Three Phase Inverter

SE25K / SE33.3K / SE40K



Specifically designed to work with power optimizers

- Fixed voltage inverter for superior efficiency (98.3%) 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
- Optional RS485 and type 2 DC and AC Surge Protection, to better withstand surges caused by lightning or other events
- Built-in module-level monitoring with Ethernet, wireless or cellular communication (optional) for full system visibility
- IP65 outdoor and indoor installation
- Optional integrated DC Safety Unit eliminates the need for external DC isolators
- Future-ready for SolarEdge energy storage solution



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Applicable to inverters with part number	SEXXK-RWXXIXXXX			
	SE25K	SE33.3K	SE40K	Units
OUTPUT				
Rated AC Active Power Output	25000	33300	40000	W
Maximum AC Apparent Output Power	25000	33300	40000	VA
AC Output Voltage - Line to Line / Line to Neutral (Nominal)		220; 400 / 230	480 / 277	Vac
AC Output Voltage - Line to Line / Line to Neutral	304 - 437 / 176 - 253; 320 - 478 / 184 - 264.5 422.5 - 529 / 244 - 305		Vac	
AC Frequency		50/60 ± 5%		Hz
Maximum Continuous Output Current (per Phase)	36.25		48.25	Aac
AC Output Line Connections		3W + PE, 4W + PE		
Supported Grids	WYE: TN-C, TN-S, TN-C-S, TT, IT; Delta: IT			
Utility Monitoring, Islanding Protection, Configurable Power		Yes		
Factor, Country Configurable Thresholds				
Total Harmonic Distortion		< 3		%
Power Factor Range	±0.2 to 1			
Maximum Residual Current Injection ⁽¹⁾		100		mA
INPUT	1		1	
Maximum DC Power (Module STC)	43750	58275	70000	W
Transformer-less, Ungrounded		Yes		
Maximum Input Voltage DC+ to DC-	950		1000	Vdc
Operating Voltage Range		680 - 1000		Vdc
Maximum Input Current	36.25		48.25	Adc
Reverse-Polarity Protection		Yes		
Ground-Fault Isolation Detection Maximum Inverter Efficiency		167kΩ Sensitivity ⁽²⁾	00.1	0/
European Weighted Efficiency		<u>98.3</u> 98	98.1	%
Nighttime Power Consumption		< 4		70 W
ADDITIONAL FEATURES		× 4		vv
		NOR ARE MAILER (anti-anal), Callular (an	tion a D	1
Supported Communication Interfaces ⁽³⁾ Smart Energy Management	2 x RS485, Wi-Fi (optional), Cellular (optional) Export Limitation			-
Inverter Commissioning	With the SetApp mobile application using built-in Wi-Fi access point for local connection			
Arc Fault Protection	Built-in, user configurable (according to UL1699B)			
Rapid Shutdown	Optional ⁽⁴⁾ (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 ⁽⁵⁾	Yes			
DC SAFETY UNIT (OPTIONAL)				
DC Disconnect	Integrated in the DC safety unit			
DC Fuses (Single Pole)	Optional, 25A/ 30A			
STANDARD COMPLIANCE				
Safety		IEC 63027; IEC 62109-1, IEC62109-	.2	1
Grid Connection Standards ⁽⁶⁾	VDE-AR-N-4105, VDE-AR-N-4110, AS-4777, EN 50549-1, EN 50549-2, CEI-021, VDE 0126-1-1, CEI-016			
Emissions	IEC61000-6-2, IEC61000-6-3 Class A, IEC61000-3-11, IEC61000-3-12			
RoHS	Yes			
INSTALLATION SPECIFICATIONS	1			
AC Output Gland Diameter / Line cross section / PE cross				
section	Cable diameter 19 – 28 mm / 4 – 16 mm ² / 4 – 16 mm ²			
DC Input ⁽⁷⁾	4 MC4 pairs			
DC Input with Safety Unit	4 Strings: Gland: Cal	ble outer diameter 5 – 10 mm / Wire c	moss section $2.5 - 16 \text{ mm}^2$	
Dimensions (H x W x D)	i stangs, stand, ca	558 x 328 x 273		mm
Dimensions with Safety Unit (H x W x D)		839 x 328 x 300		mm
Weight		32		kg
Weight with Safety Unit	36.5			kg
Operating Temperature Range	-40 to +60 ⁽⁸⁾		°C	
Cooling	Fan (user replaceable)			
Noise	< 62			dBA
Protection Rating	IP65 – outdoor and indoor			
Mounting	Brackets provided			

(1) If an external RCD is required, its trip value must be \geq 100mA.

(2) Where permitted by local regulations.

(3) For specifications of optional communication options, see the <u>SolarEdge website</u>.

(4) Inverters with rapid shutdown part number: SExxK-xxRxxxxx.

(5) For details, see Set Volt-Ampere at Night – Application Note

(6) For all standards refer to the <u>Knowledge Center</u>.
(7) Only MC4 connectors manufactured by Stäubli are approved for use.
(8) For power de-rating information refer to the <u>Temperature Derating Technical Note</u>.