

Cold Shot Chillers®



**RUGGED
DEPENDABILITY**

50 through 80-Ton Air-Cooled Portable Water Chillers



(60-Ton unit shown)

FEATURES

- Carlyle Semi-Hermetic Reciprocating Compressors with Electrical Multi-Stage Unloading Down to 33%
- Stainless Steel Brazed Plate Evaporators
- Brass Pump Down Service Valves
- Large Copper Condensing Coil with Aluminum Fins
- Powder Coated, Heavy Gauge Steel Cabinet
- Strong Stainless Steel Centrifugal Pumps
- Oversized Magnetic Contactors
- High-Density Polyethylene Tanks

BENEFITS

- Long Life - Dependable - Economical to Operate
- Compact Efficiency
- Allows for Field Service Without Dissassembly
- Easy Maintenance and Efficient
- Rugged Protection While Allowing for Easy Maintenance and Wash Down
- High Flow - Long Life - Dependable
- Rugged Dependability - Long Life
- Rugged - Long Life - Eco-Friendly

Cold Shot Chillers

"ECONOMICALLY PRICED DEPENDABILITY"



TECHNICAL SPECIFICATION

Model: ACWC-600-E-EST¹-__²-__³-__⁴

Description:

Multi stage portable air-cooled water chiller system. To provide approximately 600,000 Btu/hr. of cooling capacity with a leaving fluid temperature of 50°F with an ambient air temperature of 95°F.

CAPACITY ±5% AT 50° LCWT / 95°F AMBIENT		600,000 BTU /HR							
COMPRESSOR / REFRIGERANT		(2) SEMI-HERMETIC RECIPROCATING / R-422D							
CONDENSER FANS / AIRFLOW		4 / 35,000 CFM							
CONDENSER COILS TYPE		COPPER TUBE / ALUMINUM FIN							
EVAPORATOR TYPE		STAINLESS STEEL / COPPER BRAZED							
FLUID CONNECTIONS		3" 150 FLANGE (IN/OUT)							
ELECTRICAL:	V - Ø - HZ	COMP RLA / LRA		COMP RLA / LRA		(No*) FAN FLA (ea)	MCA		
-1	575 - 3 - 60	A1	36.5	164	B1	40.4	176	(1-4) 3.4	100.6
- 5	230 - 3 - 60	A1	89.7	446	B1	106.4	506	(1,2) 5.5 (3,4) 6.6	246.9
- 6	460 - 3 - 60	A1	43.6	223	B1	46.8	253	(1,2) 2.8 (3,4) 3.3	114.3
DIMENSIONS		8'4" L X 7'5" W X 6'7" H							
WEIGHT (APPROX.)		4100 LBS							

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

MCA: Minimum circuit amps per UL 1995

STANDARD FEATURES:

- **Controls:** Electronic temperature controller with constant (set point & process) temperature LED readout.
- **Refrigeration Components:** Semi-hermetic reciprocating compressors, electric unloaders, sight glass/moisture indicators, balance 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.
- **Safety Controls:** High/low pressure safety, oil pressure safety, "freeze safety" with auto reset, "low water flow safety" with manual reset, internal overloads, thermal overloads, circuit breakers and/or safety fuses for compressors and fan motors.
- **Construction:** Galvanized steel frame, powder coated carbon steel cabinet.
- **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.
- **M20:** Suitable for outdoor use to -20°F ambient. Includes with low ambient fan speed controls.

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)

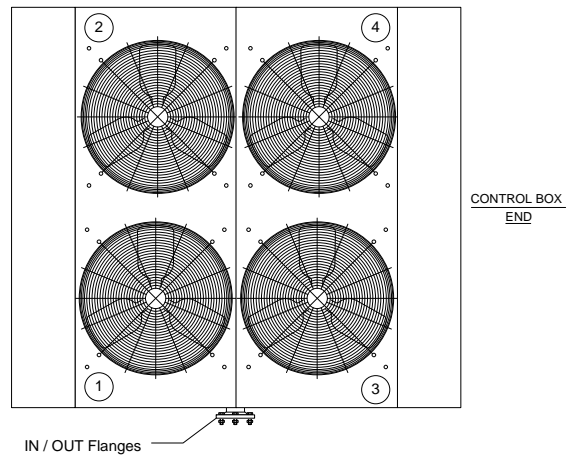
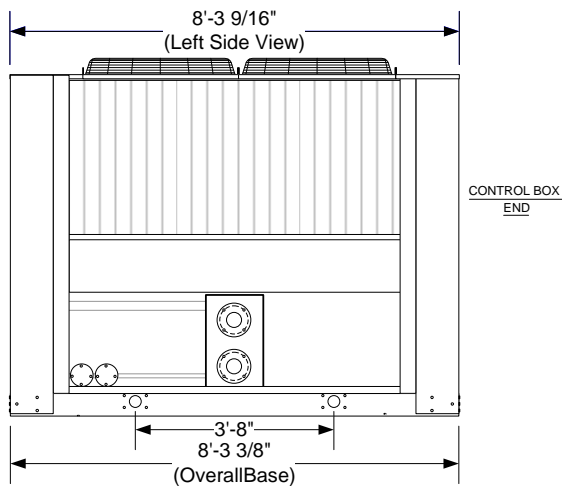
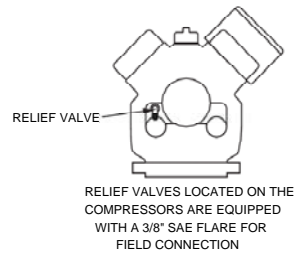
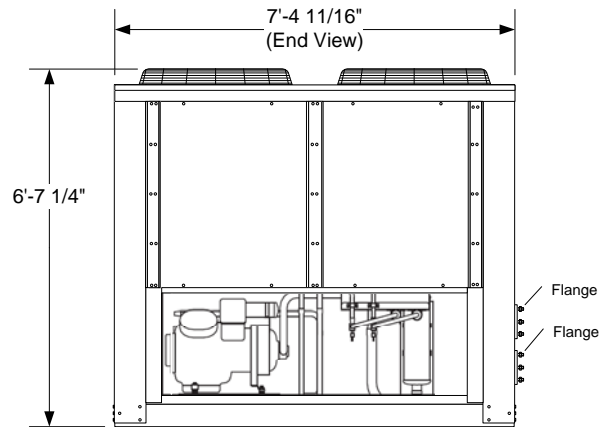
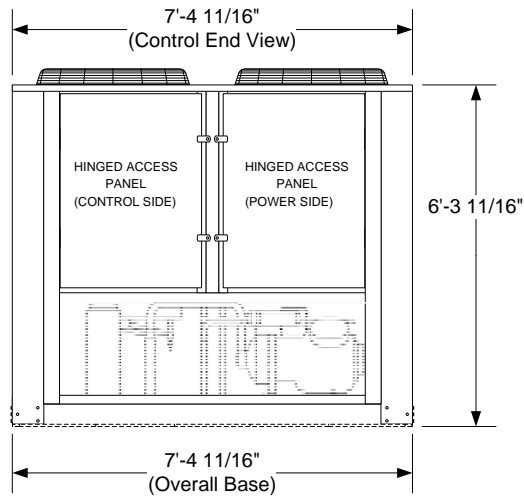
³ Ambient Temperature Conditions (see above)

⁴ Electrical Power Code (see above)

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PAGE 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 in any way.
Ends — 5 ft
Sides — 6 ft
- Mounting holes (17/32\" Diameter) may be used to mount unit to concrete pad. They are not recommended for mounting unit to spring isolators. If spring isolators are used, a perimeter support channel between the unit and the isolators is recommended.
- Field Power Supply Connection: 2½\" Diameter
- Relief valves located on the compressors are equipped with a 3/8\" SAE flare for field connection.
- All chilled fluid piping should be insulated.
- Dimensions are in inches +/- ¼\".
- 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.

Cold Shot Chillers

INSTALLATION DRAWING

ACWC-600-E-EST_ (50Ton Chiller)

TYPICAL

ENGINEERING

SIZE
A

VIEW
OverallLayout

DWG NO

DWG_ACWC-600-E-EST_ (OverallLayout)_ (0416a).vsd

REV

1

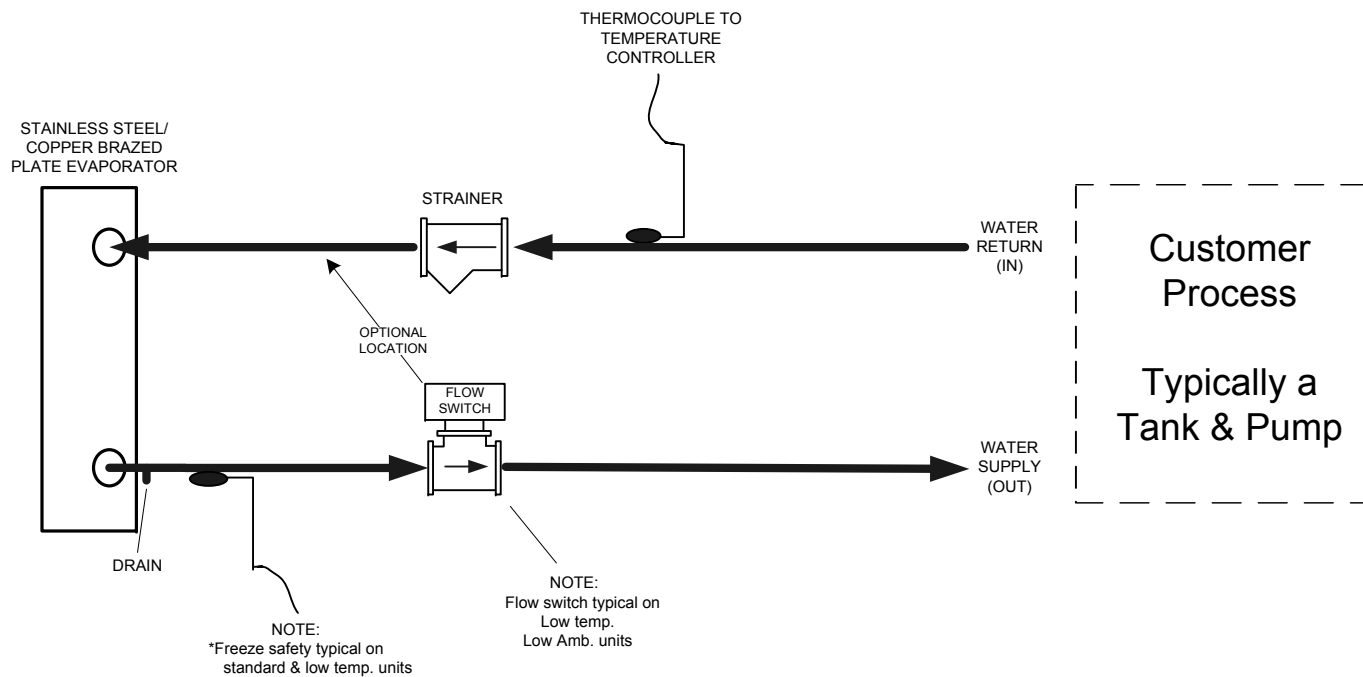
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SCALE

N.T.S.

SHEET

1



COLD SHOT CHILLERS

DRAWN ENGINEERING

ISSUED 11/2011

SIZE

A

SCALE

FSCM NO

NA

DWG NO

CHILL WATER CIRCUIT
EST-_-_- "Stationary – with Flow Switch" (Typical)

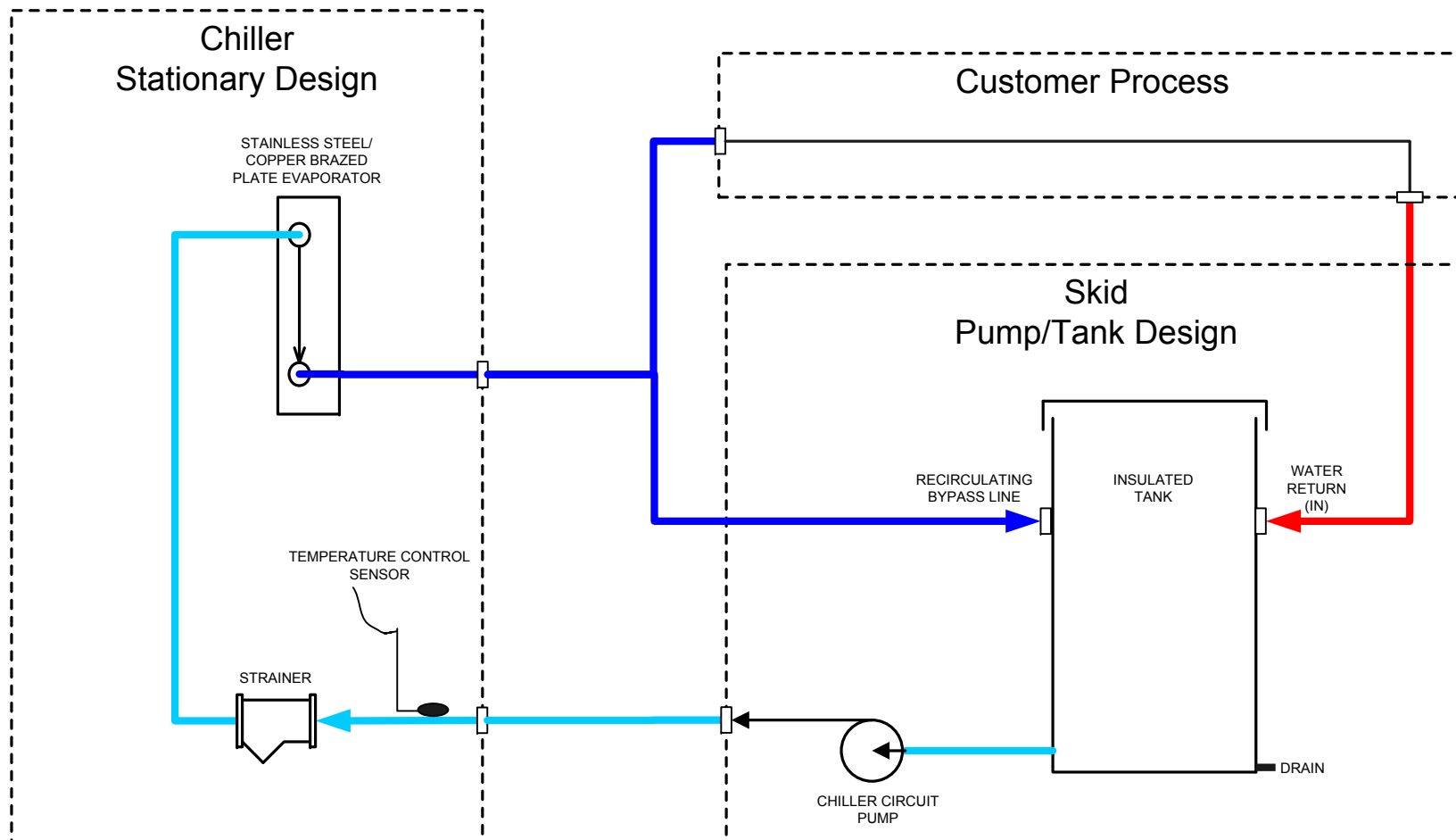
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REV

1

SHEET

6



NOTES			
- This diagram is only for typical layout design purposes and is not for engineering purposes. - Placement of components is not an indication of actual piping connections and positioning. - Items within the dashed areas are typically included with the system. Field supplied piping, components, and interconnections will need to be supplied, as needed.			
SIZE	FSCM NO	DWG NO	REV
A		CHILL WATER CIRCUIT (Typical) “Pump/Tank Skid” (EST/Skid/ProcessCircuit)	1
SCALE	NA	DWG-CHW_FlowDesigns-(PumpTankSkid-EST-Process)_0312).vsd	SHEET 1

COLD SHOT CHILLERS	
DRAWN	ENGINEERING
ISSUED	3/16/2012