

# PCA SERIES

## 1.5 HP Packaged Chillers



## Technical Data Sheet

PCA Series Packaged Chiller by AEC are specially engineered for small, demanding industrial applications. Each self-contained unit is designed for immediate hook-up and is ready to supply clean, cooling water at constant temperatures.

Control within  $\pm 2^\circ\text{F}$  ( $1.1^\circ\text{C}$ ) is achieved using microprocessor based PID controls with autotuning capability. NEMA 1-style electrical enclosures, non-ferrous wetted surfaces, and all refrigerant safeties. In order to conserve valuable floor space, the PCA chiller offers a space-saving footprint of 20" wide x 26" deep.

### Features

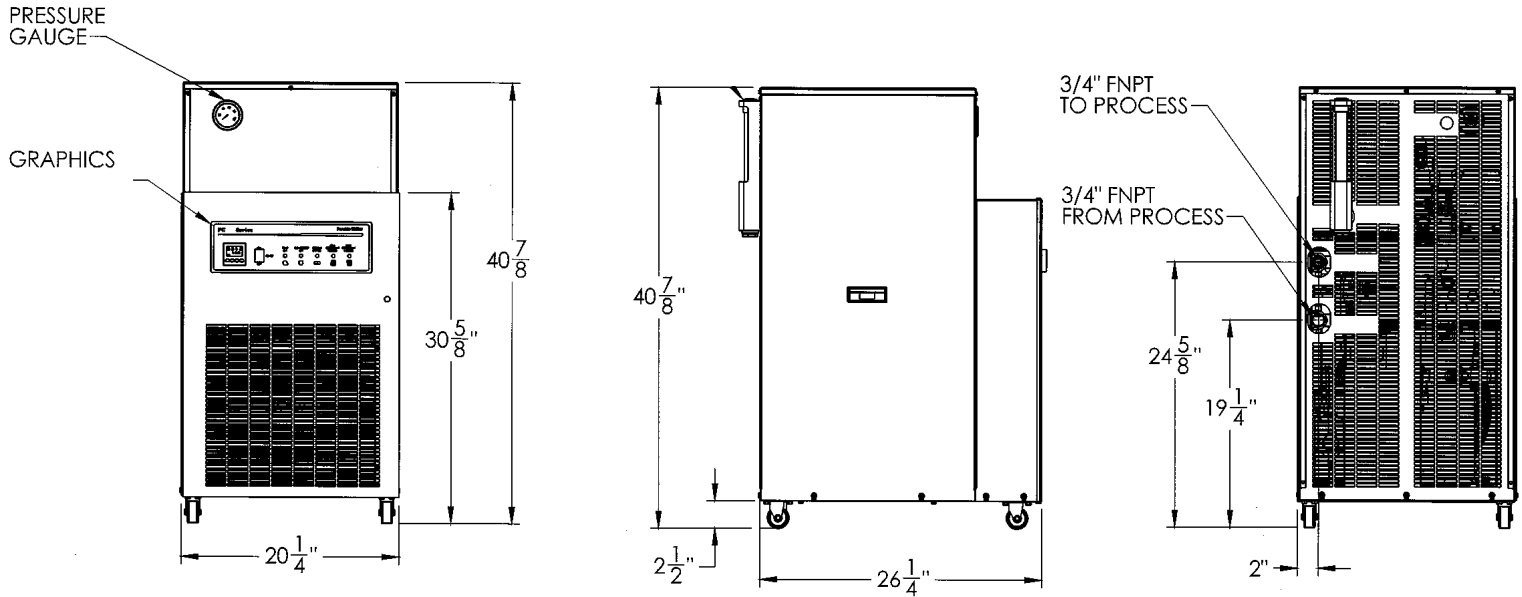
#### Standard Features

- Leaving water temperature range 35°F to 65°F (1.6°C to 18.3°C), glycol is required for fluid temps below 50°F (10°C)
- 1.5hp: Hermetic scroll compressor
- Highly efficient tube-in-tube evaporators
- Aluminum fin/copper tube condensers
- Six (6) gallon (22.7 liter) polyethylene tank with external fill/drain sight glass
- Non-ferrous piping
- Regenerative turbine, horizontally mounted pump
- Microprocessor based PID controller with autotuning and To Process and Set Point LED readout
- Pressure-actuated process fluid bypass valve for system protection
- To Process 2.5" (63 mm) diameter, dual scale liquid-filled to process fluid pressure gauge
- Fully insulated refrigeration and process piping
- HFC-134a refrigerant
- NEMA 1 electrical enclosure
- Fully insulated pump and evaporator
- High and low refrigerant pressure safety switches
- Hot gas bypass capacity control
- Thermal expansion valve
- Refrigerant sight glass and filter dryer
- Ease of maintenance with multiple refrigeration access ports
- 1 year warranty on parts

#### Key Attributes

- 1.5 hp compressor
- Air-cooled
- 3/4 hp pump
- 230/1/60 operating voltage
- UL/cUL listed electrical subpanel

## Product Diagrams



## Specifications

Model	Comp., HP (kW)	Standard Pump	Nominal chilled water, gpm (lpm)	Capacity @ 65°F (18°C) LWT, 75°F (24°C) ambient BTUH (tons)	Capacity @ 50°F (10°C) LWT, 90°F (32°C) ambient BTUH (tons)	Refrigerant	Process connection, in. NPT	Ship. weight, lbs. (kgs).
PCA 150	1.5 (1.12)	4.0 gpm @ 48 psi (15.2 lpm @ 330 kPa)	4.0 (15.2)	25400 (2.1)	16000 (1.3)	HFC 134A	0.75	372 (168)

## Water Circuit Pressure Drop Table

Model	Gallons/Minute (gpm)	lpm	ΔP (psig)	ΔP (kPa)
PCA 150	2.0	7.5	2.5	17.3
	2.4	9.0	2.5	17.3
	3.6	13.6	3.0	20.7
	4.8	18.1	3.5	24.2