

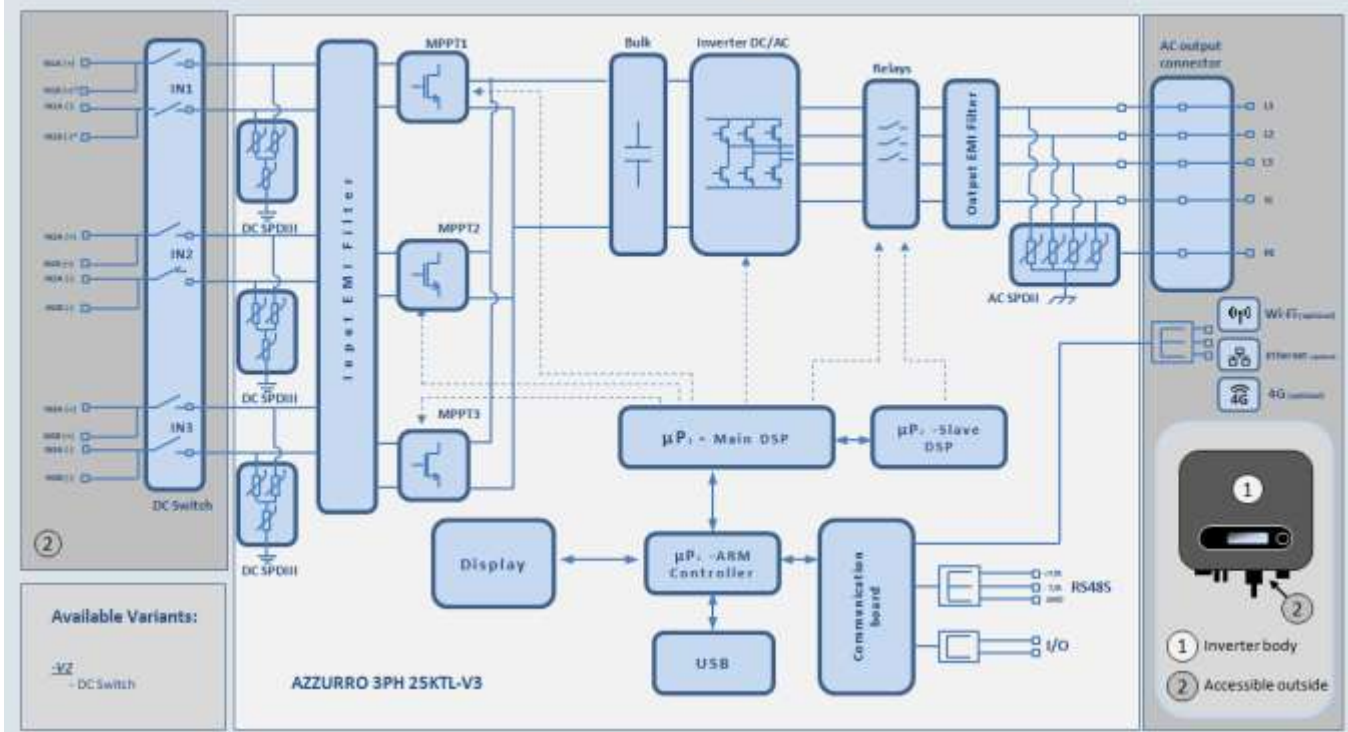
# ZCS AZZURRO – THREE-PHASE STRING INVERTER

3PH 25KTL-V3/3PH 30KTL/3PH 33KTL/3PH 36KTL/3PH 40KTL/3PH 45KTL/3PH 50KTL



- » Maximum yield 98,6%
- » Up to 4 independent MPPT with dual input section
- » Update and diagnostics via USB
- » 10 years ZCS warranty
- » “Zero Grid Feed-in” functionality
- » Possibility to manage reactive power
- » Wide operating input range from 180V to 1000V also suitable for small-sized string systems

## Block Diagram



TECHNICAL DATA	3PH 25KTL-V3	3PH 30KTL-V3	3PH 33KTL-V3	3PH 36KTL-V3	3PH 40KTL-V3	3PH 45KTL-V3	3PH 50KTL-V3
<b>DC Input data</b>							
Typical DC power*	30000W	36000W	39600W	43200W	48000W	54000W	60000W
Maximum DC power for each MPPT	25000(625V-850V)						
N. of independent MPPTs / No. of strings per MPPT	3/2				4/2		
Maximum DC input voltage	1100V						
Start-up voltage	200V						
Nominal DC input voltage	620V						
MPPT DC voltage range	180V-1000V						
DC voltage range at full load	420V-850V	510V-850V	510V-850V	480-850V	510V-850V	540V-850V	
Maximum input current for each MPPT	40A/40A/40A				40A/40A/40A/40A		
Maximum absolute current for each MPPT	50A/50A/50A				50A/50A/50A/50A		
<b>AC output data</b>							
Rated AC power	25000W	30000W	33000W	36000W	40000W	45000W	50000W
Maximum AC power	28000VA	34000VA	37000W	40000W	44000W	50000W	55000W
Maximum AC current per phase	42.4A	51.5A	56A	60.6A	66.7A	75A	83.3A
Connection type/ Rated grid voltage	Trifase 3PH/N/PE 220V/230V/240V (PH-N); 380V/400V/415V (PH-PH) o Trifase 3PH/PE 380V/400V/415V (PH-PH)						
Grid voltage range	184V~276V (PH-N); 310V~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**						
<b>Efficiency</b>							
Maximum efficiency	98.6%				98.8%		
Weighted efficiency (EURO)	98.2%						
MPPT efficiency	>99.9%						
Consumption at night	<3W						
<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 / Protective class I						
Integrated dischargers	AC/DC MOV: Type 2 standard						
<b>Standard</b>							
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						
<b>Communication</b>							
Communication interfaces	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	IP65						
Allowable relative humidity range	0%... 95% non-condensing						
Maximum operating altitude	4000m						
Noise Level	< 60dB @ 1mt						
Weight	36Kg				37Kg		
Cooling	Forced fan convection						
Dimensions (H*L*W)	480mm*585mm*220mm						
Display	LCD						
Warranty	10 anni						

\* The typical DC power does not represent a maximum applicable power limit..

\*\* Possible by using a specific meter