



Model: CSAC-090-DM-__1__2__3__4

Description:

Two stage air-cooled portable water chiller system. Dual pump model includes one recirculating pump for the chiller circuit and a second pump dedicated for the process circuit. Process pump indicated on table is typical, with options available for different capacity. System capacity indicated on table is the approximate BTU/hr based on a leaving fluid temperature of 50°F with an ambient air temperature of 95°F.

CAPACITY ±5% AT 50° LCWT / 95°F AMBIENT		90,000 BTU /HR					
COMPRESSOR / REFRIGERANT		HERMETIC SCROLL / R410A					
CONDENSER FANS / AIRFLOW		1 / 13608 CFM					
CONDENSER COILS TYPE		MICROCHANNEL					
EVAPORATOR TYPE		STAINLESS STEEL / COPPER BRAZED					
FLUID CONNECTIONS		1 1/4" MNPT (IN/OUT)					
ELECTRICAL:	V - Ø - HZ	COMP RLA / LRA (ea)		FAN FLA	(No*) PUMP FLA	MCA	MOCP
- 5	230 - 3 - 60	A1/12.8	A1/95	5.5	(1) 3.4 (2) 6.8	57.2	80
		B1/23	B1/160				
- 6	460 - 3 - 60	A1/6.4	A1/45	5.5	(1) 1.7 (2) 3.4	32.3	40
		B1/12.2	B1/87				
CHILLER PUMP HP / OUTPUT (1)		1.0 HP / 30 GPM @ 30 PSI					
PROCESS PUMP HP / OUTPUT (2)		2.0 HP / 10 GPM @ 62 PSI					
TANK SIZE / CONSTRUCTION		41 GALLON / 304 STAINLESS STEEL TANK WITH LID					
DIMENSIONS		65.7" L x 44.7" W x 64.4" H					
WEIGHT (APPROX.)		1000 LBS					

Note: All specifications subject to change without notice. Specify voltage and ambient condition upon ordering.

MCA: Minimum circuit amps per UL 1995. MOCP: Maximum overcurrent protective device per UL 1995.

STANDARD FEATURES:

- **Controls:** Electronic programmed temperature controller with constant (set point & process) temperature readout.
- **Refrigeration Components:** Efficient scroll compressors, sight glass/moisture indicators, balanced port expansion valves, filter drier, service valves, fan cycling head pressure controls.
- **Process Fluid Components:** Bronze "Y" strainer with 20 mesh stainless steel screen. Pumps are stainless steel centrifugal. Tanks are insulated with shoe box lid, fill port, and level sight glass. Portable systems will include a flow control valve.
- **Safety Controls:** High and low refrigerant pressure, high and low fluid temperature, freeze, low water flow, overloads for compressor and fan motors, safety fuses or overloads for pump.
- **Construction:** Welded steel powder coated frame and full metal cabinet, copper piping connections.
- **Warranty:** One year parts / five year compressor.

SUITABLE AMBIENT CONDITIONS/FEATURES:

- **IND:** Indoor use only. Casters on frame.
- **40:** Suitable for outdoor use with an ambient of 40°F ambient. Includes Heat trace cable.
- **0:** Suitable for outdoor use to 0°F ambient. Includes Heat trace cable.
- **M20:** Suitable for outdoor use to -20°F ambient. Includes Heat trace cable.

Available Options:

- Automatic City Water Switchover Panel
- Manual City Water Switchover (Internal or External/Panel)
- Operating & Safety Indicator lights
- City Water Audible Alarm
- Remote Status Panel
- Panel Mount Water, Refrigeration, and Air Pressure Gauges
- Pump capacity upgrade
- Phase Monitoring Safety
- Compressed Air System
- Vibration eliminators on all outside connections
- 150 Micron City Water Filter
- 150 Micron Chill Water Filter

¹ Flow Design (_=Portable, ST=Stationary, RF=Reverse Flow, EXCH=Extra Heat Exchanger, DM=Dual Pump Medical, DR=Dual Return)

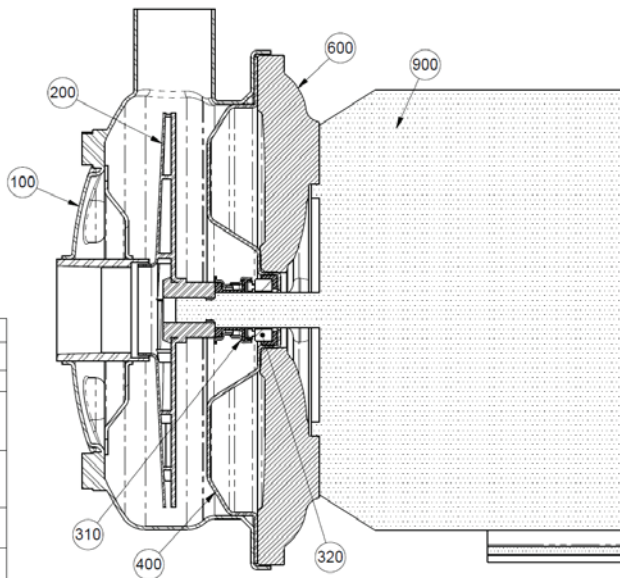
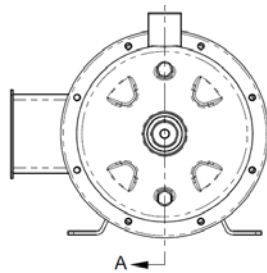
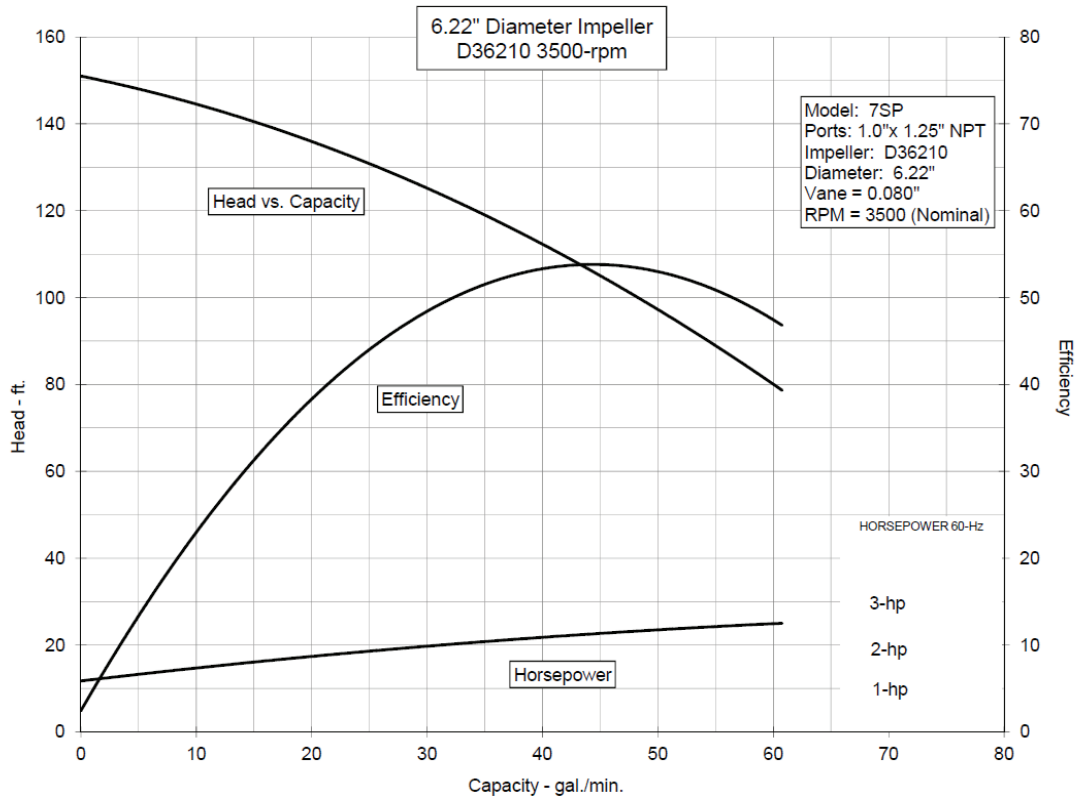
² Leaving Fluid Temperature (_=Standard, LT=Low Temperature-specify lowest temperature in °F)

³ Ambient Temperature Conditions (see above)

⁴ Electrical Power Code (see above)

PUOD-000-002-0-2

2Hp/3Ø Motor ODP/ Pump with 6.22" Impeller and 0.080" Vane at 3500rpm



Item #	Description
100	7" Pump Casing
200	7" Enclosed Impeller
310	Mechanical Seal rotating element for 5/8" diameter shaft.
320	Mechanical Seal Seat 1.25-inch outer diameter
400	7" Sealplate
600	Cast Iron Motor Adapter
900	NEMA 56J Frame motor

SECTION A-A
SCALE 1 : 2

7SP Pump/Motor Assembly

- If needed, the pump label is located on the pump casing near outlet port under the insulation. Carefully pull insulation up near the unglued section. Pump Base (not supplied with footed motors)
- Reference the chiller serial number when ordering parts for specific supplied pump.

COLD SHOT CHILLERS / Marrone & Co., Inc.

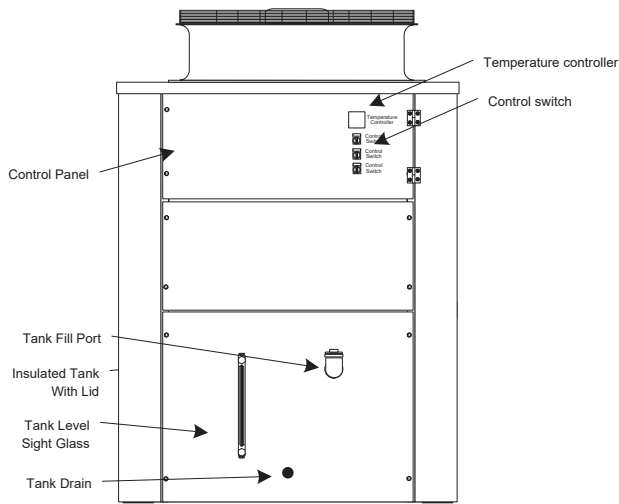
2730 Maximilian Dr, Houston, Texas 77032 • Phone (800) 473-9178, (281) 227-8400

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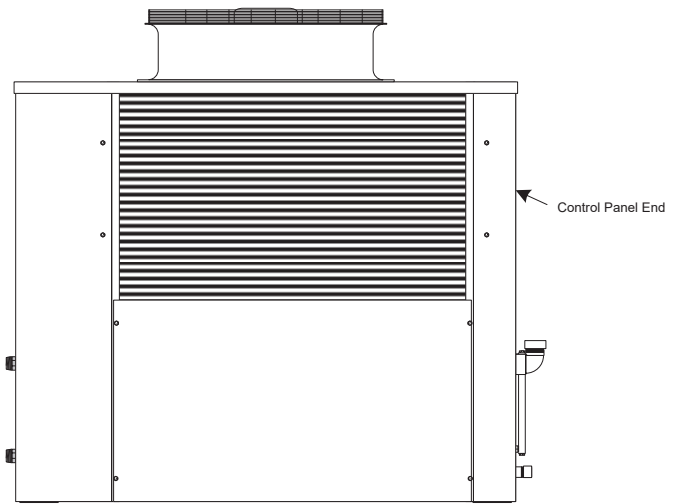


TECHNICAL SPECIFICATION

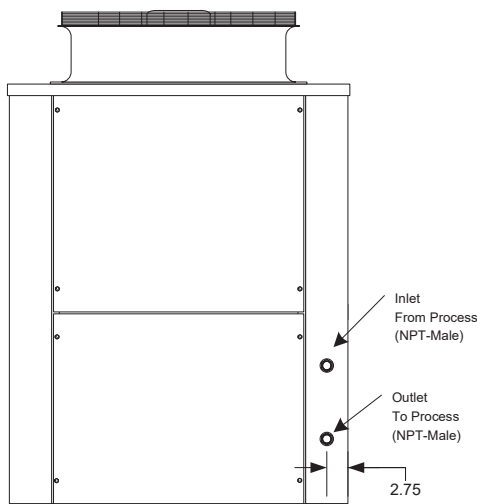
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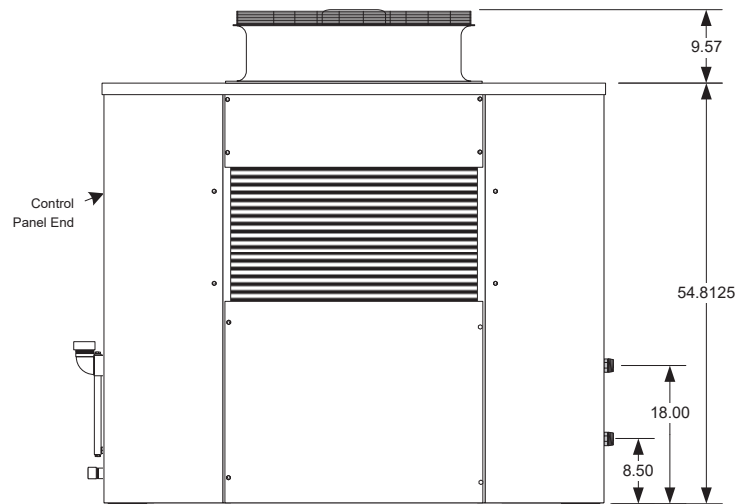
LEFT SIDE VIEW



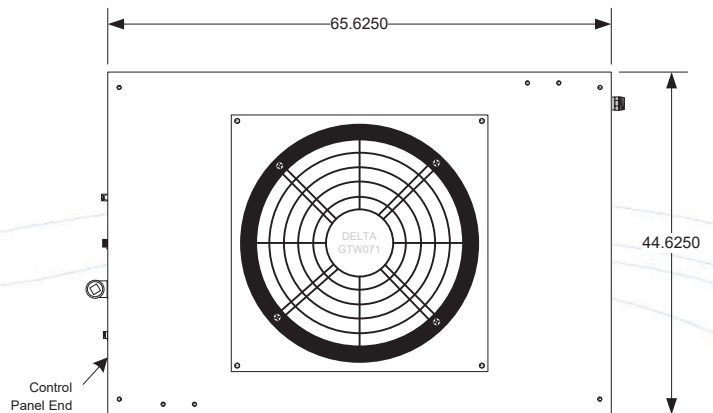
BACK VIEW



RIGHT SIDE VIEW



FRONT VIEW



TOP VIEW

NOTES

- Unit should be installed with at least 2' clearance on all sides and a minimum of 5' clear air space above the unit
- Dimensions are approximate. (inches)
- Casters (Optional)
- All specifications subject to change without notice.

COLD SHOT CHILLERS

DRAWN ENGINEERING

ISSUED 6/10/2021

SIZE	DIMENSION NOTES
A	Dimensions are in inches Unless otherwise specified, +/-1/4"

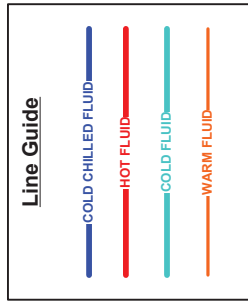
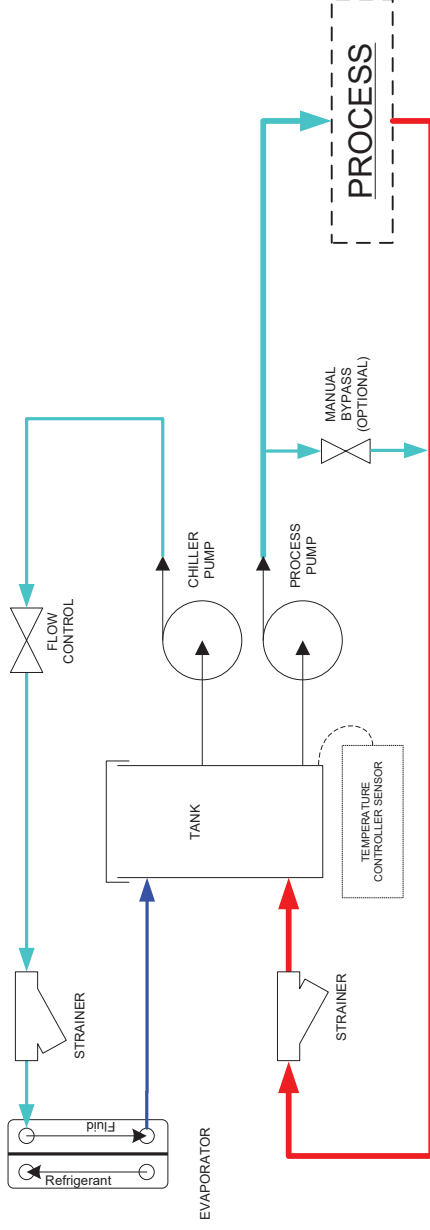
DWG NO	REV
INSTALLATION DRAWING CSAC-090-DM/DP	1



TECHNICAL SPECIFICATION

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DUAL PUMP (DP)



NOTES

- All designs are subject to change without notice.
- The diagrams are to be used as a basic flow diagram only.
- Color Code is for relative temperature comparison.
- Additional components may be included.
- Evaporator may be located in tank.

COLD SHOT CHILLERS

ENGINEERING

5/2020

DRAWN	ENGINEERING	SCALE	NONE	DWG-CKT_ChillerCircuitFlowOptions-Typical_(0520)\vsd	SHEET	DESCRIPTION	REV
						Typical FLOW OPTIONS for Chiller Circuits	
ISSUED						6 / Dual Pump (DP)	