

8.2 Sunny Central 630CP XT

DC Input

Maximum DC Power	713 kW
Minimum input voltage / maximum input voltage	500 V to 1000 V
Minimum MPP voltage	500 V
MPP voltage range at +25 °C	529 V to 850 V
MPP voltage range at +50 °C	500 V to 850 V
MPP voltage range at +25 °C and 60 Hz	529 V to 850 V
MPP voltage range at +50 °C and 60 Hz	505 V to 850 V
Rated input voltage	529 V
Maximum input current	1350 A
Maximum short-circuit current	2500 A
Maximum reverse current	2300 A
Number of independent MPP inputs	1
Number of DC inputs	9

AC Output

Rated power at +25 °C	700 kVA
Rated power at +50 °C	630 kVA
Nominal AC voltage	315 V
Nominal AC voltage range	284 V to 362 V
AC power frequency	50 Hz / 60 Hz
AC power frequency range	47 Hz to 63 Hz
Rated frequency	50 Hz
Rated grid voltage	315 V
Maximum total harmonic distortion	0.03
Maximum AC current	1283 A 1,350 A*
Maximum residual current at the AC output	3500 A
Maximum overcurrent protection at output	50000 A
Power factor at rated power	1
Displacement power factor cos φ	0.9 overexcited to 0.9 underexcited
Feed-in phases	3

AC Output	
Connection phases	3
Inrush current of the internal power supply	48 A (100 ms)
* up to +5% I_{max} possible at $V_{ac} < V_{acnom}$	
Efficiency	
Maximum efficiency	98.7%
European weighted efficiency	98.5%
CEC weighted efficiency	98.5%
Protective Devices	
DC overvoltage protection	Type I
Lightning protection as per IEC 62305-1	Lightning protection level III
Surge arrester for auxiliary power supply	Yes
Protection class in accordance with IEC 62109-01	I
Overvoltage category in accordance with IEC 60664-1	III
General Data	
Width x height x depth	2562 mm x 2272 mm x 956 mm
Weight	1900 kg
Operating temperature range	-25°C to +62°C
Operating temperature range for low-temperature option	-40°C to +62°C
Noise emission at a distance of 10 m	64 db(A)
Self-consumption in operation	< 1,900 W
Standby consumption	< 100 W
External supply voltage	230 V/400 V (3/N/PE), 50 Hz/60 Hz
Degree of protection of electronics	IP54
Degree of protection of the connection area	IP43
Maximum permissible value for relative humidity (non-condensing)	15% to 95%
Maximum operating altitude above mean sea level	2000 m
Maximum operating altitude above MSL for option "Installation at high altitudes"	4000 m
Fresh air consumption	3000 m³/h