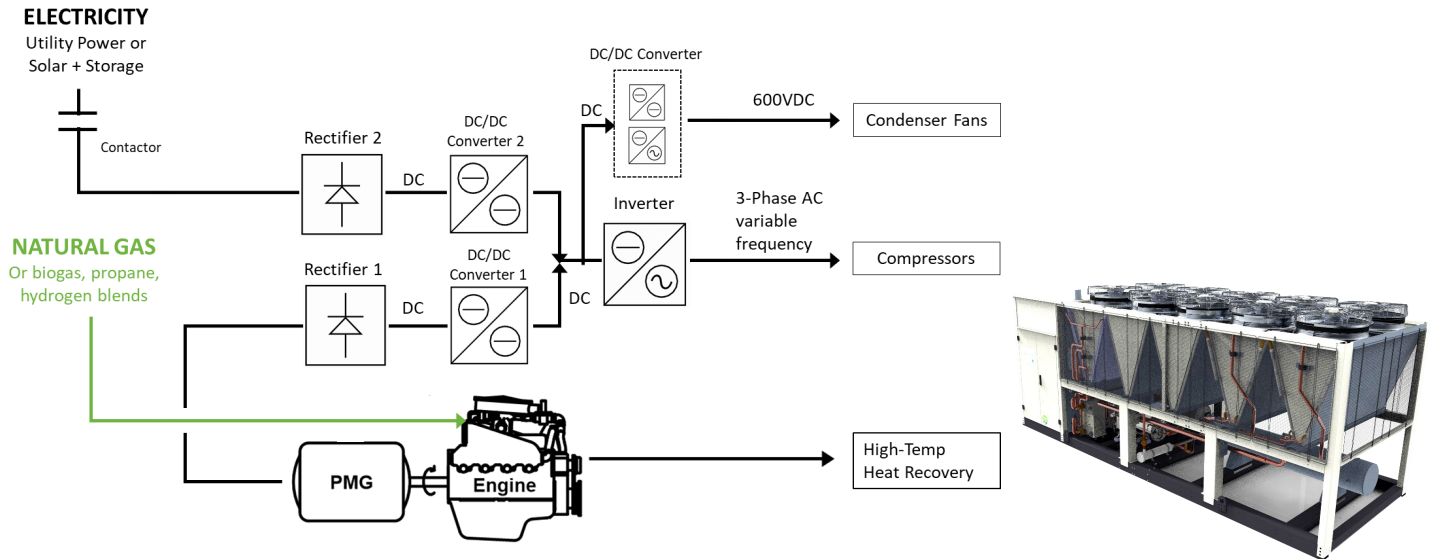


Tecochill Hybrid-Drive Air-Cooled Chiller



Intelligent Hybrid-Drive provides the ability to blend natural gas and electric operation seamlessly in any combination

Both sources can be blended to optimize savings and carbon footprint. Program the chiller to your preferred operating mode.

Highest Efficiency, Lowest Operating Cost

Cut costs and carbon footprint by as much as 30% to 60% compared to conventional electric-only chillers.

Boost Resiliency

Two power sources gives owners extra resiliency, such as during grid outages.

Proprietary Hybrid-Drive VFD Technology

Tecogen's permanent magnet generator & power conversion system operate the engine drive at variable speeds to deliver power to the chiller at a variable frequency, providing efficient output modulation similar to conventional VFD chiller at a much lower operating cost.



Tecogen's chillers have operated successfully for years in universities, hospitals, government buildings, hotels, grow facilities, ice rinks, & industrial facilities.



Tecogen is the industry leader in mechanical CHP systems, with over 40 years of experience.



Applications

Ideal for Retrofit or New Applications

- Footprint comparable to an electric chiller
- Quiet operation

Versatility:

- Heat recovery option
- Low-temperature capability, for critical process cooling; chilled glycol down to 10°F
- Low ambient operation standard, start up down to -10°F, operate down to -20°F.

Environmentally Friendly

- Meets the strictest ultra-low emissions standards, including SCAQMD compliant
- Reduced global warming (lowest energy input per unit of cooling of any chiller)
- Reduced fossil fuel use
- Reduced CO₂ emissions due to the efficient use of natural gas through combined heat and power
- Low GWP refrigerant (R-513a)

Cost Savings

- Cut chiller operating costs by as much as 30% to 60%, compared to conventional electric chillers
- Avoid electric demand charges and peak “time-of-day” rates
- Variable-speed engine technology yields excellent part-load efficiencies
- Additional savings can be realized by recovering free waste engine heat, for heating domestic hot water, space heat, dehumidification process, etc.

Engineering & Support

- Proven, standardized product design
- All units factory run-tested
- ETL-listing anticipated
- Professional application engineering and service
- Extensive service documentation and training programs

Tecogen Service

Tecogen's extensive service network offers local service for many regions in North America. Factory-trained technicians not only provide expertise in the engine and its subsystems, but their capabilities extend to the entire chiller.

Services:

- Preventative maintenance & overhauls
- Troubleshooting and repair
- Seasonal start-up and shut-down

Preliminary Specifications	
Cooling Capacity	100 tons @ Standard AHRI Conditions-44°F/54°F CHW & 95°F Ambient
Chilled Water Supply Temperature	10°F to 50°F
Sound Power Rating	72 dBA @ 30' @ Full Load
Heat Recovery (from Engine Oil, Jacket, & Exhaust)	671 MBtu/hr @ 208°F Hot Water (Full Load)
Efficiency (Natural Gas-Engine Driven Mode) @ Standard AHRI Conditions	Full Load COP = 0.90 IPLV COP = 1.52 Full Load COP w/ Heat Recovery = 1.40 IPLV COP w/ Heat Recovery = 2.13
Efficiency (Electric-Driven Mode) @ Standard AHRI Conditions	Full Load = 1.15 kW/ton (EER = 10.39) IPLV = 0.74 kW/ton (EER = 16.65)
Field Connections & Installation	
Chilled Water In & Out	6" Grooved Connection (Left Hand & Right Hand Evaporator Options Available)
Electrical Requirement	Standard Option: 480VAC/3PH 200A (allows for full electric operation) or 480VAC/3PH 15A (allows for natural gas operation only) Special Option: 208VAC/3PH-Consult Factory
Natural Gas Requirement	1-1/2" NPT Connection; low pressure 4-12" W.C. Max Consumption 1,341 scfh @ Full Load
Weight	12,581 lbs
Dimensions	20'0"L x 7'6"W x 8'3"H
Components	
Engine	Ultra low-emission gaseous-fueled 8-cylinder industrial engine
Generator	High Efficiency, Variable Speed, Permanent Magnet
Compressor	Dual Semi-Hermetic Variable Speed Single Screw Compressors
Condenser	Microchannel, high-efficiency air-cooled type, w/ direct DC-powered fan motors
Evaporator	DX Shell & Tube
Refrigerant	Low GWP R-513a