



MODEL: CSAC-180-D-__1__2__3__4

DESCRIPTION:

Dual refrigerant circuit / two-stage air-cooled portable fluid chiller system. The chiller pump indicated in the table is typical with options available for different capacities.

CAPACITY		180,000 BTU /HR					
REFRIGERANT CIRCUIT(S) (QTY A/B)		2 (1/1)					
COMPRESSOR(S) / REFRIGERANT		(2) HERMETIC SCROLL / R454B					
CONDENSER FANS / AIRFLOW		1 / 13,600 CFM					
CONDENSER COILS TYPE		ALUMINUM MICROCHANNEL					
EVAPORATOR TYPE		STAINLESS STEEL / COPPER BRAZED PLATE					
FLUID CONNECTIONS		2" MNPT (IN/OUT)					
ELECTRICAL:	V - Ø - HZ	COMP RLA / LRA (ea)		FAN FLA	PUMP FLA	MCA	MOCP
- 5	230 - 3 - 60	A1/B1 28.8	250	3.6	5.6	77.6	100
- 6	460 - 3 - 60	A1/B1 16.7	125	3.6	2.8	43.9	60
CHILLER PUMP HP / OUTPUT		2.0 HP / 60 GPM @ 30 PSI					
TANK SIZE / CONSTRUCTION		68 GALLON / POLYETHYLENE TANK WITH LID					
DIMENSIONS		89" L x 41" W x 75" H					
WEIGHT (APPROX.)		2300 LBS					

STANDARD FEATURES:

- **Controls:** Electronic temperature controller with constant Set Point & Process Value temperature readout. A programmable Logic Controller (PLC) with various temperature and pressure sensors monitors refrigerant and fluid circuits. Optional Human Machine Interface (HMI) touch panel to visually display system conditions.
- **Refrigeration Components:** Efficient scroll compressors, sight glass/moisture indicators, balanced port thermal expansion valves, filter driers, service ports, and 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 are insulated. The polyethylene tank includes a vented lid, level sight glass, and a fill and drain port. Portable systems will 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, 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, brass, and plastic piping connections.
- **Warranty:** One-year parts / five-year compressor.

SUITABLE AMBIENT CONDITIONS/FEATURES: (see footnote 3)

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

Notes:

- System capacity indicated in the 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 are subject to change without notice. Specify voltage and ambient conditions upon ordering.
- MCA: Minimum circuit amps per UL 1995. MOCP: Maximum overcurrent protective device per UL 1995.
- Pump outputs based on specific points on the pump curve which varies depending on the system

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

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

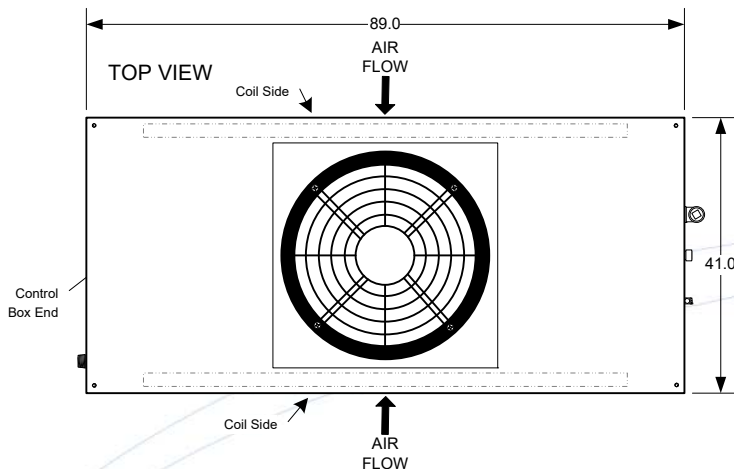
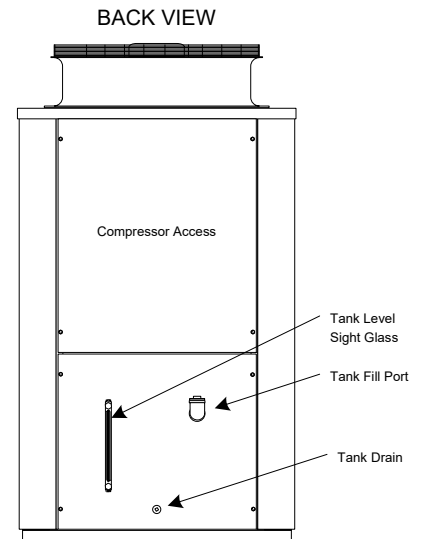
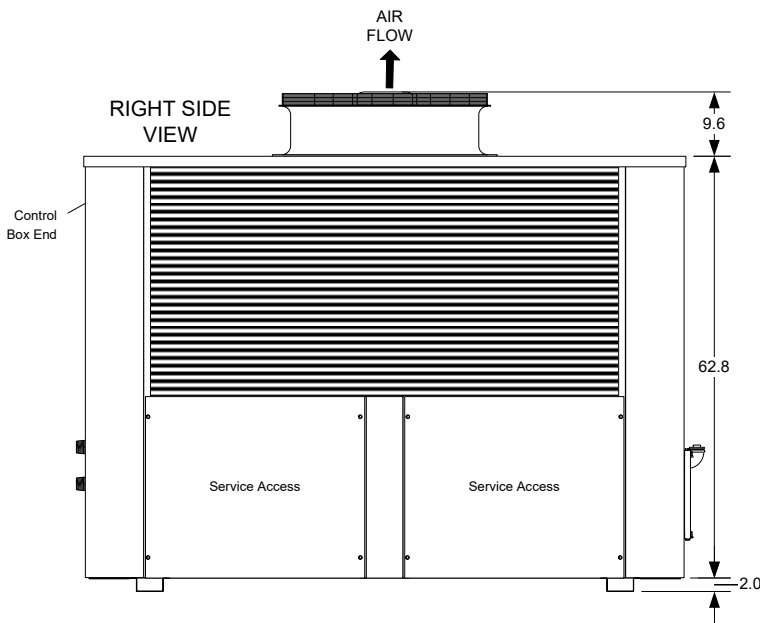
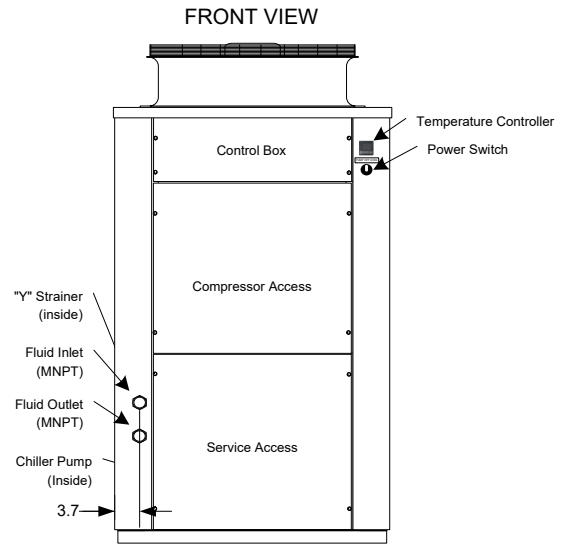
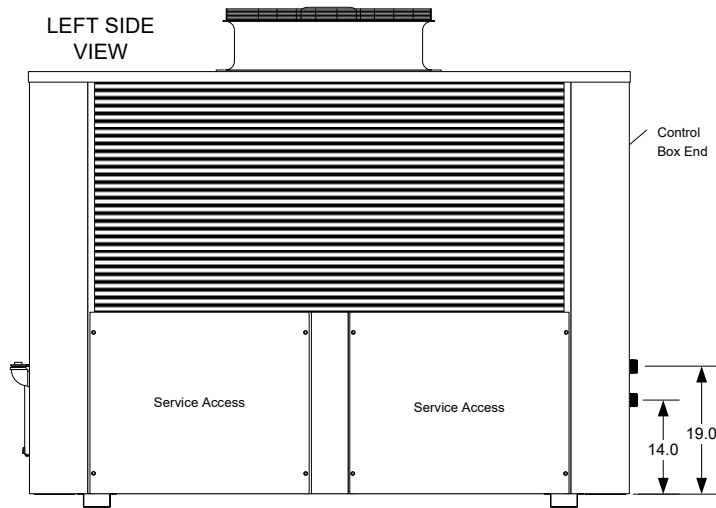
³ Ambient Temperature Conditions (see above)

⁴ Electrical Power Code (see above)



TECHNICAL SPECIFICATION

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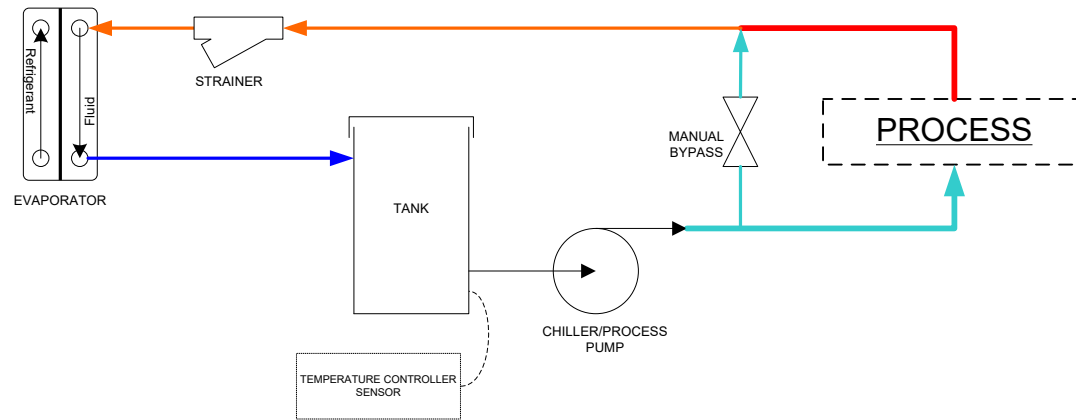
NOTES

- Unit should be installed with at least 4' clearance on all sides and a minimum of 8' clear air space above the unit
- Dimensions are approximate. (inches)
- Casters (Optional)
- All specifications subject to change without notice.

COLD SHOT CHILLERS		SIZE	DIMENSION NOTES	DWG NO	REV
DRAWN ENGINEERING		A	Dimensions are in inches Unless otherwise specified. +1/4"	INSTALLATION DRAWING CSAC-180-240_ (Typical)	1
ISSUED	10/10/2022	SCALE	.035 in : 1 in	DWG-INST_CSAC-180-240-_0922.vsd	SHEET 2 / Front-Back-Top-Sides-Portable



STANDARD/PORTABLE/PACKAGE (-)



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 Typical FLOW OPTIONS for Chiller Circuits	REV		
		A		1		
DRAWN	ENGINEERING	SCALE	NONE	DWG-CKT_ChillerCircuitFlowOptions-Typical_(0520).vsd	SHEET	1 / Standard/Portable
ISSUED	5/2020					