

The Genesis HC 80 compressor is a powerful compressor offering an ideal solution for multiple pump applications. The HC 80 is designed to supply compressed helium for as many as two ICP cryopumps up to 18"(450mm) or for up to four 6"(100mm) pumps.

Cost-Effective, High-Power Solution

The HC 80 compressor is a closed-loop system that supplies high-purity helium to cryo refrigerators and cryopumps.

The compressor features include:

- A water-cooled oil-lubricated compressor
- A two-stage filtering system that removes oil aerosol from the high-pressure helium stream
- An interlock system to prevent damage to the compressor
- A power supply to run the compressor and expander
- LED displays on the front and rear panels that provide operational and alarm information



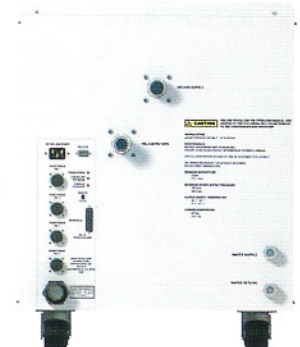
The compressor capsule is built around a high-performance scroll compressor, providing simultaneous suction, compression and discharge. This significantly extends durability and life while reducing vibration, noise, maintenance and operating cost. A water-cooled heat exchanger provides the cooling capacity to remove up to a 7KW heat load.

This highly reliable compressor has the power and capability to drive three to four pumps, while requiring only an estimated 3 years between maintenance intervals. Smaller than comparable models on the market, the HC 80 compressor utilizes very little floor space and is very cost effective for an application where multiple pumps are used.

HC 80 COMPRESSOR

TECHNICAL DATA

| MODEL | HC 80 COMPRESSOR |
|------------------------------|--|
| Height x Width x Depth | 23.5 "(596mm) x 19.5 "(495.3mm) x 21 "(531mm) |
| Weight | 275 Lbs. max (124kg) |
| Power | |
| Phase | 3-phase |
| Frequency | 50/60 Hz |
| Voltage | 208 ± 10% VAC |
| Operating current | 20 Amps |
| Refrigerant | |
| Gas | Helium |
| Purity | 99.995% Min., -63°C Dew Point |
| Supply Pressure | 300 Psi |
| Return Pressure | 100 Psi |
| Charge Pressure | 210 Psi @ 20°C |
| Cooling Water | |
| Flow rate | 2 GPM(7L/min.) |
| Temperature | Inlet 10°C to 27°C |
| Cooling water heat radiation | 7kw |
| Supply and Return fittings | 3/8"-18" NPT |
| Environment | |
| Temperature | 5°C to 40°C |
| Humidity | 30% to 95% |
| Noise | Max. 70 dB (A) |
| Certifications | |
| CE Mark | Meets the requirements of European Directive on Electromagnetic Compatibility (89/336/EEC) and Low Voltage Directive(73/23/EEC) |
| SEMI | Meets SEMI-S2 Environmental, Health, and Safety Guidelines for Semiconductor Manufacturing Equipment, and SEMI-S8 Safety Guidelines for Ergonomics Engineering of Semiconductor Manufacturing Equipment. |



ORDERING INFORMATION *Please specify the following:*

| COMPLETE CRYOPUMP SYSTEM, CONSISTS OF THE FOLLOWING | PART NUMBER |
|---|-------------------------------|
| Cryopump | |
| <ul style="list-style-type: none"> · ICP 100, 150, 200, 200L(Low profile), 250, 250L, 300, 300L, 320, 320+, 350, 400, 450 · High Vacuum or Ultra High Vacuum, or Fixed Sputter · Quick Regeneration Option · ISO, ANSI, or ConFlat Flange | Contact Genesis |
| Compressor | |
| <ul style="list-style-type: none"> · Model HC 80 for multiple cryopump operation | 634-2900 |
| GEN Controller (only required for cryopumps with Quick Regeneration) | |
| <ul style="list-style-type: none"> · GEN, 1 module: · GEN, 2 module: · GEN, 3 module: · GEN, 4 module: · GEN, 5 module: | |
| Cryoboss Controller (for network control of GEN Controller modules) | 645-3000 |
| Helium Hoses & Manifolds: Available in 1/2" & 3/4" diameter: 90°elbow or straight ends, and up to 60' in Length | |
| Cables | |
| <ul style="list-style-type: none"> · Expander Power Cable: 1 per pump, 14' - 40' in Length · Pump Power Cable: 1 per pump if GEN is used, 20' - 75' in Length · RS-485 Cables: For network control of cryopumps | Contact Genesis |
| Accessories | |
| <ul style="list-style-type: none"> · Handheld Service Terminal, to monitor cryopump operation from pump versus controller · Temperature Monitor: 110VAC, 220VAC, Single Channel or Eight Channel | 140-000700 Contact Genesis |