

MUELLER®

AIR-COOLED PACKAGED AND SPLIT SYSTEM CHILLERS 1 TO 40 NOMINAL TONS







Mueller® Air-Cooled Packaged and Split System Chillers



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Typical List of Applications

COMMERCIAL AND INDUSTRIAL PROCESS COOLING

- Commercial air conditioning
- Oil cooling
- Injection molding cooling
- Plating process cooling
- Welding machine cooling
- Computer room air-conditioning
- Laser cooling
- Dry cleaning machine cooling
- Jacket cooling
- Water-cooled condenser cooling
- X-ray developer cooling
- Photo process cooling

MEDICAL PROCESS COOLING

- MRI magnet cooling
- Operating room air-conditioning
- PET scan cooling
- CAT scan cooling
- Lab testing
- Hypothermia blankets

FOOD PROCESS COOLING

- Bakery process cooling
- Brewery process cooling
- Winery process cooling
- Drinking water fountain cooling
- Batch cooling for mixing ingredients
- Fruit and vegetable washing
- Ice machine pre-cooling

RESIDENTIAL A/C CHILLER, 2- THRU 15-TON, SINGLE-PHASE, 208-230 VOLTS

- 2- thru 5-ton single circuit
- 15-ton three circuit
- 6- thru 10-ton dual circuit

Product Nomenclature

EXAMPLE: **P AC T B 30 S 2 - T3 - Z**

P **P** = Packaged **ES** = Evaporator Section **CS** = Condenser Section

AC **AC** = Air-Cooled Condenser **WC** = Water-Cooled Condenser

T **T** = Tank Model

B **B** = Brewery Model **L** = Low Temperature Model **Blank** = Standard Unit

30 **Nominal Capacity:** MBtuh (Example: 12 = 12,000 Btuh, etc.)

S **S** = Single-Circuit Unit **D** = Dual-Circuit Unit **M** = Three-Circuit Unit

2 **1** = R-134a **2** = R-22 **3** = R-407c **6** = R-404A, R-507

T3 **Electrical Requirement:**
S2 = 208/230-1-60 **S6** = 220-1-50
T3 = 208/230-3-60 **T7** = 200/208-3-50
S4 = 460-1-60 **T9** = 380-3-50
T4 = 460-3-60
T5 = 575-3-60

H **Compressor Type:** **H** = Hermetic **S** = Semi-Hermetic **Z** = Scroll

Note:
Low ambient or lower leaving water temperatures can require the recirculation of glycol solutions or other fluid blends. These solutions can effect unit capacities. Please consult the factory on these or other special applications for proper sizing.

Air-Cooled Chiller Selection Procedure

AIR-COOLED CHILLER SELECTION PROCEDURES

To properly select an air-cooled packaged chiller, the following information must be known:

- The required cooling capacity, Btuh.
- Entering and leaving process fluid temperatures.
- Gpm of process fluid to be circulated.
- Design ambient air temperature.

If you know any three of items 1 through 4 above, you can calculate the fourth by using the formulas below:

For 100% Water:

Cooling Capacity (in Btuh) = GPM x Delta T x 500

$$\text{GPM} = \frac{\text{Capacity (in Btuh)}}{\text{Delta T} \times 500}$$

$$\text{Delta T} = \frac{\text{Capacity (in Btuh)}}{\text{GPM} \times 500}$$

Sample Selection:

Select an air-cooled packaged chiller to cool 6.5 gpm of 100% water from 54°F to 44°F.
Design ambient air temperature 95°F.

Find:

A) Air-cooled chiller model

Solution:

- A) 1. Chilled fluid Delta T = 54°F - 44°F = 10°F
2. Capacity (in Btuh) = 6.5 gpm x 10°F Delta T x 500 = 32,500 Btuh
3. From the PAC chiller capacity tables, it can be determined that the PAC36S has the capacity to meet the requirements.

Note: Consult factory on sizing chillers with glycol or any fluid other than water.

Air-Cooled Chiller Capacities - 12S to 60S

AIR-COOLED CHILLER CAPACITIES																							
		Ambient Air Temperature - °F/Btuh																					
Mueller	Model	Compressor	LWT °F	80				90				95				100				105			
			Tons	kW	EER	Tons	kW	EER	Tons	kW	EER	Tons	kW	EER	Tons	kW	EER						
12S	ZR16KC	42.0	1.2	1.2	7.5	1.2	1.3	6.8	1.1	1.4	6.3	1.1	1.4	6.0	1.1	1.5	5.6						
		44.0	1.3	1.2	7.7	1.2	1.3	6.9	1.2	1.4	6.5	1.1	1.4	6.2	1.1	1.5	5.8						
		45.0	1.3	1.2	7.8	1.2	1.3	7.0	1.2	1.4	6.6	1.2	1.4	6.3	1.1	1.5	5.9						
		50.0	1.4	1.2	8.4	1.3	1.3	7.5	1.3	1.4	7.1	1.3	1.5	6.7	1.2	1.6	6.3						
18S	ZR15KC	42.0	1.8	1.7	8.9	1.7	1.8	7.9	1.7	1.9	7.4	1.6	2.0	7.0	1.6	2.2	6.5						
		44.0	1.9	1.7	9.1	1.8	1.9	8.1	1.7	2.0	7.6	1.7	2.1	7.2	1.6	2.2	6.7						
		45.0	1.9	1.7	9.3	1.8	1.9	8.3	1.8	2.0	7.7	1.7	2.1	7.3	1.7	2.2	6.8						
		50.0	2.1	1.8	9.9	2.0	1.9	8.8	1.9	2.0	8.3	1.9	2.1	7.8	1.8	2.2	7.3						
24S	ZR19KC	42.0	2.2	1.9	9.7	2.1	2.1	8.6	2.0	2.2	8.1	2.0	2.3	7.6	2.0	2.4	7.1						
		44.0	2.2	1.9	10.0	2.1	2.1	8.9	2.1	2.2	8.4	2.0	2.3	7.9	2.0	2.4	7.4						
		45.0	2.3	1.9	10.2	2.2	2.1	9.1	2.1	2.2	8.5	2.1	2.3	8.0	2.1	2.5	7.5						
		50.0	2.5	1.9	10.9	2.4	2.1	9.7	2.3	2.3	9.2	2.3	2.4	8.6	2.2	2.5	8.1						
30S	ZB26KC	42.0	3.1	2.8	10.4	2.9	3.1	9.1	2.9	3.3	8.4	2.8	3.5	7.9	2.7	3.7	7.3						
		44.0	3.2	2.8	10.6	3.1	3.2	9.3	3.0	3.4	8.7	2.9	3.5	8.2	2.9	3.7	7.6						
		45.0	3.3	2.9	10.8	3.1	3.2	9.5	3.0	3.4	8.8	3.0	3.5	8.3	2.9	3.7	7.7						
		50.0	3.5	2.9	11.4	3.4	3.3	10.0	3.3	3.5	9.3	3.2	3.6	8.8	3.1	3.8	8.2						
36S	ZB30KC	42.0	3.6	3.4	10.3	3.5	3.8	9.2	3.3	3.9	8.6	3.3	4.1	8.1	3.2	4.3	7.6						
		44.0	3.8	3.5	10.6	3.6	3.8	9.4	3.4	4.0	8.8	3.4	4.1	8.4	3.3	4.4	7.8						
		45.0	3.8	3.5	10.8	3.7	3.8	9.6	3.5	4.0	9.0	3.5	4.2	8.5	3.4	4.4	7.9						
		50.0	4.2	3.6	11.4	4.0	3.9	10.2	3.8	4.1	9.6	3.8	4.3	9.1	3.7	4.5	8.5						
48S	ZB38KC	42.0	4.3	4.0	10.9	4.1	4.4	9.5	4.0	4.6	8.9	3.9	4.8	8.3	3.8	5.1	7.7						
		44.0	4.5	4.0	11.2	4.3	4.4	9.8	4.2	4.6	9.2	4.0	4.9	8.6	3.9	5.1	8.0						
		45.0	4.6	4.0	11.3	4.3	4.4	9.9	4.2	4.7	9.3	4.1	4.9	8.7	4.0	5.2	8.1						
		50.0	5.0	4.2	12.1	4.8	4.6	10.6	4.6	4.8	10.0	4.5	5.0	9.4	4.4	5.3	8.7						
50S	ZB42KC	42.0	4.8	4.3	11.2	4.6	4.8	9.7	4.4	5.1	9.0	4.3	5.4	8.4	4.2	5.8	7.7						
		44.0	5.0	4.4	11.5	4.7	4.9	10.0	4.6	5.2	9.2	4.5	5.5	8.6	4.4	5.9	7.9						
		45.0	5.1	4.4	11.6	4.8	4.9	10.1	4.7	5.2	9.3	4.6	5.5	8.7	4.5	5.9	8.0						
		50.0	5.5	4.6	12.3	5.3	5.1	10.7	5.1	5.4	9.8	5.0	5.7	9.2	4.8	6.1	8.5						
60S	ZB45KC	42.0	5.4	4.6	12.0	5.1	5.1	10.5	5.0	5.4	9.7	4.9	5.7	9.1	4.7	6.0	8.4						
		44.0	5.6	4.6	12.3	5.3	5.2	10.7	5.2	5.4	10.0	5.0	5.7	9.3	4.9	6.1	8.6						
		45.0	5.7	4.7	12.5	5.4	5.2	10.9	5.3	5.5	10.1	5.2	5.8	9.4	5.0	6.1	8.7						
		50.0	6.2	4.8	13.2	5.9	5.3	11.6	5.7	5.6	10.7	5.6	5.9	10.0	5.4	6.2	9.3						

- Note:**
- Capacities on this chart are based on refrigerant 22. Low ambient or lower leaving water temperatures can require the use of a glycol solution or other fluid blends. These solutions affect unit capacities. Please consult the factory on these or other special fluids.
 - kW input is for compressor(s) only.
 - EER = Energy Efficiency Ratio (BTU/watt-hour). Power inputs include compressor(s), condenser fan motor(s), and control power.

Air-Cooled Chiller Capacities - 70S to 300S

AIR-COOLED CHILLER CAPACITIES																	
Mueller Model	Compressor	LWT °F	Ambient Air Temperature - °F/Btuh														
			80		90			95			100			105			
		Tons	kW	EER	Tons	kW	EER	Tons	kW	EER	Tons	kW	EER	Tons	kW	EER	
70S	ZB58KC	42.0	7.0	5.9	11.1	6.6	6.6	9.8	6.4	6.9	9.1	6.3	7.3	8.5	6.1	7.7	8.0
		44.0	7.2	6.0	11.4	6.8	6.6	10.0	6.7	7.0	9.4	6.5	7.3	8.8	6.3	7.7	8.2
		45.0	7.3	6.0	11.6	6.9	6.7	10.2	6.8	7.0	9.6	6.6	7.4	9.0	6.5	7.8	8.4
		50.0	7.9	6.2	12.3	7.6	6.8	10.8	7.3	7.2	10.2	7.2	7.5	9.6	7.1	7.9	9.0
80S	ZB66KC	42.0	7.9	7.1	10.9	7.5	7.8	9.7	7.3	8.2	9.1	7.2	8.6	8.5	7.0	9.0	8.0
		44.0	8.1	7.2	11.2	7.8	7.9	9.9	7.6	8.3	9.3	7.4	8.6	8.8	7.3	9.1	8.2
		45.0	8.3	7.2	11.4	7.9	7.9	10.1	7.8	8.3	9.5	7.6	8.7	8.9	7.4	9.1	8.4
		50.0	8.9	7.4	12.0	8.6	8.1	10.7	8.4	8.5	10.1	8.3	8.8	9.6	8.1	9.3	8.9
90S	ZB76KC	42.0	9.0	8.4	10.8	8.6	9.2	9.6	8.4	9.7	9.0	9.0	10.1	8.4	8.0	10.6	7.9
		44.0	9.3	8.5	11.1	8.9	9.3	9.8	8.7	9.7	9.2	8.5	10.2	8.7	8.3	10.7	7.2
		45.0	9.5	8.6	11.3	9.1	9.3	10.0	8.9	9.8	9.4	8.7	10.3	8.9	8.5	10.7	7.3
		50.0	10.3	8.7	12.0	9.8	9.5	10.7	9.6	10.0	10.0	9.4	10.5	9.4	9.2	10.9	7.9
120S	ZB88KC	42.0	10.5	9.1	11.9	10.0	10.0	10.4	9.7	10.5	9.7	9.5	11.1	9.1	9.2	11.7	8.4
		44.0	10.8	9.2	12.2	10.3	10.1	10.7	10.1	10.6	9.9	9.8	11.2	9.3	9.5	11.8	8.6
		45.0	11.0	9.2	12.4	10.5	10.2	10.8	10.3	10.7	10.0	10.0	11.2	9.4	9.7	11.9	8.7
		50.0	11.9	9.5	13.0	11.3	10.4	11.4	11.1	11.0	10.7	10.8	11.5	10.0	10.5	12.1	9.3
180S	ZB11M	42.0	13.1	11.8	10.3	12.5	13.1	9.0	11.8	13.8	8.4	11.8	14.6	7.9	11.6	15.4	7.3
		44.0	13.5	11.9	10.5	12.8	13.2	9.2	12.2	13.9	8.6	12.2	14.7	8.1	11.9	15.4	7.6
		45.0	13.7	11.9	10.6	13.0	13.2	9.3	12.4	14.0	8.7	12.4	14.7	8.2	12.1	15.5	7.7
		50.0	14.7	12.1	11.3	14.0	13.4	10.9	13.3	14.2	9.3	13.3	14.9	8.7	13.0	15.7	8.1
250S	ZR250K	42.0	17.7	16.3	10.7	17.0	18.0	9.4	16.6	18.9	8.9	16.3	19.8	8.4	15.8	20.8	7.8
		44.0	18.3	16.6	10.9	17.5	18.2	9.6	17.1	19.1	9.1	16.8	20.0	8.6	16.4	21.1	8.0
		45.0	18.6	16.6	11.0	17.8	18.3	9.8	17.5	19.2	9.2	17.1	20.1	8.7	16.7	21.2	8.1
		50.0	20.0	17.1	11.6	19.3	18.8	10.4	18.9	19.7	9.7	18.5	20.6	9.2	17.9	21.7	8.6
300S	ZR300K	42.0	21.0	19.4	11.0	20.2	21.3	9.8	19.8	22.8	9.2	19.4	23.4	8.6	18.8	24.6	8.0
		44.0	21.8	19.6	11.3	20.8	21.6	10.0	20.4	22.6	9.4	20.0	23.6	8.8	19.5	24.8	8.2
		45.0	22.1	19.7	11.4	21.2	21.7	10.1	20.7	22.7	9.5	20.3	23.7	8.9	19.8	25.0	8.5
		50.0	23.9	20.8	12.0	22.9	22.2	10.7	22.3	23.4	10.0	21.9	24.3	9.5	21.4	25.6	8.8

Notes:

1. Capacities on this chart are based on refrigerant 22. Low ambient or lower leaving water temperatures can require the use of a glycol solution or other fluid blends. These solutions affect unit capacities. Please consult the factory on these or other special fluids.
2. kW input is for compressor(s) only.
3. EER = Energy Efficiency Ratio (BTU/watt-hour). Power inputs include compressor(s), condenser fan motor(s), and control power.

Air-Cooled Chiller Capacities - 72D to 180M

AIR-COOLED CHILLER CAPACITIES																		
Mueller Model	Compressor	LWT °F	Ambient Air Temperature - °F/Btuh															
			80			90			95			100			105			
			Tons	kW	EER	Tons	kW	EER	Tons	kW	EER	Tons	kW	EER	Tons	kW	EER	
72D	ZB30KC	42.0	7.1	7.1	9.8	6.8	7.8	8.7	6.6	8.2	8.2	6.5	8.5	7.7	6.3	8.9	7.2	
		44.0	7.4	7.2	10.1	7.0	7.9	9.0	6.9	8.3	8.5	6.7	8.6	7.9	6.5	9.0	7.5	
		45.0	7.5	7.3	10.3	7.2	7.9	9.1	7.0	8.3	8.6	6.8	8.7	8.0	6.7	9.1	7.6	
		50.0	8.1	7.4	10.9	7.8	8.1	9.7	7.6	8.4	9.1	7.4	8.8	8.6	7.2	9.2	8.1	
96D	ZB38KC	42.0	8.8	7.8	11.4	8.3	8.5	10.0	8.1	8.9	9.3	7.9	9.4	8.6	7.7	9.9	8.1	
		44.0	9.2	7.8	11.7	8.7	8.6	10.3	8.5	9.0	9.6	8.2	9.5	9.0	8.0	10.0	8.4	
		45.0	9.3	7.9	11.9	8.9	8.7	10.4	8.7	9.1	9.8	8.4	9.6	9.1	8.2	10.0	8.5	
		50.0	10.2	8.1	12.6	9.7	8.9	11.2	9.4	9.3	10.4	9.2	9.8	9.8	9.0	10.3	9.2	
100D	ZB42KC	42.0	9.8	8.4	11.8	9.3	9.4	10.2	9.1	9.9	9.5	8.8	10.5	8.8	8.6	11.2	8.1	
		44.0	10.2	8.5	12.1	9.7	9.5	10.5	9.4	10.1	9.7	9.2	10.6	9.0	8.9	11.3	8.3	
		45.0	10.3	8.6	12.3	9.8	9.6	10.6	9.6	10.1	9.9	9.3	10.7	9.2	9.1	11.4	8.4	
		50.0	11.2	8.9	13.0	10.7	9.8	11.3	10.5	10.4	10.5	10.2	11.0	9.8	9.9	11.7	9.0	
120D	ZB45KC	42.0	10.6	9.2	12.0	10.2	10.2	10.5	10.0	10.7	9.7	9.7	11.3	9.1	9.5	11.9	8.4	
		44.0	11.1	9.3	12.3	10.6	10.3	10.7	10.3	10.8	10.0	10.1	11.4	9.4	9.8	12.0	8.7	
		45.0	11.4	9.4	12.5	10.8	10.4	10.9	10.6	10.9	10.2	10.3	11.5	9.5	10.1	12.1	8.8	
		50.0	12.3	9.7	13.2	11.8	10.7	11.6	11.4	11.2	10.8	11.2	11.7	10.1	10.9	12.4	9.4	
140D	ZB58KC	42.0	13.9	11.8	12.5	13.2	13.1	10.8	12.9	13.8	10.1	12.6	14.5	9.4	12.3	15.3	8.7	
		44.0	14.4	11.9	12.8	13.7	13.2	11.2	13.4	13.9	10.4	13.1	14.6	9.7	12.8	15.4	9.0	
		45.0	14.6	12.0	13.0	14.0	13.3	11.3	13.7	14.0	10.6	13.3	14.7	9.8	13.0	15.5	9.2	
		50.0	15.7	12.3	13.7	15.2	13.6	12.0	14.7	14.3	11.2	14.4	15.0	10.5	14.0	15.8	9.8	
160D	ZB66KC	42.0	15.3	14.0	11.8	14.6	15.5	10.3	14.3	16.2	9.7	13.9	17.1	9.0	13.5	17.9	8.4	
		44.0	16.3	14.3	12.3	15.5	15.7	10.8	15.2	16.5	10.1	14.8	17.3	9.4	14.5	18.2	8.8	
		45.0	16.5	14.4	12.5	15.8	15.8	10.9	15.5	16.6	10.3	15.2	17.4	9.6	14.8	18.3	8.9	
		50.0	17.8	14.8	13.2	17.1	16.2	11.6	16.8	17.0	10.8	16.4	17.8	10.2	16.0	18.7	9.5	
180D	ZB76KC	42.0	17.9	16.8	11.7	17.2	18.5	10.3	16.9	19.4	9.7	16.4	20.3	9.0	16.0	21.4	8.4	
		44.0	18.5	17.0	12.0	17.7	18.7	10.5	17.3	19.6	9.8	17.0	20.6	9.2	16.5	21.6	8.6	
		45.0	18.9	17.1	12.1	18.1	18.8	10.7	17.7	19.7	10.0	17.3	20.7	9.4	16.9	21.7	8.7	
		50.0	20.3	17.6	12.8	19.5	19.3	11.3	19.0	20.3	10.4	18.7	21.2	9.9	18.2	22.2	9.2	
180M	ZB38KC	42.0	13.1	11.2	12.2	12.5	12.5	10.5	12.2	13.2	9.7	11.9	14.0	9.0	11.5	14.8	8.3	
		44.0	13.6	11.2	12.6	12.9	12.5	10.9	12.7	13.2	10.1	12.3	14.0	9.4	12.0	14.9	8.6	
		45.0	13.9	11.2	12.8	13.1	12.5	11.1	12.8	13.2	10.3	12.5	14.0	9.5	12.1	14.9	8.8	
		50.0	14.8	11.3	13.7	14.3	12.6	11.9	13.8	13.3	11.1	13.5	14.1	10.2	13.1	14.9	9.5	

Notes:

1. Capacities on this chart are based on refrigerant 22. Low ambient or lower leaving water temperatures can require the use of a glycol solution or other fluid blends. These solutions affect unit capacities. Please consult the factory on these or other special fluids.
2. kW input is for compressor(s) only.
3. EER = Energy Efficiency Ratio (BTU/watt-hour). Power inputs include compressor(s), condenser fan motor(s), and control power.

Air-Cooled Chiller Capacities - 240D to 600D

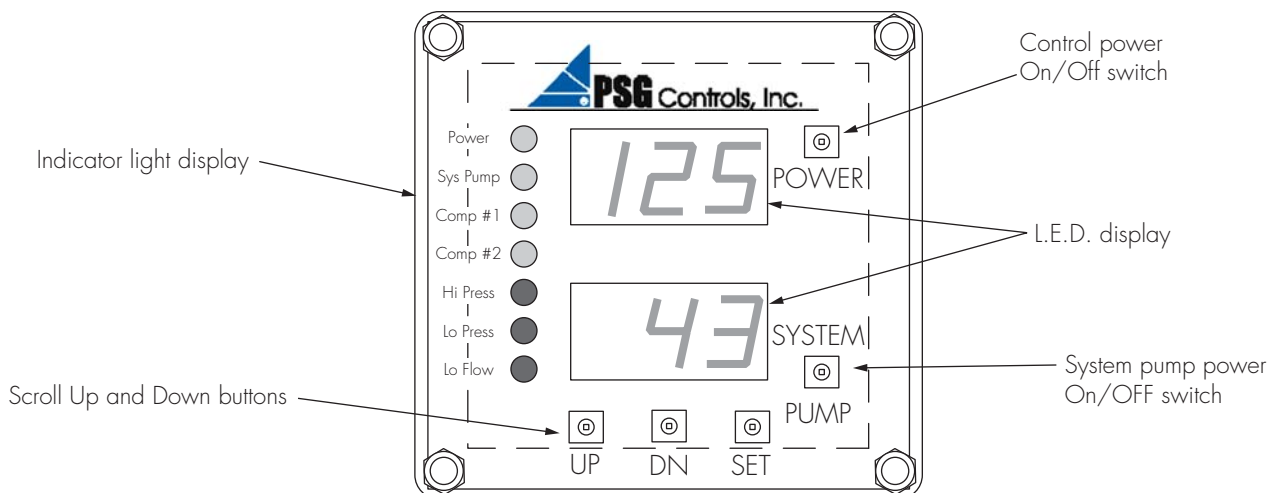
AIR-COOLED CHILLER CAPACITIES																	
Mueller Model	Compressor	LWT °F	Ambient Air Temperature - °F/Btuh														
			80			90			95			100			105		
		Tons	kW	EER	Tons	kW	EER	Tons	kW	EER	Tons	kW	EER	Tons	kW	EER	
240D	ZB88KC	42.0	20.9	18.0	12.0	20.0	19.8	10.5	19.4	20.8	9.8	18.9	21.8	9.2	18.5	23.0	8.5
		44.0	21.7	18.2	12.3	20.7	20.0	10.7	20.1	21.0	10.0	19.7	22.0	9.4	19.2	23.2	8.8
		45.0	22.1	18.2	12.5	21.0	20.1	10.9	20.5	21.1	10.2	20.0	22.2	9.6	19.6	23.3	8.9
		50.0	23.8	18.8	13.1	22.8	20.6	11.6	22.1	21.6	10.8	21.7	22.6	10.2	21.3	23.7	9.5
360D	ZB11M	42.0	26.0	23.4	10.9	24.8	26.0	9.5	24.2	27.5	8.9	23.7	28.9	8.3	23.0	30.5	7.7
		44.0	26.7	23.5	11.2	25.2	26.2	9.7	24.9	27.6	9.1	24.3	29.1	8.5	23.7	30.7	7.9
		45.0	27.2	23.6	11.3	25.9	26.3	9.9	25.3	27.7	9.2	24.8	29.2	8.6	24.1	30.8	8.0
		50.0	29.1	23.9	12.0	27.8	26.6	10.5	27.1	28.1	9.7	26.5	29.5	9.1	25.8	31.1	8.5
500D	ZR250K	42.0	35.4	33.0	10.7	33.9	36.1	9.5	33.3	37.8	8.9	32.5	39.5	8.4	31.7	41.6	7.8
		44.0	36.7	33.3	11.0	35.1	36.5	9.7	34.4	38.3	9.1	33.7	39.9	8.6	32.9	42.0	8.0
		45.0	37.3	33.5	11.1	35.8	36.8	9.8	35.0	38.5	9.2	34.3	40.1	8.7	33.3	42.2	8.1
		50.0	40.3	34.5	11.7	38.7	37.8	10.4	37.8	39.5	9.8	37.2	41.0	9.3	36.3	43.2	8.6
600D	ZR300K	42.0	42.8	37.7	11.5	41.1	41.4	10.2	40.2	43.4	9.6	39.3	45.4	9.0	38.4	47.7	8.4
		44.0	44.2	38.1	11.8	42.5	41.8	10.5	41.6	43.7	9.8	40.8	45.8	9.3	39.8	48.1	8.7
		45.0	45.0	38.3	11.9	43.3	42.0	10.6	42.3	44.0	10.0	41.4	46.0	9.4	40.4	48.3	8.8
		50.0	48.8	39.4	12.6	46.8	43.0	11.2	45.8	44.9	10.6	44.9	46.8	10.0	43.8	49.2	9.4

Notes:

- Capacities on this chart are based on refrigerant 22. Low ambient or lower leaving water temperatures can require the use of a glycol solution or other fluid blends. These solutions affect unit capacities. Please consult the factory on these or other special fluids.
- kW input is for compressor(s) only.
- EER = Energy Efficiency Ratio (BTU/watt-hour). Power inputs include compressor(s), condenser fan motor(s), and control power.


Microprocessor Standard Features

- Control operates to a +/- 1°F accuracy.
- Powered from the chiller 24-volt control circuit. No high voltage interference.
- 1 or 2 compressor control capability.
- Operates and displays in °F or °C.
- Controls chiller on inlet or outlet temperature.
- Scroll through set-up and review mode.
- 30-second compressor time delay to prevent short cycling and nuisance faults.
- 60-second hot gas solenoid delay to prevent false hot gas feeding during compressor start up.
- Lock out relay shuts down the chiller when control fault settings activate.
- Automatic compressor lead lag on dual circuit chillers.
- Weather resistant for outdoor use.
- Basic chiller functionality for ease of set up and operation.
- Factory default function code to reset the controller to the initial factory settings.
- Two L.E.D. display windows:
 - ▲ Displays inlet and outlet temperature during chiller operation.
 - ▲ Displays refrigerant high- and low-pressure in review mode.
- No cap tubes to break causing a loss of refrigerant and down time.
- No refrigerant recovery to change out the pressure transducer.
- Chiller control power on/off switch with green indicator.
- System pump on/off switch with green indicator.
- Compressor run indicator lights.
- High and low refrigerant pressure red fault indicator.
- Low fluid flow red indicator.
- Display flashes all chiller safety faults:
 - ▲ High fluid temperature outlet alarm (display only — does not shut down the chiller).
 - ▲ Low fluid temperature outlet alarm (shuts down the chiller and requires manual reset).
 - ▲ High refrigerant pressure (shuts down the chiller and requires manual reset).
 - ▲ Low refrigerant pressure (shuts down the chiller and requires manual reset).
 - ▲ Low water flow through evaporator (shuts down the chiller and automatically resets when flow is restored).
- Monitors and logs compressor run hours.



PAC and PACT Chiller Standard Features

STANDARD FEATURES - ALL MODELS

- ETL listed. 
- Microprocessor controller.
- Stainless steel brazed plate evaporator with 1/2" insulation, and secured in a steel bracket.
- Shell and tube 180S to 600D models.
- Scroll compressor with crankcase heater.
- Suction accumulator.
- Water flow switch.
- Hot gas by-pass capacity control.
- 24V control transformer.
- Direct drive condenser fan motor.
- Rust resistant, high CFM, aluminum condenser fan blade.
- Condenser(s): copper tube/aluminum fin.
- Compressor motor contactor.
- Condenser motor and control circuit fusing.
- Hard start kit (single-phase units only).
- Painted galvanized sheet metal cabinet.
- 1/2" insulation on all water and refrigerant lines.
- Liquid line drier, sightglass, solenoid, TEV.
- Full refrigerant charge from factory.



PAC240D



PAC90S

Additional Features On Tank Models Only

- Stainless steel storage tank with 1/2" insulation.
- Fused stainless steel recirculation pump for tank operation with ball valve and cleanable strainer.
- Tank pressure relief valve, vent and drain connections.

PAC and PACT Chiller Available Options



PACT60S

AVAILABLE OPTIONS - ALL MODELS

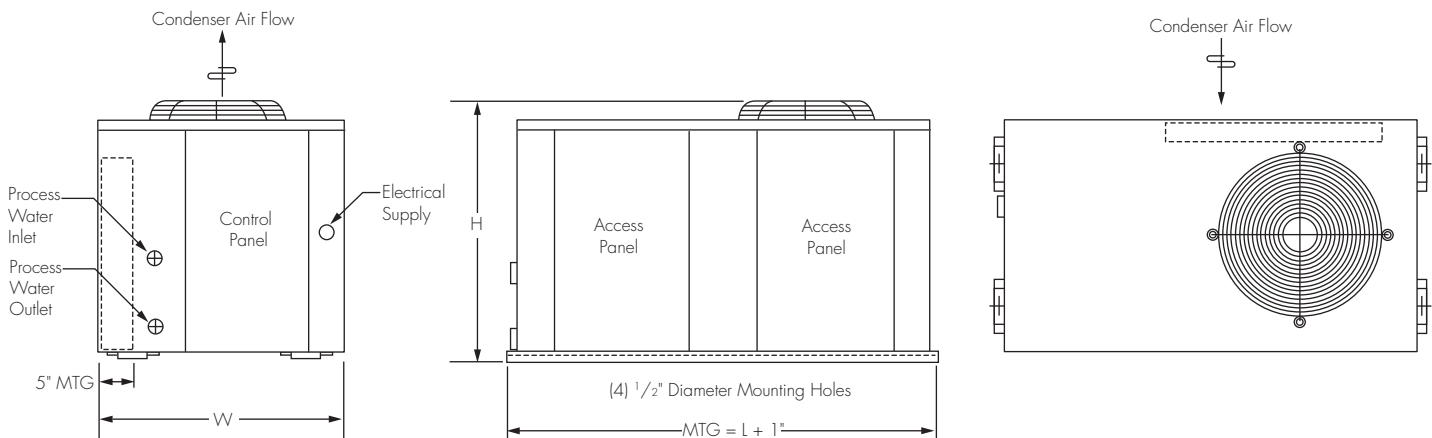
- 4-year extended compressor warranty.
- Fused stainless steel system process pump.
- Casters (factory mounted).
- Dual system pump with manual changeover.
- 115-volt (rain tight) service outlet.
- Dual system pump with auto changeover.
- Fused disconnect.
- Low flow bypass valve.
- Phase monitor.
- “Gold” finned condenser coil (coastal protection).
- Compressor fusing.
- Semi-hermetic compressor.
- Fan cycle control on PAC 90 and 120 units only (+40°F).
- Shell-and-tube chiller barrel.
- Variable fan speed control (+20°F).
- Water flow meter.
- Flooded condenser with receiver/head pressure control (-20°F).
- Heated flooded condenser with receiver/head pressure control (-20°F).
- Auto city water make-up solenoid.
- Auto city water changeover panel.
- Auto city water changeover panel with 5 micron filter.
- Special piping for de-ionized and reverse osmosis water systems.
- Factory installed evaporator heat tape freeze protection, thermostatically controlled.
- Blower type condenser fan (forward curve) 12S to 60S.

Additional Features On Tank Models Only

- Storage tank sight glass.
- Tank low liquid level indicator with dry contacts.

PAC Chiller Dimensional and Electrical Specifications

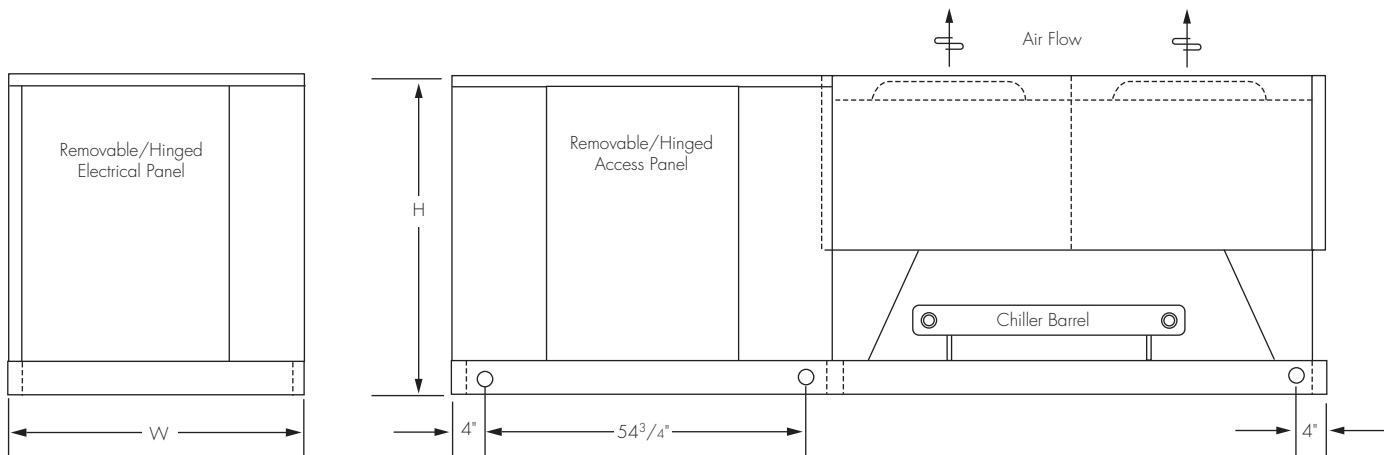
SINGLE CIRCUIT PACKAGED AIR-COOLED CHILLER														
Mueller Model	Btuh @ 95°F Amb 45°F LWT	Length (in)	Width (in)	Height (in)	Fluid Connection	Compressor Qty	Compressor HP	RLA ea.	LRA ea.	Fan Motor Qty	FLA ea.	MCA	MOP	Weight (lbs)
12S2-S2-Z	14,400	36	34	40	3/4" FPT	1	1.3	10	42	1	3.3	20	25	250
18S2-S2-Z	21,600	36	34	40	3/4" FPT	1	2.0	13.6	61.0	1	3.3	25	30	250
18S2-T3-Z	21,600	36	34	40	3/4" FPT	1	2.0	8.6	55.0	1	3.3	15	20	250
18S2-T4-Z	21,600	36	34	40	3/4" FPT	1	2.0	4.3	27.0	1	1.6	15	15	250
24S2-S2-Z	25,200	36	34	40	1" FPT	1	2.5	15.7	73.0	1	3.3	25	35	275
24S2-T3-Z	25,200	36	34	40	1" FPT	1	2.5	8.2	63.0	1	3.3	15	20	275
24S2-T4-Z	25,200	36	34	40	1" FPT	1	2.5	4.3	31.0	1	1.6	15	15	275
30S2-S2-Z	36,000	36	34	40	1" FPT	1	3.5	20.7	127.0	1	3.3	30	45	300
30S2-T3-Z	36,000	36	34	40	1" FPT	1	3.5	13.9	88.0	1	3.3	25	30	300
30S2-T4-Z	36,000	36	34	40	1" FPT	1	3.5	7.1	44.0	1	1.6	15	15	300
36S2-S2-Z	42,000	56	34	40	1" FPT	1	4	25.0	132.0	1	3.3	35	50	500
36S2-T3-Z	42,000	56	34	40	1" FPT	1	4	15.0	115.0	1	3.3	25	35	500
36S2-T4-Z	42,000	56	34	40	1" FPT	1	4	7.4	47.5	1	1.6	15	15	500
48S2-S2-Z	50,400	56	34	40	1" FPT	1	5	30.1	175.0	1	3.3	45	70	550
48S2-T3-Z	50,400	56	34	40	1" FPT	1	5	20.7	115.0	1	3.3	30	45	550
48S2-T4-Z	50,400	56	34	40	1" FPT	1	5	8.9	63.0	1	1.6	15	20	550
50S2-S2-Z	56,400	56	34	40	1" FPT	1	5	27.9	129.0	1	3.3	40	60	575
60S2-T3-Z	63,600	56	34	40	1" FPT	1	6	20.7	156.0	1	3.3	30	45	600
60S2-T4-Z	63,600	56	34	40	1" FPT	1	6	11.5	70.0	1	1.6	20	25	600
70S2-T3-Z	81,600	85	34	40	1.25" FPT	1	8	32.1	195.0	1	3.3	50	70	700
70S2-T4-Z	81,600	85	34	40	1.25" FPT	1	8	16.4	95.0	1	1.6	25	40	700
80S2-T3-Z	93,600	85	34	40	1.25" FPT	1	9	33.6	225.0	1	3.3	50	80	725
80S2-T4-Z	93,600	85	34	40	1.25" FPT	1	9	17.3	114.0	1	1.6	25	40	725
90S2-T3-Z	106,800	85	34	40	1.25" FPT	1	10	42.0	239.0	2	3.3	60	100	750
90S2-T4-Z	106,800	85	34	40	1.25" FPT	1	10	19.2	125.0	2	1.6	30	45	750
120S2-T3-Z	123,600	85	34	40	1.25" FPT	1	12	47.0	245.0	2	3.3	70	110	850
120S2-T4-Z	123,600	85	34	40	1.25" FPT	1	12	22.1	125.0	2	1.6	35	50	850



PAC Chiller Dimensional and Electrical Specifications

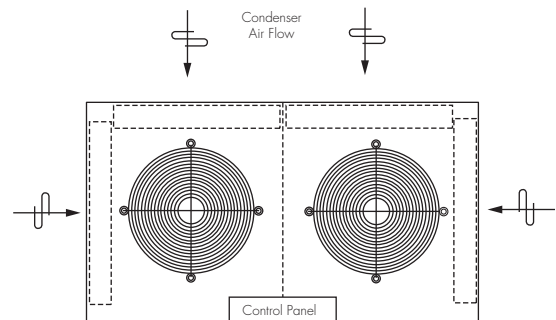
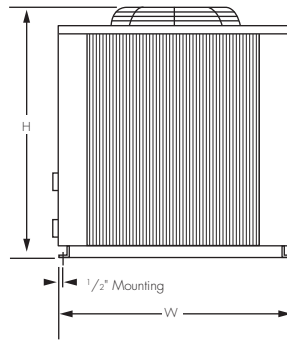
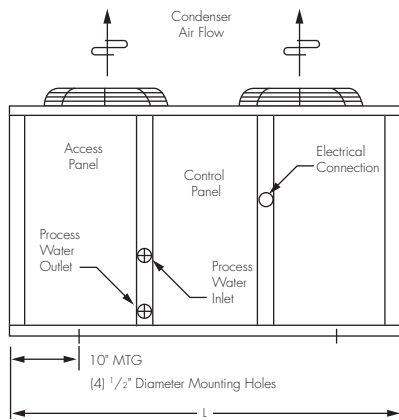
SINGLE CIRCUIT PACKAGED AIR-COOLED CHILLER

Mueller Model	Btuh @ 95°F Amb 45°F LWT	Length (in)	Width (in)	Height (in)	Fluid Connection	Compressor Qty	Compressor HP	RLA ea.	LRA ea.	Fan Motor Qty	FLA ea.	MCA	MOP	Weight (lbs)
180S2-T3-Z	148,800	157	45	54.5	2" MPT	1	15	55.2	425.0	2	6.6	90	125	1,600
180S2-T4-Z	148,800	157	45	54.5	2" MPT	1	15	27.2	187.0	2	3.1	45	60	1,600
250S2-T3-Z	210,000	157	45	54.5	2.5" MPT	1	20	81.0	505.0	2	6.6	125	175	1,700
250S2-T4-Z	210,000	157	45	54.5	2.5" MPT	1	20	34.0	225.0	2	3.1	50	80	1,700
300S2-T3-Z	248,400	157	45	54.5	2.5" MPT	1	25	87.9	500.0	2	6.6	125	200	1,800
300S2-T4-Z	248,400	157	45	54.5	2.5" MPT	1	25	43.0	250.0	2	3.1	60	100	1,800



PAC Chiller Dimensional and Electrical Specifications

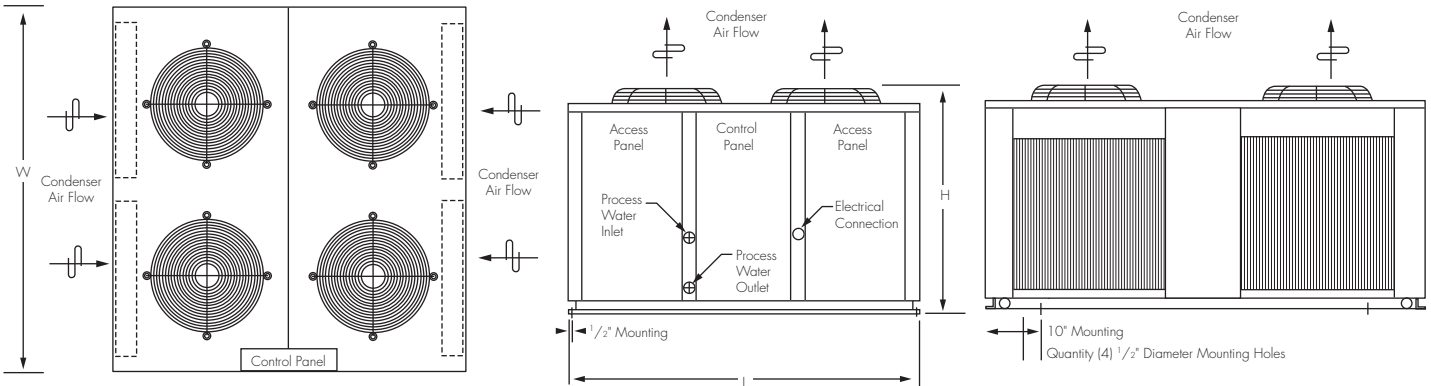
DUAL CIRCUIT PACKAGED AIR-COOLED CHILLER														
Mueller Model	Btuh @ 95°F Amb 45°F LWT	Length (in)	Width (in)	Height (in)	Fluid Connection	Compressor Qty	HP	RLA ea.	LRA ea.	Fan Motor Qty	FLA ea.	MCA	MOP	Weight (lbs)
72D2-S2-Z	84,000	75	34	47	1.25"FPT	2	4	25.0	132	2	3.3	70	80	900
72D2-T3-Z	84,000	75	34	47	1.25"FPT	2	4	15.0	115	2	3.3	45	50	900
72D2-T4-Z	84,000	75	34	47	1.25"FPT	2	4	7.4	47.5	2	1.6	20	25	900
96D2-S2-Z	104,400	75	34	47	1.25"FPT	2	5	30.1	175	2	3.3	80	100	1,000
96D2-T3-Z	104,400	75	34	47	1.25"FPT	2	5	20.7	115	2	3.3	60	70	1,000
96D2-T4-Z	104,400	75	34	47	1.25"FPT	2	5	8.9	63	2	1.6	25	30	1,000
100D2-S2-Z	115,200	75	34	47	1.25"FPT	2	5	27.9	129	2	3.3	70	90	1,100
120D2-T3-Z	127,200	75	34	47	1.25"FPT	2	6	20.7	156	2	3.3	60	70	1,150
120D2-T4-Z	127,200	75	34	47	1.25"FPT	2	6	11.5	70	2	1.6	30	40	1,150
140D2-T3-Z	164,400	85	40	47	1.25"FPT	2	8	32.1	195	2	3.3	80	110	1,400
140D2-T4-Z	164,400	85	40	47	1.25"FPT	2	8	16.4	95	2	1.6	45	50	1,400
160D2-T3-Z	186,000	85	40	47	1.25"FPT	2	9	33.6	225	2	3.3	90	110	1,450
160D2-T4-Z	186,000	85	40	47	1.25"FPT	2	9	17.3	114	2	1.6	45	50	1,450
180D2-T3-Z	212,400	85	40	47	1.5" FPT	2	10	42.0	239	2	3.3	110	125	1,500
180D2-T4-Z	212,400	85	40	47	1.5" FPT	2	10	19.2	125	2	1.6	45	60	1,500



PAC Chiller Dimensional and Electrical Specifications

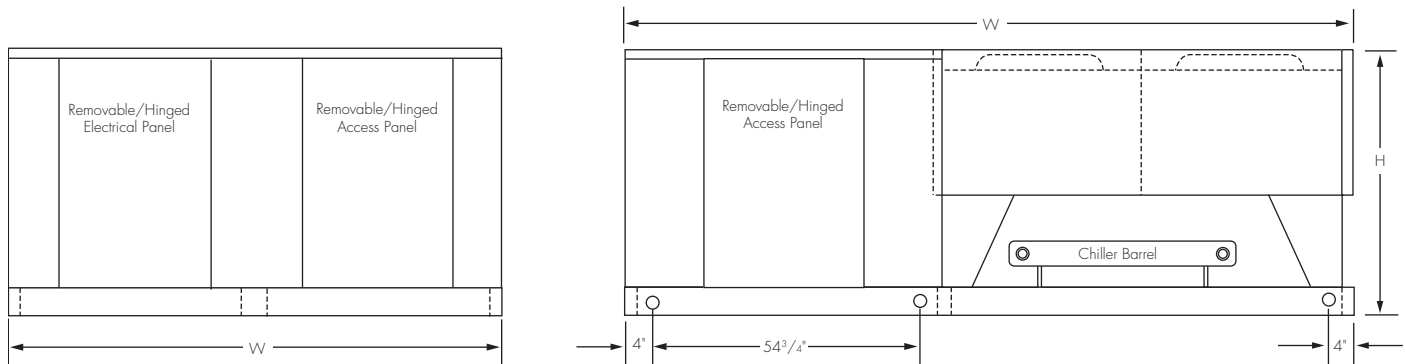
DUAL CIRCUIT PACKAGED AIR-COOLED CHILLER

Mueller Model	Btuh @ 95°F Amb 45°F LWT	Length (in)	Width (in)	Height (in)	Fluid Connection	Compressor Qty	Compressor HP	RLA ea.	LRA ea.	Fan Motor Qty	FLA ea.	MCA	MOP	Weight (lbs)
240D2-T3-Z	246,000	66	75	49	1.5" FPT	2	12	47.0	245	4	3.3	125	150	1,750
240D2-T4-Z	246,000	66	75	49	1.5" FPT	2	12	22.1	125	4	1.6	60	70	1,750



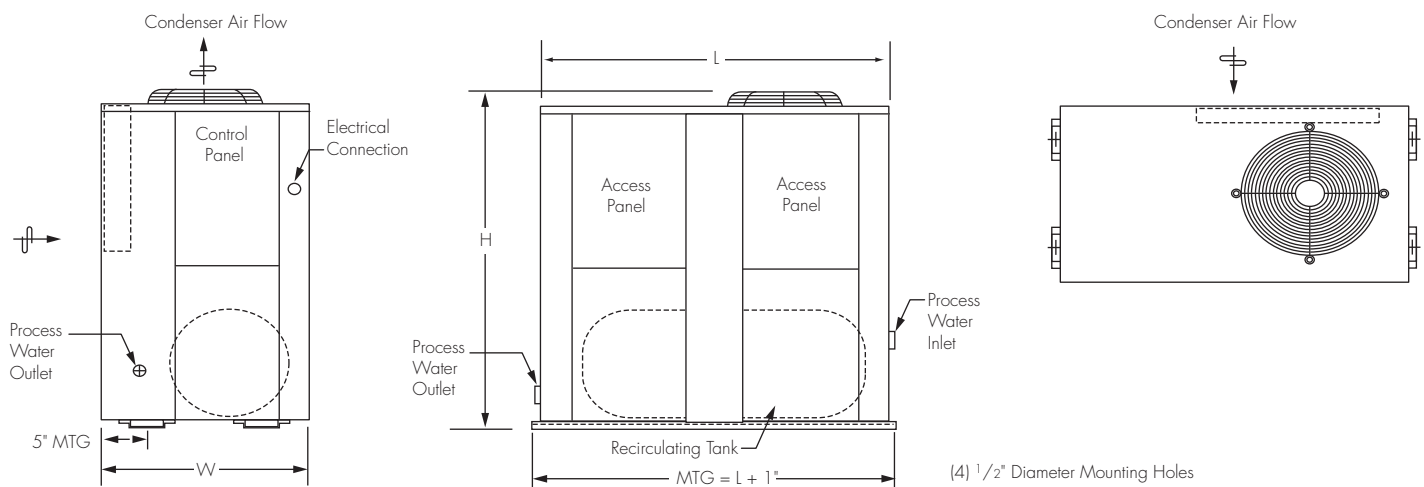
DUAL CIRCUIT PACKAGED AIR-COOLED CHILLER

Mueller Model	Btuh @ 95°F Amb 45°F LWT	Length (in)	Width (in)	Height (in)	Fluid Connection	Compressor Qty	Compressor HP	RLA ea.	LRA ea.	Fan Motor Qty	FLA ea.	MCA	MOP	Weight (lbs)
360D2-T3-Z	303,600	204	45	54.5	2.5" MPT	2	15	55.2	425	3	6.6	150	175	2,600
360D2-T4-Z	303,600	204	45	54.5	2.5" MPT	2	15	27.2	187	3	3.1	80	90	2,600
500D2-T3-Z	420,000	157	88	54.5	3" MPT	2	20	81.0	505	4	6.6	225	250	2,900
500D2-T4-Z	420,000	157	88	54.5	3" MPT	2	20	34.0	225	4	3.1	90	110	2,900
600D2-T3-Z	507,600	183	88	54.5	3" MPT	2	25	87.9	500	4	6.6	225	300	3,200
600D2-T4-Z	507,600	183	88	54.5	3" MPT	2	25	43.0	250	4	3.1	110	150	3,200



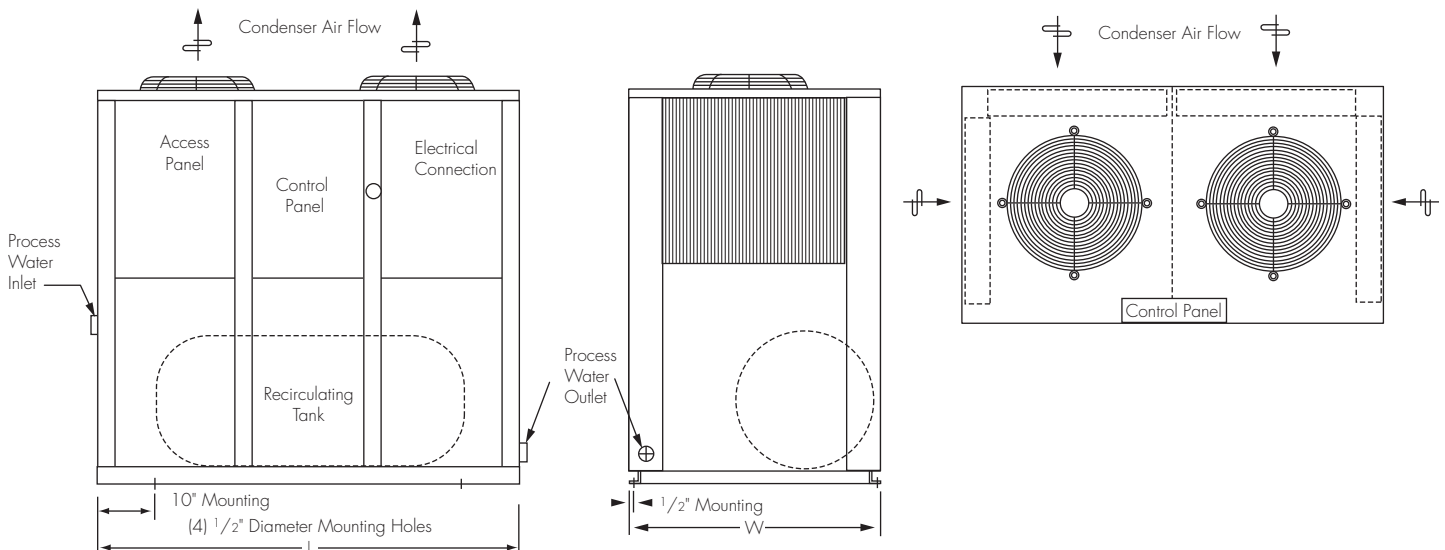
PACT Chiller Dimensional and Electrical Specifications

PACKAGED AIR-COOLED CHILLER WITH TANK																	
Mueller Model	Btuh@95°F		Length (in)	Width (in)	Height (in)	Tank Gal	Fluid Conn	Compressor		RLA ea	LRA ea	Fan Motor		Evap Pump		Weight (lbs)	
	Amb 45°F LWT							Qty	HP			Qty	Fla ea	FLA	MCA		MOP
12S2-S2-Z	13,500		36	34	60	30	3/4" FPT	1	1.3	10	42	1	3.3	5.1	25	30	550
18S2-S2-Z	19,500		36	34	60	30	3/4" FPT	1	2.0	13.6	61.0	1	3.3	5.1	30	35	600
18S2-T3-Z	19,500		36	34	60	30	3/4" FPT	1	2.0	8.6	55.0	1	3.3	5.1	20	25	600
18S2-T4-Z	19,500		36	34	60	30	3/4" FPT	1	2.0	4.3	27.0	1	1.6	1.3	15	15	600
24S2-S2-Z	24,000		36	34	60	30	1" FPT	1	2.5	15.7	73.0	1	3.3	5.1	30	40	650
24S2-T3-Z	24,000		36	34	60	30	1" FPT	1	2.5	8.2	63.0	1	3.3	5.1	20	25	650
24S2-T4-Z	24,000		36	34	60	30	1" FPT	1	2.5	4.3	31.0	1	1.6	1.3	15	15	650
30S2-S2-Z	34,000		36	34	60	30	1" FPT	1	3.5	20.7	127.0	1	3.3	5.1	35	50	700
30S2-T3-Z	34,000		36	34	60	30	1" FPT	1	3.5	13.9	88.0	1	3.3	5.1	25	35	700
30S2-T4-Z	34,000		36	34	60	30	1" FPT	1	3.5	7.1	44.0	1	1.6	1.3	15	15	700
36S2-S2-Z	40,000		56	34	66	30	1" FPT	1	4	25.0	132.0	1	3.3	5.1	40	60	800
36S2-T3-Z	40,000		56	34	66	30	1" FPT	1	4	15.0	115.0	1	3.3	5.1	30	40	800
36S2-T4-Z	40,000		56	34	66	30	1" FPT	1	4	7.4	47.5	1	1.6	1.3	15	15	800
48S2-S2-Z	48,000		56	34	66	60	1" FPT	1	5	30.1	175.0	1	3.3	5.1	50	70	850
48S2-T3-Z	48,000		56	34	66	60	1" FPT	1	5	20.7	115.0	1	3.3	5.1	35	50	850
48S2-T4-Z	48,000		56	34	66	60	1" FPT	1	5	8.9	63.0	1	1.6	1.3	15	20	850
50S2-S2-Z	53,000		56	34	66	60	1" FPT	1	5	27.9	129.0	1	3.3	5.1	45	70	875
60S2-T3-Z	59,000		56	34	66	60	1" FPT	1	6	20.7	156.0	1	3.3	5.1	35	50	900
60S2-T4-Z	59,000		56	34	66	60	1" FPT	1	6	11.5	70.0	1	1.6	1.3	20	25	900
70S2-T3-Z	76,000		85	34	66	60	1" FPT	1	8	32.1	195.0	1	3.3	6.7	60	80	1,100
70S2-T4-Z	76,000		85	34	66	60	1" FPT	1	8	16.4	95.0	1	1.6	1.7	30	40	1,100
80S2-T3-Z	86,000		85	34	66	90	1.25" FPT	1	9	33.6	225.0	1	3.3	7.9	60	80	1,150
80S2-T4-Z	86,000		85	34	66	90	1.25" FPT	1	9	17.3	114.0	1	1.6	2.0	30	40	1,150
90S2-T3-Z	100,000		85	34	66	90	1.25" FPT	1	10	42.0	239.0	2	3.3	10.0	70	110	1,250
90S2-T4-Z	100,000		85	34	66	90	1.25" FPT	1	10	19.2	125.0	2	1.6	2.8	30	45	1,250
120S2-T3-Z	112,000		85	34	66	90	1.25" FPT	1	12	47.0	245.0	2	3.3	10.0	80	110	1,300
120S2-T4-Z	112,000		85	34	66	90	1.25" FPT	1	12	22.1	125.0	2	1.6	2.8	35	50	1,300




PACT Chiller Dimensional and Electrical Specifications

PACKAGED AIR-COOLED CHILLER WITH TANK																	
Mueller Model	Btuh@95°F		Length (in)	Width (in)	Height (in)	Tank Gal	Fluid Conn	Compressor		RLA ea	LRA ea	Fan Motor		Evap Pump		Weight (lbs)	
	Amb 45°F	LWT						Qty	HP			Qty	Fla ea	FLA	MCA		MOP
72D2-S2-Z	79,000		75	34	73	60	1.25" FPT	2	4	25.0	132	2	3.3	6.7	70	90	1,100
72D2-T3-Z	79,000		75	34	73	60	1.25" FPT	2	4	15.0	115	2	3.3	6.7	50	60	1,100
72D2-T4-Z	79,000		75	34	73	60	1.25" FPT	2	4	7.4	47.5	2	1.6	1.7	25	25	1,100
96D2-S2-Z	97,000		75	34	73	90	1.25" FPT	2	5	30.1	175	2	3.3	10.0	90	110	1,200
96D2-T3-Z	97,000		75	34	73	90	1.25" FPT	2	5	20.7	115	2	3.3	10.0	70	80	1,200
96D2-T4-Z	97,000		75	34	73	90	1.25" FPT	2	5	8.9	63	2	1.6	2.8	30	30	1,200
100D2-S2-Z	109,000		75	34	73	90	1.25" FPT	2	5	27.9	129	2	3.3	10.0	80	100	1,250
120D2-T3-Z	120,000		75	34	73	90	1.25" FPT	2	6	20.7	156	2	3.3	10.0	70	80	1,250
120D2-T4-Z	120,000		75	34	73	90	1.25" FPT	2	6	11.5	70	2	1.6	2.8	35	40	1,250
140D2-T3-Z	154,000		85	40	73	90	1.5" FPT	2	8	32.1	195	2	3.3	10.5	90	110	1,300
140D2-T4-Z	154,000		85	40	73	90	1.5" FPT	2	8	16.4	95	2	1.6	3.2	45	50	1,300
160D2-T3-Z	175,000		85	40	73	135	1.5" FPT	2	9	33.6	225	2	3.3	7.9	100	110	1,400
160D2-T4-Z	175,000		85	40	73	135	1.5" FPT	2	9	17.3	114	2	1.6	2.0	45	60	1,400
180D2-T3-Z	200,000		85	40	73	135	1.5" FPT	2	10	42.0	239	2	3.3	5.6	110	125	1,450
180D2-T4-Z	200,000		85	40	73	135	1.5" FPT	2	10	19.2	125	2	1.6	2.8	50	60	1,450



ES and EST Chiller Standard Features

STANDARD FEATURES - ALL MODELS

- ETL listed 
- Remote condenser section.
- Stainless steel brazed plate evaporator with 1/2" insulation, and secured in a steel bracket.
- Shell and tube 180S to 600D models.
- Scroll compressor with crankcase heater.
- Suction accumulator.
- Water flow switch.
- Hot gas bypass capacity control.
- 24V control transformer.
- Direct drive condenser fan motor.
- Rust resistant, high CFM, aluminum condenser fan blade.
- Condenser(s): copper tube/aluminum fin.
- Compressor motor contactor.
- Condenser motor and control circuit fusing.
- Hard start kit (single-phase units only).
- Painted galvanized sheet metal cabinet.
- 1/2" insulation on all water and refrigerant lines.
- Liquid line drier, sightglass, solenoid, TEV.
- Full refrigerant charge from factory.



EST90S

Additional Features - Tank Models Only

- Stainless steel storage tank with 1/2" insulation.
- Fused stainless steel recirculation pump for tank operation with ball valve and cleanable strainer.
- Tank pressure relief valve, vent and drain connections.

ES and EST Chiller Available Options

AVAILABLE OPTIONS - ALL MODELS

ES60S



- 4-year extended compressor warranty.
- Fused stainless steel system process pump.
- Casters (factory mounted).
- 115-volt (rain tight) service outlet.
- Dual system pump with manual changeover.
- Dual system pump with auto changeover.
- Fused disconnect.
- Low flow bypass valve.
- Phase monitor.
- “Gold” finned condenser coil (coastal protection).
- Compressor fusing.
- Semi-hermetic compressor.
- Fan cycle control on PAC 90 and 120 units only (+40°F).
- Shell-and-tube chiller barrel.
- Variable fan speed control (+20°F).
- Water flow meter.
- Flooded condenser with receiver/head pressure control (-20°F).
- Heated flooded condenser with receiver/head pressure control (-20°F).
- Auto city water make-up solenoid.
- Auto city water changeover panel.
- Auto city water changeover panel with 5 micron filter.
- Special piping for de-ionized and reverse osmosis water systems.
- Factory installed evaporator heat tape freeze protection, thermostatically controlled.
- Blower type condenser fan (forward curve) 12S to 60S.

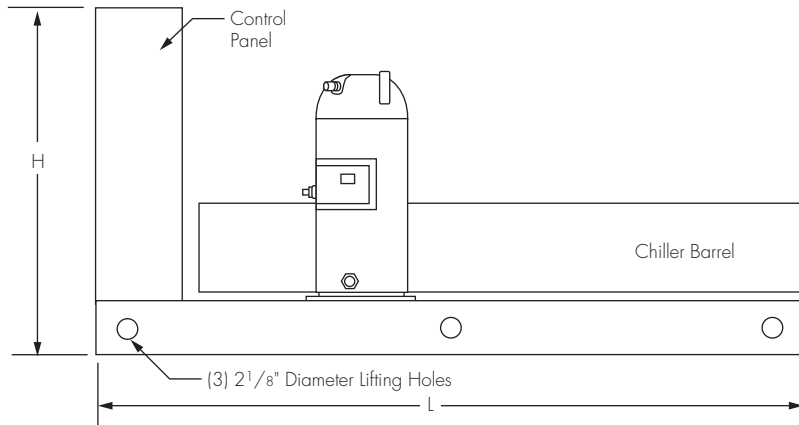
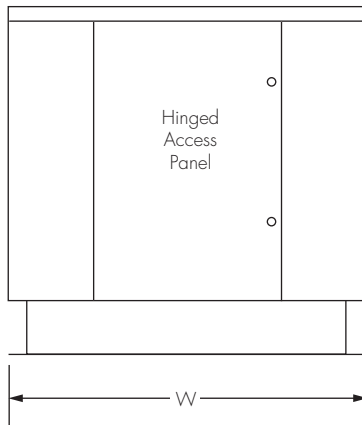
Additional Features - Tank Models Only

- Storage tank sight glass.
- Tank low liquid level indicator with dry contacts.

ES Chiller Dimensional and Electrical Specifications

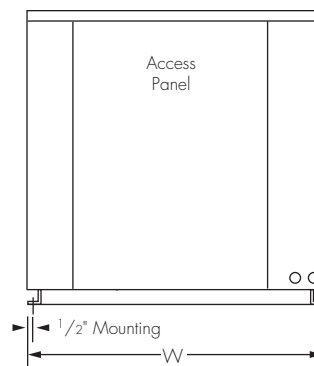
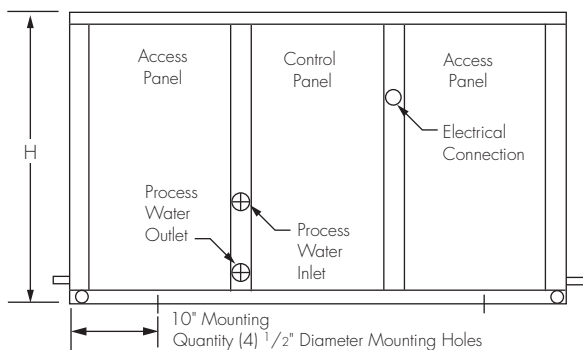
SINGLE CIRCUIT SPLIT SYSTEM AIR-COOLED CHILLERS

Btuh@95°F															
Mueller Model	Amb 45°F LWT	Length (in)	Width (in)	Height (in)	Fluid Conn	Compressor Qty	HP	RLA ea	LRA ea	Fan Motor Qty	Fla ea	MCA	MOP	Weight (lbs)	Condenser Selection
180S2-T3-Z	148,800	65	34	42	2" MPT	1	15	55.2	425.0	2	6.6	90	125	850	DVC022
180S2-T4-Z	148,800	65	34	42	2" MPT	1	15	27.2	187.0	2	3.1	45	60	850	DVC022
250S2-T3-Z	210,000	65	34	42	2.5" MPT	1	20	81.0	505.0	2	6.6	125	175	950	DVC024
250S2-T4-Z	210,000	65	34	42	2.5" MPT	1	20	34.0	225.0	2	3.1	50	80	950	DVC024
300S2-T3-Z	248,400	65	34	42	2.5" MPT	1	25	87.9	500.0	2	6.6	125	200	1000	DVC027
300S2-T4-Z	248,400	65	34	42	2.5" MPT	1	25	43.0	250.0	2	3.1	60	100	1000	DVC027



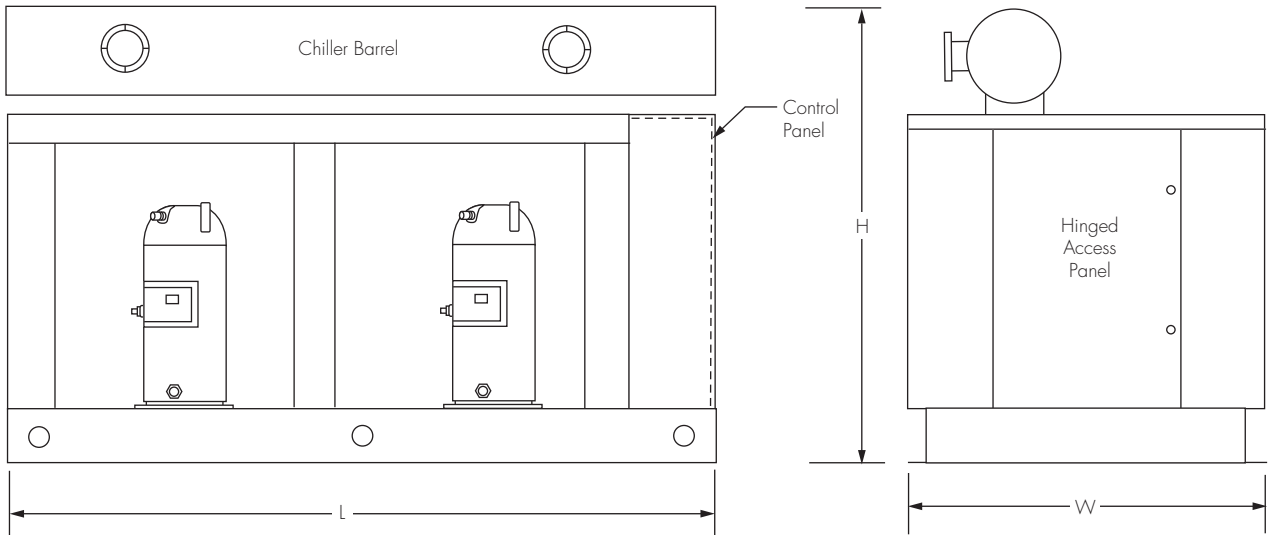
ES Chiller Dimensional and Electrical Specifications

DUAL CIRCUIT SPLIT SYSTEM AIR-COOLED CHILLERS															
Mueller Model	Btuh@95°F														
	Amb 45°F LWT	Length (in)	Width (in)	Height (in)	Fluid Conn	Compressor Qty	HP	RLA ea	LRA ea	Fan Motor Qty	Fla ea	MCA	MOP	Weight (lbs)	Condenser Selection
72D2-S2-Z	84,000	65	30	39	1.25" FPT	2	4	25.0	132	2	3.3	70	80	900	CS72D
72D2-T3-Z	84,000	65	30	39	1.25" FPT	2	4	15.0	115	2	3.3	45	50	900	CS72D
72D2-T4-Z	84,000	65	30	39	1.25" FPT	2	4	7.4	47.5	2	1.6	20	25	900	CS72D
96D2-S2-Z	104,400	65	30	39	1.25" FPT	2	5	30.1	175	2	3.3	80	100	1,000	CS96D
96D2-T3-Z	104,400	65	30	39	1.25" FPT	2	5	20.7	115	2	3.3	60	70	1,000	CS96D
96D2-T4-Z	104,400	65	30	39	1.25" FPT	2	5	8.9	63	2	1.6	25	30	1,000	CS96D
100D2-S2-Z	115,200	65	30	39	1.25" FPT	2	5	27.9	129	2	3.3	70	90	1,100	CS100D
120D2-T3-Z	127,200	65	30	39	1.25" FPT	2	6	20.7	156	2	3.3	60	70	1,100	CS120D
120D2-T4-Z	127,200	65	30	39	1.25" FPT	2	6	11.5	70	2	1.6	30	40	1,100	CS120D
140D2-T3-Z	164,400	65	30	39	1.25" FPT	2	8	32.1	195	2	3.3	80	110	1,400	CS140D
140D2-T4-Z	164,400	65	30	39	1.25" FPT	2	8	16.4	95	2	1.6	45	50	1,400	CS140D
160D2-T3-Z	186,000	65	30	39	1.25" FPT	2	9	33.6	225	2	3.3	90	110	1,450	CS160D
160D2-T4-Z	186,000	65	30	39	1.25" FPT	2	9	17.3	114	2	1.6	45	50	1,450	CS160D
180D2-T3-Z	212,400	65	30	39	1.5" FPT	2	10	42.0	239	2	3.3	110	125	1,500	CS180D
180D2-T4-Z	212,400	65	30	39	1.5" FPT	2	10	19.2	125	2	1.6	45	60	1,500	CS180D
240D2-T3-Z	246,000	65	30	39	1.5" FPT	2	12	47.0	245	4	3.3	125	150	1,750	CS240D
240D2-T4-Z	246,000	65	30	39	1.5" FPT	2	12	22.1	125	4	1.6	60	70	1,750	CS240D



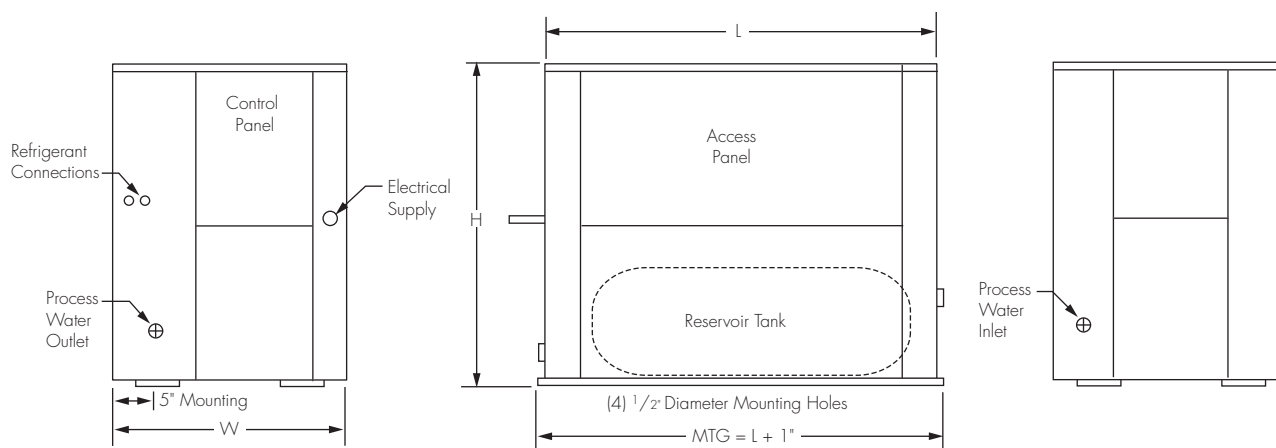
ES Chiller Dimensional and Electrical Specifications

DUAL CIRCUIT SPLIT SYSTEM AIR-COOLED CHILLERS																
Mueller Model	Btuh@95°F		Length (in)	Width (in)	Height (in)	Fluid Conn	Compressor		RLA ea	LRA ea	Fan Motor		MCA	MOP	Weight (lbs)	Condenser Selection
	Amb 45°F LWT						Qty	HP			Qty	Fla ea				
360D2-T3-Z	303,600		85	34	42	2.5" MPT	2	15	55.2	425	3	6.6	150	175	1,500	DVC041
360D2-T4-Z	303,600		85	34	42	2.5" MPT	2	15	27.2	187	3	3.1	80	90	1,500	DVC041
500D2-T3-Z	420,000		85	34	42	3" MPT	2	20	81.0	505	4	6.6	225	250	1,600	DVC049
500D2-T4-Z	420,000		85	34	42	3" MPT	2	20	34.0	225	4	3.1	90	110	1,600	DVC049
600D2-T3-Z	507,600		85	34	42	3" MPT	2	25	87.9	500	4	6.6	225	300	1,700	DVC057
600D2-T4-Z	507,600		85	34	42	3" MPT	2	25	43.0	250	4	3.1	110	150	1,700	DVC057



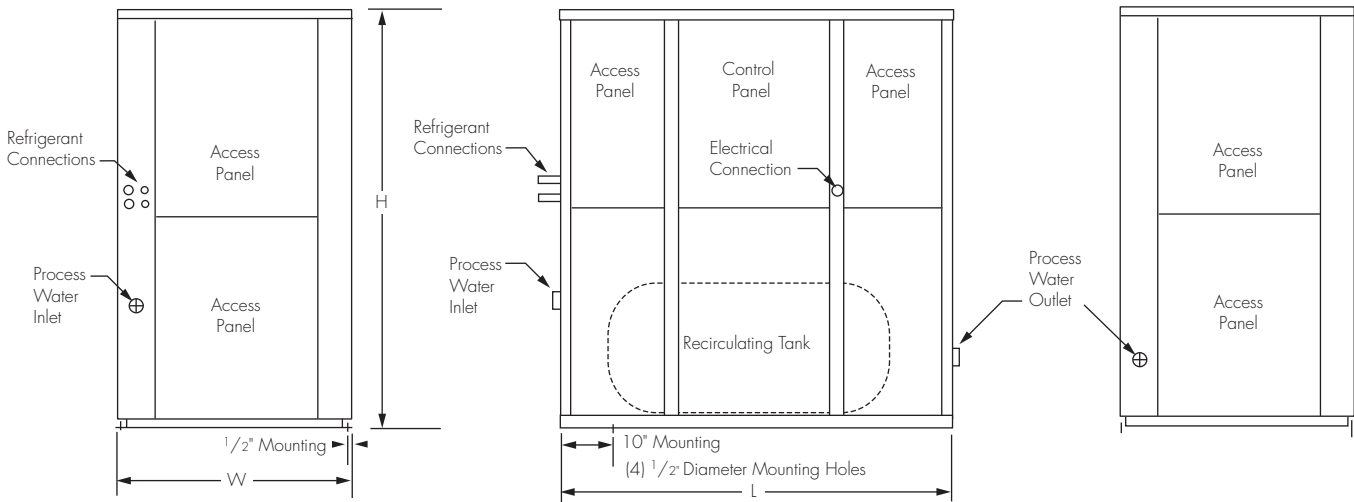
EST Chiller Dimensional and Electrical Specifications

SPLIT SYSTEM AIR-COOLED CHILLER WITH TANK																		
Mueller Model	Btuh@95°F		Length (in)	Width (in)	Height (in)	Tank Gal	Fluid Conn	Compressor Qty	HP	RLA ea	LRA ea	Fan Motor		Evap Pump		Weight (lbs)	Condenser Selection	
	Amb 45°F	LWT										Qty	Fla ea	FLA	MCA			MOP
12S2-S2-Z	13,500		36	34	53	30	3/4" FPT	1	1.3	10	42	1	3.3	5.1	25	30	550	CS12S
18S2-S2-Z	19,500		36	34	53	30	3/4" FPT	1	2.0	13.6	61.0	1	3.3	5.1	30	35	600	CS18S
18S2-T3-Z	19,500		36	34	53	30	3/4" FPT	1	2.0	8.6	55.0	1	3.3	5.1	20	25	600	CS18S
18S2-T4-Z	19,500		36	34	53	30	3/4" FPT	1	2.0	4.3	27.0	1	1.6	1.3	15	15	600	CS18S
24S2-S2-Z	24,000		36	34	53	30	1" FPT	1	2.5	15.7	73.0	1	3.3	5.1	30	40	650	CS24S
24S2-T3-Z	24,000		36	34	53	30	1" FPT	1	2.5	8.2	63.0	1	3.3	5.1	20	25	650	CS24S
24S2-T4-Z	24,000		36	34	53	30	1" FPT	1	2.5	4.3	31.0	1	1.6	1.3	15	15	650	CS24S
30S2-S2-Z	34,000		36	34	53	30	1" FPT	1	3.5	20.7	127.0	1	3.3	5.1	35	50	700	CS30S
30S2-T3-Z	34,000		36	34	53	30	1" FPT	1	3.5	13.9	88.0	1	3.3	5.1	25	35	700	CS30S
30S2-T4-Z	34,000		36	34	53	30	1" FPT	1	3.5	7.1	44.0	1	1.6	1.3	15	15	700	CS30S
36S2-S2-Z	40,000		36	34	53	30	1" FPT	1	4	25.0	132.0	1	3.3	5.1	40	60	800	CS36S
36S2-T3-Z	40,000		36	34	53	30	1" FPT	1	4	15.0	115.0	1	3.3	5.1	30	40	800	CS36S
36S2-T4-Z	40,000		36	34	53	30	1" FPT	1	4	7.4	47.5	1	1.6	1.3	15	15	800	CS36S
48S2-S2-Z	48,000		56	34	63	60	1" FPT	1	5	30.1	175.0	1	3.3	5.1	50	70	850	CS48S
48S2-T3-Z	48,000		56	34	63	60	1" FPT	1	5	20.7	115.0	1	3.3	5.1	35	50	850	CS48S
48S2-T4-Z	48,000		56	34	63	60	1" FPT	1	5	8.9	63.0	1	1.6	1.3	15	20	850	CS48S
50S2-S2-Z	53,000		56	34	63	60	1" FPT	1	5	27.9	129.0	1	3.3	5.1	45	70	875	CS50S
60S2-T3-Z	59,000		56	34	63	60	1" FPT	1	6	20.7	156.0	1	3.3	5.1	35	50	900	CS60S
60S2-T4-Z	59,000		56	34	63	60	1" FPT	1	6	11.5	70.0	1	1.6	1.3	20	25	900	CS60S
70S2-T3-Z	76,000		85	34	63	60	1" FPT	1	8	32.1	195.0	1	3.3	6.7	60	80	1,100	CS70S
70S2-T4-Z	76,000		85	34	63	60	1" FPT	1	8	16.4	95.0	1	1.6	1.7	30	40	1,100	CS70S
80S2-T3-Z	86,000		85	34	63	90	1.25" FPT	1	9	33.6	225.0	1	3.3	7.9	60	80	1,150	CS80S
80S2-T4-Z	86,000		85	34	63	90	1.25" FPT	1	9	17.3	114.0	1	1.6	2.0	30	40	1,150	CS80S
90S2-T3-Z	100,000		85	34	63	90	1.25" FPT	1	10	42.0	239.0	2	3.3	10.0	70	110	1,250	CS90S
90S2-T4-Z	100,000		85	34	63	90	1.25" FPT	1	10	19.2	125.0	2	1.6	2.8	30	45	1,250	CS90S
120S2-T3-Z	112,000		85	34	63	90	1.25" FPT	1	12	47.0	245.0	2	3.3	10.0	80	110	1,300	CS120S
120S2-T4-Z	112,000		85	34	63	90	1.25" FPT	1	12	22.1	125.0	2	1.6	2.8	35	50	1,300	CS120S



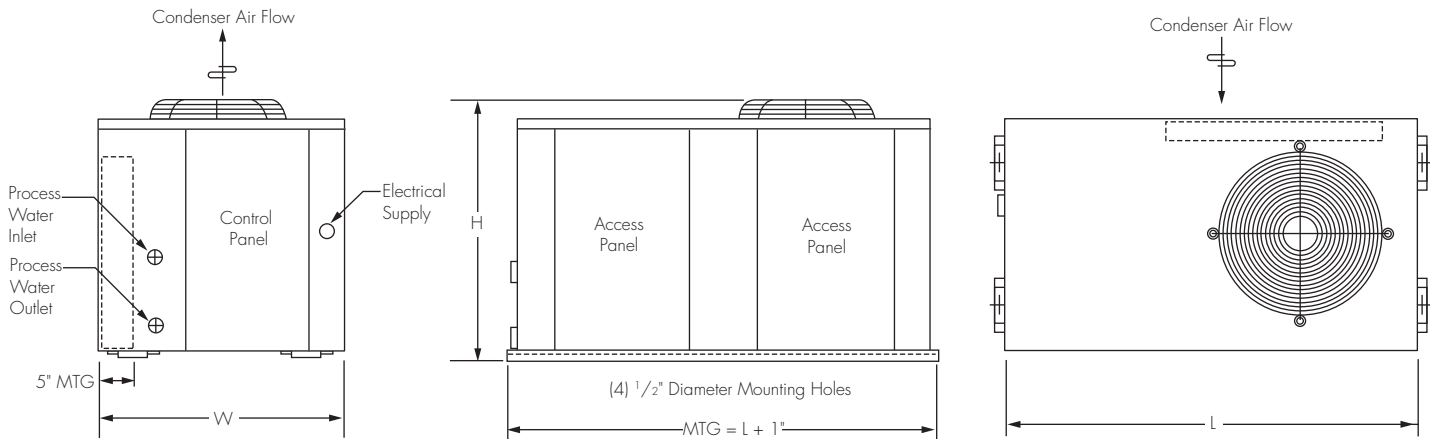
EST Chiller Dimensional and Electrical Specifications

SPLIT SYSTEM AIR-COOLED CHILLER WITH TANK																		
Mueller Model	Btuh@95°F		Length (in)	Width (in)	Height (in)	Tank Gal	Fluid Conn	Compressor Qty	HP	RLA ea	LRA ea	Fan Motor		Evap Pump		Weight (lbs)	Condenser Selection	
	Amb 45°F	LWT										Qty	Fla ea	FLA	MCA			MOP
72D2-S2-Z	79,000		85	34	63	60	1.25" FPT	2	4	25.0	132	2	3.3	6.7	70	90	1,350	CS72D
72D2-T3-Z	79,000		85	34	63	60	1.25" FPT	2	4	15.0	115	2	3.3	6.7	50	60	1,350	CS72D
72D2-T4-Z	79,000		85	34	63	60	1.25" FPT	2	4	7.4	47.5	2	1.6	1.7	25	25	1,350	CS72D
96D2-S2-Z	97,000		85	34	63	90	1.25" FPT	2	5	30.1	175	2	3.3	10.0	90	110	1,400	CS96D
96D2-T3-Z	97,000		85	34	63	90	1.25" FPT	2	5	20.7	115	2	3.3	10.0	70	80	1,400	CS96D
96D2-T4-Z	97,000		85	34	63	90	1.25" FPT	2	5	8.9	63	2	1.6	2.8	30	30	1,400	CS96D
100D2-S2-Z	109,000		85	34	63	90	1.25" FPT	2	5	27.9	129	2	3.3	10.0	80	100	1,450	CS100D
120D2-T3-Z	120,000		85	34	63	90	1.25" FPT	2	6	20.7	156	2	3.3	10.0	70	80	1,500	CS120D
120D2-T4-Z	120,000		85	34	63	90	1.25" FPT	2	6	11.5	70	2	1.6	2.8	35	40	1,500	CS120D
140D2-T3-Z	154,000		85	34	63	90	1.5" FPT	2	8	32.1	195	2	3.3	10.5	90	110	1,700	CS140D
140D2-T4-Z	154,000		85	34	63	90	1.5" FPT	2	8	16.4	95	2	1.6	3.2	45	50	1,700	CS140D
160D2-T3-Z	175,000		85	34	63	135	1.5" FPT	2	9	33.6	225	2	3.3	7.9	100	110	1,800	CS160D
160D2-T4-Z	175,000		85	34	63	135	1.5" FPT	2	9	17.3	114	2	1.6	2.0	45	60	1,800	CS160D
180D2-T3-Z	200,000		85	34	63	135	1.5" FPT	2	10	42.0	239	2	3.3	5.6	110	125	1,900	CS180D
180D2-T4-Z	200,000		85	34	63	135	1.5" FPT	2	10	19.2	125	2	1.6	2.8	50	60	1,900	CS180D
240D2-T3-Z	235,000		85	34	63	135	1.5" FPT	2	12	47.0	245	4	3.3	5.6	125	150	1,750	CS240D
240D2-T4-Z	235,000		85	34	63	135	1.5" FPT	2	12	22.1	125	4	1.6	2.8	60	70	1,750	CS240D



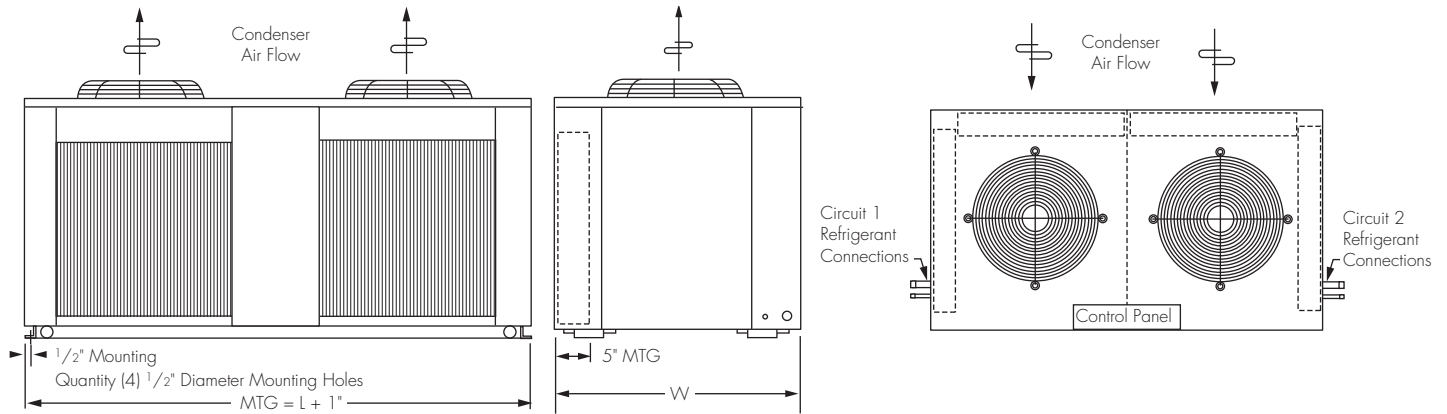
CS Dimensional Specifications

SPLIT SYSTEM CONDENSER SECTION								
Mueller Model	Length (in)	Width (in)	Height (in)	Fan Motor Quantity	Fan Motor HP	Refrigerant Connection Discharge	Refrigerant Connection Liquid	Weight (lbs)
CS12S	36	36	40	1	1/4	1/2"	3/8"	125
CS18S	36	36	40	1	1/4	1/2"	3/8"	135
CS24S	36	36	40	1	1/2	1/2"	3/8"	145
CS30S	36	36	40	1	1/2	1/2"	3/8"	200
CS36S	56	36	40	1	1/2	5/8"	1/2	225
CS48S	56	36	40	1	1/2	5/8"	1/2	245
CS50S	56	36	40	1	1/2	5/8"	1/2	255
CS60S	56	36	40	1	1/2	5/8"	1/2	255
CS70S	65	36	40	2	3/4	3/4"	5/8"	355
CS80S	65	36	40	2	3/4	3/4"	5/8"	355
CS90S	65	36	40	2	3/4	3/4"	5/8"	355
CS120S	65	36	40	2	3/4	3/4"	5/8"	400



CS Dimensional Specifications

SPLIT SYSTEM CONDENSER SECTION								
Mueller Model	Length (in)	Width (in)	Height (in)	Fan Motor Quantity	Fan Motor HP	Refrigerant Connection Discharge	Refrigerant Connection Liquid	Weight (lbs)
CS72D	75	36	47	2	1/2	5/8"	1/2"	500
CS96D	75	36	47	2	1/2	5/8"	1/2"	525
CS100D	75	36	47	2	1/2	5/8"	1/2"	650
CS120D	75	36	47	2	1/2	5/8"	1/2"	650
CS140D	85	40	47	2	3/4	3/4"	5/8"	750
CS160D	85	40	47	2	3/4	3/4"	5/8"	750
CS180D	85	40	47	2	3/4	3/4"	5/8"	750
CS240D	66	75	49	4	3/4	3/4"	5/8"	1,000



Tank Section Features and Specifications

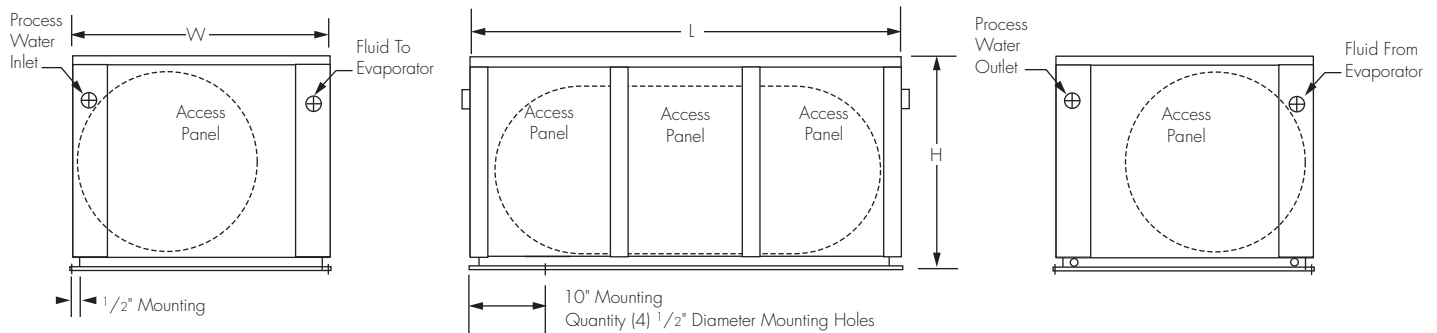
STANDARD FEATURES

- Stainless steel storage tank.
- 1/2" tank and fluid piping insulation.
- Copper fluid piping.
- Tank vent and drain connections.
- Tank pressure relief valve.
- Fused evaporator fluid recirculating stainless steel pump.
- Fluid pump discharge ball valve and cleanable "Y" strainer.
- Control box with pump terminal block.
- Painted, galvanized steel sheet metal cabinet.
- 24V LED process fluid thermometers.

AVAILABLE OPTIONS

- Fused stainless steel process pump.
- Tank fluid sight glass.
- Tank liquid level indicator with dry contacts.
- Stainless steel piping for reverse osmosis or deionized water applications.
- 1" tank and piping insulation in lieu of 1/2".
- Seal-tight electrical connections.

TANK SECTION DIMENSIONAL SPECIFICATIONS									
Mueller Model	Length (in)	Width (in)	Height (in)	Water Connection	Tank Capacity	Recirc. Pump	RLA 230/30	RLA 460/30	Weight (lbs)
TS30S	36	34	36	1" FPT	30 Gal.	1/3 HP	2.8	1.4	500
TS60S	56	34	36	1" FPT	60 Gal.	1/3 HP	2.8	1.4	525
TS90S	75	34	36	1 1/4" FPT	90 Gal.	1/2 HP	3.6	1.8	600
TS135S	85	34	36	1 1/2" FPT	135 Gal.	3/4 HP	2.6	1.3	625



Glycol Factor Tables

PROPYLENE GLYCOL CAPACITY CORRECTION FACTOR TABLE							
Propylene Glycol By Weight	15%	20%	25%	30%	35%	40%	50%
Freezing Point in °F	24°F	18°F	15°F	9°F	5°F	-5°F	-30°F
Capacity Factor Multiplier*	0.922	0.986	0.972	0.960	0.950	0.928	0.878
Pressure Drop Multiplier	1.04	1.08	1.13	1.21	1.26	1.47	2.79

ETHYLENE GLYCOL CAPACITY CORRECTION FACTOR TABLE							
Ethylene Glycol By Weight	15%	20%	25%	30%	35%	40%	50%
Freezing Point in °F	25°F	21°F	17°F	11°F	5°F	0°F	-10°F
Capacity Factor Multiplier*	0.98	.96	.95	.93	.92	.91	.89
Pressure Drop Multiplier	1.08	1.11	1.16	1.21	1.27	1.32	1.38

Note:

*At standard ARI-590 conditions: 54°F entering fluid temperature, 44°F leaving fluid temperature, 95°F ambient temperature, .0005 fouling.

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- ▲ Bakery Chillers
- ▲ Condensing Units
- ▲ Semi-Welded Evaporators
- ▲ Brazed-Plate Heat Exchangers
- ▲ Fre-Heater®
- ▲ Model "QPX" Heat Exchangers
- ▲ MaximICE®

Due to the manufacturer's policy of continuous product improvement, the manufacturer reserves the right to make changes without notice.

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