MODEL: CSAC-024-C-DM[1]-__[2]-__[3]-__[4]

DESCRIPTION:

Two stage air-cooled portable fluid chiller system setup for medical system application. 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 includes thermal heat trace cable on all fluid components to permit water only use for systems with backup water cooling system.

CAPACITY		24,000 BTU /HR					
REFRIGERANT CIRCUIT(S)		1					
COMPRESSOR(S) / REFRIGERANT		HERMETIC SCROLL / R454B					
CONDENSER FAN(S) / AIRFLOW		1 / 3147 CFM					
CONDENSER COILS TYPE		ALUMINUM MICROCHANNEL					
EVAPORATOR TYPE		STAINLESS STEEL / COPPER BRAZED PLATE					
FLUID CONNECTIONS		1 ¼" MNPT (IN/OUT)					
ELECTRICAL:		COMPRESSOR(S)		FAN	(No) PUMP		
	V - Ø - HZ	RLA	LRA	FLA	FLA	MCA	MOCP
- 2	230 - 1 - 60	16	87.5	3.0	(1) 6.6 (2) 9.8	40.4	50
- 5	230 - 3 - 60	12.8	95	3.0	(1) 3.4 (2) 5.6	28	40
- 6[5]	460 - 3 - 60	6.4	45	3.0	(1) 1.7 (2) 2.8	15.5	20
CHILLER PUMP HP / OUTPUT (1)		1.0 HP / 30 GPM @ 30 PSI					
PROCESS PUMP HP / OUTPUT (2)		2.0 HP / 10 GPM @ 54 PSI					
TANK SIZE / CONSTRUCTION		25 GALLON / 304 STAINLESS STEEL VENTED TANK WITH LID					
DIMENSIONS		45" L x 32.5" W x 62.3" H					
WEIGHT (APPROX.)		650 LBS					

STANDARD FEATURES:

- **Controls:** Electronic temperature controller with constant Set Point & Process Value temperature readout. Terminal blocks for interface with Automatic City Water Switchover (ACSO) system.
- **Refrigeration Components:** Efficient scroll compressors, sight glass/moisture indicators, balanced port thermal expansion valves, filter drier, service valves, condenser fan(s) are electronically commutated motors (ECM) with variable speed control of head pressure.
- **Fluid Components:** Bronze "Y" strainers with 20 mesh stainless steel screen. Pumps are stainless steel centrifugal. All fluid components insulated. Vented tank includes lid, level sight glass and a fill and drain port. Portable systems will include a flow control valve. Process pump circuit to include a manually operated bypass valve.
- **Safety Controls:** High and low refrigerant pressures, high and low fluid temperatures, evaporator freeze condition, low water flow switch, thermal overloads for compressors, and thermal overloads for fan motors, and current/thermal overload motor starter safety for pumps.
- **Construction:** Welded steel powder coated frame and full metal cabinet, copper piping connections.
- **Warranty:** One-year parts / five-year compressor.

SUITABLE AMBIENT CONDITIONS/FEATURES: (see footnote 3)

- **IND:** Indoor use only. Casters on frame, optional.
- **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.

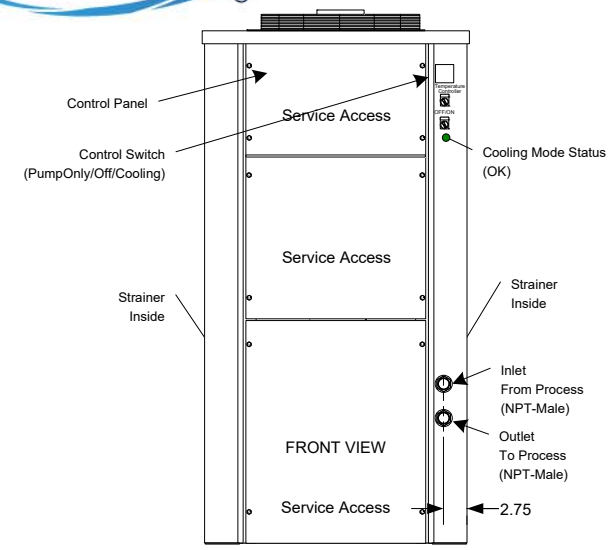
Notes:

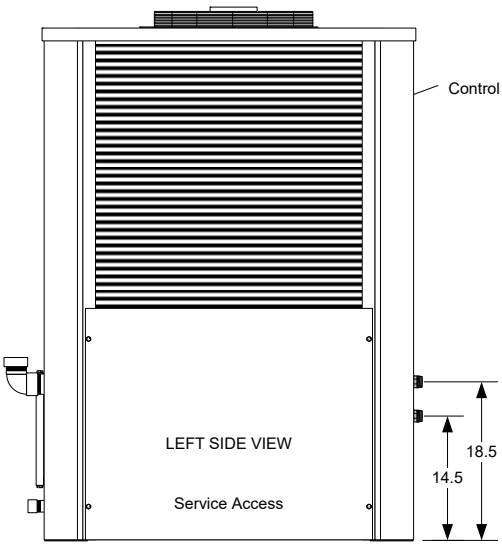
- System capacity indicated on table is the approximate BTU/hr based on a leaving fluid temperature of 50°F with an ambient air temperature of 95°F.
- All specifications subject to change without notice. Specify voltage and ambient condition upon ordering.
- MCA: Minimum circuit amps per UL 1995. MOCP: Maximum overcurrent protective device per UL 1995.
- Pump outputs based on specific point on the pump curve which varies depending on system.

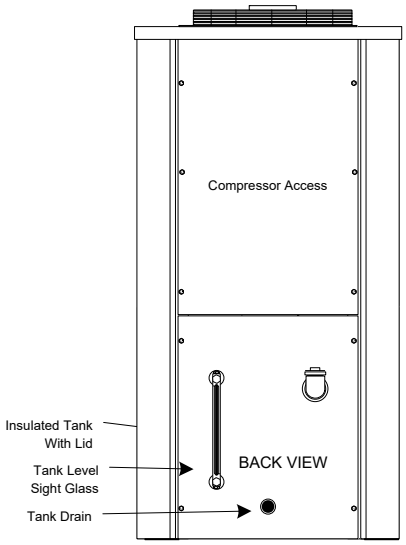
[1] Flow Design (_=Portable, ST=Stationary, RF=Reverse Flow, EXCH=Extra Heat Exchanger, DP/DM=Dual Pump Medical, DR=Dual Return)
[2] Leaving Fluid Temperature (_=Standard, LT=Low Temperature-specify lowest temperature in °F)
[3] Ambient Temperature Conditions (see above)
[4] Electrical Power Code (see above)
[5] Unit will require a 4-wire electrical service with neutral. If only 3 phase 3 wire 480-volt service is available, please notify our sales/technical support staff for proper installation procedures.

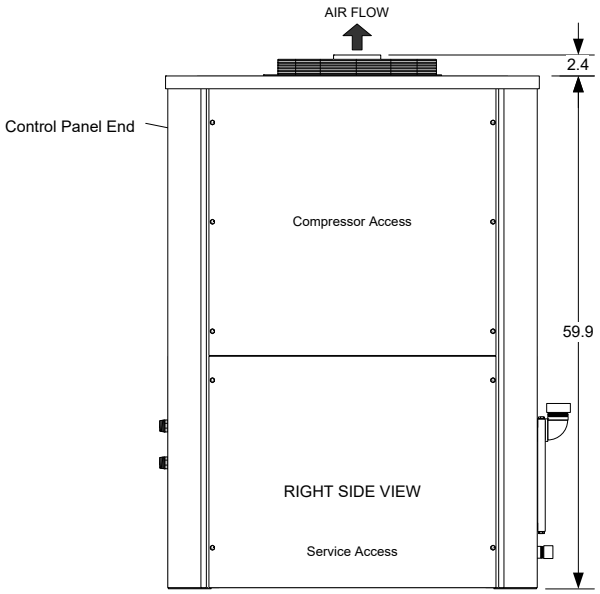
TECHNICAL SPECIFICATION

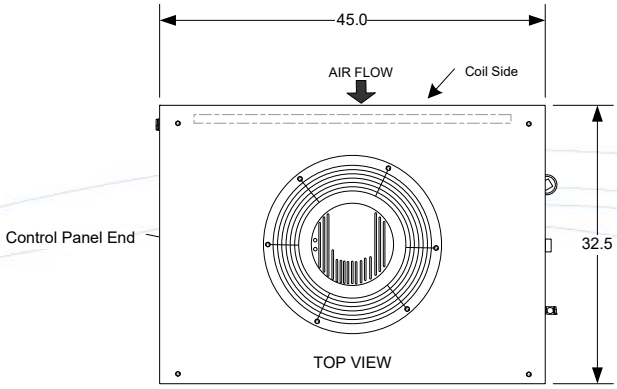
WWW.WATERCHILLERS.COM











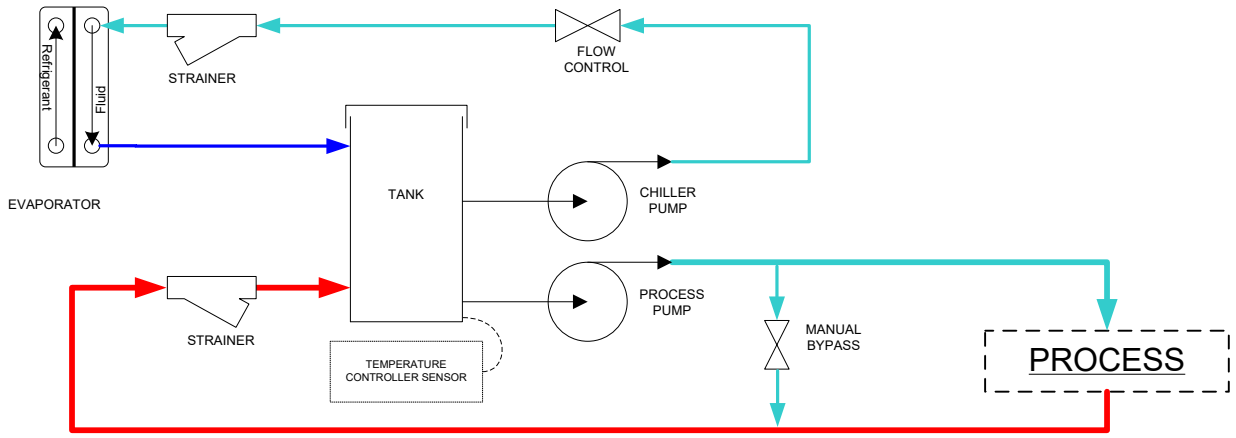
NOTES

- 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	SIZE: A	DIMENSION NOTES: Dimensions are in inches Unless otherwise specified. +-¼"	DWG NO: **INSTALLATION DRAWING CSAC-024 to 060- (Typical)** REV: 1
ISSUED	4/25/2023	SCALE .535 in = 1 ft	DWG-INST_CSAC-024 to 060-_022023.vsd	SHEET 2 / Front-Back-Top-Side Views_DP

DUAL PUMP (DP)



Line Guide

- COLD CHILLED FLUID
- HOT FLUID
- COLD FLUID
- WARM FLUID

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		SIZE	DESCRIPTION	REV
DRAWN	ENGINEERING	A	Typical FLOW OPTIONS for Chiller Circuits	1
ISSUED	5/2020	SCALE NONE	DWG-CKT_ChillerCircuitFlowOptions-Typical_(0520).vsd	SHEET 6 / Dual Pump (DP)