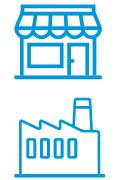


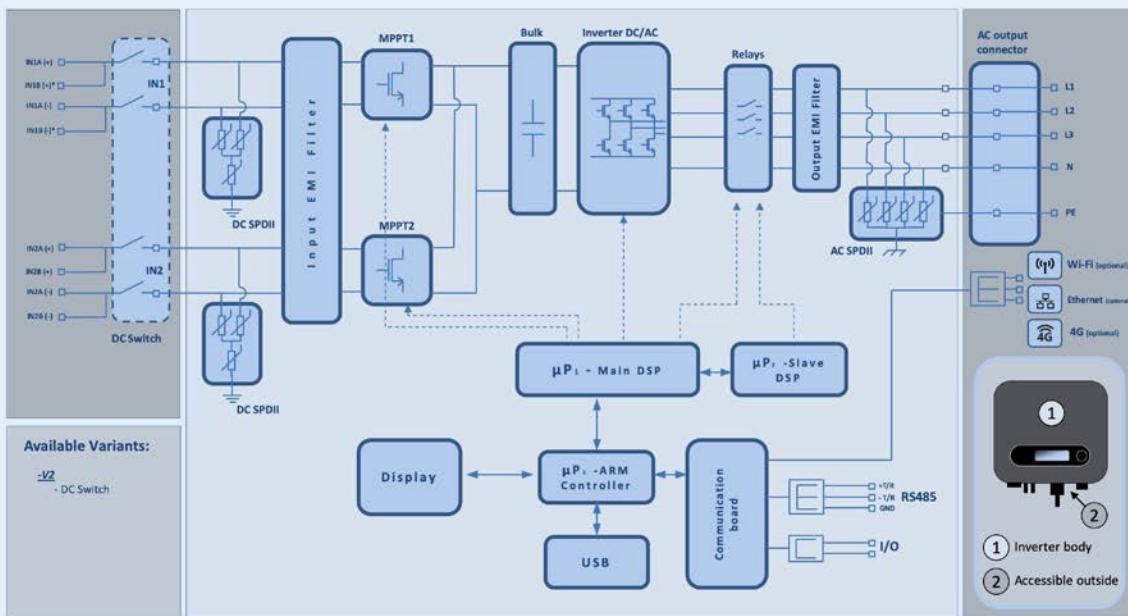
3PH 15KTL-V3/3PH 24KTL-V3

Three-phase string inverter



- » Maximum yield 98.6%
- » Dual input section with independent MPPTs
- » Updates and diagnostics via USB
- » 5 or 10 year ZCS warranty
- » “Zero Grid Feed-in” functionality
- » Possibility to manage reactive power
- » Wide operating input range from 140V to 1000V also suitable for small-sized string systems

BLOCK DIAGRAM



| TECHNICAL DATA | 3PH 15KTL-V3 | 3PH 17KTL-V3 | 3PH 20KTL-V3 | 3PH 22KTL-V3 | 3PH 24KTL-V3 | | | |
|--|---|--------------------|-----------------------|--------------------|--------------------|--|--|--|
| DC Input data | | | | | | | | |
| Typical DC power* | 18000W | 20400W | 24000W | 26400W | 28800W | | | |
| Maximum DC power for each MPPT | 10000W (400V-850V) | 12000W (460V-850V) | 12000W (460V-850V) | 15000W (580V-850V) | 15000W (580V-850V) | | | |
| No. of independent MPPTs / No. of strings per MPPT | | | 2/2 | | | | | |
| Maximum DC input voltage | | | 1100V | | | | | |
| Start-up voltage | | | 160V | | | | | |
| Nominal DC input voltage | | | 650V | | | | | |
| MPPT DC voltage range | | | 140V-1000V | | | | | |
| DC voltage range at full load | 300V-850V | 340V-850V | 400V-850V | 440V-850V | 480V-850V | | | |
| Maximum input current for each MPPT | | | 26A/26A | | | | | |
| Maximum absolute current for each MPPT | | | 36A/36A | | | | | |
| AC Output data | | | | | | | | |
| Rated AC power | 15000W | 17000W | 20000W | 22000W | 24000W | | | |
| Maximum AC power | 16500VA | 18700VA | 22000VA | 24200VA | 26400VA | | | |
| Maximum AC current per phase | 23.9A | 27.1A | 31.9A | 35.1A | 38.3 | | | |
| Connection type/Rated grid voltage | Three-phase 3PH/N/PE 220V/230V/240V (PH-N); 380V/400V/415V (PH-PH) o 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% | | | | | | | |
| Weighted efficiency (EURO) | 98.2% | | | | | | | |
| 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 | | | | | | | |
| Oversupply category/Protection class | Oversupply Category III / Protection class I | | | | | | | |
| Integrated dischargers | AC/DC MOV: Type 2 standard | | | | | | | |
| Standard | | | | | | | | |
| EMC | EN 61000-6-1/2/3/4, | | | | | | | |
| Safety standard | IEC 62116, IEC 61727, IEC 61683, IEC 60068-1/2/14/30, IEC 62109-1/2 | | | | | | | |
| Grid connection standard | Connection certificates and standards available at www.zcsazzurro.com | | | | | | | |
| Communication | | | | | | | | |
| Communication interfaces | Wi-Fi/4G/Ethernet (optional), RS485 (proprietary protocol), USB, Bluetooth | | | | | | | |
| General data | | | | | | | | |
| Allowable ambient temperature range | -30°C...+60°C (power limit above 45°C) | | | | | | | |
| Topology | Transformerless | | | | | | | |
| Environmental protection class | IP65 | | | | | | | |
| Allowable relative humidity range | 0%.....95% non-condensing | | | | | | | |
| Maximum operating altitude | 4000m | | | | | | | |
| Noise level | < 40dB @ 1mt | | | | | | | |
| Weight | 20 kg | 22 kg | | 23 kg | | | | |
| Cooling | Natural convection | | Forced fan convection | | | | | |
| Dimensions (H x L x D) | 430mmx520mmx189mm | | | | | | | |
| Data monitoring | LCD Display + APP | | | | | | | |
| Warranty | (NB: the extended warranty can be obtained by registering on the EXTENDED WARRANTY section of the zcsazzurro.com website) | | | | | | | |

* 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