



Model: ACWC-720-GC-DP<sup>1</sup>-\_\_<sup>2</sup>-\_\_<sup>3</sup>-\_\_<sup>4</sup>

**Description:**

Five 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		720,000 BTU /HR							
±5% AT 50° LCWT / 95°F AMBIENT									
<b>COMPRESSOR / REFRIGERANT</b>		(5) HERMETIC SCROLLS / R410A							
<b>CONDENSER FANS / AIRFLOW</b>		4 / 41,800 CFM							
<b>CONDENSER COILS TYPE</b>		MICROCHANNEL							
<b>EVAPORATOR TYPE</b>		STAINLESS STEEL / COPPER BRAZED							
<b>FLUID CONNECTIONS</b>		3" 150# FLANGE (IN/OUT)							
<b>ELECTRICAL:</b>	<b>V - Ø - HZ</b>	<b>COMP RLA / LRA (ea)</b>		<b>FAN FLA (ea)</b>	<b>(No*) PUMP FLA</b>		<b>MCA</b>	<b>MOCP</b>	
- 5	230 - 3 - 60	A1/A2	55.8	340	6.6	(1) 17.5	(2) 17.5	331.2	350
		B1-B3	48.1	245					
- 6	460 - 3 - 60	A1/A2	26.9	179	3.3	(1) 8.7	(2) 8.7	146.9	150
		B1-B3	18.6	125					
<b>CHILLER PUMP HP / OUTPUT (1)</b>		7.5 HP / 225 GPM @ 35 PSI							
<b>PROCESS PUMP HP / OUTPUT (2)</b>		7.5 HP / 225 GPM @ 35 PSI							
<b>TANK SIZE / CONSTRUCTION</b>		625 GALLON / HIGH-DENSITY POLYETHYLENE							
<b>DIMENSIONS</b>		207" L x 88 ¼" W x 73" H							
<b>WEIGHT (APPROX.)</b>		3000 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, pump down valves, fan cycling head pressure controls.
- **Process Fluid Components:** PVC "Y" strainer with 20 mesh stainless steel screen. Pumps are stainless steel centrifugal. Tanks are insulated with fluid level sensor, spin on lid and drain. Portable systems will include a flow control valve.
- **Safety Controls:** High and low refrigerant pressure, high and low fluid temperature, freeze, low water flow, internal overloads, thermal overload circuit breakers and/or safety fuses for compressors, pumps, and fan motors, temperature relief fusible plug on liquid lines of each circuit.
- **Construction:** Galvanized steel frame, powder coated carbon steel cabinet, PVC flange connections.
- **Warranty:** One year parts / five year compressor.

**SUITABLE AMBIENT CONDITIONS/FEATURES:**

- **IND:** Indoor use only.
- **40:** Suitable for outdoor use with an ambient of 40°F ambient.
- **0:** Suitable for outdoor use to 0°F ambient. Includes Low ambient fan speed controls with (LT) models.
- **M20:** Suitable for outdoor use to -20°F ambient. Includes Low ambient fan speed controls.

<sup>1</sup> Flow Design (\_\_=Portable, ST=Stationary, RF=Reverse Flow, EXCH=Extra Heat Exchanger, DP=Dual Pump, DR=Dual Return)

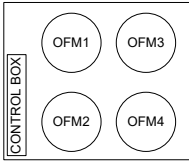
<sup>2</sup> Leaving Fluid Temperature (\_\_=Standard, LT=Low Temperature-specify lowest temperature in °F)

<sup>3</sup> Ambient Temperature Conditions (see above)

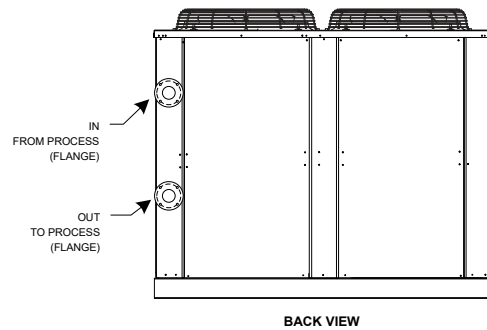
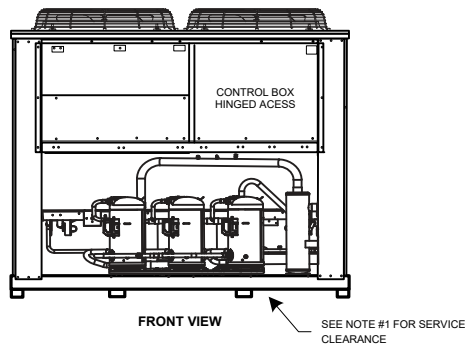
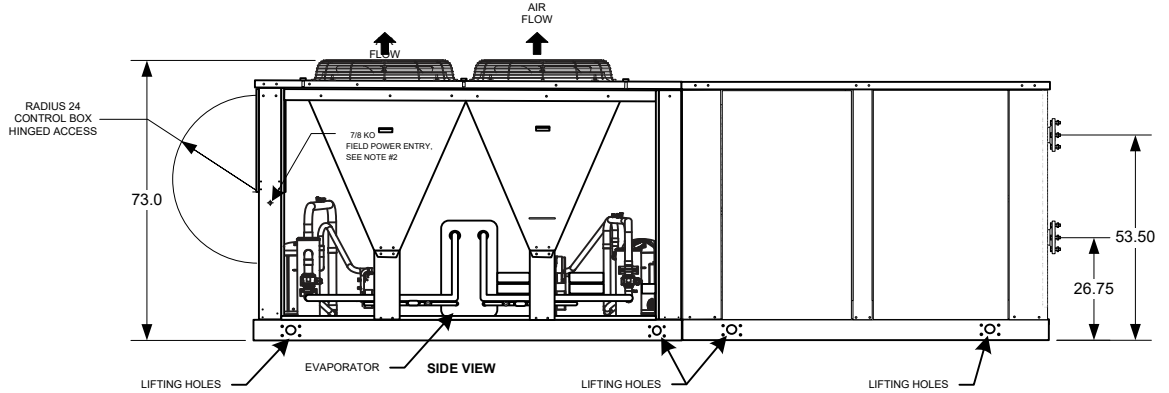
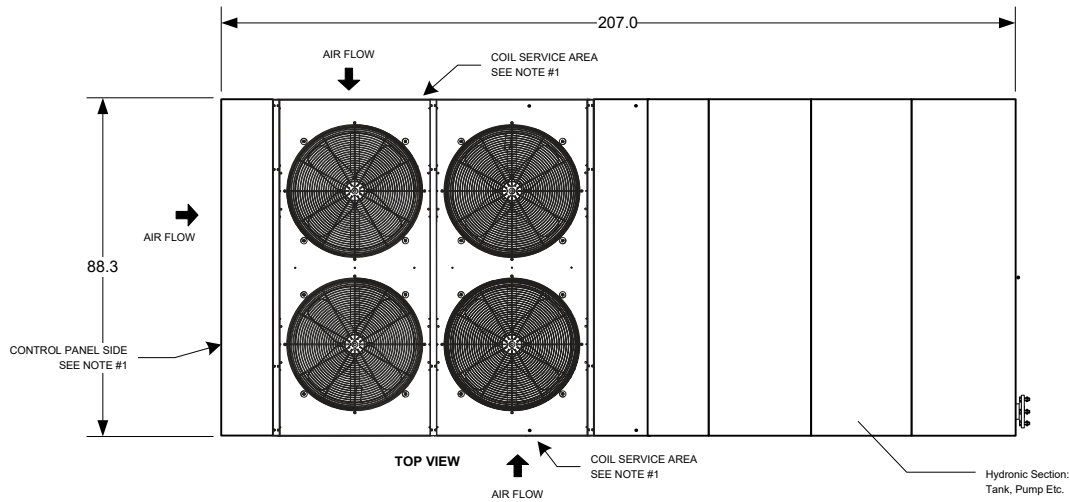
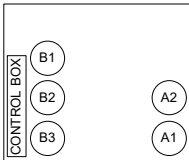
<sup>4</sup> Electrical Power Code (see above)



Outdoor Fan Layout  
Top View



Compressor Layout  
Dual Circuit - Top View



PAGE NOTES

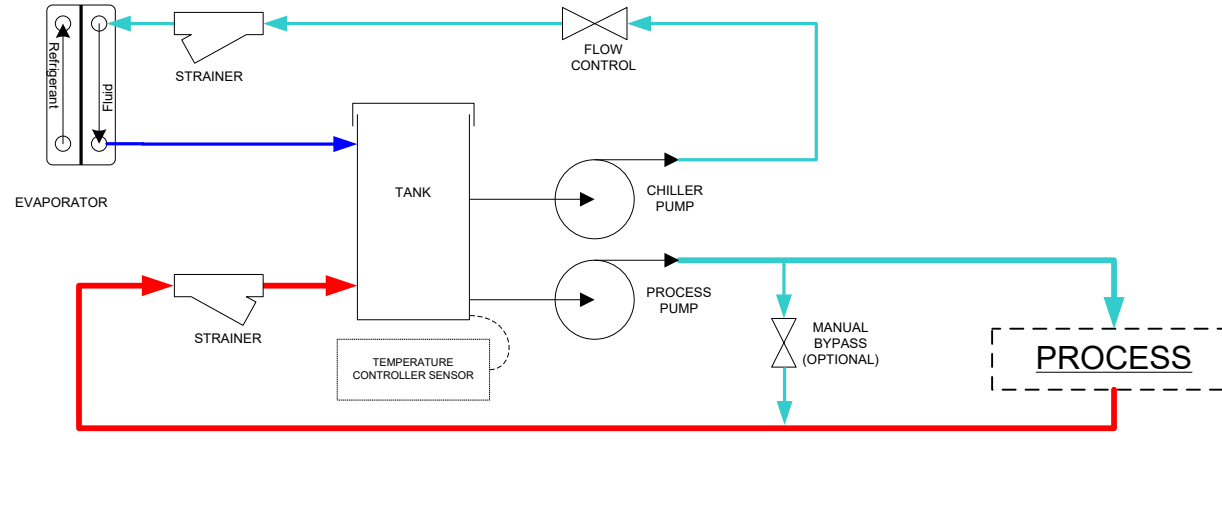
- Unit must have minimum clearances for air flow/service access as follows: (air must be directed away from machine to prevent re-circulating air back into machine coil sides.)  
 Top — Do not restrict in any way over condenser fan area.  
 Panel End — 4 ft per NEC.  
 Sides and End — 6 ft from solid surface for airflow.  
 Side — 8 ft required for coil service area.
- Field power supply connection: two 7/8 pilot holes provided. Actual hole required depend on field wire sizing.
- Temperature relief device located on suction line, liquid line and filter drier of each circuit are equipped with a 1/4" flare field connection.
- All chilled fluid piping should be insulated.
- Dimensions are in inches unless otherwise specified.
- Design and layout may change depending on parts or manufacturing without notice. Notify Cold Shot Chillers for any details needed based on construction.
- Contact Cold Shot Chillers for details or other information.
- Lifting:
  - System can be rigged with a crane. Approximate weights noted. See lifting points on diagram below located on each side of chiller.
  - Not recommended for lifting with a forklift.

## COLD SHOT CHILLERS

DRAWN ENGINEERING		SIZE A	DIMENSION NOTES Dimensions are in inches unless otherwise specified. +/-1/4"	DWG NO <b>INSTALLATION DRAWING</b> <b>ACWC-720-GC (Typical - Front-Back-Top-Side)</b>	REV 1
ISSUED	11/17/2021	SCALE	NONE	DWG-INST_-720-GC-DP-_(0620) .vsd	SHEET 1



**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**

DRAWN ENGINEERING

SIZE A

DESCRIPTION  
**Typical FLOW OPTIONS for Chiller Circuits**

REV 1

ISSUED 5/2020

SCALE NONE

DWG-CKT\_ChillerCircuitFlowOptions-Typical\_(0520).vsd

SHEET 6 / Dual Pump (DP)