

---

# Three Phase Inverters

For the 208V Grid for North America

SE9KUS / SE14.4KUS

INVERTERS



## 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

## For the 208V Grid for North America

### SE9KUS / SE14.4KUS

	SE9KUS	SE14.4KUS	
<b>APPLICABLE TO INVERTERS WITH PART NUMBER</b>	<b>SEXXX-XXXXXNXXX</b>		
<b>OUTPUT</b>			
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 <sup>(2)</sup> (L-N)	105-120-132.5		Vac
AC Output Voltage Minimum-Nominal-Maximum <sup>(2)</sup> (L-L)	183-208-229		Vac
AC Frequency Min-Nom-Max <sup>(2)</sup>	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		
<b>INPUT</b>			
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	1M $\Omega$ Sensitivity	350k $\Omega$ Sensitivity <sup>(3)</sup>	
CEC Weighted Efficiency	96.5	97	%
Night-time Power Consumption	< 3	< 4	W
<b>ADDITIONAL FEATURES</b>			
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		
<b>STANDARD COMPLIANCE</b>			
Safety	UL1741, UL1741 SA, UL1699B, CSA C22.2, Canadian AFCl according to T.I.L. M-07		
Grid Connection Standards	IEEE1547, Rule 21, Rule 14 (HI)		
Emissions	FCC part15 class B		
<b>INSTALLATION SPECIFICATIONS</b>			
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 <sup>(4)</sup>	
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 <sup>(5)</sup>		°F / °C
Protection Rating	NEMA 3R		

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

<sup>(2)</sup> For other regional settings please contact SolarEdge support

<sup>(3)</sup> Where permitted by local regulations

<sup>(4)</sup> 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

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