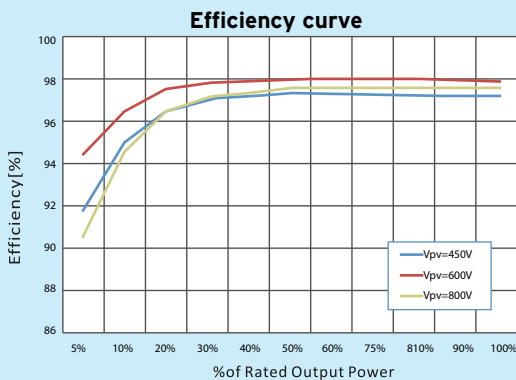


The compact three-phase **ZCS Azzurro** inverters are the ideal solution for small to medium size PV systems for residential, commercial and small industrial applications.

The Italian technology developed by ZCS makes the Azzurro series efficient, versatile and high-performing.

Their wide input range makes them easy to configure and suitable for all requirements on both new and retrofit installations on existing systems.



## ✓ AzzurroZCS technology

- Performance optimisation
- WiFi integration on the ZCS platform for stable, effective and intelligent connectivity

## ✓ Maximum Energy Efficiency

- Maximum performance 98.3%
- Stable efficiency in all working conditions
- Rapid and accurate MPPT algorithm
- Dual input section with independent MPPT

## ✓ A Flexible, Economic and Easy Installation solution

- IP65 Protection rating
- Integrated string combiner with different configuration options
- Power Management Unit
- 4" LCD display
- SD Card installed for updates and diagnostics

## ✓ Reliability, Sturdiness and Flexibility

- External enclosure in rust-proof, corrosion-proof and UV-ray proof aluminium
- Natural ventilation cooling
- Flexible and user-friendly management of operating parameters
- Optional class II power surge protection devices (AC and DC)
- Topology without transformer
- 10 year ZCS warranty

## ✓ Intelligent Grid Management

- Dynamic management of delivery to the grid
- "Zero Delivery" grid function
- Reactive output management feature
- Remote control over deliverable active/reactive output limit

## ✓ Ideal For Retrofit Options

- Wide operating input range from 160V to 960V also suitable for small size string systems
- Compact size
- Simple and user-friendly installation and configuration
- Dual MPPT channel





# TECHNICAL DATA SHEET



Azzurro ZCS - Three-phase String Inverters - 4.4KTL/5.5KTL/6.6KTL/8.8KTL/11KTL/12KTL

Technical Specifications	4.4KTL	5.5KTL	6.6KTL	8.8KTL	11KTL	12KTL
<b>Input(DC)</b>						
Typical PV power	4800W	6000W	7200W	9600W	12000W	14400W
Max DC power for single MPPT	2640W	3300W	3960W	5280W	6600W	7200W
Number of independent MPPT	2					
Number of DC inputs	1 for each MPPT					
Max. input voltage	1000V					
Start-up input voltage	180V					
Rated input voltage	600V					
MPPT voltage range	160V-960V					
DC voltage range at rated power	190V-850V	240V-850V	290V-850V	380V-850V	480V-850V	575V-850V
Max. input current per MPPT	11A/11A					
Input short circuit current foreach MPPT	14A					
<b>Output(AC)</b>						
Max. AC power	4400VA	5500VA	6600VA	8800VA	11000VA	13200VA
Rated power	4000VA	5000VA	6000VA	8000VA	10000VA	12000VA
Max. output current	6.4A	8.0A	9.6A	12.8A	15.9A	19.1A
Nominal Grid Voltage	3/N/PE,220/380 3/N/PE,230/400 3/N/PE,240/415					
Grid Voltage Range	184V-276V(According to local standard)					
Nominal Frequency	50/60Hz					
Grid frequency range	50Hz,+/-5Hz(According to local standard)					
Active power adjustable range	0~100%					
THDi	<3%					
Power factor	1 (Adjustable +/-0,8)					
<b>Performance</b>						
Max. efficiency	98%			98,30%		
Weighted eff. (EU/CEC}	97,50%			98%		
Self-consumption at night	<1W					
Feed-in start power	45W					
MPPT efficiency	>99,5%					
<b>Protection</b>						
DC reverse polarity protection	Yes					
DC switch	Available on WS versions					
Protection class /overvoltage category	I/III					
Safety protection	Anti Islanding, RCMU, Ground fault monitoring					
Certification	CEI 0-21, CE, CGC, AS4777, AS3100, VDE4105,C10-C11MG83/G59(more available on request)					
<b>Communication</b>						
Power management unit	According certification and request					
Standard Communication Mode	wifi, RS485, GPRS(Optional), SD card					
Operation Data Storage	25years					
<b>General data</b>						
Ambient temperature range	-25°C...+60°C					
Topology	Transformereless					
Degree of protection	IP65					
Allowable relative humidity range	0...95% no condensing					
Max.operating altitude	2000m					
Noise	<29db					
Weight	21kg			22kg		
Cooling	Natural					
Dimension	483*452*200mm					
Display	LCD display					
Warranty	10 years					



AS4777 G83/2 G59/3

CE, CEI 0-21, CQC, IEC, VDE-AR-N4105/VDE-0126, EMC, C10/11, EN50438, RD1669