AMERICAN DG ENERGY

NATURAL GAS ENGINE-DRIVEN CHILLERS

Our packaged chiller cooling systems range from 50 to 1200 tons and can be installed in standard locations such as plant rooms or rooftops. We use only the most efficient clean energy systems available to provide you with high-performance air-conditioning and improved comfort at your properties. Our natural gas engine-driven chillers offer you greater efficiency by supplying both cooling and optional hot water to supplement your existing boilers for domestic hot water applications, laundries, and heated swimming pools.

Since this clean energy technology offers better efficiencies, the result is lower energy costs for you and reduced greenhouse gas emissions for the environment. And because it is deployable today with a proven record of reliability, it is a practical, "green" energy solution, providing superior comfort.

Because our natural gas fueled chillers do not use electricity, they reduce the electric demand of your property and can satisfy your cooling needs during power outages.

FEATURES

- → Non-ozone depleting HFC-134a
- → TecoDrive 7400[™] natural-gas engine
- → Single-screw balanced action compressor
- → High-efficiency flooded evaporator
- → IPLV's exceeding 2.5
- → Optional heat recovery for hot water
- → Natural gas, not electricity-based
- → Footprint equivalent to electric chillers
- → Variable engine-speed operation for excellent part-load performance and longer life
- → TecoNET™ Microprocessor-based control system with precise PID Control for fully automatic operation, continuous system monitoring, digital display, fault diagnostics, and tie-in to an energy management system
- → Remote Monitoring and Control System permits remote real-time monitoring, data acquisition, and system control by telephone or Ethernet
- → ETL-listed



An efficient, natural gas chiller can significantly reduce energy costs.

ON-SITE ENERGY PRODUCTS

American DG Energy offers a variety of clean energy systems, including combined heat and power, chiller cooling systems, and heat pumps to provide energy costs savings along with environmental and economic benefits to our customers. With an installed base of thousands of systems, these clean energy technologies, deployed at sites across the country for over 20 years, provide a "green" energy solution that is proven, reliable, and flexible to fit the needs of your business.

ON-SITE UTILITY

American DG Energy sells the energy produced from an on-site energy system to an individual property as an alternative to the outright sale of energy equipment. On-Site Utility customers only pay for the energy produced by the system and receive a guaranteed discount rate on the price of the energy. All system capital, installation, operating expenses, and support are paid for and handled by American DG Energy.

CONTACT US TODAY

Set up a site assessment and start your energy cost savings.

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DATA SHEET

SPECIFICATIONS

	STx SERIES CH-200x	DTx SERIES CH-400x
Full Load Rating [tons]	200	400
IPLV COP	2.6	2.6
Full Load COP	1.6	1.6
COP with Engine Heat Recovery	1.9	1.9
Fuel Consumption [MBtu/hr @ HHV 1020 Btu/scf]	1,526	3,052
Fuel Consumption [scfh]	1,496	2,992
Fuel Pressure [in. wc, 27.703 in. wc = 1 psig]	13-28	13-28
Available Engine Heat [MBtu/hr]	480	960
Maximum Supply Temperature [°F]	212	212
WATER SYSTEMS		
Chilled Water Flow [GPM]	480	960
Chilled Water Pressure Drop @ Rated Flow [ft]	16.2	12.6
Total Cooling Tower Flow [GPM]	640	1,280
—Flow To Condenser Only [GPM]	600	1,200
—Flow To Dump HX Only [GPM]	40	80
Condenser Pressure Drop @ Rated Flow [ft]	23.1	18.1
Cooling Tower Heat Rejection [MBtu/hr]	3,473	6,946
ELECTRICAL REQUIREMENT		
Voltage Requirement	208-230, 50/60 Hz	208-230, 50/60 Hz
Electrical Service	Single Phase with Neutral	Single Phase with Neutral
Amperage Rating	30	40
Parasitic Power Requirement [kW]	2.2	2.7
ACOUSTIC LEVELS [dBa @ 3 ft]		
—with Enclosure	89	92
—without Enclosure	96	99
Refrigerant	HFC-134a	HFC-134a
DIMENSIONAL DATA		
Length	13'10"	14'3"
Width	4.4	7.0"
Height	6'9"	7.7"
WEIGHTS		
Rigging Weight [lb]	10,450	24,675
Operational Weight [lb]	11,250	28,175
DRIVELINE		
Engine	TecoDrive 7400	TecoDrive 7400
Compressor	J&E Hall HS2024GED	J&E Hall HS2024GED

Specifications subject to change without notice, all specifications are + 5%. COP ratings are based upon Fuel Highter Heating Value [HHV] @ 1020 BTU/SCF

