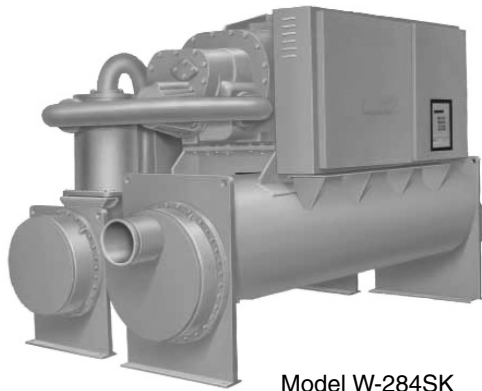


WATER-COOLED MODELS W-205SK TO W-481SK

Model W-284SK

CENTRAL CHILLING WITH LARGE CAPACITY

Free up factory floor space with the Conair Water-Cooled W-SK Central Chillers. These large-capacity, heavy-duty chillers make the most of your energy dollars. Precise temperature control at the mold, die, screw or barrel results in faster cycle times and less warping and shrinking of the product.

Recirculating cooling water through a tower-chiller system also reduces water and sewer bills.

COOLING CAPACITIES FROM 205 TONS TO 481 TONS

The Conair Water-Cooled W-SK Series Central Chillers are engineered for improved efficiency and better reliability. The screw compressor is the most advanced compressor in the industry. The unit protects against starting and running overload, under and over voltages, phase loss, phase reversals, high winding temperature and rapid recycling.

The microprocessor control maintains chilled water temperature more accurately, resulting in less temperature drift.

The microprocessor monitors temperature and the rate of change over time, effectively controlling compressor loading for efficient chiller operation.

The screw compressor's positive displacement design results in lower energy costs.

■ Rugged compressor design

The screw compressor has only four moving parts eliminating the need for pistons, connecting rods, wrist pins and valves. Fewer moving parts means less internal friction and greater efficiency.

■ Customized to fit your needs

Conair has the central chiller to match your process. Pick nominal chilling capacities from 205 tons to 481 tons. Smaller capacities are available.

■ Easy setup

Small unit size, factory wiring, easy lifting procedures and startup control logic result in quick and easy installation. And includes one day of startup services by a factory-trained technician.

■ Trouble-free operation

Smart safety features and over 40 diagnostic displays for easy and virtually trouble-free operation.



WATER-COOLED MODELS W-205SK TO W-481SK

Easy access controls

Controls have automatic compressor, load limiting, and anti-recycle functions.

Low flow switch

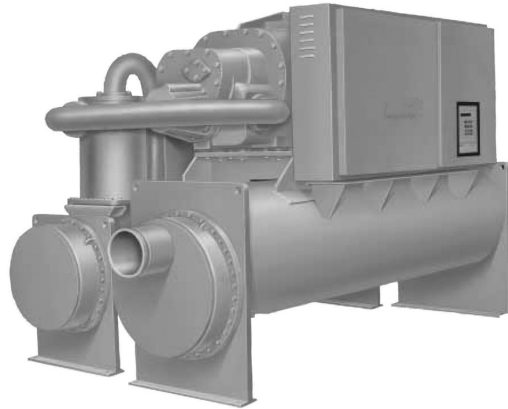
field installed to positively detect flow loss of evaporator solution.

Helical rotary compressor

Compressor has only four moving parts; direct-drive, low speed for high efficiency and high reliability.

Operator interface

Interface monitors temperature and rate of change over time, effectively controlling compressor loading.



Evaporator

Shell-and-tube evaporator is designed with seamless internally finned copper tubes, roller-expanded into tube sheets.

Tolerates slugging

Compressors are designed to handle liquid slugging.

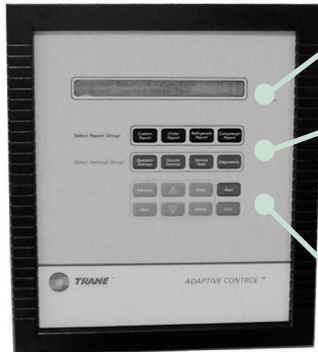
Water regulating valves

for condenser water lower than 85°F {29.4°C}.

Energy efficient

Results in lower energy costs when compared with reciprocating compressor designs.

CONTROL



LCD Display

easy-to-read screen provides system information.

The Main Menu

monitor temperature, pressure and setpoint status, set and edit control parameters, edit pre-set factory setpoints, and review active and historical diagnostic conditions.

Navigation buttons

provide easy scrolling through screens.

Microprocessor Control with Human Interface Panel

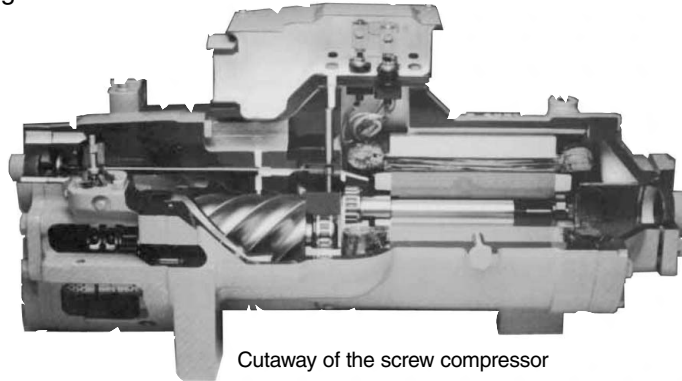
- designed to take corrective action to prevent unit shutdown.
- limit compressor operation with smart safety controls, avoiding compressor or evaporator failures.
- built-in chiller flow protection automatically detects no-water flow condition.
- improved chiller start-up, load limiting, compressor anti-recycle timing, and lead/lag functions.
- alarm diagnostic displays specific information for quick action.
- service menu offers easy troubleshooting by controlling all outputs individually.
- chiller capacity algorithm optimizes setpoint control and provides evaporator freeze protection.
- failure protections include loss of chilled solution flow, chiller freeze protection, chilled solution flow interlock, head pressure control, pump down control, and low ambient lockout.

WATER-COOLED MODELS W-205SK TO W-481SK**HELICAL ROTARY SCREW COMPRESSOR****Only four moving parts**

when compared to reciprocating compressors; there are no pistons, connecting rods, suction and discharge valves or mechanical oil pump.

Reduced rotor tip clearance

results in reduced leakage between the high and low pressure cavities during compression.



Cutaway of the screw compressor

Latest heat transfer technology

results in increased condenser and evaporator tube efficiency.

Helical screw design

results in part load performance far superior to single reciprocating compressors.

Resistant to liquid slugging

this compressor design can handle amounts of liquid refrigerant that would severely damage a reciprocating compressor.

OPTIONS**Different LWT Ranges**

standard leaving water temperature ranges from 37°F to 65°F {2.8°C to 18.3°C} and optional temperature ranges from 10°F to 65°F {-12.2°C to 18.3°C}.

Disconnect

external handle allows local power shutoff to control center.

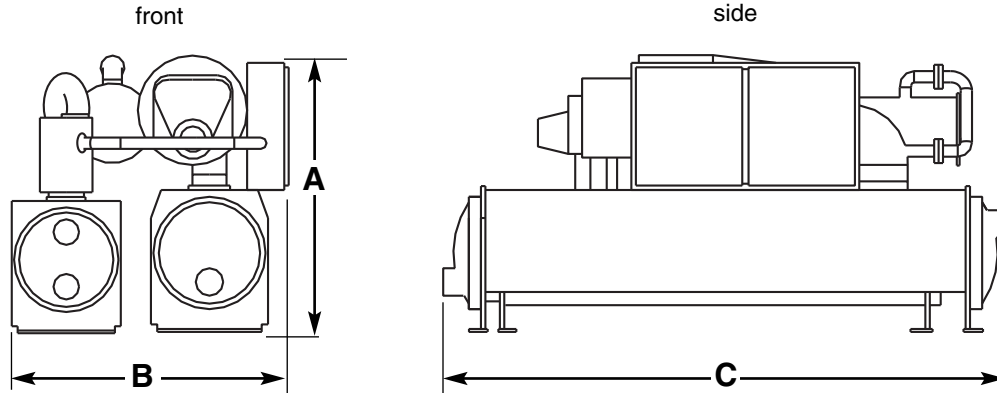
Remote Setpoint

input for integration into the control system. Choose 0-5VDC or 0-10VDC.

Compressor Warranty

choose an additional two- to five-year compressor component replacement warranty.

WATER-COOLED MODELS W-205SK TO W-481SK



MODEL	W-205SK	W-224SK	W-284SK	W-326SK	W-394SK	W429SK	W-481SK							
Performance characteristics														
Capacity* tons at 85°F condenser water inlet:														
40°F {4.4°C}	171.1	185.3	245.2	274.3	334.4	363.3	391.7							
45°F {7.2°C}	190.6	200.2	272.4	304.6	370.7	402.0	434.3							
50°F {10°C}	211.5	228.7	301.7	337.4	409.7	443.3	479.8							
55°F {12.8°C}	233.9	252.9	333.1	372.7	451.4	487.4	528.2							
60°F {15.5°C}	257.8	278.8	366.0	410.3	495.3	534.0	579.7							
Evaporator flow† gpm {lpm}	506 {1915}	547 {2070}	722 {2733}	807 {3054}	980 {3709}	1060 {4012}	1147 {4341}							
Pressure drop‡ psi {bar}	8.1 {0.55}	7.4 {0.51}	9.1 {0.62}	11.0 {0.75}	11.5 {0.79}	11.5 {0.79}	4.1 {0.28}							
Condenser water flow gpm {lpm}	591 {2237}	638 {2415}	847 {3206}	950 {3596}	1156 {4375}	1248 {4724}	1324 {5011}							
Condenser pressure drop§ psi {bar}	7.0 {0.48}	6.8 {0.46}	9.1 {0.67}	11.2 {0.77}	11.3 {0.77}	11.3 {0.77}	5.6 {0.38}							
Dimensions in {cm}														
A-Height	71 {180}	71 {180}	72 {183}	72 {183}	76 {193}	76 {193}	80 {203}							
B-Width	125 {318}	125 {318}	129 {328}	129 {328}	134 {340}	134 {340}	153 {389}							
C-Length	65 {165}	65 {165}	68 {173}	68 {173}	68 {173}	68 {173}	70 {178}							
Evaporator connections type	6-GRV	6-GRV	8-GRV	8-GRV	8-GRV	8-GRV	10-GRV							
Condenser connections type	6-GRV	6-GRV	8-GRV	8-GRV	8-GRV	8-GRV	8-GRV							
Weight lb {kg}														
Shipped	9700 {4400}	9800 {4445}	13,300 {6034}	13,500 {6125}	15,000 {6804}	15,000 {6804}	20,100 {9117}							
Installed	10,250 {4649}	10,400 {4717}	13,900 {6307}	14,175 {6431}	15,850 {7189}	15,900 {7212}	22,100 {10,024}							
Utility requirements														
Power consumption amps **	MCA	RLA	MCA	RLA	MCA	RLA	MCA	RLA	MCA	RLA	MCA	RLA	MCA	RLA
200V/3 phase/60hz	490	392	525	420	729	583	854	683	996	797	1071	857	1005	804
230V/3 phase/60hz	426	341	457	365	634	507	742	594	866	693	931	745	874	699
460V/3 phase/60hz	213	170	228	182	317	253	371	297	433	346	465	372	437	349
575V/3 phase/60hz	170	136	182	146	253	202	297	237	346	277	372	298	349	279

SPECIFICATION NOTES

- * Based on 50°F {10°C} leaving water temperature with 2.4 gpm/ton flow rate and 85°F {27°C} condenser water supply @ 3 gpm/ton flow rate.
- † Based on 50°F {10°C} leaving water temperature and 60°F {16°C} returning water temperature.
- ‡ Not including optional water regulating valves.
- § Evaporator pressure drop at respective nominal flow rate.
- ** MCA: Minimum circuit ampacity - 125% of the compressor RLA.
RLA: Running load amps. GRV: Groove. FLG: Flange.

Specifications may change without notice. Check with a Conair representative for the most current information.