

# PS SERIES 3.5 hp Air-Cooled Chiller

## Technical Data Sheet

PSA Series Air-Cooled Packaged Chiller includes a 3.5 hp scroll compressor in a compact footprint. This chiller features a unique enclosure design that simplifies service and maintenance and conserves valuable production floor space. Incorporate these chillers into your planned or existing production layout easily and effectively. PSA Series Packaged Chillers have an operating leaving fluid temperature range of 30°F to 65°F (-1°C to 18°C).

#### **Features**

#### **Standard Features**

- Operating leaving water temperature range 30°F to 65°F (-1°C to 18°C), glycol is required for fluid temps below 50°F (10°C)
- Hot gas bypass capacity control
- Scroll compressor
- R-410a refrigerant
- External fill/drain/sight glass
- Valved Process fluid connections
- Low Process fluid pressure switch
- Non-ferrous piping
- Hot gas bypass capacity control
- Scroll compressor
- Pressure-actuated Process water bypass valve for system protection
- To Process 2.5" dual scale liquid-filled pressure gauge
- Fully insulated refrigeration and process piping

- High and low refrigerant pressure cut-outs
- High compressor discharge temperature cut-out
- High pressure spring-actuated refrigerant relief valve
- Filter dryer, sight glass, balanced-port thermal expansion valve, refrigeration service access ports
- 6 Gallon polyethylene tank

#### **Electrical Control Features**

- Fully accessible NEMA 12 enclosure
- Non-fused disconnect switch with MCP motor protection
- Microprocessor-based PID auto-tuning controller with To Process and Set Point LED readout
- Low and high process water temperature electronic cut-out switch with LCD display
- Graphic control panel with status lights

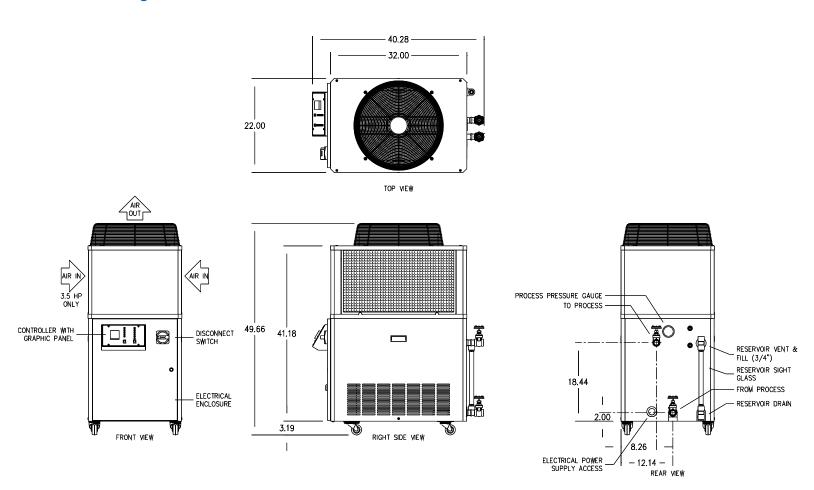
#### **Key Attributes**

- 3.5 hp compressor
- 1.5 hp pump
- · Air-cooled
- 460/3/60 operating voltage
- · Manual bypass
- Audible and visual alarm for high and low water temperature, low water flow, and high and low refrigerant pressure
- UL/cUL listed electrical subpanel





### **Product Diagrams**



## **Specifications**

Model	Compressor hp	Compressor Type	Evaporator Type	Condenser Type	Reservoir gallons	Pump	Discharge air openings	Discharge air, cfm
PSA 3.5	3.5	Hermetic scroll compressor	SS copper- brazed plate	Aluminum fin/ copper tube with washable filters	6 (polyethylene)	1.5 hp, 304 SS	1 @ 18.5"	2350

NOTE: Nominal operating parameters for PSA air-cooled chillers are  $50^{\circ}$ F leaving water temperature at 2.4 gpm/ton, with  $95^{\circ}$ F ambient air. For 50 Hz applications, multiply capacity by 0.83. Nominal 60 Hz flow rate must be maintained.

Model	Nominal cooling cap., tons1	Process connections, in. NPT	Water flow, gpm²	Discharge Pressure	460/3/60	Ship weight lbs. (kgs).
Model	1 pump	Process connections, iii. NP1			FLA	
PSA 3.5	3.2	1	7.7	41 psig	12.5	460 (209)

<sup>1</sup> Based on  $50^{\circ}\text{F}$  (10°C) chilled water supply temperature and  $95^{\circ}\text{F}$  (35°C) ambient air.

<sup>2</sup> Based on 2.4 gpm per ton (9.1 lpm per 3.517 kW) nominal 1 pump.