



Model: ACWC-300-GC-EXCH¹_²_³_⁴

Description:

Two stage air-cooled portable water chiller system with additional process system heat exchanger. 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		300,000 BTU /HR					
COMPRESSOR / REFRIGERANT		TANDEM HERMETIC SCROLLS / R410A					
CONDENSER FANS / AIRFLOW		2 / 20,900 CFM					
CONDENSER COILS TYPE		MICROCHANNEL					
EVAPORATOR TYPE		STAINLESS STEEL / COPPER BRAZED					
HEAT EXCHANGER TYPE		STAINLESS STEEL / COPPER BRAZED					
FLUID CONNECTIONS		2" MNPT (IN/OUT)					
ELECTRICAL:	V - Ø - HZ	COMP RLA / LRA (ea)	FAN FLA (ea)	PUMP FLA	MCA	MOCP	
- 5	230 - 3 - 60	48.1	245	6.6	7.0	128.4	175
- 6	460 - 3 - 60	18.6	125	3.3	3.5	48.5	60
PUMP HP / OUTPUT		3.0 HP / 95 GPM @ 30 PSI					
TANK SIZE / CONSTRUCTION		220 GALLON / 304 STAINLESS STEEL TANK WITH LID					
DIMENSIONS		88 ¼" L x 80" W x 61" H					
WEIGHT (APPROX.)		1850 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:** Heat exchanger for separation of chilled fluid circuit from process fluid circuit. Bronze "Y" strainer with 20 mesh stainless steel screen. Pumps are stainless steel centrifugal. Tanks are insulated with shoe box lid, fill port, and fluid level sensor. 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, copper piping 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. External wind baffles, optional.

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)

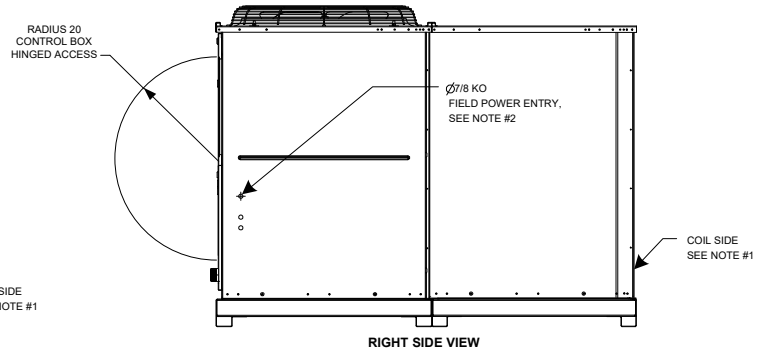
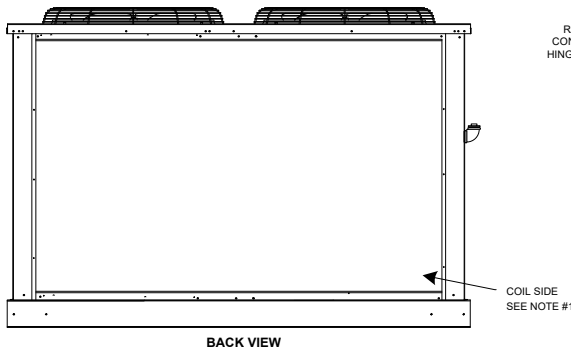
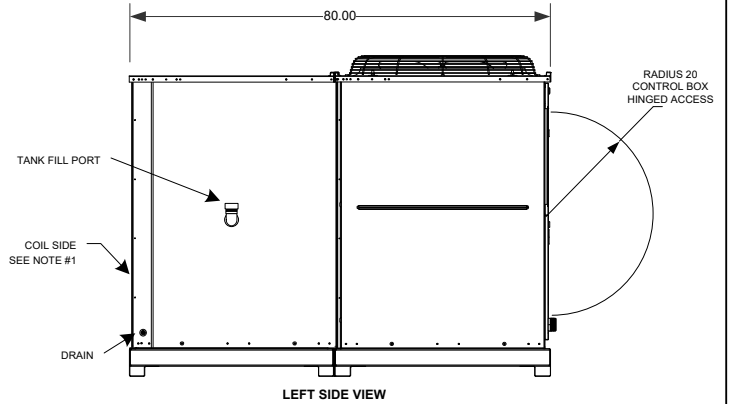
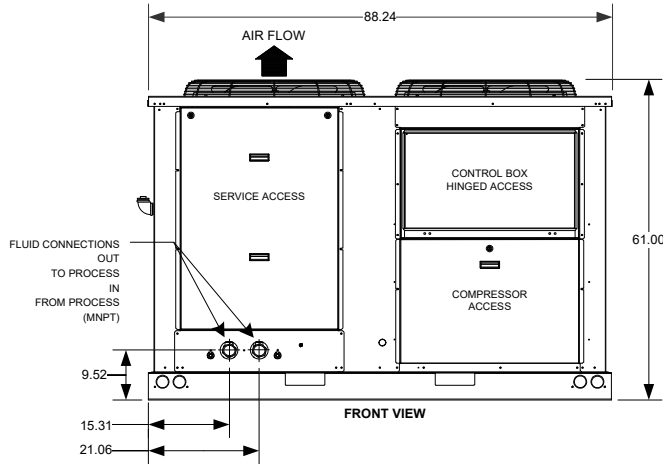
³ Ambient Temperature Conditions (see above)

⁴ Electrical Power Code (see above)

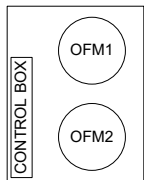


TECHNICAL SPECIFICATION

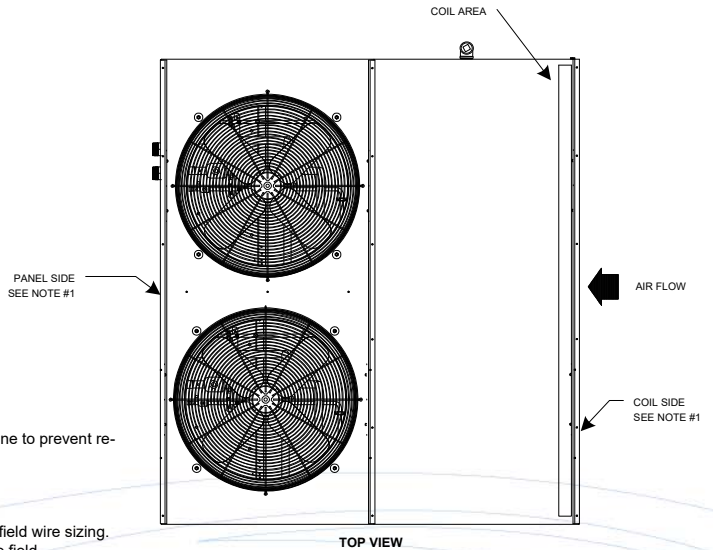
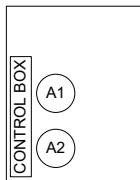
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Outdoor Fan Layout
Top View



Compressor Layout
Single Circuit – Top View



NOTES:

- Unit must have 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.
Coil End — 42 in. from solid surface for airflow.
Panel Side — 48 in. per NEC (National Electrical Code).
- A 7/8 in. diameter hole is provided for locating field power wiring. Actual hole size required depends on field wire sizing.
- Temperature relief device located on suction line, liquid line of each circuit are equipped with a 1/4" flare field connection. Do not cap or otherwise obstruct temperature relief device.
- All chilled fluid piping should be insulated.
- Dimensions are in inches unless otherwise specified.
- Unit can be handled using the fork truck lift pockets front of unit ONLY. Do not lift from back.
- Design and layout may change depending on parts or manufacturing without notice.
- Contact Cold Shot Chillers for details or other information.

COLD SHOT CHILLERS

DRAWN ENGINEERING

ISSUED 5/20/2020

SIZE

A

DIMENSION NOTES

Dimensions are in inches
unless otherwise specified. +/-1/4"

SCALE

NONE

DWG NO

INSTALLATION DRAWING
ACWC-300-GC (Typical - Front-Back-Top-Sides)

DWG-INST_-300-GC---_(0520).vsd

REV

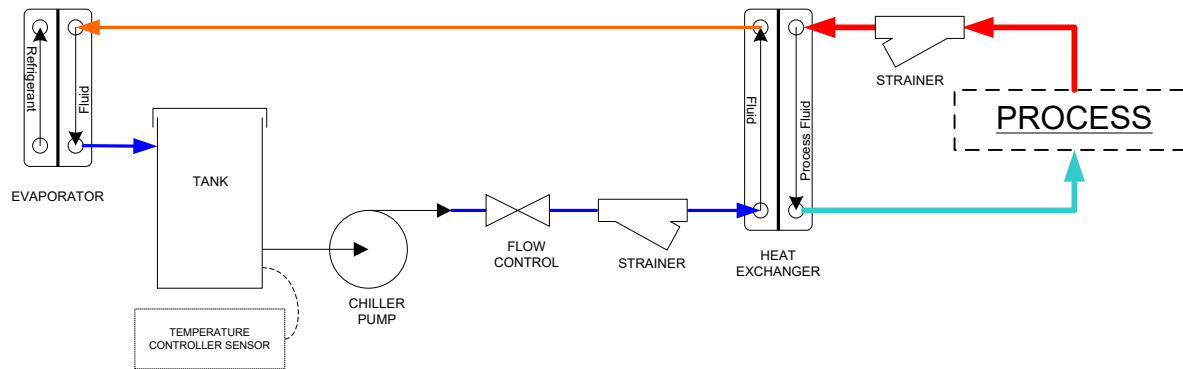
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SHEET

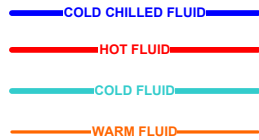
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HEAT EXCHANGER (EXCH)



Line Guide



COLD SHOT CHILLERS

DRAWN

ENGINEERING

ISSUED

5/2020

SIZE

A

SCALE

NONE

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.

DESCRIPTION

Typical FLOW OPTIONS for Chiller Circuits

REV

1

DWG-CKT_ChillerCircuitFlowOptions-Typical_(0520).vsd

SHEET

2 / Heat Exchanger (EXCH)