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	
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)	380 / 22	20 ; 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 Factor,	Yes			
Country Configurable Thresholds		res		
Total Harmonic Distortion	<u><</u> 3			%
Power Factor Range	+/-0.2 to 1			
Maximum Residual Current Injection ⁽¹⁾	100			mA
INPUT				
Maximum DC Power (Module STC)	37500	50000	60000	W
Transformer-less, Ungrounded		Yes		
Maximum Input Voltage DC+ to DC-	1000			Vdc
Operating Voltage Range	680 - 1000			Vdc
Maximum Input Current	36.25		48.25	Adc
Reverse-Polarity Protection		Yes		
Ground-Fault Isolation Detection		167kΩ Sensitivity ⁽²⁾		
Maximum Inverter Efficiency		98.3	98.1	%
European Weighted Efficiency		98	l.	%
Nighttime Power Consumption	< 4			W
ADDITIONAL FEATURES	L			
Supported Communication Interfaces ⁽³⁾	23	RS485, Wi-Fi (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	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, optional			
AC Surge Protection	Type II, field replaceable, optional			
DC SAFETY UNIT (OPTIONAL)				
DC Disconnect	Integrated in the DC safety unit			
DC Fuses (Single Pole)	Optional, 25A			
STANDARD COMPLIANCE		-		
Safety		IEC-62109-1, IEC-62109-2		
Grid Connection Standards ⁽⁵⁾	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	IECO1000-0-2, IECO1000-0-3 Class A, IECO1000-3-11, IECO1000-3-12 Yes			
INSTALLATION SPECIFICATIONS		103		
AC Outout Gland Diameter / Line cross section / PE cross section	Cabla		14 162	1
	Cable diameter 19 - 28 mm / 4 - 16 mm ² / 4 - 16 mm ² 4 MC4 pairs			
DC Input ⁽⁶⁾	4 MC4 pairs 4 Strings: Gland: Cable outer diameter 5 - 10 mm / Wire cross section 2.5 - 16mm ²			
DC Input with Safety Unit	4 strings: Gland: Cable outer diameter 5 - 10 mm / Wire cross section 2.5 - 16mm ⁻ 558 x 328 x 273			
Dimensions (H x W x D)	839 x 328 x 2/3			mm
Dimensions with Safety Unit (H x W x D)				mm
Weight		32		kg
Weight with Safety Unit	36.5		kg	
Operating Temperature Range	-40 to +60 ⁽⁷⁾			°C
Cooling	Fan (user replaceable)			10.1
Noise	< 62			dBA
Protection Rating	IP65 - outdoor and indoor			
Mounting		Brackets provided		

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

(2) Where permitted by local regulations
(3) Refer to Datasheets -> Communications category on Downloads page for specifications of optional communication options: https://www.solaredge.com/products/communication

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

(5) For all standards refer to Certifications category in Downloads page: https://www.solaredge.com/downloads#/

(6) Only MC4 connectors manufactured by Stäubli are approved for use

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