

# Single-phase Inverter

## BLD-3k/4k/5k-TL

SAA CCC CE CQC CEC VDE GS C10/11 TF3.2.1 NRS-097

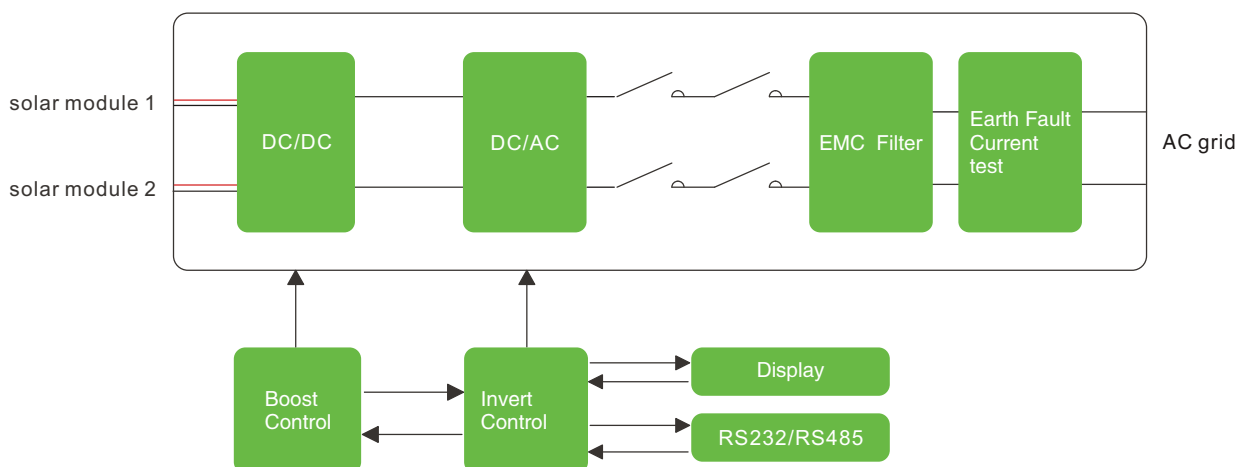
BLD-3k/4k/5k-TL Multi-string inverter is specialized designed for small PV station ,provided a flexible solution for the design of photovoltaic power station.Equip 2 MPPT tracker ,Wide DC input range (120-590 Vdc), compatible with different module technologies,BLD-3K-4K-5K-TL on grid inverter is featured by portability,beautiful appearance ,high cost performance and high efficiency.

### 【 Features 】

- Transformerless design, high efficiency (Max.97.5%, Euro.96.6%)
- High MPPT accuracy (>99.9%)
- Wide DC input range (80-500Vdc), compatible with different module technologies
- Easy to wire, install and operate
- IP 65 design, suitable for indoor and outdoor installation
- 5 years warranty (10~25 years as option)



### 【 Model diagram 】



## [ Inverter Technical Data ]

Type	BLD-3k-TL	BLD-4k-TL	BLD-5k-TL
<b>Input (DC)</b>			
Max. PV Power	3400W	4500W	5000W
Max. DC voltage [V]	590V	590V	590V
Nominal DC voltage[V]	360V	360V	360V
Operating MPPT Voltage Range	120–500V	120–500V	120–500V
MPPT Voltage Range at Nominal Power	150–500V	200–500V	200–500V
Start up DC voltage[V]	150V	150V	150V
Turn off DC voltage [V]	120V	120V	120V
Max. DC Current	16A/16A	18A/18A	18A/18A
Number of MPP trackers	2	2	2
Number of DC Connection for each MPPT	A:1/B:1	A:1/B:1	A:1/B:1
DC Connection Type	MC4 connector	MC4 connector	MC4 connector
<b>Output (AC)</b>			
Max. AC Power	3300W	4400W	4800W
Nominal AC Power(cos phi = 1)	3000W	4000W	4600W
Nominal Grid Voltage	220V/230V/240V	220V/230V/240V	220V/230V/240V
Nominal Grid Frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Max. AC Current	14.4A	19.0A	21.0A
Grid Voltage Range*	185–276V	185–276V	185–276V
Grid Frequency Range*	45–55Hz/55–65Hz	45–55Hz/55–65Hz	45–55Hz/55–65Hz
Power Factor	>0.99	>0.99	>0.99
Total Harmonic Distortion (THD)	<2%	<2%	<2%
Feed in Starting Power	45W	50W	50W
Night time Power Consumption	0W	0W	0W
Standby Consumption	6W	6W	6W
AC Connection Type	Plug-in Connector	Plug-in Connector	Plug-in Connector
<b>Efficiency</b>			
Max. Efficiency (at 360Vdc)	97.5%	97.6%	97.6%
Euro Efficiency (at 360Vdc)	96.6%	97.0%	97.0%
MPPT Efficiency	99.9%	99.9%	99.9%
<b>Safety and Protection</b>			
DC Insulation Monitoring		Yes	
DC switch		Optional	
Residual Current Monitoring Unit(RCMU)		Integrated	
Grid Monitoring with Anti-islanding		Yes	
Protection Class		I (According to IEC 62103)	
Overvoltage Category		PV II / Mains III (According to IEC 62109-1)	
<b>Reference Standard</b>			
Safety Standard		EN 62109, AS/NZS 3100	
EMC Compliance		EN 61000-6-1, EN 61000-6-3, EN 61000-6-2, EN 61000-6-4, EN61000-3-2, EN61000-3-3, EN61000-3-11, EN61000-3-12	
Grid Standard		VDE 0126-1-1, RD1663, C10/11, G83/2, UTE C15-712-1, AS4777, CQC, EN50438	
<b>Physical structure</b>			
Dimensions (W×H×D) [mm]		367x526x153mm	
Weight [kg]		20kg	
Environmental Protection Rating		IP65	
Cooling Concept		Natural Convection	
Mounting Information		Wall bracket	
<b>General Data</b>			
Operating Temperature Range		20°C to + 60°C ( derating above 45°C)	
Relative Humidity		0% to 98%, no condensation	
Maximum Altitude (above sea level)[m]		2000m	
Noise Level[dBA]		< 40dB	
Isolation Type		Transformerless	
Display		3 LED, Backlight, 16 × 2 Character LCD	
Data Communication Interfaces		RS485, (Wi-Fi, GPRS, Optional)	
Computer Communication		RS232 as Option	
Standard Warranty		5 Years ( Optional 10~25 years)	

\* The AC voltage and current range may change with the criteria of nations

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