

## Residential Single Phase Inverter



### HIGH YIELD

- Higher yield with max. efficiency 98.4 %, European efficiency 98.0 %
- Flexible PV string configurations, DC/AC ratio up to 1.3



### SMART MANAGEMENT

- Easy local and online monitoring via App or Web
- Export power control with smart energy meter



### SAFE AND DURABLE

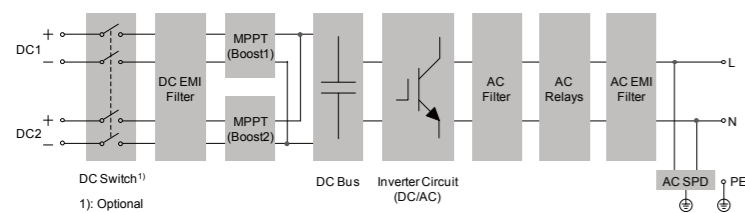
- Built-in surge arresters and residual current protection
- High anti-corrosion with aluminum alloy die casting



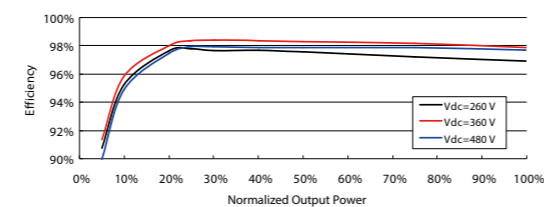
### EASY AND USER FRIENDLY

- 11.5 kg compact design, plug and play installation
- Fast commissioning via LCD

### CIRCUIT DIAGRAM



### EFFICIENCY CURVE



Type designation	SG3K-D	SG5K-D
<b>Input (DC)</b>		
Max. PV input voltage	600 V	
Min PV input voltage / Startup voltage	90 / 120 V	
Nominal input voltage	360 V	
MPP voltage range	90 V – 560 V	
MPP voltage range for nominal power	160 V – 480 V	260 V – 480 V
No. of MPPTs	2	
Max. number of PV strings per MPPT	1	
Max. PV input current	20 A (10 A / 10 A)	
Max. current for input connector	24 A (12 A / 12 A)	
Max. PV short-circuit current	24 A (12 A / 12 A)	
<b>Output (AC)</b>		
AC output power	3000 VA	4990 VA
Max. AC output current	13.7 A	21.7 A
Nominal AC voltage	230 Vac	
AC voltage range	180 – 276 Vac	
Nominal grid frequency	50 Hz / 60 Hz	
Grid frequency range	45 Hz – 55 Hz / 55 Hz – 65 Hz	
Total harmonic distortion (THD)	< 3 % (of nominal power)	
DC current injection	< 0.5 % (of nominal current)	
Power factor	> 0.99 / 0.8 leading – 0.8 lagging	
Feed-in phases / Connection phases	1 / 1	
<b>Efficiency</b>		
Max. efficiency	98.4 %	
Max. European efficiency	97.7 %	98.0 %
<b>Protection</b>		
PV reverse connection protection	Yes	
AC short circuit protection	Yes	
Leakage current protection	Yes	
Grid monitoring	Yes	
PV string current monitoring	Yes	
DC switch	Optional	
Overvoltage protection	AC Type II	
<b>General Data</b>		
Dimensions (W*H*D)	360*390*133 mm	
Weight	11.5 kg	
Isolation method	Transformerless	
Ingress protection rating	IP65	
Power loss in night mode	< 1 W	
Operating ambient temperature	-25 °C to 60 °C (>45 °C derating)	
Allowable relative humidity (non-condensing)	0 – 100 %	
Cooling method	Natural cooling	
Max. operating altitude	4000 m (> 2000 m derating)	
Display / Communication	LCD / WiFi	
PV connection type	MC4 (Max. 6 mm2)	
AC connection type	Plug and play connector (max. 6 mm2)	
Compliance	IEC62109-1, IEC62109-2, IEC62116, IEC61727, EN 61000-6-2, EN 61000-6-3, AS4777.2	
Grid support	Active & reactive power control, power ramp rate control	
Type designation	SG3K-D	SG5K-D