



## CAP FRAC 03 and 05 AIR COOLED CHILLER 1 & 3 PHASE



MADE IN USA 



### **Standard Features**

CAP's horizontal air discharge chillers Single Phase and three phase model "FRAC-03, and 05" are cost efficient packaged chillers, environmentally friendly R410A refrigerant. They include Bristol Compressors that are the choice in a wide range of applications that demand efficiency and reliability with low sound output, high efficiency coaxial counter balanced evaporators and copper tube aluminum fins air cooled condensers. A water pump is installed in the unit making this unit one of the most cost efficient for air conditioning applications. Many factory mounted options save expensive field labor and material, resulting in lower first costs.

### **Water Pump**

The chiller water pump is carefully selected to fit most residential and small commercial applications, it's fully installed, piped and wired to the control box and piped to chiller system to save expensive field installation costs.

### **Condenser Air Fan**

Unit is also designed to start and operate in higher ambient conditions, up to 115 degrees °F. The large surface, low speed, propeller fan for horizontal air flow fan is statically and dynamically balanced and operates at low tip speeds for low vibration and low sound levels.

### **Fan Guard:**

Fan guard is chrome-plated to meet OSHA requirements.

### **Refrigerant Circuit**

Each unit has one refrigerant circuit, with one single speed Reciprocating compressor. The refrigerant circuit includes compressor suction and discharge service ports, filter dryer, liquid line sight glass and expansion valve.

### **Power Connection**

Unit is provided with single-point electrical power connection. Field wiring connection point will be at the outside junction box.



**CAP CHILLER NOMENCLATURE**

	F	R	C	A	S	-	05	A	S	S	O	H	G
	REFR	COMPR	U TYPE	C/TYPE	C/SPEED		CAP	VOLT	C/FAN	W PUMP	TXV	OPT	OPT
<b>REFRIGERANT TYPE</b>													
R-													
F 410A													
M R-32													
R-134A													
B													
X SPECIAL													
<b>COMPRESSOR TYPE</b>													
S SCROLL													
R RECIP													
W SCREW													
<b>UNIT TYPE</b>													
C CHILLER													
H HEAT PUMP													
<b>CONDENSER TYPE</b>													
A AIR COOLED													
<b>COMPRESSOR SPEED</b>													
S SINGLE SPEED													
VARIABLE													
V SPEED													
F FOUR SPEED													
<b>UNIT CAPACITY (TON)</b>													
03 3 TON (36,000 BTUH NOMINAL)													
04 4 TON (48,000 BTUH NOMINAL)													
5 TON (60,000 BTUH													
NOMINAL)													
05													
<b>VOLTAGE</b>													
A 208/230/1/60													
B 208/230/3/60													
C 460/3/60													
D 380/3/50													
E 575/3/60													
<b>CONDENSER FAN OPTIONS</b>													
S SINGLE SPEED													
VARIABLE													
V SPEED													
F FOUR SPEED													
<b>WATER PUMP OPTIONS</b>													
S SINGLE SPEED													
VARIABLE													
V SPEED													
<b>EXPANSION VALVE OPTIONS</b>													
E ELECTRONIC EXPANSION VALVE - EEV													
T THERMOSTATIC EXPANSION VALVE - TXV													
<b>OPTIONAL ACCESSORIES</b>													
O NO OPTIONS													
EXTERNAL DOMESTIC HOT WATER HEAT													
H RECOVERY													
<b>OPTIONAL ACCESSORIES</b>													
O NO OPTIONS													
G INTERNAL GLYCOL HEAT RECOVERY													



### **Bristol Compressors**

Bristol Compressors are the choice in a wide range of applications that demand efficiency and reliability with low sound output. This time proven technology has been enhanced with continuous improvements and innovation in materials, machining, assembly techniques, and quality assurance. Bristol Compressors are durable, robust, and are used world-wide by leading manufacturers in applications across virtually every HVAC-R market segment

### **Chiller/Evaporator:**

Coaxial counter flow high efficiency evaporators are UL listed. The evaporator has a uniquely built direct expansion distributor designed specifically for chillers.

### **Refrigerant Piping:**

Refrigerant circuit includes:

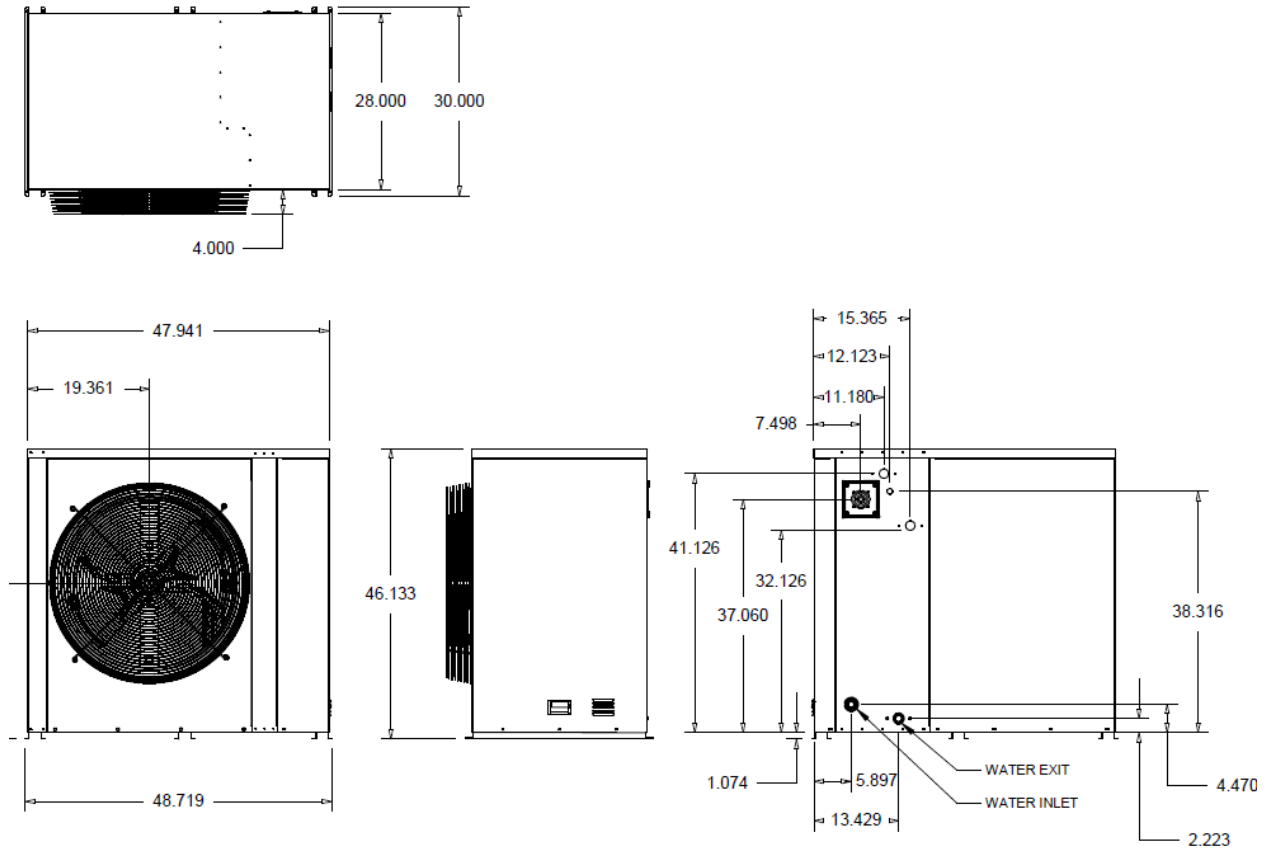
- Liquid line valve with charging connection
- Sealed Filter drier
- Suction and discharge service connections
- Sight glass
- Expansion valve

### **Control Center:**

All power, operating and safety controls are mounted in a NEMA 3R enclosure.

- Single point electrical terminal block
- Compressors Contactor
- Fan Motor Relay
- High pressure switch per circuit with manual reset
- Low pressure switch per circuit with auto reset
- Chiller digital controller

**UNIT DIMENSIONS FRAC-03 and 05**





### FRAC 03 and 05 Capacity

FRAC Size	CAPACITY		Compressor (Kw)	Number of Compressors	Number of Fans	Fans (Kw)	FL EFF		IPLV		Tons	Aguar Kw
	Tons.	Kw					EER	COP	EER	FSACS		
03	3.4	4.5	4.5	1	1	0.34	9.92		12.45			
05	5.21	6.6	3.1	1	1	0.34	9.75		12.35			

This unit is rated in accordance with AHRI-550/590 standard rating conditions; options are not included in these ratings

EER Energy Efficiency Ratio  
 COP Coefficient of Performance  
 IPLV Integrated Part Load Value

### FRAC 03 and 05 Dimensions & Weights

FRAC Size	Weight Dry		Length		Width		Height		Shipping Weight		Shipping Volume	
	LB	Kg	Inches	mm	Inches	mm	Inches	mm	lb	Kg	Cu ft	Cu mts
03	490	222.7	48.00	1219	28.146	715	48.00	1219	521	236.8	40	1.13
05	525	238.6	48.00	1219	28.146	715	48.00	1219	556	252.8	40	1.13

### FSAC 03, and 05 ELECTRICAL DATA

UNIT FSAC SIZE	COMPRESSOR DATA		FAN DATA		PUMP DATA				UNIT VOLTAGE		BREAKER SIZE	
	RLA	LRA	FLA	RPM	FLA	SIZE	RLA	LRA	FLA	RPM	FLA	
03-A	19.2	85	1.03	3450	3.8	3450	15.0	60	208/230/1/60		30	48
03-B	8.5	48	1.03	3450	3.8	3450	15.0	60	208/230/3/60		20	30
05-A	29.7	110	1.03	3450	3.8	3450	15.0	60	208/230/1/60		40	70
05-B	14.8	88	1.03	3450	3.8	3450	15.0	60	208/230/3/60		30	50
05-C	7.6	44	1.03	3450	3.8	3450	15.0	60	460/3/60		20	25

### FRAC 005 COOLING PERFORMANCE DATA

LWT °F	ENTERING AIR TEMPERATURE											
	85 ° F			95 ° F			100 ° F			110 ° F		
	TONS	MBTU	GPM	TONS	MBTU	GPM	TONS	MBTU	GPM	TONS	MBTU	GPM
35	4.92	59.07	12.0	4.78	57.41	12.0	4.65	55.81	12.0	4.52	54.24	12.0
40	5.06	60.77		4.92	59.07		4.78	57.41		4.65	55.81	
42	5.21	62.52		5.06	60.77		4.92	59.07		4.78	57.41	
45	5.36	64.32		5.21	62.52		5.06	60.77		4.92	59.07	
46	5.51	66.17		5.36	64.32		5.21	62.52		5.06	60.77	
48	5.67	68.08		5.51	66.17		5.36	64.32		5.21	62.52	
50	5.84	70.04		5.67	68.08		5.51	66.17		5.36	64.32	
55	6.00	72.06		5.84	70.04		5.67	68.08		5.51	66.17	
60	6.18	74.13		6.00	72.06		5.84	70.04		5.67	68.08	

### FRAC 003 COOLING PERFORMANCE DATA

LWT °F	ENTERING AIR TEMPERATURE											
	85 ° F			95 ° F			100 ° F			110 ° F		
	TONS	MBTU	GPM	TONS	MBTU	GPM	TONS	MBTU	GPM	TONS	MBTU	GPM
35	2.78	33.39	7.5	2.70	32.46	7.5	2.63	31.55	7.5	2.56	30.66	7.5
40	2.86	34.35		2.78	33.39		2.70	32.46		2.63	31.55	
42	2.95	35.34		2.86	34.35		2.78	33.39		2.70	32.46	
45	3.03	36.36		2.95	35.34		2.86	34.35		2.78	33.39	
46	3.12	37.41		3.03	36.36		2.95	35.34		2.86	34.35	
48	3.21	38.48		3.12	37.41		3.03	36.36		2.95	35.34	
50	3.30	39.59		3.21	38.48		3.12	37.41		3.03	36.36	
55	3.39	40.73		3.30	39.59		3.21	38.48		3.12	37.41	
60	3.49	41.91		3.39	40.73		3.30	39.59		3.21	38.48	