

Efficient

Quiet

**Environmentally
Friendly**

Maneuverable

Reliable

**True
Redundancy**

Compact



Ultra Green Modular Chiller

UGW Series

80 Tons – Configurable up to 640 Tons

Available in 208, 230, 460 and 575 Volts

CLIMA  COOL[®]

THE ULTIMATE CHILLER SOLUTION[®]



Ultra Quiet. Ultra Green Efficiency.

The ClimaCool® Ultra Green Chiller Solution, model UGW, utilizes the most advanced technology compact quiet screw compressor. It is economized and optimized for water cooled applications using R-134a non-ozone depleting refrigerant. The low noise level - 73 dBA per AHRI 575 - allows placement flexibility for applications with sound sensitivity requirements while also helping to gain significant LEED points in multiple categories.

Ultra...

Efficient Compressor profiles specifically tuned for R-134a and water cooled optimization creating maximum full and part-load efficiency. Integrated variable frequency drives provide increased load tracking response, more precise water temperature control and optimum part-load energy efficiency.

Performance Infinite unloading accurately tracks changing load profiles and provides precise leaving water temperatures.

Serviceable Unique design allows access to all major components without removal from the bank.

Environmentally Friendly Micro charge of chlorine-free and non-ozone depleting R-134a refrigerant.

Compact Small footprint allows access through any standard doorway reducing installation cost and restrictions on placement.

Expandable Modular, easy connect design simplifies installation, service and controls which enables the system to incrementally grow from 80 - 640 tons per bank as your load increases.

Maneuverable Chiller modules include base cutouts and are easily transported with standard forklifts or pallet jacks.

Redundant Separate module electrical feeds permit maintenance of one module while the remaining chiller system continues operating.

Reliable Proven rotary optimized quiet screw compressor technology and stainless steel brazed plate heat exchangers provide ultra low maintenance cost and minimal down time.

Low Oil Circulation Rate Less than 1/2 of one percent, which is low enough to save valuable pumping horsepower without jeopardizing proper lubrication of critical seals and components.

Durable Heavy gauge G90 galvanized steel bolted base and framework with a protective powder coat paint for durable and long lasting finish. Schedule 40 carbon steel pipe water headers with 300 psi rated grooved coupling connection on both water circuits.

Integrated CoolLogic Control System Infinite unloading and optimum part-load efficiency, incremental water flow and precise temperature control. BAS interface via native BACnet, LonWorks, Modbus and N2 communication which reduces overall building energy usage.



Three (3) 80 ton modules totaling 240 tons capacity. Modules are configurable up to 640 tons per bank.

Options for Every Application.

Automatic CS Series Strainer Package

Field installed high quality stainless steel filtration systems with minimum 60 mesh stainless steel screens. Available options include pressure differential alarm and automatic time flush.

Condenser Water Head Pressure Regulating Control

Factory installed motorized condenser water valves provide head pressure regulation for low entering condenser water temperature applications (less than 60°F).

Heat Recovery Factory installed desuperheater provides hot water.

Manual Strainers Field installed to increase efficiency and ensure long life of the equipment with Y-style and Basket strainers of cast iron 200 psi or carbon 275 psi with 60 mesh stainless steel screens. All strainers are field installed external to the chiller bank for ease of service.

Motorized or Manual Water Isolation Valves and Flush Ports

Factory installed water isolation valves and flush ports provide isolation to the module for maintenance and cleaning of evaporator and condenser heat exchangers while adjacent modules continue normal operation. Both motorized and manual valves include standard ¾" fill and flush valves.

Pressure Differential Flow Sensor Field installed to prevent operation of chiller without sufficient water flow to evaporator and condenser.

Shell and Tube Condenser Factory installed cleanable shell and tube condenser with enhanced copper tube geometry. Provides removable, epoxy coated, water plates to facilitate cleaning.

Water Header Bypass A field installed water header bypass may be utilized to prevent deadheading the pump.

LEED categories satisfied by the UGW system:

Enhanced Commissioning and Measurement and Verification

CoolLogic Control System provides maximum flexibility with BAS interface.

Enhanced Refrigerant Management

Micro charge of chlorine-free and non-ozone depleting refrigerant.

Optimized Energy Performance

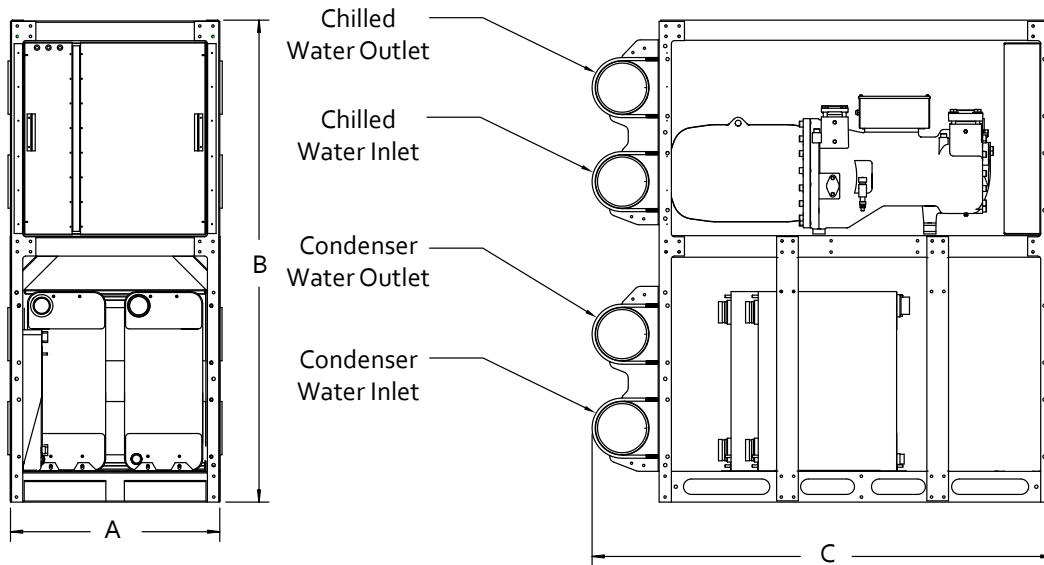
Exceeds ASHRAE 90.1 minimum efficiency.

Sustainable Sites and Building Re-Use

Compact design shrinks mechanical room and building footprint. This also allows modules to fit through existing doors eliminating the need for demolition and reconstruction.

Thermal Comfort Precise required heating and cooling ensures the highest comfort for building occupants.





Model UGW	Voltage	A Unit Width ³ (in.)	B Unit Height ³ (in.)	C Unit Depth ³ (in.)	Unit Weight ¹ (lb.)	Operational Weight ² (lb.)	Header Connection (in.)
80	208/230/460/575/3/60	34 3/4	78	75	3,680	4,080	8

Notes:

1. Shipping weight includes refrigerant charge, compressor oil and packaging.
2. Operational weight includes refrigerant charge, compressor oil and water.
3. 208/230v module has external variable frequency drive which will add to module dimensions. Please consult the Installation, Operation & Maintenance Manual.

Contact your local Climacool representative or visit our web site at www.climacoolcorp.com to find out more about the UGW and other heating and cooling solutions that may fit your application needs.



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