

ZCS AZZURRO - LV 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 |
|--|---|---------------|---|
| DC Input data | | | |
| Typical DC power* | 120000 W | 150000 W | 163200 W |
| Maximum DC power for each MPPT | 20000 W | | |
| 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 | | |
| AC Output data | | | |
| Rated AC power | 100 kW | 125 kW | 136 kW |
| 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** | | |
| Efficiency | | | |
| Maximum efficiency | 98.8% | 99% | 99% |
| Weighted efficiency (EURO) | 98.5% | 98.5% | 98.51% |
| 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