



Three Phase Inverters for the 277/480V Grid for North America

SE30KUS / SE33.3KUS



INVERTERS

The best choice for SolarEdge enabled systems

- Specifically designed to work with power optimizers
- Quick and easy inverter commissioning directly from a smartphone using the SolarEdge SetApp
- Superior efficiency (98.5%)
- 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 Device, to better withstand lightning events



Three Phase Inverters for the 277/480V Grid⁽¹⁾ for North America

SE30KUS / SE33.3KUS

	SE30KUS	SE33.3KUS	
APPLICABLE TO INVERTERS WITH PART NUMBER	SEXXX-XXXXXBXX4		
OUTPUT			
Rated AC Power Output	30000	33300	VA
Maximum AC Power Output	30000	33300	VA
AC Output Line Connections	3 phase, 4-wire / PE (L1-L2-L3-N), TN, TT		
AC Output Voltage Minimum-Nominal-Maximum ⁽²⁾ (L-N)	244-277-305		Vac
AC Output Voltage Minimum-Nominal-Maximum ⁽²⁾ (L-L)	422.5-480-529		Vac
AC Frequency Min-Nom-Max ⁽²⁾	59.3 - 60 - 60.5		Hz
Max. Continuous Output Current (per Phase)	36.5	40	A
GFDI Threshold	1		A
Utility Monitoring, Islanding Protection, Country Configurable Set Points	Yes		
THD	≤ 3		%
INPUT			
Maximum DC Power (Module STC)	40500	45000	W
Transformer-less, Ungrounded	Yes		
Maximum Input Voltage DC to Gnd	490		Vdc
Maximum Input Voltage DC+ to DC-	1000		Vdc
Nominal Input Voltage DC to Gnd	420		Vdc
Nominal Input Voltage DC+ to DC-	840		Vdc
Maximum Input Current	39	40	Adc
Maximum Input Short Circuit Current	45		Adc
Reverse-Polarity Protection	Yes		
Ground-Fault Isolation Detection	350kΩ Sensitivity ⁽³⁾		
CEC Weighted Efficiency	98.5		%
Night-time Power Consumption	< 4		W
ADDITIONAL FEATURES			
Supported Communication Interfaces	2 x RS485, Ethernet, Built-in GSM (optional)		
Inverter Commissioning	With the SetApp mobile application using built-in Wi-Fi station for local connection		
Rapid Shutdown – NEC 2014 and 2017 690.12	Automatic Rapid Shutdown upon AC Grid Disconnect		
RS485 Surge Protection	Supplied with the inverter		
Smart Energy Management	Export Limitation		
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 / 8-4 AWG		
DC input conduit size / AWG range	3/4" minimum / 12-6 AWG		
Number of DC inputs	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	99.5 / 45		lb / kg
Weight with Safety Switch	106 / 48		lb / kg
Cooling	Fans (user replaceable)		
Noise	< 55		dBA
Operating Temperature Range	-40 to +140 / -40 to +60 ⁽⁵⁾		°F / °C
Protection Rating	NEMA 3R		

⁽¹⁾ For 120/208V inverters refer to: <http://www.solaredge.com/files/pdfs/products/inverters/se-three-phase-us-inverter-208V-datashet.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>

