



EQ Family of Chillers

### General

The EQ Series portable chillers are designed for indoor use in industrial manufacturing locations. The chillers are produced in our ISO 9001:2000 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 rotary compressor (1 ton unit only) or scroll compressor (2 and 3 ton units)
- 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 (optional on 1 ton unit).
- (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
- 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

- NEMA-1 electrical enclosure with single point electrical connection
- Control transformer to provide 115V/1/60 control voltage
- 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

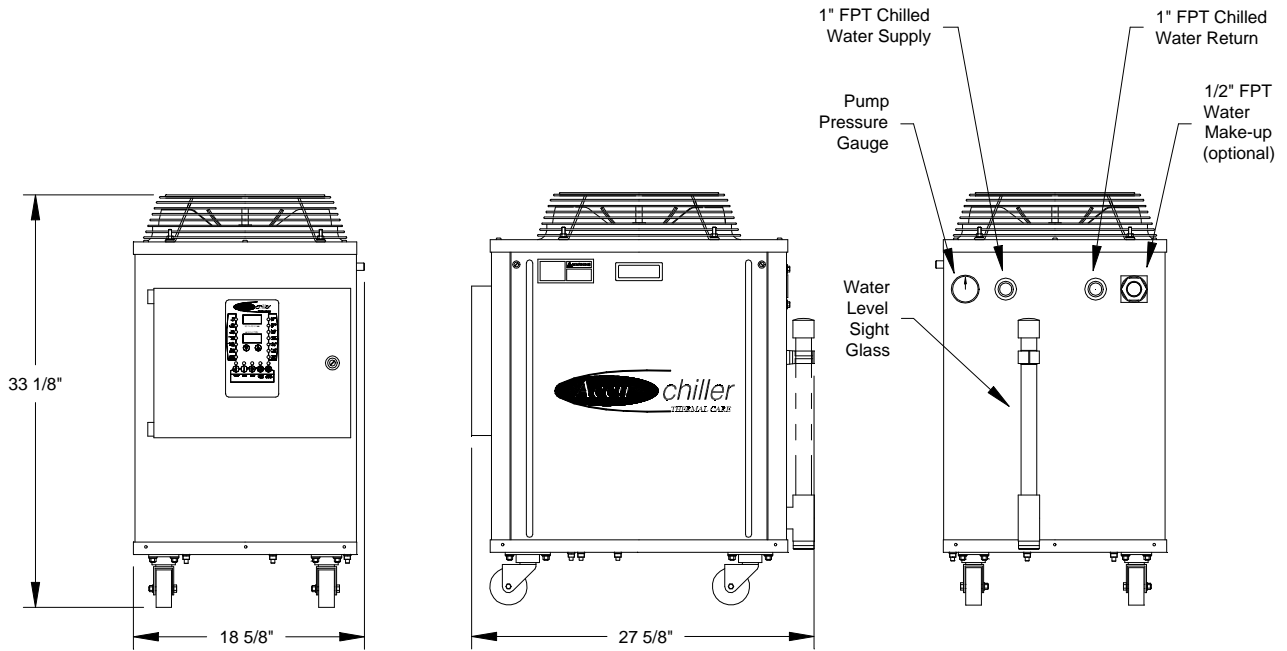
### Microprocessor Features

- 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

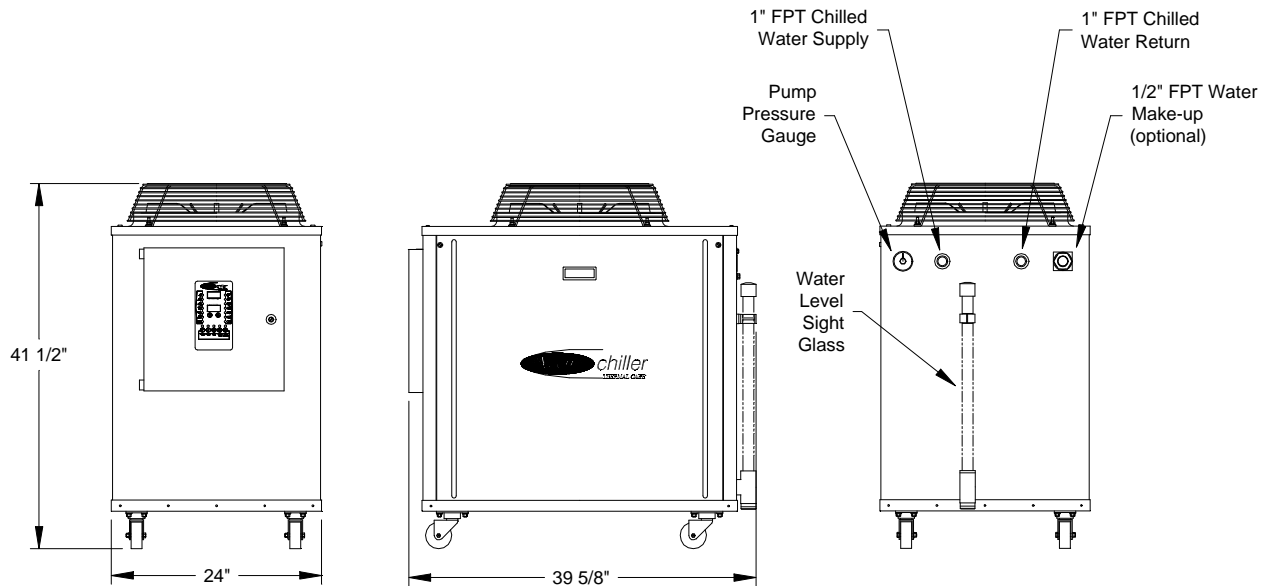
### Warranty

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

### EQ3A01 Air-Cooled Chiller



### EQ2A02 to EQ2A03 Air-Cooled Chillers

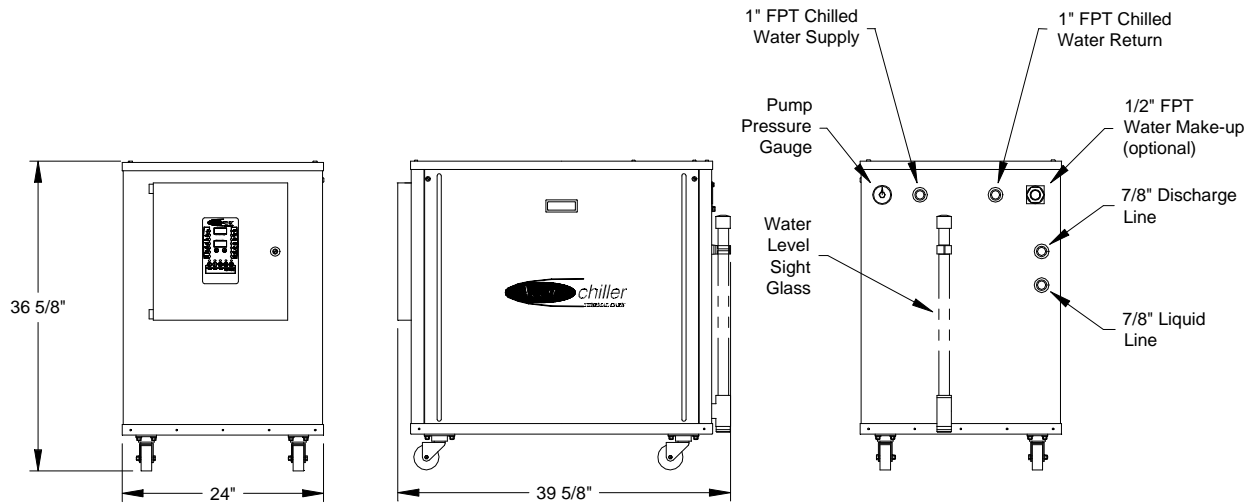


Model	Cooling Tons <sup>1</sup>	Set Point Range °F	Refrigerant Type	Condenser Fan Air Flow CFM	Standard Pump			Unit MCA @ 460/3/60	Shipping Weight Lbs.
					HP	GPM	PSI		
EQ3A01	1.0	30 – 65	HCFC-22	1,110	¼	2	80	12 @ 230/1/60 <sup>2</sup>	205
EQ2A02	2.0	20 – 65	HCFC-22	1,585	1	5	39	9	390
EQ2A03	3.0	20 – 65	HCFC-22	2,470	1	7	38	12	410

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

<sup>2</sup>Model EQ3A01 is only available as a 230 volt, single-phase, 60-Hertz unit.

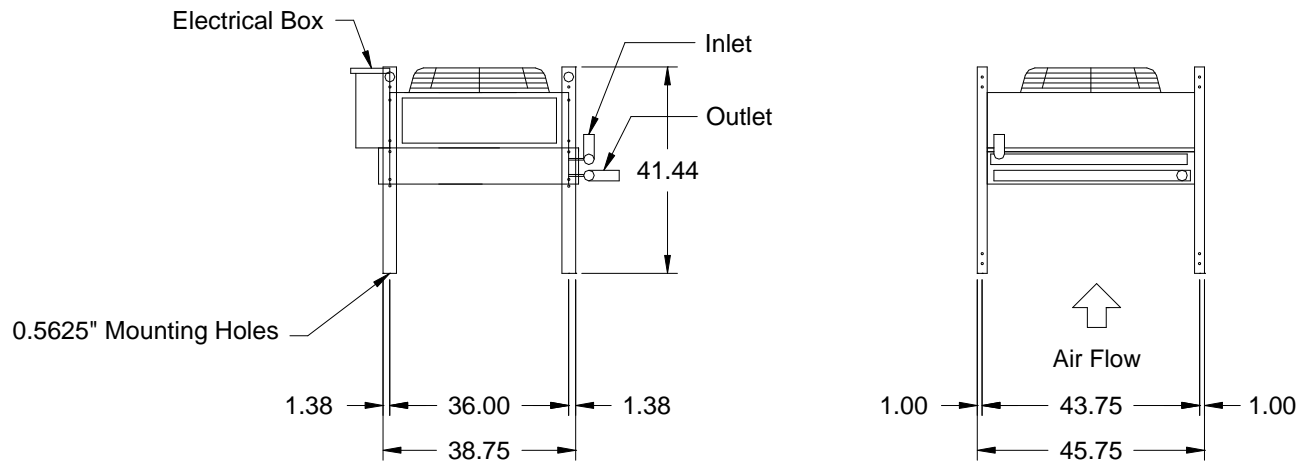
### EQ2R03 Remote Condenser Chiller



Model	Cooling Tons <sup>1</sup>	Set Point Range °F	Refrigerant Type	Standard Pump			Unit MCA @ 460/3/60	Shipping Weight Lbs.
				HP	GPM	PSI		
EQ2R03	3.0	20 – 65	HCFC-22	1	7	38	11	410

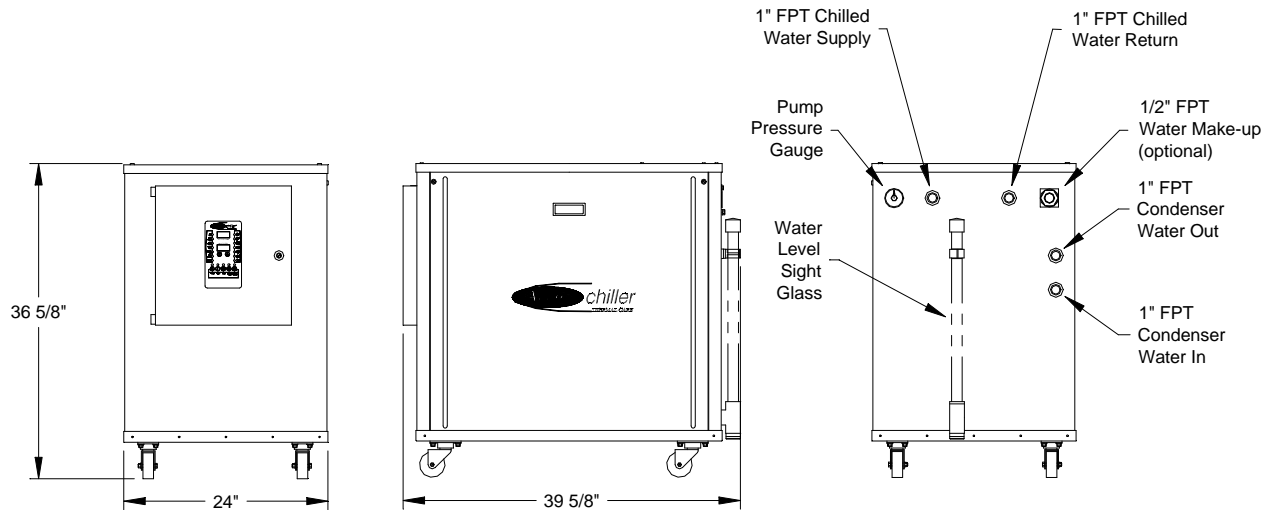
<sup>1</sup>Cooling tons based on 12,000 BTU/Hr/ton with 50°F leaving coolant and 95°F ambient air

### LAVB11210 Remote Condenser



Model	Chiller Model Used With	Refrigerant Type	Condenser Air Flow CFM	Connection Size (inch)		Condenser Fans		Unit MCA @ 460/3/60	Shipping Weight Lbs.
				Inlet	Outlet	Qty	HP		
LAVB11210	EQ2R03	HCFC-22	6,750	1 1/8	1 1/8	1	1/2	3	185

**EQ2W02 to EQ2W03 Water-Cooled Chillers**

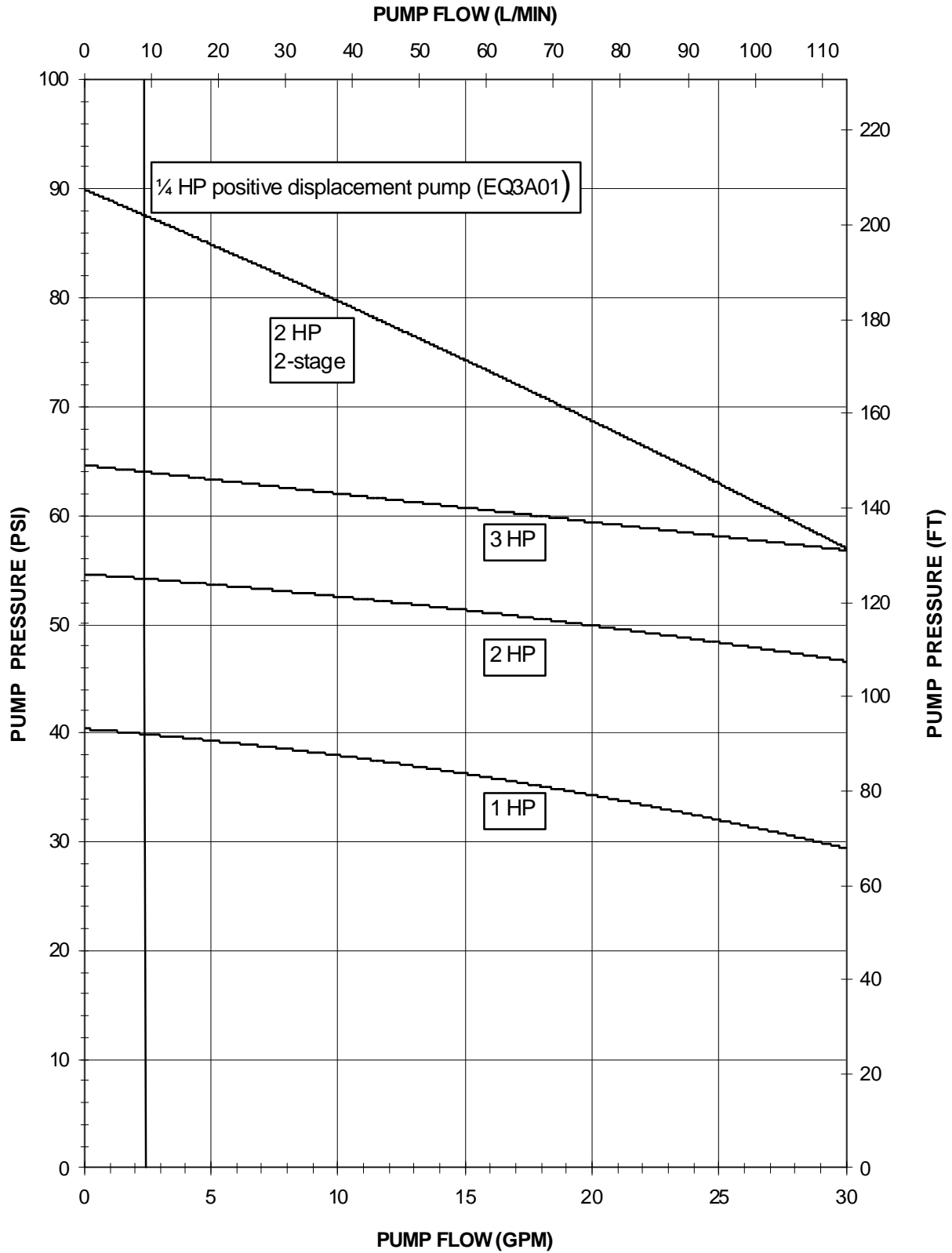


Model	Cooling Tons <sup>1</sup>	Set Point Range °F	Refrigerant Type	Condenser Water GPM	Standard Pump			Unit MCA @ 460/3/60	Shipping Weight Lbs.
					HP	GPM	PSI		
EQ2W02	2.2	20 – 65	HCFC-22	7	1	5	39	8	390
EQ2W03	3.3	20 – 65	HCFC-22	10	1	8	37	11	410

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

Pump	1 HP	2 HP	2 HP 2-stage	3 HP
EQ3A01	---	---	---	---
EQ2A02	9	10	10	12
EQ2W02	8	9	9	11
EQ2A03	12	13	13	15
EQ2R03	11	12	12	14
EQ2W03	11	12	12	14

# Pump Curves (60 Hz)





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