

SINAMICS PERFECT HARMONY GH180

Technical Data

[siemens.com/sinamics-perfect-harmony-gh180](https://www.siemens.com/sinamics-perfect-harmony-gh180)



Drive Features

Output power	Air-cooled: 0.18 to 10 MVA Water-cooled: 5 to 24.4 MVA
Output voltage	2.3 – 11 kV
Cooling	Air-cooled Water-cooled
Topology	Multi-cell Voltage Source Inverter (VSI)
Drive quadrants	2 quadrants
Rules and standards	EN, IEC, CE, EAC, CSA, ANSI, UL, NEMA
Motor type	Asynchronous Synchronous Permanent magnet Wound rotor motors
Supply	Integrated transformer (air-cooled or water-cooled)
Open/closed-loop control	Sensorless vector control (optionally with sensor) Communication with all current BUS systems Automatic motor identification Automatic start-up
Efficiency of converter	98.5% (> 96.5 including the integral transformer)

Input & Output Data	
Input configuration	18- to 48-pulse diode rectifier
Input voltage	2.4 to 13.8 kV AC (standard) $\pm 10\%$
Input power factor	≥ 0.95 above 10% load
Input frequency	50 / 60 Hz $\pm 5\%$
Output frequency	330 Hz standard $\pm 0.5\%$
Auxiliary voltage	380 V 3 AC, 50 / 60 Hz 400 V 3 AC, 50 / 60 Hz 415 V 3 AC, 50 / 60 Hz 460 V 3 AC, 60 Hz 480 V 3 AC, 60 Hz 575 V 3 AC, 60 Hz

Environmental Features	
Altitude	AC up to 5000 m
Ambient air temperature	AC +5 to +40 °C (optionally up to 50 °C)
Noise	< 82 dB(A)
Degree of protection	Air-cooled: IP21 or higher Water-cooled: IP52 NEMA 1 Optional: IP42