

# ZCS AZZURRO - HV SERIES THREE-PHASE STRING INVERTER

100KTL-HV/125KTL-HV/136KTL-HV



- » Maximum yield 99%
- » Protection class of IP66
- » Updates and diagnostics via USB
- » Forced convection with speed-controlled cooling
- » Class II surge protection devices (AC and DC)
- » 5 or 10 year ZCS warranty
- » Wide operating range from 180V to 1000V for enhanced configuration flexibility
- » Up to 12 independent MPPT channels



TECHNICAL DATA	3PH 100KTL-HV	3PH 125KTL-HV	3PH 136KTL-HV
<b>DC Input data</b>			
Typical DC power*	120000W	150000W	163200W
Maximum DC power for each MPPT		20000W	
No. of independent MPPTs / No. of strings per MPPT	10/2		12/2
Maximum DC input voltage		1100V	
Start-up voltage		200V	
Nominal DC input voltage		680V	
MPPT DC voltage range		180V-1000V	
DC voltage range at full load		550V-850V	
Maximum input current for each MPPT		26A	
Maximum absolute current for each MPPT		40A	
<b>AC Output data</b>			
Rated AC power	100kW	125kW	136kW
Maximum AC power	110kVA	137kVA	150kVA
Maximum AC current per phase	128A	160A	160A
Connection type/Rated grid voltage	Three-phase 3PH/PE 288 (PH-N); 500V (PH-PH)		Three-phase 3PH/PE 311 (PH-N); 540V (PH-PH)
Grid voltage range	230V~332V (PH-N); 400V~575V (PH-PH) (according to the local grid standards)		250V~358V (PH-N); 432V~621V (PH-PH) (according to the local grid standards)
Rated grid frequency	50Hz/60Hz		
Grid frequency range	45Hz~55Hz / 54Hz~66Hz (according to the local grid standards)		
Total harmonic distortion	<3%		
Power factor	1 (programmable +/-0.8)		
Active power adjustment range (settable)	0~100%		
Grid feed-in limit	Feed-in adjustable from zero to nominal power value**		
<b>Efficiency</b>			
Maximum efficiency	98.8%	99%	99%
Weighted efficiency (EURO)	98.5%	98.5%	98.51%
MPPT efficiency		>99.9%	
Consumption at night		<1W	
<b>Protections</b>			
Internal interface protection		No	
Safety protections	Anti-islanding, RCMU, Ground Fault Monitoring		
Reverse polarity protection DC		Yes	
DC circuit breaker		Integrated	
Overheating protection		Yes	
Overvoltage category/Protection class	Overvoltage category III / Protection class I		
Integrated dischargers	AC/DC: Type 2 standard		
<b>Standard</b>			
EMC	EN 61000-6-2/4, EN 61000-3-11/12		
Safety standard	IEC 62109-1/2, IEC62116, IEC61727, IEC61683, IEC60068(1,2,14,30)		
Grid connection standard	Connection certificates and standards available at <a href="http://www.zcsazzurro.com">www.zcsazzurro.com</a>		
<b>Communication</b>			
Communication interface (optional)	Wi-Fi/4G/Ethernet (optional), RS485 (proprietary protocol), USB, Bluetooth		
<b>General data</b>			
Allowable ambient temperature range	-30°C...+60°C (power limit above 45°C)		
Topology	Transformerless		
Environmental protection class	IP66		
Allowable relative humidity range	0%....100%		
Maximum operating altitude	4000m		
Noise level	< 60dB @ 1mt		
Weight	72kg	84kg	85kg
Cooling	Forced fan convection		
Dimensions (H x L x D)	1051mmx660mmx340mm		
Display	Led indicators, Bluetooth + app		
Warranty	5 or 10 years		

\* The typical DC power does not represent a maximum applicable power limit. The online configurator available at [www.zcsazzurro.com](http://www.zcsazzurro.com) will provide any applicable configurations

\*\* Possible using specific meter