# **Aeca**

## coolcept-x

StecaGrid 1500x, StecaGrid 2000x, StecaGrid 2500x, StecaGrid 3010x, StecaGrid 3600x, StecaGrid 4200x

### Highest efficiency with longer service life

The high efficiency results in a peak efficiency of 98.6 % and a European efficiency of up to 98.3 %, which results in less lost power that must be dissipated into the environment. This improves your yields.

In addition to this, a new and unique cooling concept inside the inverter ensures an even distribution of the dissipated heat and a long service life for the device.

#### **Product design and visualisation**

The StecaGrid has a graphical LCD display for visualising the energy yield values, current performance and operating parameters of the system. Its innovative menu allows individual selection of the various measurements

The guided, pre-programmed menu allows easy final commissioning of the device.

#### Installation

The lightweights weigh only 11 kg, 11.5 kg and 12 kg and can be easily and safely mounted on a wall. The supplied wall bracket make mounting of the device simple and convenient. The device does not need to be opened for installation. All connections and the DC circuit breaker are externally accessible. The devices meet all the standards for the IP 65 protection class. Its robust stainless steel housing provides reliable protection against dust and water, including jet water. This enables problem-free installation of the inverters outdoors.

#### **Product features**

- Highest efficiency
- Simple installation
- Integrated data logger
- Low housing temperature at full load
- Solid stainless steel casing
- Suitable for outdoor installation
- Integrated DC circuit breaker
- Very long service life
- Droop Mode for integration in hybrid systems
- Fixed voltage mode for other energy sources
- Up to 7-year free warranty after registration
- Optimised shadow management using global MPP tracking

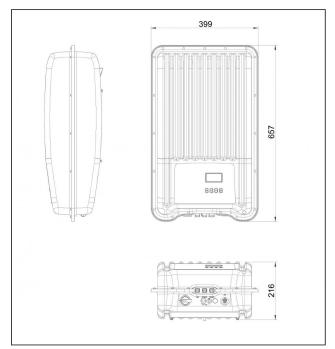
#### **Displays**

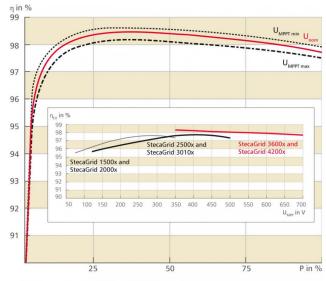
- Multifunction graphical LCD display with backlighting
- · Animated representation of yield

#### Operation

- Simple menu-driven operation
- Multilingual menu navigation







Efficiency values for the StecaGrid 3600x and comparison of the MPPT voltage of the all types





	StecaGrid 1500x	StecaGrid 2000x	StecaGrid 2500x	StecaGrid 3010x	StecaGrid 3600x	StecaGrid 4200x	
DC input side (PV generator)						<u> </u>	
Maximum input voltage	420 V	420 V	600 V	600 V	845 V	845 V	
Operating input voltage range	75 V 350 V	75 V 350 V	125 V 500 V	125 V 500 V	350 V 700 V	350 V 700 V	
Number of MPP tracker			1			I	
Maximum input current	11.5 A	11.5 A	11.5 A	11.5 A	12.0 A	12.0 A	
Maximum short circuit current	+20 A/-13 A						
Maximum input power at maximum active	1540 W	2050 W	2560 W	3070 W	3770 W	4310 W	
output power							
output side (Grid connection)							
Grid voltage	185 V 276 V (depending on regional settings)						
Rated grid voltage	230 V						
Maximum output current	12.0 A	12.0 A	14.0 A	14.0 A	16.0 A	18.5 A	
Maximum active power (cos phi = 1)	1500 W	2000 W	2500 W	3000 W	3680 W	4200 W	
Maximum active power (cos phi = 0.95)	1500 W	2000 W	2500 W	3000 W	3500 W	3990 W	
Maximum apparent power (cos phi = 0.95)	1850 VA	2100 VA	2630 VA	3160 VA	3680 VA	4200 VA	
Rated power	1500 W	2000 W	2500 W	3000 W	3680 W	4200 W	
Rated frequency	50 Hz and 60 Hz						
Frequency	45 Hz 65 Hz (depending on regional settings)						
Night-time power loss	< 2 W W						
Feeding phases	single-phase						
Total harmonic distortion (cos phi = 1)	< 2 %						
Power factor cos phi	0.95 capacitive 0.95 inductive						
Characterisation of the operating performance							
Max. efficiency	98.0 %	98.0 %	98.0 %	98.0 %	98.6 %	98.6 %	
European efficiency	97.4 %	97.5 %	97.6 %	97.7 %	98.3 %	98.2 %	
Californian efficiency	97.6 %	97.7 %	97.7 %	97.8 %	98.3 %	98.2 %	
MPP efficiency	> 99.7 % (static), > 99 % (dynamic)						
Own consumption	< 4 W						
Power derating at full power from	50 °C (T <sub>amb</sub> )	50 °C (T <sub>amb</sub> )	50 °C (T <sub>amb</sub> )	45 °C (T <sub>amb</sub> )	50 °C (T <sub>amb</sub> )	45 °C (T <sub>amb</sub> )	
Safety							
Isolation principle	no galvanic isolation, transformerless						
Grid monitoring	yes, integrated						
Residual current monitoring	yes, integrated (The design of the inverter prevents it from causing DC leakage current)						
Operating conditions							
Area of application	indoor rooms with or without air conditioning, outdoors with or without protection						
Climate protection class as per IEC 60721-3-4	4K4H						
Ambient temperature	-25 °C +60 °C						
Storage temperature	-30 °C +80 °C						
Relative humidity	0 % 100 %, non-condensating						
Noise emission (typical)	31 dBA						
Fitting and construction							
Degree of protection	IP 65						
Overvoltage category	III (AC), II (DC)						
DC Input side connection	Phoenix Contact SUNCLIX (1 pair), mating connector included						
AC output side connection	Wieland RST25i3 plug, mating connector included						
Dimensions (X x Y x Z)	399 x 657 x 227 mm	399 x 657 x 227 mm	399 x 657 x 227 mm	399 x 657 x 222 mm	399 x 657 x 222 mm	399 x 657 x 222 mm	
Weight	11.0 kg	11.0 kg	11.0 kg	12.0 kg	11.5 kg	11.5 kg	
Communication interface	RS-485 (2 x RJ45 sockets; connectable to Meteocontrol WEB'log or Solar-Log™), Ethernet interface (1 x RJ45)						
Integrated DC circuit breaker	yes, compliant with VDE 0100-712						
Cooling principle	temperature controlled fan, variable speed, internal (dustproof)						
Test certificate	see certificate download on the product page						
	id 3600(x) / /200(x) = 3 330 W (cos phi = 1)						

- Maximum active power Belgium: StecaGrid 3600(x) / 4200(x) = 3,330 W (cos phi = 1)
  Rated power Portugal: StecaGrid 3600(x) = 3,450 W, StecaGrid 4200(x) = 3,680 W

