

4 Technical Data

Input – Electrical data

Model	25000xi	30000xi	33000xi
DC rated power	30.0 kW	37.5 kW	39.0 kW
Max. PV generator power for each DC input	10.0 kW	12.5 kW	13.0 kW
Max. number of strings	5		
MPP range	350 ... 600 V		
No-load voltage	Max. 800 V		
Monitoring Input voltage	Stand-by from U _e > 300 V Night shutdown from U _e < 250 V		
Max. DC input current for each string	27.4 / 26.9* A	32.8 / 29.2* A	33.2 / 32.5* A
Polarity safeguard	Short-circuit diode		
Overvoltage protection	Varistors		
String fuses (versions L and XL)	12 A in "+" potential (10 x 38 mm)		
Overvoltage protection (version XL)	Class II/"C" (medium protection) 3 varistors in Y (star) connection		

Output – Electrical data

Model	25000xi	30000xi	33000xi
AC rated power	25.0 kW	29.9 kW	33.3 kW
Maximum power AC	27.5 kW	32.9 kW	33.3 kW
Line voltage	See Section 4 – Technical Data – Country-specific parameters		
Rated current	36.2 A	43.3 A	48.3 A
Max. current	39.9 A	47.7 A	48.3 A
Power factor	≈1		
Frequency	See Section 4 – Technical Data – Country-specific parameters		
Distortion factor according to VDE0383	< 3 % at rated power < 5 % over the entire range		
Fault signal relay	Potential-free NO contact (make contact), max. 30 V / 1 A		

***Park Version**

Inverter – Electrical data

Model	25000xi	30000xi	33000xi
Maximum degree of efficiency	96.5 % / 97.4 %*		
European degree of efficiency	96.0 % / 97.0 %*		
Internal consumption	Night shutdown: 7 W Operation: < 120 W		
Minimum grid feed power	120 W		
Circuit design	Self-inverted, transformerless		
Clock frequency	18 kHz / 9 kHz*		
Principle	3 single-phase full bridges with IGBT technology		
Grid monitoring	3-phase monitoring		

Inverter – Mechanical and technical data

Model	25000xi	30000xi	33000xi
Visual displays	LEDs: PV generator (green) Grid feed (green) Fault (red) LCD (2 x 16 characters)		
Controls	2 keys for operating display		
Connections	AC connection via screw terminals Bushing 1 x M40 DC connection via screw/spring terminals Bushing 8 x M32 (with 4 sealing inserts)		
Ambient temperature	–20 to +60 °C (> 40 °C power derating at high ambient temperatures)		
Temperature monitoring	>75 °C temperature-dependent impedance matching >85 °C Disconnection from the grid		
Interface	RS485		
Cooling	Forced-air cooling (variable speed fan, max. 600 m³/h)		
Cooling for the Park version	Forced-air cooling (fan with external power supply, max. 600 m³/h)		
Protection class	IP54 according to EN 60529		
Noise emission	58 dB (A) due to fan operation (measured at maximum fan speed)		
Housing	Steel plating		
Dimensions W x D x H	835 x 340 x 1,460 mm		
Weight	190 kg		

*Park Version

Country-specific setting of parameters

Parameter → ↓ Country	Line voltage range [V]	Line voltage according to EN 50160 [V]	Standard frequency range [Hz]	Switch-on value after a re-start [s]	Reset time after insufficient grid feed power [s]	Reset time after a fault [s]
Germany	190 ... 264	253	47.5 ... 50.2	> 60	> 180	> 30
Spain	196 ... 254	–	49.0 ... 51.0	> 180	> 180	> 180
Italy	190 ... 264	–	49.7 ... 50.3	> 180	> 180	> 30
France	190 ... 264	253	49.5 ... 50.5	> 60	> 180	> 30
Cyprus (GR)	208 ... 252	–	49.5 ... 50.5	> 180	> 180	> 180
Greece	190 ... 264	–	49.5 ... 50.5	> 180	> 180	> 180
South Korea	194 ... 242	–	59.7 ... 60.3	> 360	> 360	> 360
Czech Republic	196 ... 252	253	47.0 ... 51.0	> 60	> 180	> 30
Portugal	196 ... 264	253	47.0 ... 51.0	> 60	> 180	> 30
Bulgaria	196 ... 264	–	47.0 ... 51.0	> 60	> 180	> 30
India	204 ... 264	253	47.5 ... 52.5	> 60	> 180	> 30
Australia	200 ... 264	–	44.0 ... 55.0	> 60	> 60	> 60
Israel	204 ... 264	–	44.0 ... 55.0	> 60	> 60	> 60
China	190 ... 264	–	49.5 ... 50.5	> 180	> 180	> 180
Malaysia	190 ... 264	–	49.5 ... 50.5	> 180	> 180	> 180
Taiwan	194 ... 242	–	59.7 ... 60.3	> 360	> 360	> 360

The switch-on times after a re-start, a fault or after insufficient grid feed power are approximate values.