

# Three Phase Inverter For the 277/480V Grid

SE33.3K



INVERTERS

## Specifically designed to work with power optimizers

- // Superior efficiency (98.1%)
- // Quick and easy inverter commissioning directly from a smartphone using the SolarEdge SetApp
- // Small, lightest in its class, and easy to install
- // Built-in module-level monitoring
- // Internet connection through Ethernet or Wireless
- // IP65 – Outdoor and indoor installation
- // Fixed voltage inverter for longer strings
- // Smart Energy Management control
- // Optional integrated DC Safety Unit - eliminates the need for external DC isolators
- // Optional DC surge protection and DC fuses
- // Advanced safety features - Integrated arc fault protection and optional rapid shutdown
- // 150% DC oversizing, enabling higher energy production

# / Three Phase Inverter for the 277/480V Grid

## SE33.3K

Applicable to inverters with part numbers	SEXK-XXXXBXX4	
	SE33.3K (Requires medium voltage transformer)	
<b>OUTPUT</b>		
Rated AC Power Output	33300	VA
Maximum AC Power Output	33300	VA
AC Output Voltage - Line to Line / Line to Neutral (Nominal)	480 / 277	Vac
AC Output Voltage - Line to Neutral Range	244 - 305	Vac
AC Frequency	50/60 ± 5	Hz
Maximum Continuous Output Current (per Phase) @277V	40	A
Grids Supported - Three Phase	3 / N / PE (WYE with Neutral)	V
Utility Monitoring, Islanding Protection, Configurable Power Factor, Country Configurable Thresholds	Yes	
<b>INPUT</b>		
Maximum DC Power (Module STC)	50000	W
Transformer-less, Ungrounded	Yes	
Maximum Input Voltage	1000	Vdc
Operating Voltage Range	680 - 1000	Vdc
Maximum Input Current	40	Adc
Reverse-Polarity Protection	Yes	
Ground-Fault Isolation Detection	350kΩ Sensitivity <sup>(1)</sup>	
Maximum Inverter Efficiency	98.1	%
European Weighted Efficiency	98	%
Nighttime Power Consumption	< 4	W
<b>ADDITIONAL FEATURES</b>		
Supported Communication Interfaces <sup>(2)</sup>	RS485, Ethernet, Wi-Fi (requires antenna) <sup>(3)</sup> , ZigBee (optional), Cellular (optional)	
Smart Energy Management	Export Limitation	
Inverter Commissioning	With the SetApp mobile application using built in Wi-Fi access point for local connection	
Arc Fault Protection	Integrated, User Configurable (According to UL1699B)	
Rapid Shutdown	Optional <sup>(4)</sup> (Automatic upon AC Grid Disconnect)	
RS485 Surge Protection	Optional <sup>(5)</sup>	
<b>DC SAFETY UNIT (OPTIONAL)</b>		
2-pole Disconnection	1000V / 40A	
DC Surge Protection	Type II, field replaceable	
DC Fuses on Plus & Minus	Optional, 20A	
Compliance	UTE-C15-712-1	
<b>STANDARD COMPLIANCE</b>		
Safety	IEC-62103 (EN50178), IEC-62109, AS3100	
Grid Connection Standards <sup>(6)</sup>	BDEW, CEI-016, G99	
Emissions	IEC61000-6-2, IEC61000-6-3, IEC61000-3-11, IEC61000-3-12	
RoHS	Yes	
<b>INSTALLATION SPECIFICATIONS</b>		
AC Output	Cable Gland - diameter 18 - 25	mm
DC Input	3 MC4 pairs	
DC Input with Safety Unit	Gland outer diameter 5 - 10 mm / Wire cross section 0.5 - 13.5 mm <sup>2</sup>	
Dimensions (H x W x D)	540 x 315 x 260	mm
Dimensions with Safety Unit (H x W x D)	775 x 315 x 260	mm
Weight	45	kg
Weight with Safety Unit	48	kg
Operating Temperature Range	-40 to +60 <sup>(7)</sup>	°C
Cooling	Fan (user replaceable)	
Noise	< 55	dB(A)
Protection Rating	IP65 - Outdoor and Indoor	
Mounting	Bracket Provided	

(1) Where permitted by local regulations

(2) Refer to Datasheets -> Communications category in Downloads page for specifications of optional communication options: <http://www.solaredge.com/groups/support/downloads>

(3) Wi-Fi connectivity requires an external antenna. For more information refer to: <https://www.solaredge.com/sites/default/files/se-wifi-zigbee-antenna-datasheet.pdf>

(4) Inverter with rapid shutdown part number: SE33.3K-RWRxxxxxx

(5) Provided with the inverter in India only. For other countries an SPD plug-in can be purchased. Refer to: [https://www.solaredge.com/sites/default/files/se\\_spd\\_plug\\_in\\_for\\_rs485\\_3ph\\_setapp\\_ds.pdf](https://www.solaredge.com/sites/default/files/se_spd_plug_in_for_rs485_3ph_setapp_ds.pdf)

(6) For all standards refer to Certifications category in Downloads page: <http://www.solaredge.com/groups/support/downloads>

(7) For power de-rating information refer to: <https://www.solaredge.com/sites/default/files/se-temperature-derating-note.pdf>