INVERTERS

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

SE20KUS / SE30KUS / SE33.3KUS





The best choice for SolarEdge enabled systems

- Quick and easy inverter commissioning directly from a smartphone using the SolarEdge SetApp
- Specifically designed to work with power optimizers
- Superior efficiency (98%)
- Fixed voltage inverter for longer strings
- Integrated Safety Switch
- UL1741 SA certified, for CPUC Rule 21 grid compliance

- Integrated arc fault protection and rapid shutdown for NEC 2014 and 2017, per article 690.11 and 690.12
- Built-in module-level monitoring
- Internet connection through Ethernet or Wireless
- Small, lightweight, and easy to install outdoors or indoors on provided bracket
- Supplied with RS485 Surge Protection Device, to better withstand lightning events



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

SE20KUS / SE30KUS / SE33.3KUS

MODEL NUMBER	SE20KUS	SE30KUS	SE33.3KUS	
APPLICABLE TO INVERTERS WITH PART NUMBER	SEXXK-XXXXXBXX4			
OUTPUT				
Rated AC Power Output	20000	30000	33300	VA
<u> </u>				VA
Maximum AC Power Output	20000	30000	33300	VA
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	
Maximum Continuous Output Current (per Phase)	24	36.5	40	А
GFDI Threshold		1		А
Utility Monitoring, Islanding Protection, Country Configurable Set Points	Yes			
THD	≤ 3		%	
INPUT	<u>'</u>			
Maximum DC Power (Module STC)	27000	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	26.5	39	40	Adc
Maximum Input Short Circuit Current	45		Adc	
Reverse-Polarity Protection	Yes			
Ground-Fault Isolation Detection	1MΩ Sensitivity 350kΩ Sensitivity ⁽³⁾			
CEC Weighted Efficiency	98	98.5		%
Night-time Power Consumption	< 3	<	4	W
ADDITIONAL FEATURES				
Supported Communication Interfaces	RS485,	Ethernet, Built-in Cellular (o	ptional)	
Inverter Commissioning	With the SetApp mobile application using built-in access point for local connection			
Rapid Shutdown – NEC 2014 and 2017 690.12	Automatic Rapid Shutdown upon AC Grid Disconnect ⁽⁴⁾			
RS485 Surge Protection Plug-in	Supplied with the inverter			
Smart Energy Management		Export Limitation		
STANDARD COMPLIANCE				T
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" minimu	m / 8-4 AWG	
DC input conduit size / AWG range	3/4" minimum / 12-6 AWG			
Number of DC inputs	2 pairs	3 pairs ⁽⁵⁾		
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 Weight	73.2 / 33.2		/ 45	lb / kg
Weight with Safety Switch	79.7 / 36.2			lb / kg
Cooling	79.7 / 36.2 106 / 48 Fans (user replaceable)		15 / Kg	
			۸۵۲	
Noise	< 50		J.)	dBA °E /°C
Operating Temperature Range	-40 to +140 / -40 to +60 ⁽⁶⁾			°F/°C
Protection Rating (1) For 120/208V inverters refer to: https://www.solaredge.com/sites/default/files/se-three-pl		NEMA 3R		

 $⁽¹⁾ For 120/208V inverters \ refer \ to: https://www.solaredge.com/sites/default/files/se-three-phase-us-inverter-208V-setapp-datasheet.pdf$

⁽²⁾ For other regional settings please contact SolarEdge support
(3) Where permitted by local regulations
(4) P/Ns SE20K-US0xxxxx have Manual Rapid Shutdown for NEC 2014 compliance (NEC 2017 compliance with outdoor installaton)
(5) 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

⁽⁶⁾ For power de-rating information refer to: https://www.solaredge.com/sites/default/files/se-temperature-derating-note-na.pdf