

SG60KTL

String Inverter



Secured Yield

- Max. efficiency 98.7 %
- Max. DC/AC ratio up to 1.4
- Long-term overload at 1.1 Pn



Intelligent Design

- Integrated string current monitoring function
- Integrated DC fuses and DC/AC surge protection function



Qualified

- TÜV, CE, G59/3, BDEW



Input (DC)

Max. PV input voltage	1000 V
Startup voltage	620 V
MPP voltage range	570 - 950 V
MPP voltage range for nominal power	570 - 850 V
No. of MPPTs	1
Max. number of PV strings per MPPT	14
Max. PV input current	120 A
Max. current for input connector	12 A

Output (AC)

Nominal AC output power	60000 W
Max AC output power (PF=1)	66000 W
Max. AC output apparent power	66000 VA
Max. AC output current	96 A
Nominal AC voltage	3P + N + PE / 3P + PE, 230 / 400 V
AC voltage range	310 - 480 V
Nominal grid frequency	50 Hz / 60 Hz
Grid frequency range	45 - 55 Hz / 55 - 65 Hz
THD	< 3 % (at nominal power)
DC current injection	< 0.5 % In
Power factor	> 0.99 @default value at nominal power, (adj. 0.8 leading - 0.8 lagging)

Protection & Functions

Anti-islanding protection	Yes
LVRT	Yes
DC reverse connection protection	Yes
AC short circuit protection	Yes
Leakage current protection	Yes
DC switch	Yes
DC fuse	DC positive fuses
PV string current monitoring	Yes
Overvoltage protection	DC Type II SPD (40 kA) / AC Type III SPD

System Data

Max. efficiency	98.70 %
Euro. efficiency	98.50 %
Isolation method	Transformerless
Ingress protection rating	IP65
Night power consumption	< 1 W
Operating ambient temperature range	-25 to 60 °C
Allowable relative humidity range	0 - 100 %
Cooling method	Smart forced air cooling
Max. operating altitude	4000 m (> 3000 m derating)
Display	Graphic LCD
Communication	RS485
DC connection type	MC4, max. 6 mm ² cable
AC connection type	Screw clamp terminal, max. 95 mm ² copper or aluminum cable
Certification	VDE0126-1-1, EN62109-1, EN62109-2, G59/3, VDE-AR-N 4105, BDEW

Mechanical Data

Dimensions (W*H*D)	634*959*267 mm
Mounting method	Wall bracket
Weight	55 kg
Type designation	SG60KTL-V18

Note: this inverter may only be used for industrial applications

Efficiency Curve

