



SQ Air-Cooled Chiller

General

The SQ Series portable chillers are designed for indoor use in industrial manufacturing locations. The chillers are produced in our ISO 9001:2008 certified facility. Water-cooled and air-cooled units ship with a full refrigerant charge. Units with a remote air-cooled condenser ship with a nitrogen charge. All units are housed in a heavy gauge painted steel cabinet with tool-free access.

Mechanical Features

- Energy efficient and reliable scroll compressor
- Electronic hot gas bypass for capacity control
- Stainless steel brazed plate evaporator provides higher heat transfer coefficients due to reduced fouling.
- (Air-Cooled Units) Generously sized copper tube/aluminum finned air-cooled condensers designed for industrial environments. Includes air inlet filters.
- (Water-Cooled Units) Generously sized cleanable shell-and-tube water-cooled condenser for industrial environments.
- (Remote Condenser Units) Modular design with divided fan sections to prevent 'wind-milling' during fan cycling. Includes galvanized steel fan sections and coil baffles, copper tube/aluminum fin coils tested to 400 PSIG, direct drive multi-blade propeller fans with venture orifices to optimize efficiency, and a nitrogen holding charge.
- (Water-Cooled Units) Condenser water regulating valve to provide constant head pressure

- Refrigerant TXV, filter/drier, and sight glass
- Freezestat safety switch with solid state sensor
- Encapsulated high and low refrigerant pressure safeties
- Nonferrous water circuit construction
- Insulated polyethylene reservoir with removable cover
- Stainless steel process pump with pressure gauge
- Fail safe flow switch interlocked with compressor
- Y-strainer to protect evaporator from contamination
- Internal valved bypass line to protect pump and evaporator
- (Air and Water-Cooled Units) Factory tested under full load conditions prior to shipment

Electrical Features

- Compressor, pump and condenser fan (air-cooled units only) starters mounted in control panel and wired to motors
- Single-point main power block for simple wiring connection

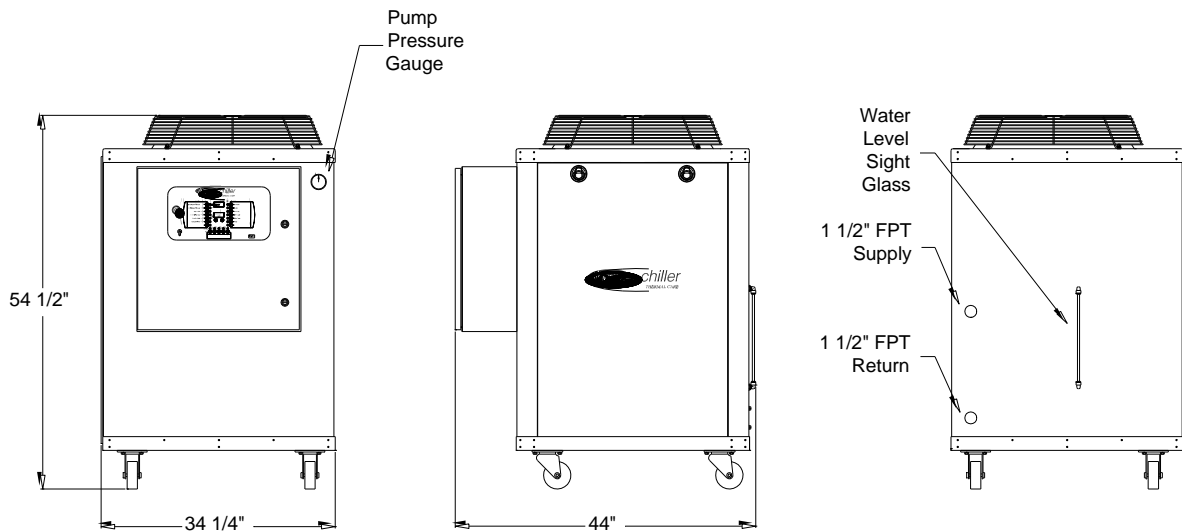
Microprocessor Features

- Dual LED digital displays of actual and set point temperatures
- Anti-cycle 2.5 minute timer to prevent short-cycling of compressor
- Deviation alarm 30 minute timer delay to prevent nuisance alarms during start-up and set point changes
- Display temperatures easily switched from °F to °C from the front panel
- Easy front panel alarm reset button
- Diagnostic lights: no flow, high refrigerant pressure, low refrigerant pressure, freezestat, over set point, under set point, pump on, compressor on, partial load, water make-up (active if option is purchased), low water level (active if option is purchased), high water temperature and probe fault
- Operation lights: control power on, start, stop, alarm reset, alarm horn silence (active if option is purchased)
- PID control algorithm

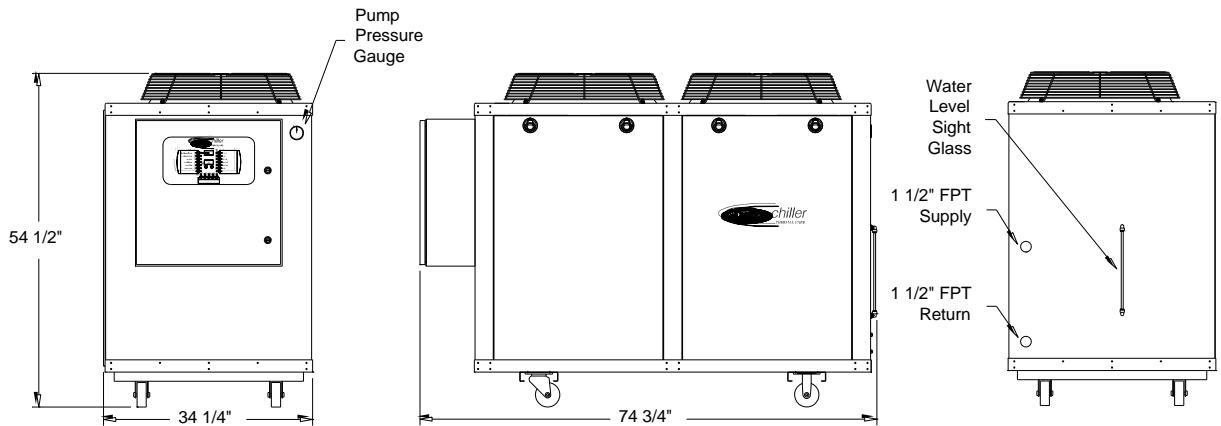
Warranty

- 5 year parts warranty for microprocessor with a lifetime \$175 exchange policy after initial 5 year warranty period
- 18 months parts warranty
- 12 months labor warranty

1 year labor warranty **SQ2A05 Air-Cooled Chiller**



SQ2A08 – SQ2A14 Air-Cooled Chillers

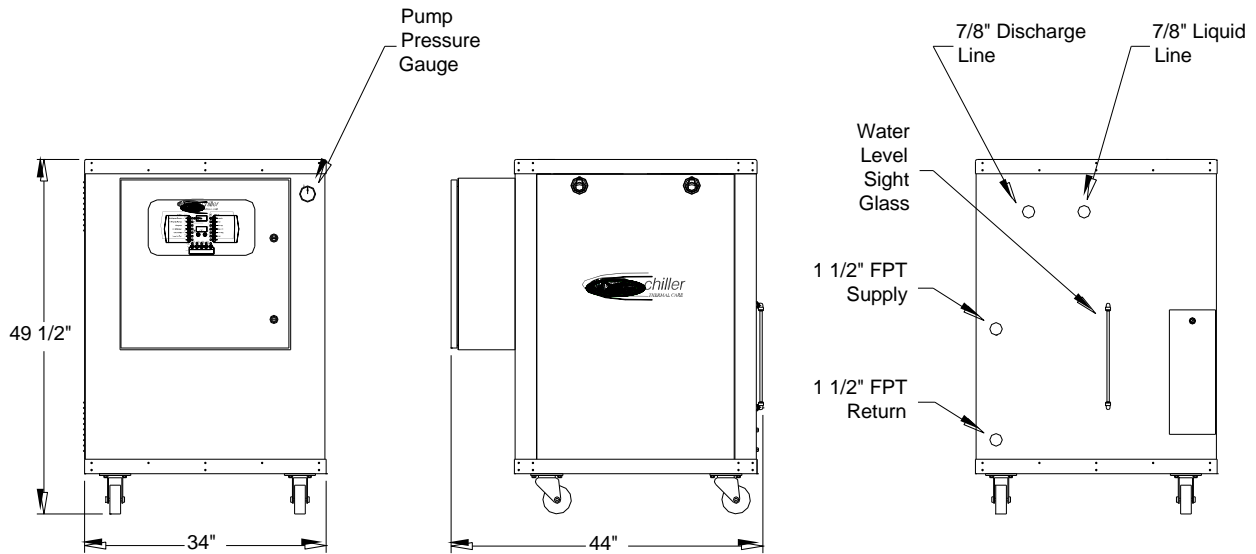


Model	Cooling Tons ¹	Set Point Range °F	Refrigerant	Condenser Fan Air Flow CFM	Standard Pump			Unit MCA @ 460/3/60	Shipping Weight Lbs.
					HP	GPM	PSI		
SQ2A05	5.5	20 – 80 ²	R407C	4,400	1½	13	43	17	720
SQ2A08	7.5	20 – 80	R407C	10,000	1½	18	42	21	1,195
SQ2A10	10.0	20 – 80	R407C	10,000	1½	24	40	27	1,195
SQ2A14	13.1	20 – 80	R407C	10,000	1½	31	36	41	1,215

¹Cooling tons based on 12,000 BTU/Hr/ton with 50°F leaving coolant and 95°F ambient air.

²Standard set point range is 20°F to 65°F for SQ2A05. To extend range to 20°F to 80°F the CPR valve option is required.

SQ2R05 Remote Condenser Chiller

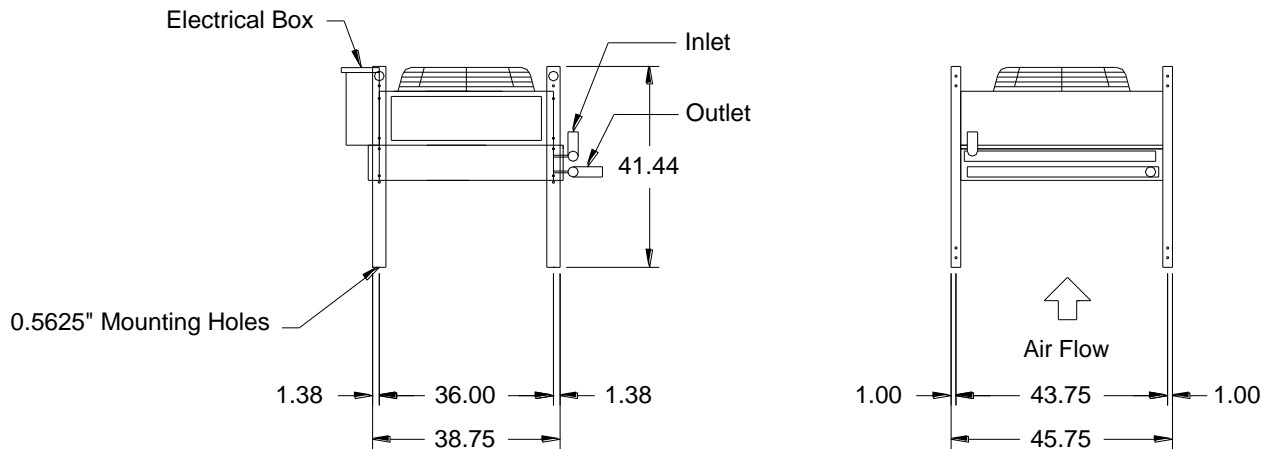


Model	Cooling Tons ¹	Set Point Range °F	Refrigerant	Standard Pump			Unit MCA @ 460/3/60	Shipping Weight Lbs.
				HP	GPM	PSI		
SQ2R05	5.5	20 – 80 ²	R407C	1½	13	43	15	720

¹Cooling tons based on 12,000 BTU/Hr/ton with 50°F leaving coolant and 95°F ambient air.

²Standard set point range is 20°F to 65°F for SQ2R05. To extend range to 20°F to 80°F the CPR valve option is required.

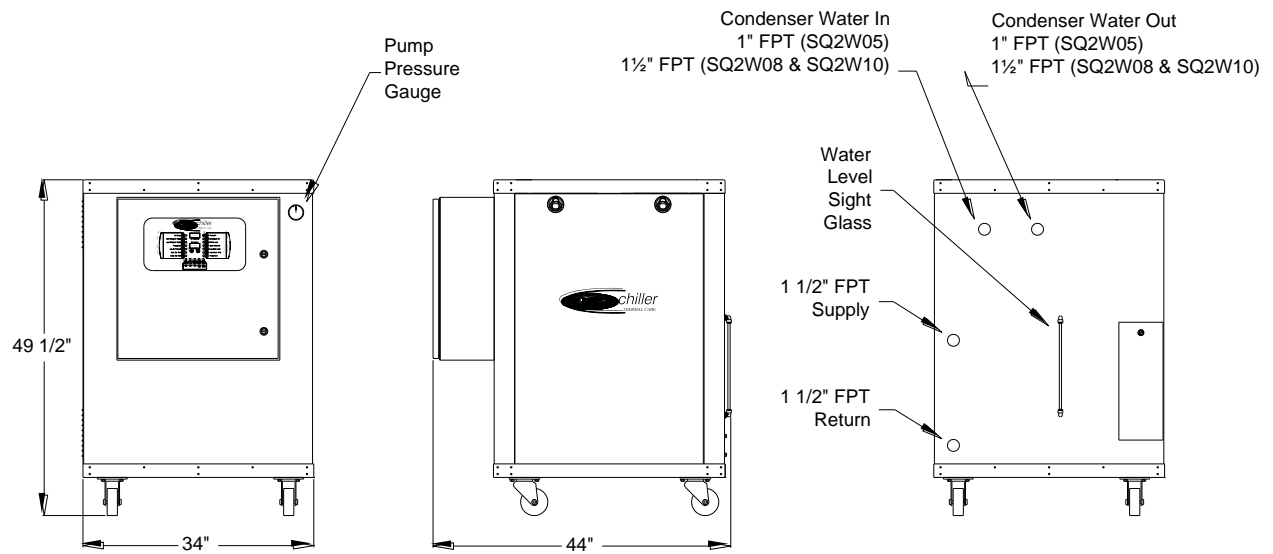
LAVB11310 Remote Condenser



Model	Chiller Model Used With	Refrigerant	Condenser Air Flow CFM	Connection Size (inch)		Condenser Fans		Unit MCA @ 230/1/60 ¹	Shipping Weight Lbs.
				Inlet	Outlet	Qty	HP		
LAVB11310	SQ2R05	R407C	6,400	1 3/8	1 1/8	1	½	3	565

¹Remote condenser is only available in 230/1/60.

SQ2W05 - SQW10 Water-Cooled Chillers



Model	Cooling Tons ¹	Set Point Range °F	Refrigerant	Condenser Water GPM	Standard Pump			Unit MCA @ 460/3/60	Shipping Weight Lbs.
					HP	GPM	PSI		
SQ2W05	5.5	20 – 80 ²	R407C	17	1½	13	43	15	720
SQ2W08	7.7	20 – 80	R407C	23	1½	19	41	18	1,195
SQ2W10	10.8	20 – 80	R407C	33	1½	26	40	24	1,195

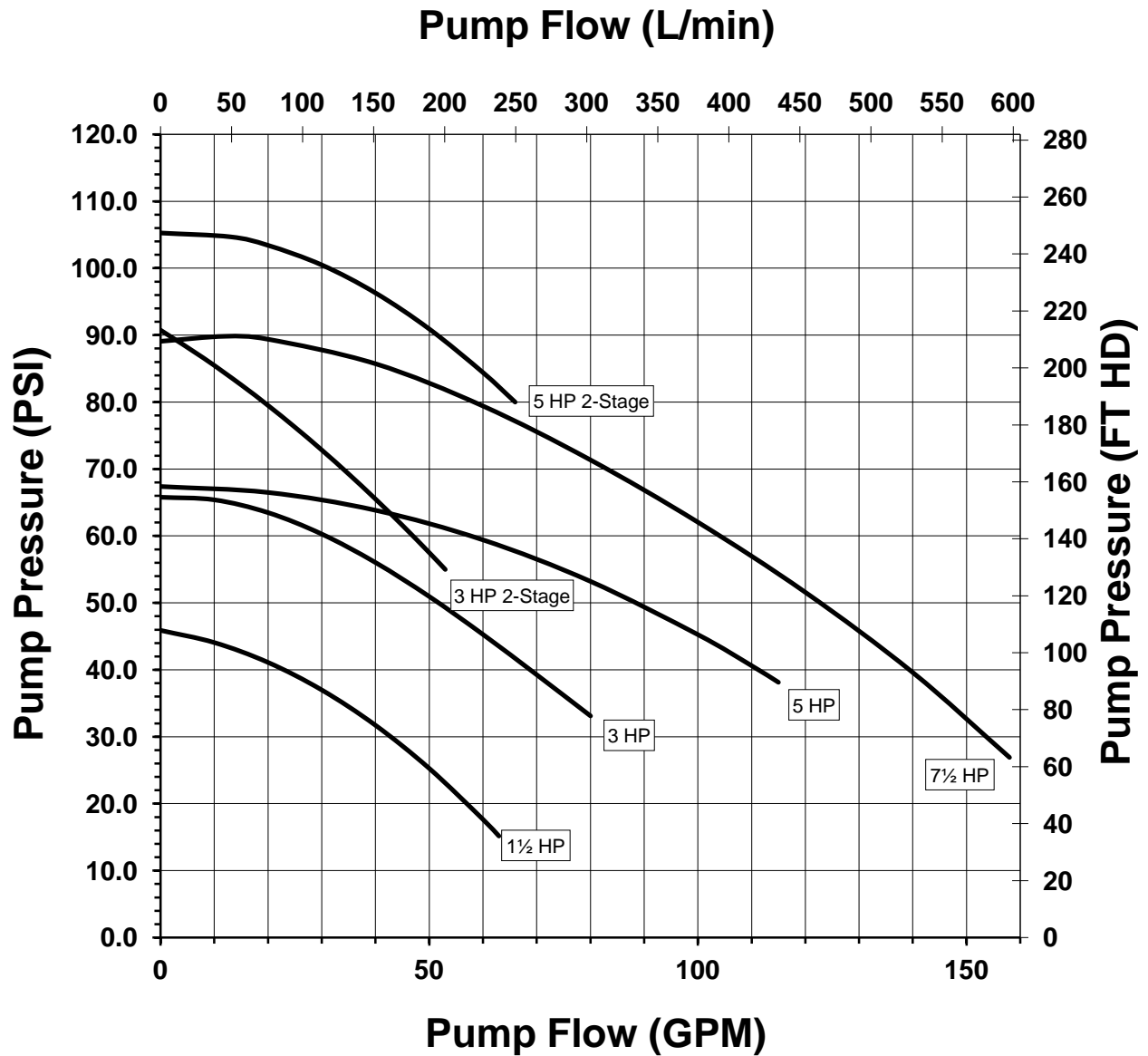
¹Cooling tons based on 12,000 BTU/Hr/ton with 50°F leaving coolant and 85°F condenser water.

²Standard set point range is 20°F to 65°F for SQ2W05. To extend range to 20°F to 80°F the CPR valve option is required.

Unit MCA @ 460/3/60 with Optional Pumps

Pump	1½ HP	3 HP	3 HP 2-stage	5 HP	5 HP 2-Stage	7½ HP
SQ2A05	17	20	20	---	---	---
SQ2R05	15	17	17	---	---	---
SQ2W05	15	17	17	---	---	---
SQ2A08	21	23	23	26	26	30
SQ2W08	18	20	20	23	23	25
SQ2A10	27	29	29	32	32	36
SQ2W10	24	26	26	29	29	30
SQ2A14	42	44	44	47	47	50

Pump Curves (60 Hz)





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