Three Phase Commercial Inverter

For Europe

SE20K / SE25K / SE30K / SE33.3K

INVERTERS



Specifically designed to work with SolarEdge power optimizers

- Fixed voltage inverter for superior efficiency and longer strings
- Quick and easy inverter commissioning directly from a smartphone using the SolarEdge SetApp
- Small, lightest in its class, and easy to install
- Integrated type 2 DC surge protection, to better withstand surges caused by lightning or other events
- Optional RS485 and type 2 AC surge protection
- Built-in module-level monitoring with Ethernet, wireless, or cellular communication for full system visibility
- Advanced safety features - integrated arc fault protection and optional rapid shutdown
- IP65 for outdoor and indoor installations
- Optional integrated DC Safety Unit - eliminates the need for external DC isolators
- Future-proofed for SolarEdge energy storage solutions

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Applicable to inverters with part number	SEXXK-RWX0IXXXX				Units
	SE20K(1)	SE25K	SE30K	SE33.3K	
OUTPUT					
Rated AC Active Power Output	20,001(2)	25,000	29,990	33,300(3)	W
Maximum AC Apparent Output Power	20,001	25,000	29,990	33,300	VA
AC Output Voltage – Line to Line / Line to Neutral (Nominal)	380 / 220; 400 / 230				Vac
AC Output Voltage – Line to Line / Line to Neutral	304 – 437 / 176 – 253; 320 – 460 / 184 – 264.5				Vac
AC Frequency	50/60 ± 5%				Hz
Maximum Continuous Output Current (per Phase)	29	36.25(4)	43.5(5)	48.25	Aac
AC Output Line Connections	3W + PE, 4W + PE				
Utility Monitoring, Islanding Protection, Configurable Power Factor, Country Configurable Thresholds	Yes				
Total Harmonic Distortion	< 3				%
Power Factor Range	±0.2 to 1				
Maximum Residual Current Injection(6)	100				mA
INPUT					
Maximum DC Power (Module STC)	35,000	43,750	52,500	58,275	W
Transformer-less, Ungrounded	Yes				
Maximum Input Voltage DC+ to DC-	950		1000		Vdc
Operating Voltage Range	680 – 1000				Vdc
Maximum Input Current	29	36.25	43.5	48.25	Adc
Reverse-Polarity Protection	Yes				
Ground-Fault Isolation Detection	167 kΩ Sensitivity(7)				
Maximum Inverter Efficiency	98	98.3			%
European Weighted Efficiency	97.7	98			%
Nighttime Power Consumption	< 4				W
ADDITIONAL FEATURES					
Supported Communication Interfaces	2 x RS485, Ethernet, Wi-Fi (optional)(8), 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 UL 1699B)				
Rapid Shutdown	Optional(9) (automatic upon AC grid disconnect)				
RS485 Surge Protection	Optional				
DC Surge Protection	Type II, field replaceable, integrated				
AC Surge Protection	Type II, field replaceable, optional				
VAR at Night(10)	Yes				
DC SAFETY UNIT (OPTIONAL)					
2-pole Disconnection	N/A	1000 V / 48.25 A			
DC Fuses (Single Pole)	N/A	Optional, 25 A / 30 A			
Compliance	N/A	UTE-C15-712-1			
STANDARD COMPLIANCE					
Safety	IEC 63027; IEC 62109, AS 3100				
Grid Connection Standards(11)	VDE-AR-N-4105, VDE-AR-N-4110(12), AS-4777, EN 50438, CEI-021, VDE 0126-1-1, CEI-016, EN 50549-1, EN 50549-2, TOR Erzeuger Typ A, G99, G99 (NI), VFR 2019				
Emissions	IEC 61000-6-2, IEC 61000-6-3 Class A, IEC 61000-3-11, IEC 61000-3-12				
RoHS	Yes				

(1) Not available in all countries. For details about the inverters approved for installation in your country, see here.
(2) In Italy and Hungary, the Rated AC Active Power Output is 19,900 W.
(3) For sites under VDE-AR-N-4110, consider this as a 30 kW (at 90% Unom) inverter for site capacity calculations.
(4) For sites under VDE-AR-N-4110, the Maximum Continuous Output Current per Phase is 40 A.
(5) For sites under VDE-AR-N-4110, the Maximum Continuous Output Current per Phase is 48.25 A.
(6) If an external RCD is required, its trip value must be ≥ 100 mA.
(7) Where permitted by local regulations.
(8) Wi-Fi connectivity requires connection of an additional Wi-Fi component, ordered separately. For more details ask your SolarEdge salesperson or refer to the Communication product page.
(9) Inverters with rapid shutdown part number: SExxK-xxRxxxxxx.
(10) For details, see Set Volt Ampere Reactive at Night.
(11) For all standards refer to the Certificates category in the Knowledge Center.
(12) Not applicable for SE20K.

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CE RoHS

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Applicable to inverters with part number	SEXXK-RWX0IXXXX				
	SE20K	SE25K	SE30K	SE33.3K	
INSTALLATION SPECIFICATIONS					
AC Output Gland Diameter / Line cross section / PE cross section	Cable diameter 19 – 28 mm / 4 – 16 mm² / 4 – 16 mm²				
DC Input(13)	4 MC4 pairs				
DC Input with Safety Unit(13)(14)	4 MC4 pairs 4 Strings: Gland: Cable outer diameter 5 – 10 mm / Wire cross section 2.5 – 16 mm²				
Dimensions (H x W x D)	550 x 317 x 273				mm
Dimensions with Safety Unit (H x W x D)	836 x 317 x 300 (DC MC4); 819 x 317 x 300 (DC Gland)				mm
Weight	32				kg
Weight with Safety Unit	36.5				kg
Operating Temperature Range	-40 to +60(15)				°C
Cooling	Fan (user replaceable)				
Noise	< 62				dBA
Protection Rating	IP65 – outdoor and indoor				
Mounting	Brackets provided				

(13) DC input is available with MC4 or Gland connectors under the inverter part number. For more information, contact SolarEdge.
(14) Only MC4 connectors manufactured by Stäubli are approved for use.
(15) For power derating information refer to the Power Derating technical note.

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