

Three Phase Inverters

For the 208V Grid for North America

SE9KUS / SE14.4KUS



The best choice for SolarEdge enabled systems

- / Specifically designed to work with power optimizers
- / Integrated arc fault protection and rapid shutdown for NEC 2014 and 2017, per article 690.11 and 690.12
- / UL1741 SA certified, for CPUC Rule 21 grid compliance
- / Built-in module-level monitoring
- / Internet connection through Ethernet or Wireless
- / Small, lightweight, and easy to install outdoors or indoors on provided bracket
- / Fixed voltage inverter for longer strings
- / Integrated Safety Switch
- / Supplied with RS485 Surge Protection, to better withstand lightning events

/ Three Phase Inverters

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SE9KUS				SE14.4KUS			
APPLICABLE TO INVERTERS WITH PART NUMBER		SEXXX-XXXXXNXXX					
OUTPUT							
Rated AC Power Output		9000		14400		VA	
Maximum AC Power Output		9000		14400		VA	
AC Output Line Connections		4-wire WYE (L1-L2-L3-N) plus PE or 3 wire Delta					
AC Output Voltage Minimum-Nominal-Maximum ⁽²⁾ (L-N)		105-120-132.5				Vac	
AC Output Voltage Minimum-Nominal-Maximum ⁽²⁾ (L-L)		183-208-229				Vac	
AC Frequency Min-Nom-Max ⁽²⁾		59.3 - 60 - 60.5				Hz	
Max. Continuous Output Current (per Phase)		25		40		A	
GFDI Threshold		1				A	
Utility Monitoring, Islanding Protection, Country Configurable Set Points		Yes					
INPUT							
Maximum DC Power (Module STC)		12150		19400		W	
Transformer-less, Ungrounded		Yes					
Maximum Input Voltage DC to Gnd		250		300		Vdc	
Maximum Input Voltage DC+ to DC-		500		600		Vdc	
Nominal Input Voltage DC to Gnd		200				Vdc	
Nominal Input Voltage DC+ to DC-		400				Vdc	
Maximum Input Current		26.5		38		Adc	
Maximum Input Short Circuit Current		45				Adc	
Reverse-Polarity Protection		Yes					
Ground-Fault Isolation Detection		1MΩ Sensitivity		350kΩ Sensitivity ⁽³⁾			
CEC Weighted Efficiency		96.5		97		%	
Night-time Power Consumption		< 3		< 4		W	
ADDITIONAL FEATURES							
Supported Communication Interfaces		RS485, Ethernet, ZigBee (optional)					
Rapid Shutdown – NEC 2014 and 2017 690.12		Automatic Rapid Shutdown upon AC Grid Disconnect					
RS485 Surge Protection		Supplied with the inverter					
STANDARD COMPLIANCE							
Safety		UL1741, UL1741 SA, UL1699B, CSA C22.2, Canadian AFCI according to T.I.L. M-07					
Grid Connection Standards		IEEE1547, Rule 21, Rule 14 (HI)					
Emissions		FCC part15 class B					
INSTALLATION SPECIFICATIONS							
AC output conduit size / AWG range		3/4" minimum / 12-6 AWG		3/4" minimum / 8-4 AWG			
DC input conduit size / AWG range		3/4" minimum / 12-6 AWG					
Number of DC inputs		2 pairs		3 pairs ⁽⁴⁾			
Dimensions (H x W x D)		21 x 12.5 x 10.5 / 540 x 315 x 260				in / mm	
Dimensions with Safety Switch (H x W x D)		30.5 x 12.5 x 10.5 / 775 x 315 x 260				in / mm	
Weight		73.2 / 33.2		99.5 / 45		lb / kg	
Weight with Safety Switch		79.7 / 36.2		106 / 48		lb / kg	
Cooling		Fans (user replaceable)					
Noise		< 50		< 55		dBA	
Operating Temperature Range		-40 to +140 / -40 to +60 ⁽⁵⁾				°F / °C	
Protection Rating		NEMA 3R					

⁽¹⁾ For 277/480V inverters refer to: <https://www.solaredge.com/sites/default/files/se-three-phase-us-inverter-datasheet.pdf>

⁽²⁾ For other regional settings please contact SolarEdge support

⁽³⁾ Where permitted by local regulations

⁽⁴⁾ Field replacement kit for 1 pair of inputs P/N: DCD-3PH-1TBK; Field replacement kit for 3 pairs of fuses and holders P/N: DCD-3PH-6FHK-S1

⁽⁵⁾ For power de-rating information refer to: <https://www.solaredge.com/sites/default/files/se-temperature-derating-note-na.pdf>