



## PSA SERIES AIR-COOLED PORTABLE CHILLERS

PS Series air-cooled portable chillers from AEC provide 2 to 30 ton cooling capacities with very compact footprints. These chillers feature 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.

All PS Series portable chillers have an operating leaving water temperature range of 35°F to 65°F (2°C to 18°C). For applications outside this range, consult factory. See pages 201-202 for flow and pressure considerations and pump curves.



PSA 20-30

### STANDARD FEATURES

- Non-ferrous piping
- External fill/drain/sight glass
- Valved Process water connections
- Low Process water: pressure switch 2-3.5 hp, flow switch 5-30 hp
- NEMA-rated ODP fan motors
- Swivel casters: 2.5" (2-3.5 hp), 4" (5-15 hp), 5" w/lock (optional on 5-15 hp, standard on 20-30 hp)
- Single pump models only: 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-discharge temperature cut-out (2-10 hp models)
- High pressure spring-actuated relief valve
- Filter dryer, sight glass, balanced-port thermal expansion valve, multiple refrigeration access ports
- Hot gas bypass capacity control
- Hot gas bypass and liquid line shutoff valves (5-30 hp)
- Scroll compressors (2-30 hp)
- Fan/blower cycling switch (5-30 hp)
- R-22 refrigerant
- 1 year warranty on compressor and labor
- 2 year parts warranty, 3 year limited warranty on controller

### OPTIONAL FEATURES

- Automatic water makeup valve<sup>1</sup>
- Process water sidestream 50µ filter w/ flowmeter<sup>1</sup>
- General fault indicator, 85 dB @ 2 ft with audible alarm buzzer and silence button or 100 dB @ 10 ft audible alarm horn/108,000 peak candle-power, 80 flash/min visual alarm strobe and silence button. Alarm conditions include high and low water temperature, low water flow, and high and low refrigerant pressure<sup>1</sup>
- Compressor hour meter<sup>1</sup>
- RS232 or RS485 communications
- Recirculation pump (not available on 2 and 3.5 hp)
- High pressure fans; provides additional 0.3" WG static pressure on fan discharge (5-15 hp only), required where exiting air is exhausted through ductwork
- Crankcase pressure regulating (CPR) valve to prevent compressor motor overloading, required for process water leaving temperature of 66°F to 75° F
- 304 SS reservoir tank (not available on 2 and 3.5 hp)
- Mounting rails and/or mounting feet (not available on 2 and 3.5 hp)
- UL-Labeled electrical subpanel
- 380/3/50 or 575/3/60 operating voltage<sup>2</sup>
- Variable-speed fans (low ambient), provides sound attenuation in ambient temperatures below 95°F<sup>2</sup> (5-15 hp only)
- NEMA-12 control access window<sup>2</sup>

<sup>1</sup> Field-retrofit option  
<sup>2</sup> Additional lead time

## SPECIFICATIONS

Model	Compressor, HP	Compressor type	Evaporator type	Condenser type	Reservoir, gallons	Pumps	Discharge air openings	Discharge air, cfm
PSA 2	2	Hermetic scroll, with compressor staging on 20-30 hp tandems	SS copper-brazed plate	Aluminum fin/copper tube with washable filters	6 (polyethylene)	1 hp, 304 SS	1 @ 18.5"	1475
PSA 3.5	3.5				6 (polyethylene)	1 hp, 304 SS	1 @ 18.5"	2350
PSA 5	5				20 (polyethylene)	1 hp, 304 SS	1 @ 27"	3400
PSA 7.5	7.5				20 (polyethylene)	1 hp, 304 SS	1 @ 27"	5100
PSA 10	10				40 (polyethylene)	2 hp, 304 SS	2 @ 27"	5800
PSA 15	15				40 (polyethylene)	2 hp, 304 SS	2 @ 27"	10000
PSA 20	2 @ 10				80 (polyethylene)	5 hp, 304 SS	25" x 18.5"	10200
PSA 25	2 @ 13				80 (polyethylene)	5 hp, 304 SS	25" x 18.5"	13300
PSA 30	2 @ 15				80 (polyethylene)	5 hp, 304 SS	25" x 18.5"	18150

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

Model	Nominal cooling cap., tons <sup>1</sup>			Process connections, in. NPT				Water flow, gpm <sup>2</sup>	FLA 1 pump <sup>3</sup>		FLA 2 pumps <sup>3</sup>	
	No pump	1 pump	2 pump	1 pump	2 pump	no pump/ no tank	1 pump/ no tank		Rated	Running	Rated	Running
PSA2	1.9	1.7	n.a.	1	n.a.	n.a.	n.a.	4.6	8.0	6.9	n.a.	n.a.
PSA3.5	3.3	3.1	n.a.	1	n.a.	n.a.	n.a.	7.9	10.9	8.8	n.a.	n.a.
PSA5	4.8	4.6	4.5	1.5/2.0	2.0	1.5	1.5/2.0	11.1	14.0	11.0	14.9	11.9
PSA 7.5	6.6	6.4	6.3	1.5/2.0	2.0	1.5	1.5/2.0	15.2	18.2	14.6	19.1	15.5
PSA 10	9.9	9.5	9.4	1.5/3.0	2.0/3.0	1.5	1.5/2.0	22.8	26.1	21.8	27.8	23.5
PSA 15	14.5	14.1	14.0	2.0/3.0	2.5/3.0	2.0	2.0/3.0	33.9	33.3	27.5	35.0	29.2
PSA 20	19.4	18.4	18.0	2.0/3.0	2.5/3.0	2.0	2.0/3.0	46.5	48.3	42.0	51.4	45.1
PSA 25	23.9	22.8	22.4	2.0/3.0	2.5/3.0	2.0	2.0/3.0	57.2	62.1	48.3	65.2	51.4
PSA 30	29.2	28.2	27.8	2.0/3.0	2.5/3.0	2.0	2.0/3.0	70.2	74.1	64.4	77.2	67.5

1 Based on 50°F (10°C) chilled water supply temperature and 95°F (35°C) ambient air. Optional additional process pump hp (kW) reduces chiller capacity by 0.2 tons per hp (0.703 kW ref. cap. per 0.746 kW pump power)

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

3 FLA at 460/3/60. Multiply 460/3/60 amperage by 2.0 for 208-230/3/60 amperage (0.8 for 575/3/60). An optional oversized process pump adds to the total rated or running chiller amperage. To find the new total chiller amperage, subtract the standard process pump amperage from the optional pump amperage (see table below) and add it to the rated or running amperage.

## PUMP OPTIONS

Optional Pump	FLA @ 208-230/1/60	FLA @ 460/3/60	Availability
0.75 hp bronze turbine	5.4	1.5	2 and 3.5 hp models
1 hp SS	6.4	1.8	standard on 2-7.5 hp models
1.5 hp SS	7.5	2.3	2 and 3.5 hp models
2 hp SS	9.6	3.1	2-15 hp models (standard on 10-15 hp)
2 hp SS dual stage	n.a.	2.7	5-7.5 hp models
3 hp SS	12.7	4.2	2-15 hp models
3 hp SS dual stage	n.a.	4.5	5-15 hp models
5 hp SS	n.a.	6.2	5-30 hp models (standard on 20-30 hp)
5 hp SS dual stage	n.a.	6.6	5-15 hp models
7.5 hp bronze	n.a.	9.0	5-15 hp models
7.5 hp SS	n.a.	9.8	20-30 hp models
10 hp SS	n.a.	13.2	10-30 hp models
15 hp SS	n.a.	19.0	20-30 hp models

## ELECTRICAL CONTROL FEATURES

- Fully accessible NEMA 12 enclosure
- Non-fused disconnect switch with branch fusing
- Single-point power and ground wiring connection
- Off-the-shelf 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 w/status lights







## PSW SERIES WATER-COOLED PORTABLE CHILLERS

PS Series water-cooled portable chillers from AEC provide 2 to 40 ton cooling capacities with very compact footprints. These chillers feature 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.

All PS Series portable chillers have an operating leaving water temperature range of 35°F to 65°F (2°C to 18°C). For applications outside this range, consult factory. See pages 201-202 for flow and pressure considerations and pump curves.



PSW 20-30

### STANDARD FEATURES

- Non-ferrous piping
- External fill/drain/sight glass
- Valved Process water connections
- Low Process water: pressure switch 2-3.5 hp, flow switch 5-40 hp
- Swivel casters: 2.5" (2-3.5 hp), 4" (5-15 hp), 5" w/lock (optional on 5-15 hp, standard on 20-40 hp)
- Single pump models only: 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-discharge temperature cut-out (2-10 hp models)
- High pressure spring-actuated relief valve
- Filter dryer, sight glass, balanced-port thermal expansion valve, multiple refrigeration access ports
- Hot gas bypass capacity control
- Hot gas bypass and liquid line shutoff valves (5 to 30 hp)
- Scroll compressors (2-30 hp)  
Reciprocating compressors (40 hp)
- R-22 refrigerant
- 1 year warranty on compressor and labor
- 2 year parts warranty, 3 year limited warranty on controller

### OPTIONAL FEATURES

- Automatic water makeup valve<sup>1</sup>
- Process water sidestream 50µ filter w/ flowmeter<sup>1</sup>
- General fault indicator, 85 dB @ 2 ft with audible alarm buzzer and silence button or 100 dB @ 10 ft audible alarm horn/108,000 peak candle-power, 80 flash/min visual alarm strobe and silence button. Alarm conditions include high and low water temperature, low water flow, and high and low refrigerant pressure<sup>1</sup>
- Compressor hour meter<sup>1</sup>
- RS232 or RS485 communications
- Recirculation pump (not available on 2 and 3.5 hp)
- High pressure fans; provides additional 0.3" WG static pressure on fan discharge (5-15, 40 hp), required where exiting air is exhausted through ductwork
- Crankcase pressure regulating (CPR) valve to prevent compressor motor overloading, required for process water leaving temperature of 66°F to 75° F
- 304 SS reservoir tank (std on 40 hp, not available on 2 and 3.5 hp)
- Mounting rails and/or mounting feet (5-15 hp only)
- UL-Labeled electrical subpanel
- 380/3/50 or 575/3/60 operating voltage<sup>2</sup>
- NEMA-12 control access window<sup>2</sup>

<sup>1</sup> Field-retrofit option  
<sup>2</sup> Additional lead time

## SPECIFICATIONS

Model	Compressor, HP	Compressor type	Evaporator type	Condenser type <sup>1</sup>	Reservoir, gallons	Nominal pump	Condenser water		
							Tower water <sup>2</sup> flow, gpm	City water <sup>3</sup> flow, gpm	Water conn., in. NPT
PSW 2	2	Hermetic scroll, with compressor staging on 20-30 hp tandems	SS copper-brazed plate	Tube-in tube	6 (polyethylene)	1 hp, 304 SS	6.2	4.2	1.0
PSW 3.5	3.5				6 (polyethylene)	1 hp, 304 SS	10.5	7.2	1.0
PSW 5	5				20 (polyethylene)	1 hp, 304 SS	15.7	7.9	1.0
PSW 7.5	7.5				20 (polyethylene)	1 hp, 304 SS	21.3	10.7	1.0
PSW 10	10				40 (polyethylene)	2 hp, 304 SS	32.2	16.1	1.5
PSW 15	15			Cleanable shell and tube	40 (polyethylene)	2 hp, 304 SS	47.6	23.8	2.0
PSW 20	2 @ 10				80 (polyethylene)	5 hp, 304 SS	61.7	31.5	2.0
PSW 25	2 @ 13				80 (polyethylene)	5 hp, 304 SS	75.9	38.6	2.0
PSW 30	2 @ 15				80 (polyethylene)	5 hp, 304 SS	93.9	47.6	2.5
PSW 40	40	Semi-hermetic discus with cylinder unloading	Shell & tube	80 (304 SS)	7.5 hp, 304 SS	123.0	61.5	3	

NOTE: Nominal operating parameters for PSA air-cooled chillers are 50°F leaving water temperature at 2.4 gpm per ton, with 85°F tower water. For 50 Hz applications, multiply capacity by 0.83. Nominal 60 Hz flow rate must be maintained.

- 1 With cooling water regulating valves; select between tower or city (5-40 hp models)
- 2 Based on availability of 85° F (29°C) tower water at 25 psi (172.4 kPa/1.7 bars) minimum
- 3 Based on availability of 70° F (21°C) city water at 25 psi (172.4 kPa/1.7 bars) minimum

Model	Nominal cooling cap., tons <sup>4</sup>			Process connections, in. NPT				Water flow, gpm <sup>5</sup>	FLA 1 pump <sup>6</sup>		FLA 2 pumps <sup>6</sup>	
	No pump	1 pump	2 pump	1 pump	2 pump	no pump/ no tank	1 pump/ no tank		Rated	Running	Rated	Running
PSW2	2.1	1.9	n.a.	1	n.a.	n.a.	n.a.	5.1	12.2	8.3	n.a.	n.a.
PSW3.5	3.6	3.4	n.a.	1	n.a.	n.a.	n.a.	8.6	16.4	11.8	n.a.	n.a.
PSW5	5.2	5.0	4.9	1.5/2.0	2.0	1.5	1.5/2.0	12.1	12.2	8.3	13.1	9.2
PSW 7.5	7.1	6.9	6.8	1.5/2.0	2.0	1.5	1.5/2.0	16.6	16.4	11.8	17.3	12.7
PSW 10	10.7	10.3	10.2	1.5/3.0	2.0/3.0	1.5	1.5/2.0	24.8	22.5	16.7	24.2	18.4
PSW 15	15.9	15.5	15.3	2.0/3.0	2.5/3.0	2.0	2.0/3.0	37.1	29.7	21.6	31.4	23.3
PSW 20	21.0	20.0	19.6	2.0/3.0	2.5/3.0	2.0	2.0/3.0	50.4	43.9	34.7	47.0	37.8
PSW 25	25.7	24.7	24.3	2.0/3.0	2.5/3.0	2.0	2.0/3.0	61.7	55.9	38.2	59.0	41.3
PSW 30	31.8	30.8	30.4	2.0/3.0	2.5/3.0	2.0	2.0/3.0	76.2	60.1	45.3	63.2	48.4
PSW 40	41.0	39.5	39.1	2.5/3.0	2.5/3.0	2.5	2.5/3.0	98.4	81.9	63.1	85.0	66.2

- 4 Based on 50°F (10°C) chilled water supply temperature and 85°F (29°C) tower water. Optional additional process pump hp (kW) reduces chiller capacity by 0.2 tons per hp (0.703 kW ref. cap. per 0.746 kW pump power)
- 5 Based on 2.4 gpm per ton (9.1 lpm per 3.517 kW) nominal 1 pump.
- 6 FLA at 460/3/60. Multiply 460/3/60 amperage by 2.0 for 208-230/3/60 amperage (0.8 for 575/3/60). An optional oversized process pump adds to the total rated or running chiller amperage. To find the new total chiller amperage, subtract the standard process pump amperage from the optional pump amperage (see table on next page) and add it to the rated or running amperage.

## PUMP OPTIONS

Optional Pump	FLA @ 208-230/1/60	FLA @ 460/3/60	Availability
0.75 hp bronze turbine	5.4	1.5	2 and 3.5 hp models
1 hp SS	6.4	1.8	standard on 2-7.5 hp models
1.5 hp SS	7.5	2.3	2 and 3.5 hp models
2 hp SS	9.6	3.1	2-15 hp models (standard on 10-15 hp)
2 hp SS dual stage	n.a.	2.7	5-7.5 hp models
3 hp SS	12.7	4.2	2-15 hp models
3 hp SS dual stage	n.a.	4.5	5-15 hp models
5 hp SS	n.a.	6.2	5-30 hp models (standard on 20-30 hp)
5 hp SS dual stage	n.a.	6.6	5-15 hp models
7.5 hp bronze	n.a.	9.0	5-15 hp models
7.5 hp SS	n.a.	9.8	20-30 hp models (standard on 40 hp)
10 hp SS	n.a.	13.2	10-30 hp models
15 hp SS	n.a.	19.0	20-30 hp models

## ELECTRICAL CONTROL FEATURES

- Fully accessible NEMA 12 enclosure
- Non-fused disconnect switch with branch fusing
- Single-point power and ground wiring connection
- Off-the-shelf 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 w/status lights

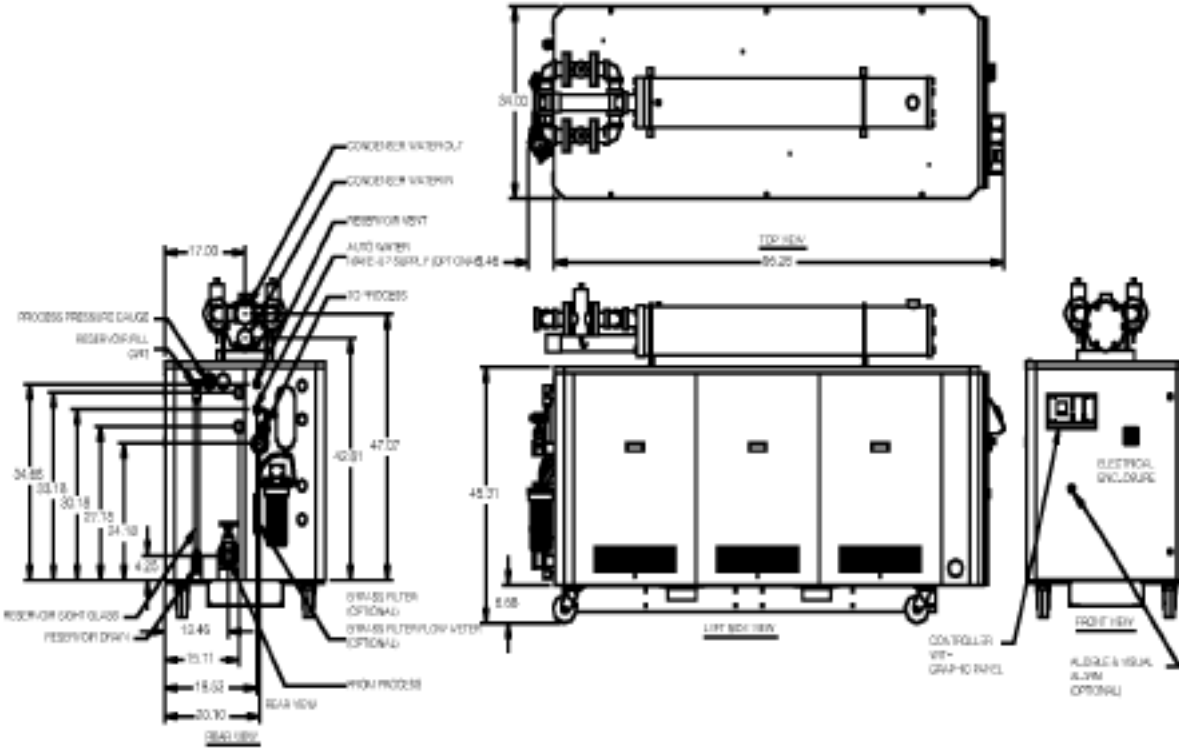




# PSW WATER-COOLED PORTABLE CHILLERS

# HEAT AND COOL

## DIMENSIONS: PSW 40



## WEIGHTS: PSW 40

Model	Dry weight, lbs.	Ship. weight, lbs.	Oper. weight, lbs.
PSW 40	2680	2930	3369

NOTES: Weights are for standard chiller. Some optional features will increase weight. Operating weight is with a full reservoir tank of water.



## PSR REMOTE AIR-COOLED PORTABLE CHILLERS

PS Series remote air-cooled portable chillers from AEC provide 5 to 40 ton cooling capacities with very compact footprints. These chillers feature 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.

All PS Series portable chillers have an operating leaving water temperature range of 35°F to 65°F (2°C to 18°C). For applications outside this range, consult factory. PSR chillers are charged with 25 psi nitrogen for shipping purposes.

Note: Remote condensers are not designed to be used indoors.



PSR 20-30

### STANDARD FEATURES

- Non-ferrous piping
- External fill/drain/sight glass
- Valved Process water connections
- Low Process water: pressure switch 2-3.5 hp, flow switch 5-40 hp
- Mounting rails
- Single pump models only: 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-discharge temperature cut-out (5-10 hp models)
- High pressure spring-actuated relief valve
- Filter dryer, sight glass, balanced-port thermal expansion valve, multiple refrigeration access ports
- Hot gas bypass capacity control
- Hot gas bypass and liquid line shutoff valves (5 to 30 hp)
- Scroll compressors (2-30 hp)  
Reciprocating compressors (40 hp)
- R-22 refrigerant
- 1 year warranty on compressor and labor
- 2 year parts warranty, 3 year limited warranty on controller

### OPTIONAL FEATURES

- Automatic water makeup valve<sup>1</sup>
- Process water sidestream 50µ filter w/ flowmeter<sup>1</sup>
- General fault indicator, 85 dB @ 2 ft with audible alarm buzzer and silence button or 100 dB @ 10 ft audible alarm horn/108,000 peak candle-power, 80 flash/min visual alarm strobe and silence button. Alarm conditions include high and low water temperature, low water flow, and high and low refrigerant pressure<sup>1</sup>
- Compressor hour meter<sup>1</sup>
- RS232 or RS485 communications
- Recirculation pump
- High pressure fans; provides additional 0.3" WG static pressure on fan discharge (5-15, 40 hp), required where exiting air is exhausted through ductwork
- Crankcase pressure regulating (CPR) valve to prevent compressor motor overloading, required for process water leaving temperature of 66°F to 75° F
- 304 SS reservoir tank (std on 40 hp)
- Mounting rails and/or mounting feet (5-15 hp only)
- UL-Labeled electrical subpanel
- 380/3/50 or 575/3/60 operating voltage<sup>2</sup>
- NEMA-12 control access window<sup>2</sup>
- Start-up available: remote condenser units must be installed, evacuated, and precharged before AEC arrives on-site

<sup>1</sup> Field-retrofit option

<sup>2</sup> Additional lead time

# PSR REMOTE AIR-COOLED PORTABLE CHILLERS

# HEAT AND COOL

## SPECIFICATIONS

Model	Compressor, HP	Compressor type	Evaporator type	Condenser type	Reservoir, gallons	Nominal pump	Refrigeration connections	
							Discharge, in. dia. ODS	Liquid, in. dia. ODS
PSR 5	5	Hermetic scroll, with compressor staging on 20-30 hp tandems	SS copper-brazed plate	Aluminum fin/copper tube (optional)	20 (polyethylene)	1 hp, 304 SS	0.625	0.625
PSR 7.5	7.5				20 (polyethylene)	1 hp, 304 SS	0.875	0.625
PSR 10	10				40 (polyethylene)	2 hp, 304 SS	1.125	0.625
PSR 15	15				40 (polyethylene)	2 hp, 304 SS	1.125	0.625
PSR 20	2 @ 10				80 (polyethylene)	5 hp, 304 SS	1.375	0.875
PSR 25	2 @ 13				80 (polyethylene)	5 hp, 304 SS	1.375	0.875
PSR 30	2 @ 15				80 (polyethylene)	5 hp, 304 SS	1.375	0.875
PSR 40	40	semi-hermetic discus w/ cylinder unloading	shell & tube		80 (304 SS)	7.5 hp, 304 SS	1.625	1.125

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

Model	Nominal cooling cap., tons <sup>1</sup>			Process connections, in. NPT				Water flow, gpm <sup>2</sup>	FLA 1 pump <sup>3</sup>		FLA 2 pumps <sup>3</sup>	
	No pump	1 pump	2 pump	1 pump	2 pump	no pump/ no tank	1 pump/ no tank		Rated	Running	Rated	Running
PSR5	4.8	4.6	4.5	1.5	2.0	1.5	1.5/2.0	11.1	12.2	9.2	13.1	10.1
PSR 7.5	6.6	6.4	6.3	1.5	2.0	1.5	1.5/2.0	15.3	16.2	12.8	17.3	13.7
PSR 10	9.9	9.5	9.4	1.5	2.0	1.5	1.5/2.0	22.8	22.5	18.2	24.2	19.9
PSR 15	14.5	14.1	14.0	2.0	2.5	2.0	2.0/3.0	33.9	29.7	23.9	31.4	25.6
PSR 20	19.4	18.4	18.0	2.0/3.0	2.5/3.0	2.0	2.0/3.0	46.5	43.9	37.6	47.0	40.7
PSR 25	23.8	22.8	27.8	2.0/3.0	2.5/3.0	2.0	2.0/3.0	57.2	55.9	42.1	59.0	45.2
PSR 30	29.2	28.2	27.8	2.0/3.0	2.5/3.0	2.0	2.0/3.0	70.2	60.0	50.4	63.2	53.5
PSR 40	36.9	35.4	35.0	2.5/3.0	2.5/3.0	2.5	2.5/3.0	88.6	81.9	68.8	85.0	58.0

<sup>1</sup> Based on 50°F (10°C) chilled water supply temperature and 95°F (35°C) ambient air. Optional additional process pump hp (kW) reduces chiller capacity by 0.2 tons per hp (0.703 kW ref. cap. per 0.746 kW pump power)

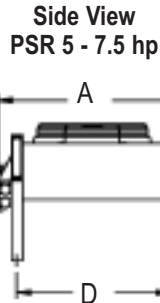
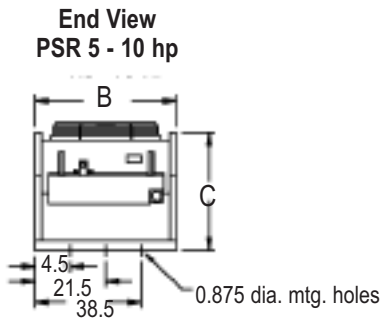
<sup>2</sup> Based on 2.4 gpm per ton (9.1 lpm per 3.517 kW) nominal 1 pump.

<sup>3</sup> FLA at 460/3/60. Multiply 460/3/60 amperage by 2.0 for 208-230/3/60 amperage (0.8 for 575/3/60). An optional oversized process pump adds to the total rated or running chiller amperage. To find the new total chiller amperage, subtract the standard process pump amperage from the optional pump amperage (see table on next page) and add it to the rated or running amperage.

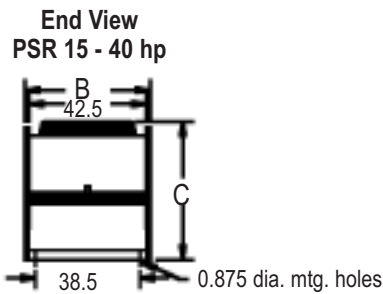
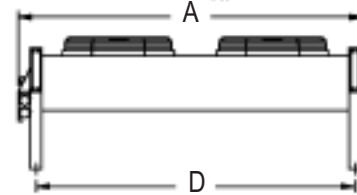




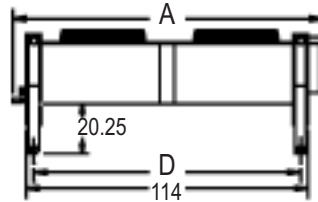
## REMOTE CONDENSER ASSEMBLY MODELS



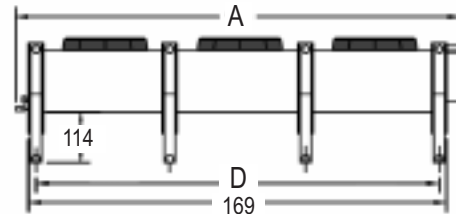
**Side View  
PSR 10 hp**



**Side View  
PSR 15 - 30 hp**



**Side View  
PSR 40 hp**



Model	Fans <sup>1</sup>						Remote condenser overall dimensions, in.				Refrigeration <sup>2</sup>		Charge R-22 lbs.
	Each			Totals			Length (A)	Width (B)	Height (C)	Mtg. (D)	Connections		
	Dia., in.	Motor, hp (phase)	Amps, 460 V	Fans	Air flow, cfm	Net wt., lbs.					Discharge, ODS, in.	Liquid ODS, in.	
PSR5	26	0.75, 1 ph	2.4	1	6450	390	49.8	43.0	40.5	40.0	1.125	0.875	9.0
PSR7.5	26	0.75, 1 ph	2.4	1	6450	390	49.8	43.0	40.5	40.0	1.125	0.875	9.0
PSR10	26	0.33, 3 ph	3.7	2	12400	520	69.8	43.0	40.5	60.0	(2) 1.125	(2) 0.875	9.5
PSR15	30	1.5, 3 ph	5.9	2	23000	790	125.0	45.5	50.0	108.0	1.375	1.375	8.0
PSR20	30	1.5, 3 ph	5.9	2	23000	800	125.0	45.5	50.0	108.0	1.375	1.375	8.0
PSR25	30	1.5, 3 ph	5.9	2	21900	860	125.0	45.5	50.0	108.0	1.625	1.625	12.0
PSR30	30	1.5, 3 ph	5.9	2	20700	950	125.0	45.5	50.0	108.0	1.625	1.625	15.0
PSR40	30	1.5, 3 ph	9.4	3	32900	1,300	180.0	45.5	50.0	163.0	2.125	2.125	19.0

<sup>1</sup> All motors are 1140 rpm. All first fan motors (header side) are 0.75 hp single phase variable speed.

<sup>2</sup> Refrigeration charge is for remote condenser only.

# PS SERIES PRESSURE CONSIDERATIONS

# HEAT AND COOL

## MIN. AND MAX. FLOW RATES

PS 2				PS 3.5				PS 5				PS 7.5				
Flow		Pressure drop ΔP		Flow		Pressure drop ΔP		Flow		Pressure drop ΔP		Flow		Pressure drop ΔP		
gpm	lpm	psig	kPa	gpm	lpm	psig	kPa	gpm	lpm	psig	kPa	gpm	lpm	psig	kPa	
4.06	15.4	3.5	24.1	8.03	30.4	4.0	27.6	10.0	37.9	1.5	10.5	12.0	45.4	2.3	16.1	
6.01	22.8	7.0	48.3	10.00	37.9	6.5	44.8	12.0	45.4	2.2	14.8	16.0	60.6	2.9	20.1	
8.02	30.4	11.5	79.3	12.00	45.4	10.0	69.	18.0	68.1	4.7	32.1	20.0	75.7	5.0	34.5	
10.00	37.9	18.0	124.1	14.00	53.0	13.0	89.6	24.0	90.8	7.3	50.2	24.0	90.8	6.9	47.4	
					16.0	60.6	18.0	124.1					28.0	106.0	9.6	65.9
												33.0	124.9	12.7	87.8	
PS 10				PS 15				PS 20				PS 25				
Flow		Pressure drop ΔP		Flow		Pressure drop ΔP		Flow		Pressure drop ΔP		Flow		Pressure drop ΔP		
gpm	lpm	psig	kPa	gpm	lpm	psig	kPa	gpm	lpm	psig	kPa	gpm	lpm	psig	kPa	
22.0	83.3	4.7	32.6	30.0	113.6	4.5	31.3	40.0	151.4	4.0	27.6	55.0	208.2	5.5	37.9	
30.0	113.6	8.28	57.1	40.0	151.4	7.5	51.7	45.0	170.3	4.0	27.6	58.0	219.5	5.8	40.0	
38.0	143.8	12.91	89.0	50.0	189.3	12.4	85.2	50.0	189.3	5.0	34.5	61.0	230.9	6.0	41.4	
46.0	174.1	16.77	115.6	60.0	227.1	17.8	122.8	52.0	196.8	6.0	41.4	70.0	264.9	8.5	58.6	
50.0	189.3	20.00	137.9	70.0	264.9	24.2	166.6	55.0	208.2	6.5	44.8					
PS 30				PS 40												
Flow		Pressure drop ΔP		Flow		Pressure drop ΔP										
gpm	lpm	psig	kPa	gpm	lpm	psig	kPa									
72.0	272.5	6.0	41.1	44.7	169.2	2.0	13.8									
75.0	283.9	6.5	44.8	58.5	221.4	3.4	23.4									
80.0	302.8	8.0	55.2	70.9	268.3	4.9	33.8									
85.0	321.7	9.5	65.5	81.6	308.8	6.3	43.5									
				105.7	400.0	10.3	71.0									

## FLOW AND PRESSURE CONSIDERATIONS

Model	Design flow		Design Δ P		Standard pump power		To process pressure		
	gpm	lpm	psig	kPa	hp	kW	psi	kPa	bars
PSA2	4.6	17.5	4.4	30.4	1	0.746	34.1	235.3	2.4
PSA3.5	7.9	29.9	4.9	33.7	1	0.746	33.0	227.5	2.3
PSA/R5	11.6	43.8	2.0	13.7	1	0.746	34.9	240.8	2.4
PSA/R7.5	15.7	59.6	2.8	19.0	1	0.746	32.7	225.7	2.3
PSA/R10	23.8	90.1	5.1	35.2	2	1.492	43.4	299.0	3.0
PSA/R15	34.9	132.1	6.1	41.8	2	1.492	38.0	262.1	2.6
PSA/R20	46.5	175.9	7.1	49.0	5	3.73	54.0	372.3	3.7
PSA/R25	57.2	216.4	8.1	55.9	5	3.73	52.0	358.5	3.6
PSA/R30	70.2	265.6	10.5	72.4	5	3.73	47.5	327.5	3.3
PSR40	88.6	335.4	8.2	56.5	7.5	5.59	55.0	379.2	3.8
PSW2	5.1	19.1	5.7	39.1	1	0.746	32.9	226.6	2.3
PSW3.5	8.6	32.7	6.0	41.2	1	0.746	31.7	218.5	2.2
PSW5	12.6	47.7	2.3	16.00	1	0.746	34.3	236.2	2.4
PSW7.5	17.0	64.5	3.1	21.4	1	0.746	32.0	220.3	2.2
PSW10	25.7	97.4	6.3	43.3	2	1.492	41.4	285.3	2.9
PSW15	38.1	144.1	7.0	48.1	2	1.492	35.5	244.4	2.4
PSW20	50.4	190.8	8.8	60.3	5	3.73	52.0	358.5	3.6
PSW25	61.7	233.7	9.0	62.1	5	3.73	49.0	337.9	3.4
PSW30	76.2	288.5	10.8	74.1	5	3.73	43.0	296.5	3.0
PSW40	98.4	372.4	8.2	56.5	7.5	5.59	55.0	379.2	3.8

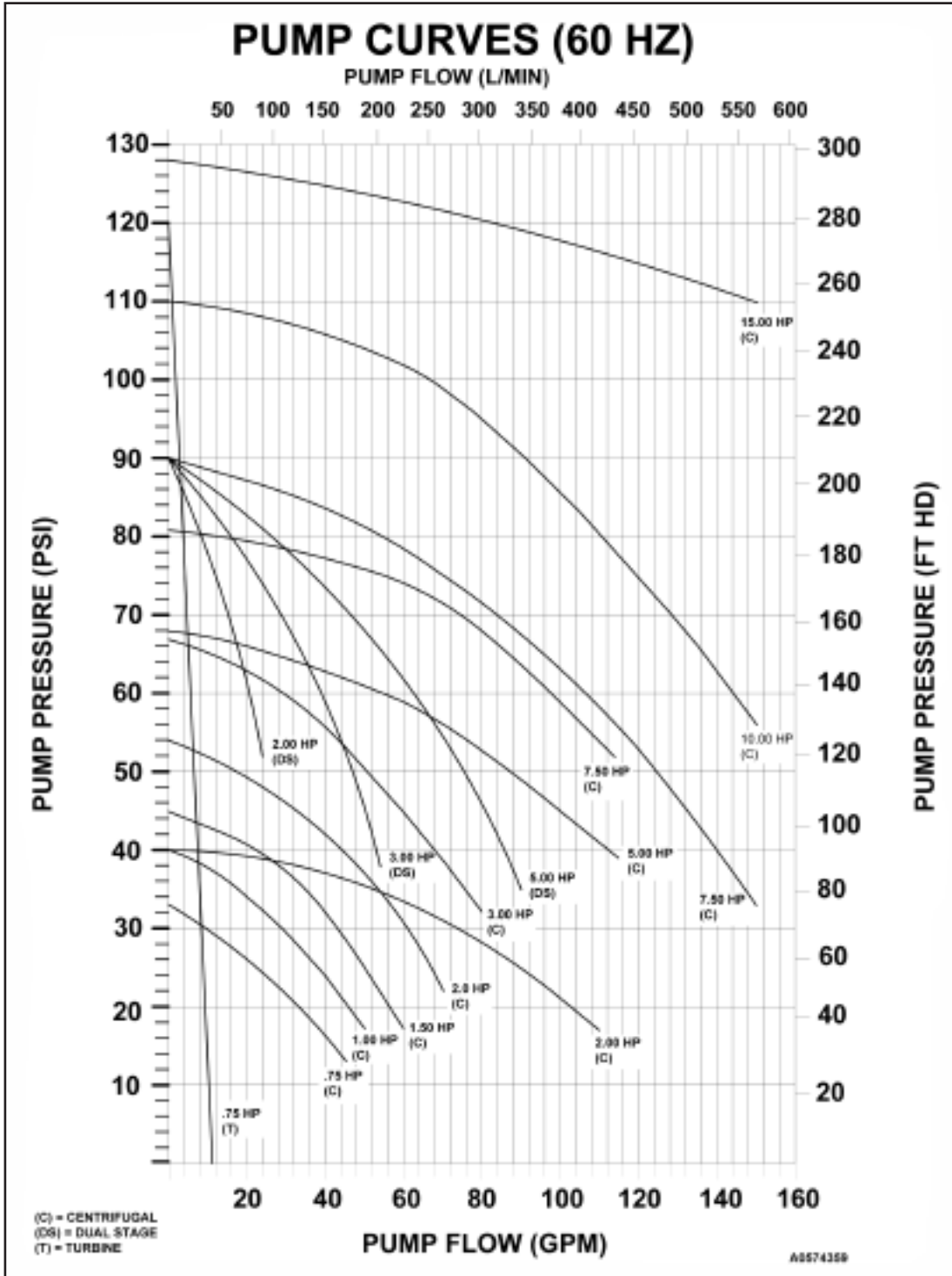
## RECIRCULATION PUMP SPECS

Model	Recirc. power		Flow rate		Δ pressure	
	hp	kW	gpm	lpm	psi	kPa
PS5	0.75	0.373	13.0	49.2	2.3	16.0
PS7.5	0.75	0.373	17.0	64.3	3.1	21.4
PS10	0.75	0.595	26.0	98.4	6.3	43.3
PS15	0.75	0.595	38.0	143.8	7.0	48.0
PS20	2.0	1.492	50.0	189.2	8.8	60.3
PS 25	2.0	1.492	63.0	238.4	9.0	62.0
PS 30	2.0	1.492	76.0	287.6	10.8	74.1
PS 40	3.0	2.238	98.0	370.9	8.2	56.5

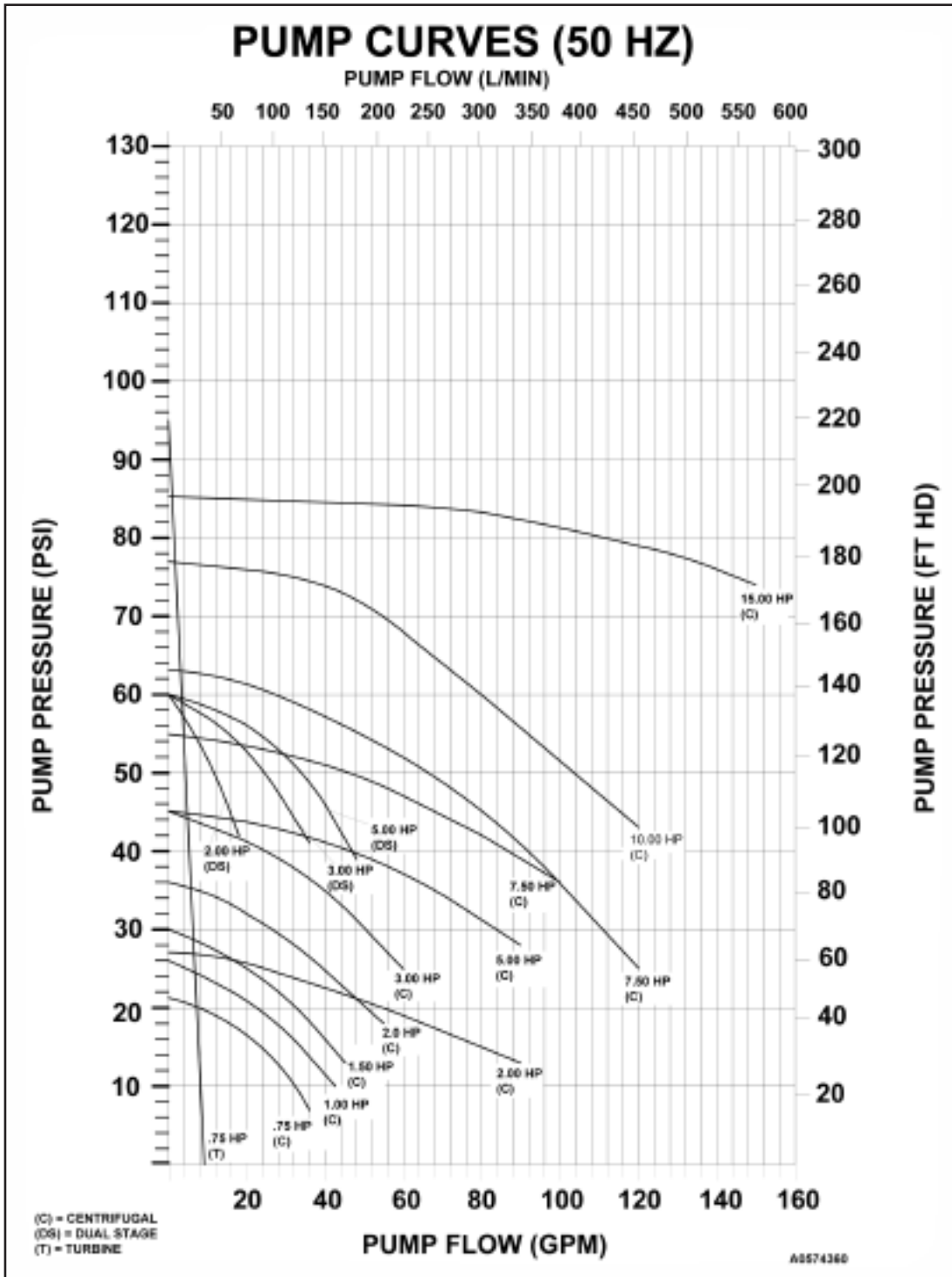
NOTES: Pressure drop values are valid for single-pump and no-pump PS Series portable chillers.

Subtract chiller ΔP from pump curve pressure for actual To Process pressure.

Recirculation pump is required for flow rate values exceeding maximums.



Important! Pump pressure must be corrected for pressure at chiller 'To Process' connection.



Important! Pump pressure must be corrected for pressure at chiller 'To Process' connection.