

ZCS AZZURRO - LV SERIES THREE-PHASE STRING INVERTER

80KTL-LV/100KTL-LV/110KTL-LV



- » Maximum yield 98.7%
- » 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 10 independent MPPT channels



TECHNICAL DATA	3PH 80KTL-LV	3PH 100KTL-LV	3PH 110KTL-LV
DC Input data			
Typical DC power*	96000 W	120000 W	132000 W
Maximum DC power for each MPPT		13000 W	
No. of independent MPPTs / No. of strings per MPPT	8/2		10/2
Maximum DC input voltage		1100V	
Start-up voltage		200V	
Nominal DC input voltage		600V	
MPPT DC voltage range		180V-1000V	
DC voltage range at full load		500V-850V	
Maximum input current for each MPPT		26A	
Maximum absolute current for each MPPT		40A	
AC Output data			
Rated AC power	80 kW	100 kW	110 kW
Maximum AC power	88kVA	110kVA	121kVA
Maximum AC current per phase	128A	160A	175A
Connection type/Rated grid voltage	Three-phase 3PH/N/PE 220V/230V/240V (PH-N); 380V/400V/415V (PH-PH) or Three-phase 3PH/PE 380V/400V/415V (PH-PH)		
Grid voltage range	184V~276V (PH-N); 320V~480V (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**		
Efficiency			
Maximum efficiency	98.6%	98.7%	98.75%
Weighted efficiency (EURO)	98.2%	98.3%	98.4%
MPPT efficiency		>99.9%	
Consumption at night		<1W	
Protections			
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		
Standard			
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 on www.zcsazzurro.com		
Communication			
Communication interface (optional)	Wi-Fi/4G/Ethernet (optional), RS485 (proprietary protocol), USB		
General information			
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	72 kg	84 kg	85 kg
Cooling	Forced fan convection		
Dimensions (H x W x D)	1051mm x 660mm x 340mm		
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 will provide any applicable configurations.

** Possible by using a specific meter