradiation, the three-phase inverters achieve an efficiency of up to 98.3 %. As a result of these high efficiency levels convection cooling is all that is needed to dissipate the heat. This ensures, in addition to noise-free cooling, the maintenance-free inner workings of the inverter.

Product features

- High efficiency
- Wide input voltage range
- Three-phase, symmetrial grid feeding
- Integrated data logger
- Firmware update possible
- Integrated DC circuit breaker
- Robust metal casing
- Suitable for outdoor installation
- Wall-mounting with steel wall bracket for very easy installation

Displays

- Multifunction graphical LCD display with backlighting
- Animated representation of yield

Operation

- Simple menu-driven operatior
- Multilingual menu navigation

Options

· System monitoring with Solar-Log[™] and WEB'log



StecaGrid 20000 3p and StecaGrid 23000 3ph, not shown: StecaGrid 40000 3p and StecaGrid 46000 3ph





System monitoring and accessories



Meteocontrol WEB'log Data logger



Solar-Log Data logger

	StecaGrid 20000 3ph	StecaGrid 23000 3ph	StecaGrid 40000 3ph	StecaGrid 46000 3ph
DC input side (PV-generator)		460 V		460 V
Maximum input voltage	1,000 V			
Operating input voltage range	350 V 850 V			
MPP voltage for rated output	490 V 850 V	575 V 900 V	490 V 850 V	575 V 850 V
Number of MPP-Tracker			1	
Maximum input current	41.8 A	41 A	84 A	82 A
Maximum recommended PV power	24,000 Wp	27,600 Wp	48,000 Wp	55,200 Wp
AC output side (Grid connection)				
Grid voltage	320 V 460 V (depending on regional settings)	368 V 529 V (depending on regional settings)	320 V 529 V (depending on regional settings)	368 V 529 V (depending on regional settings)
Rated grid voltage	400 V	460 V	400 V and 460 V	460 V
Maximum output current	29.2 A		59 A	
Maximum active power ($\cos phi = 1$)	20,000 W	23,000 W	40,000 W	46,000 W
Maximum active power (cos phi $= 0.95$)	19,000 W	21,850 W	38,000 W	43,700 W
Maximum active power (cos phi $= 0.9$)	18,000 W	20,700 W	36,000 W	41400 W
Maximum apparent power (cos phi = 0.95)	20,000 VA	23,000 VA	40,0	00 VA
Maximum apparent power (cos phi = 0.9)	20,000 VA	23,000 VA	40,000 VA	
Rated power	20,000 W	23,000 W	40,000 W	46,000 W
Rated frequency		50 Hz and 60 Hz		
Frequency	45 Hz 65 Hz (depending on regional settings)			
Rated current	29 A 58 A		8 A	
Night-time power loss	< 0.5 W			
Feeding phases	three-phase			
Distortion factor (cos phi = 1)	< 1.8 % (max. power) < 3 % (max. power)			
Power factor cos phi	0.8 capacitive 0.8 inductive			
Characterisation of the operating performance				
Maximum efficiency	98.2 %	98.3 %	98.2 %	98.3 %
European efficiency	97.8 %	98.1 %	97.8 %	98.1 %
MPP efficiency	99.9 %			
Safety				
Isolation principle	no galvanic isolation, transformerless			
Grid monitoring	yes, integrated			
Residual current monitoring	yes, integrated			
Operating conditions		· · · · · · · · · · · · · · · · · · ·		
Area of application	indoor rooms with or without air conditioning, outdoors with or without protection			
Ambient temperature	-25 °C +55 °C			
Storage temperature	-25 °C +70 °C			
Relative humidity	0 % 100 % (non-condensating)			
Noise emission (typical)	< 45 dBA			
Fitting and construction				
Degree of protection	IP 65			
Overvoltage category	III (AC), II (DC)			
DC Input side connection	Phoenix Contact SUNCLIX (6 pairs) Phoenix Contact SUNCLIX (4 pairs)			
AC output side connection - type	Screw-type terminal			
Dimensions (X x Y x Z)	535 x 601 x 277 mm		760 x 820 x 300 mm	
Weight	38.4 kg	38.4 kg 41.5 kg 68 ka		
Communication interface				
Integrated DC circuit breaker	ves. compliant with VDF 0100-712			
Cooling principle	natural convection			
Test certificate	see certificate download on the product page			