Technical specifications

	Symmetra PX 250 kW	Symmetra PX 500 kW
Input		
Grid system	Single feed: 3P + N + G, 3P+ G, Dual feed: 3P + G	
Grid parallel system	Single feed: 3P + N + G, Dual feed: 3P+ G	
Voltage range	+/- 15% for full performance; 340 - 460 V at 400 V	
Frequency	50/60 Hz	
Frequency range	40 - 70 Hz with 10 Hz/s slew rate	
Power factor (PF)	> 0.995 at load = 100%, > 0.99 at load > 50%, > 0.97 at load > 25%	
I thd (full load)	< 5%	
Nominal input current	378 A @ 400 V	756 A @ 400 V
Maximum input current	447 A @ 400 V (Nominal Vin, 10% charging batteries)	831 A @ 400 V (Nominal Vin, 10% charging batteries)
Input current limit	447 A @ 400 V	894 A @ 400 V
Maximum input short-circuit level	65 kA (50 kA with standard MBwD)	
Ouput		
Power rating	250 kW	500 kW
Grid system	3P + N + G, 3P + G	
Voltage (nominal)	380 V/400 V/415 V/480 V L-L	
Nominal output current	361 A @ 400 V	722 A @ 400 V
Maximum output current (in bypass @ 110% overload)	397 A @ 400 V	902 A @ 400 V
Frequency	Output frequency: 55 - 65Hz, configurable for +/- 0.1, 1, 2, 4, 6, 8%, Frequency regulation: 50/60 Hz bypass synchronized, 50/60 Hz +/-0.1% free running	
Synchronized slew rate	Programmable to 0.25, 0.5, 1, 2, 4, 6 Hz/s	
Overload (normal and battery operation)	150% for 30 seconds, 125% for 10 min, 100% continuous	
V thd	< 2% from 0 to 100% linear load, < 3% full non-linear load according to IEC/EN 62040-3	
Load PF	From 0.5 leading to 0.5 lagging without any derating	
Bypass		
V nominal	380 V/400 V/415 V/480 V L-L	
Voltage (range)	+/-10% (from selected voltage)	
Frequency (nominal)	50/60 Hz	
Frequency (range)	+/-0.5%, +/-1%, +/-2%, +/-4%, +/-6%, and +/-8% (user-selectable)	
Nominal input current	361 A @ 400 V	722 A @ 400 V
Maximum overload input current (125% continuous)	397 A @ 400 V	794 A @ 400 V
Efficiency		
AC–AC at nominal mains	> 96% at 50% – 100% load, >95% at 25% – 49% load	
DC–AC at nominal battery voltage	> 96% at 50% – 100% load, >95% at 25% – 49% load	