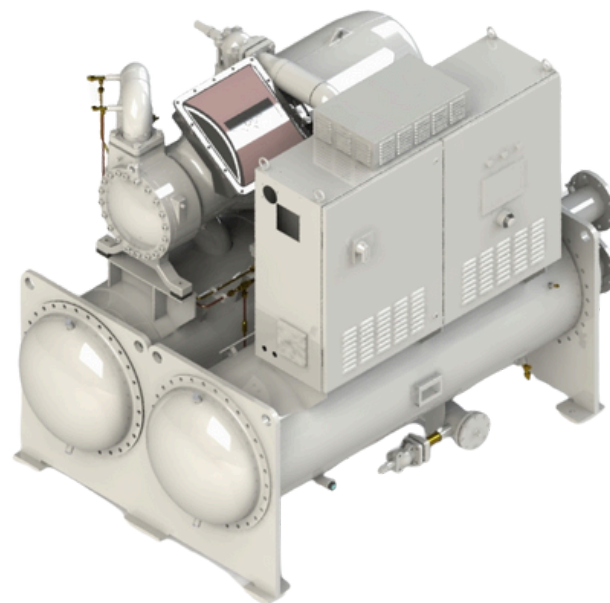


HIGH TEMPERATURE WATER-COOLED SCREW CHILLERS



EXINDA Water-Cooler Screw Chiller

- R-515B REFRIGERANT
- TOWARD HIGHER EFFICIENCIES

95.8 RT Cooling Capacity

140 RT Heating Capacity

185°F High Water Outlet

EXINDA High-Temperature Water-Cooled Screw Chiller

Heating & Cooling • Hot Water up to 185 °F

EXINDA's next-generation water-cooled screw chillers, available from 100 to 300 tons, are designed as a fully VFD-driven platform to deliver both cooling and high-temperature heating in applications where conventional chillers can't keep up. Whether producing chilled water for air conditioning or supplying hot water up to 185 °F (85 °C) for space heating, domestic hot water, or process loads, EXINDA screw chillers provide the quiet, adaptive, and energy-saving operation today's buildings demand.

Key Advantages

- **Dual-Mode Operation:** Reliable chilled-water cooling and hot-water heating up to 185 °F (85 °C) in a single machine.
- **Screw Compressor Efficiency:** Real-time compression ratio optimization for peak efficiency in all seasons.
- **Fast-Loading:** Cooling or heating recovered in seconds after a power outage.
- **Quiet, Adaptive Operation:** Ideal for comfort cooling, process loads, and mission-critical facilities.

Technical specifications

Performance & Electrical

Item	Parameter
Performance (AHRI Conditions)	
Cooling Capacity	95.8 RT / 337.0 kW
COP	4.96
IPLV.IP	7.14
Electrical	
Power Supply	3-phase, 440–480 VAC, 60 Hz
Rated Power	68.0 kW
Rated Current	124 A
Maximum Operating Current	290 A

Compressor & Heat Exchangers



Item	Parameter
Compressor	
Type	Screw
Quantity	1
Starting Method	Variable-frequency start
Capacity Control	50 %–100 % stepless
Condenser	
Type	Water-cooled shell-and-tube
Quantity	1
Inlet Water Temperature	85 °F
Outlet Water Temperature	94 °F
Cooling Water Flow	68.4 m³/h
Water Pressure Drop	66 kPa
Evaporator	
Type	Flooded shell-and-tube
Quantity	1
Inlet Water Temperature	54 °F
Outlet Water Temperature	44 °F
Chilled Water Flow	52.1 m³/h
Water Pressure Drop	62 kPa

Refrigerant, Control & Safety

Item	Parameter
Refrigerant	
Type	R515B
Charge	125 kg
Circuits	1
Expansion Device	Electronic expansion valve
Temperature Control	Water-temperature PID control
Control System	Siemens PLC with 7-inch LCD touch screen
Safety System	Circuit breaker; high & low pressure protectors; compressor over-current and over-temperature protectors; water differential pressure switch; chilled-water freeze protector; refrigerant system safety valve

Connections, Dimensions & Accessories

Item	Parameter
Piping Connections (outer diameter)	
Chilled-water inlet/outlet	4 inch
Cooling-water inlet/outlet	4 inch
Insulation Material	Flexible closed-cell rubber foam
Weight (approx.)	Dry: 2580 kg • Operating: 2760 kg
Dimensions (L × W × H)	90.6 × 57.7 × 73.6 inch
Standard Accessories	User manual, vibration-isolating pads, warranty card

Heating Condition – AHRI

Item	Unit	Value
Heating Capacity	U.S.RT	140.2
	kW	493
Input Power	kW	110.6
COP		4.46
Hot Water Inlet Temperature	°C / °F	48.89 °C / 120.0 °F
Hot Water Outlet Temperature	°C / °F	60.00 °C / 140.0 °F
Heat Source Inlet Temperature	°C / °F	24.60 °C / 76.3 °F
Heat Source Outlet Temperature	°C / °F	18.33 °C / 65.0 °F

Heating Condition – High Temperature



Item	Unit	Value
Heating Capacity	U.S.RT	124.7
	kW	438.4
Input Power	kW	162.5
COP		2.7
Hot Water Inlet Temperature	°C / °F	70.00 °C / 158.0 °F
Hot Water Outlet Temperature	°C / °F	80.00 °C / 176.0 °F
Heat Source Inlet Temperature	°C / °F	25.00 °C / 77.0 °F
Heat Source Outlet Temperature	°C / °F	20.00 °C / 68.0 °F

ENERGY EFFICIENCY

EXINDA screw chiller stands out for its ability to significantly reduce annual energy costs, particularly during prolonged part-load operations and low compressor lift scenarios. It adapts seamlessly with varying conditions, especially at lower condenser entering water temperatures to promote sustainability and low-cost operation. Moreover, it elevates power factor, mitigating utility surcharges. This not only bolsters financial resilience but also fosters a more efficient utilization of electrical power, harmonizing with sustainability initiatives and minimizing environmental impact.