



HYPERION

Water Cooled Screw Chillers

WCHX - EU

Cooling Capacity: 70~550TR (244~1930KW)



Hospitals



Buildings



Airports

Dunham-Bush

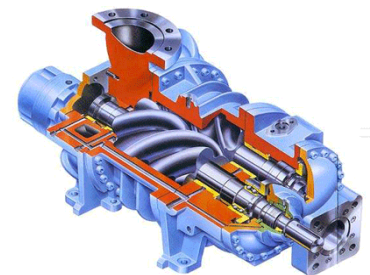
For over 45 years, Dunham-Bush has been a leader in Rotary Screw Compressor Chiller technology. Proudly made in the USA, our chillers are known for their durability and reliability, with thousands running over 100,000 hours without compressor tear-outs or overhauls—demonstrating the unmatched quality of Dunham-Bush engineering.

Features and Benefits

WCHX-EU Water Cooled Screw Chillers, uses environmentally sound R513A & R1234ze(E) refrigerant. The entire product line features high energy efficiency, compact construction, installation ease, control flexibility, and high reliability.

Compressors

The semi-hermetic Rotary Twin Screw compressors are designed for easy maintenance and repair. These compressors are ideal for large commercial and industrial applications that demand high cooling capacities, offering both efficiency and reliability for demanding environments.



WCHX- EU 70~550TR



Refrigerant liquid level control

Utilizing an Electronic Expansion Valve (EEV), the refrigerant flow into the evaporator can be precisely controlled. This enables the refrigerant liquid level in the evaporator to be maintained at an optimal level, maximizing heat transfer efficiency in flooded-type, shell and-tube heat exchange systems



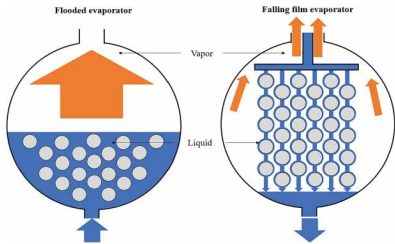
Compact Footprint

The revolutionary compact water-cooled screw chiller features an innovative, spacesaving design that prioritizes convenience and serviceability. Its small footprint allows it to fit easily into cramped mechanical rooms and even pass through a standard single access door, making installation and maintenance more efficient.

WCHX- EU Water Cooled Screw Chillers

DB Director

DB Director Controller is equipped with RS485 and Ethernet communication ports as standard. This user-friendly design allows Building Management System (BMS) to interface directly with the chiller via either of Modbus RTU, Modbus IP, or BACnet IP communication protocol. LONworks or BACnet MSTP communication protocol can be established with installation of external adapter.



Falling Film Evaporator

The removable water heads allow for easy inspection and tube cleaning without disconnecting chilled water piping, minimizing fouling and ensuring long-term system efficiency.

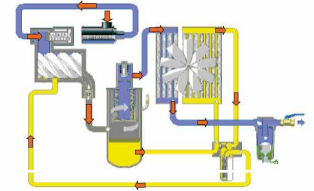
Economical and Reliable

The unit design is optimized to meet performance requirements without compromising on quality or reliability. Maximum efficiency is achieved through computermatched components and the use of multiple compressors, ensuring superior performance and long-term dependability.



Refrigerant Cycle

The rotary screw compressor chiller is a positive displacement, variable capacity compressor that will allow operation over a wide range of conditions. Even at high condenser pressure and low capacity, a difficult condition for centrifugal compressors, the rotary screw compressor performs easily.



Standard & Optional Features

Item	Standard	Optional
Water Connection	Victaulic groove	Flanged;
Water flow switch	—	NEMA 1, NEMA 4 rated, Thermal Dispersion Flow sensor
Evaporator Insulation Thickness	1" [25mm]	2" [50mm]
Compressor Isolation Valve	Discharge	Suction & Discharge
Spring Isolator	—	Neoprene Pad; Spring Isolator
Compressor Main Power Isolation	—	Main Incoming Isolator
Ice Mode or Low Temp Mode	—	Cooling or Ice Mode, Low temp mode
Communication Protocol	Modbus RS485	BACnet MSTP; LONworks; ModBus TCP/IP; BACnet TCP/IP
Vessel Code Compliance	—	ASME
Compressor Extended Warranty	1 Year	2 Years; 5 Years

DUNHAM-BUSH®

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Products that perform...By people who care

