



## C&I HYBRID INVERTER (THREE PHASE)

(ASG-29.9TL-ZH) (ASG-30TL-ZH) (ASG-36TL-ZH) (ASG-40TL-ZH) (ASG-50TL-ZH)



### High Efficiency

- » String current up to 20A
- » 2x prolonged off-grid overload capability



### Smart

- » Supports grid-connected and off-grid three-phase unbalanced outputs, single-phase outputs up to 150%
- » Integrated Intelligent Management System



### User-Friendly

- » A variety of operating modes can be selected, suitable for different application scenarios
- » Smart Meter Phase Sequence Automatic Detection



### Safe & Reliable

- » Supports I-V curve scanning, accurately identifying string anomalies
- » Intelligent AFCI reduces fire risk (Optional)



### Economical & Cost-Saving

- » Supporting AC coupling and transforming PV grid-connected systems
- » Support for the "peak shaving" model

	ASG-29.9TL-ZH	ASG-30TL-ZH	ASG-36TL-ZH	ASG-40TL-ZH	ASG-50TL-ZH
<b>PV INPUT</b>					
Max. PV access power	59.8kW	60kW	72kW	80kW	100kW
Max. PV input power	44.9kW	45kW	54kW	60kW	75kW
Max. input voltage			1000V		
Rated PV input voltage			620V		
Start-up voltage			160V		
MPPT voltage range			150-850V		
Max. PV input current		40A*3			40A*4
Max. short circuit current		50A*3			50A*4
MPPT number/Max. input strings number		3/6			4/8
<b>BATTERY</b>					
Battery type			Li-ion		
Battery voltage range			150-800V		
Number of battery input channels			2		
Max. charge / discharge current			80A+80A		
Communication			CAN/RS485		
Charging strategy for Li-Ion battery			Self-adaption to BMS		
<b>AC OUTPUT</b>					
Rated output power	29.9kW	30kW	36kW	40kW	50kW
Max. apparent output power	29.9kVA	33kVA	39.6kVA	44kVA	55kVA
Rated output voltage			220V/380V,230V/400V,3L/N/PE		
Output voltage range			165-288V(Phase voltage),286-498V(Line voltage)		
Rated output frequency/ frequency range			50Hz/60Hz(±5Hz)		
Max. output current	43.2A	47.6A	57.2A	63.5A	79.4A
Power factor			>0.99 (0.8 leading - 0.8 lagging)		
THDi			<3%		
<b>AC INPUT</b>					
Rated input power	59.8kW	60kW	72kW	80kW	100kW
Max. input power	59.8kW	60kW	72kW	80kW	100kW
Rated input voltage			220V/380V,230V/400V,3L/N/PE		
Rated input frequency			50/60Hz		
Max. input current	86.3A	86.6A	103.9A	115.5A	144.3A
<b>BACK-UP OUTPUT</b>					
Rated output Power	29.9kW	30kW	36kW	40kW	50kW
Max. output power			1.5 times of rated power, 10 s		
Rated output voltage			220V/380V,230V/400V,3L/N/PE		
Rated output frequency			50/60Hz		
Max. output current	43.2A	43.3A	52A	57.7A	72.2A
Back-up switch time			< 10ms		
THDv			< 2%		
<b>EFFICIENCY</b>					
MPPT efficiency			99.80%		
Max. efficiency			98.10%		
EU efficiency			97.60%		
BAT charged/discharged Max. efficiency			97.4%/98.5%		
<b>PROTECTION</b>					
Integrated DC switch				Yes	
DC rever-polarity protection				Yes	
Insulation impedance detection				Yes	
Residual leakage current detection				Yes	
Ground fault monitoring				Yes	
Short circuit protection				Yes	
Anti-islanding protection				Yes	
DC/AC surge protection				DC:Type II;AC:Type II	
Battery reverse protection				Yes	
DC arc-fault circuit protection				Optional	
I/V curve scanning				Yes	
Parallel				Optional	
<b>GENERAL</b>					
Operating temperature range			-30 to +60 C		
Max. operation altitude			4000m(Derating above 3000m)		
Relative humidity			0-100%		
Cooling concept			Smart Fan Cooling		
Ingress protection			IP 66		
Topology			Transformerless		
Self consumption(night)			≤20W		
Dimensions (W*H*D)			530×890×295		
Weight			75kg		
Type of PV terminal			MC4 connector		
Type of AC terminal (Grid side)			OT terminal		
<b>COMMUNICATION</b>					
Display			LCD+LED+Bluetooth+APP		
Communication			WIFI+Bluetooth,Optional:4G,LAN;BMS:CAN/RS485		
<b>CERTIFICATION</b>					
Grid standards			EN 50549-1,IEC 61727/62116,IEC 61683,VDE 4105,NRS 097		
Safety/EMC			IEC/EN 62109-1/2,IEC/EN 62477-1, EN IEC61000-6-1/2/3/4,EN IEC 61000-3-11/12		

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