

**WARNING**  
**ALWAYS MEASURE START WINDING CURRENT ON START-UP!**  
**NORMALLY 4 to 11 AMPS (See Page 5 for Details)**

# SCROLL SERIES

**INSTALLATION & SERVICE INSTRUCTIONS**  
**AIR CONDITIONING/HEAT PUMP COMPRESSORS**

**Bristol**   
**compressors**

**PLEASE NOTE:** Bristol compressors are completely interchangeable with other manufacturers. However, electrical specifications and hook-ups vary. Before installing and starting this compressor, review the wiring diagrams and check for correct electrical components.

**BRISTOL COMPRESSORS, INC.**  
**BRISTOL, VIRGINIA 24202**  
**(540) 466-4121**  
**FAX (540) 645-2423**

**WARNING:** The air conditioning unit is a pressurized system and hazards exist which could result in personal injury. It is therefore recommended that removal and installation of the hermetic compressor be performed by experienced personnel only. Always follow recognized environmental and safety practices. Wear protective goggles and work

**WARNING:** Never use oxygen to pressurize a refrigeration or air conditioning system. Oxygen can explode on contact with oil and could cause personal injury. When using high pressure gas such as nitrogen or CO<sub>2</sub> for this purpose, be sure to use a regulator that can control the pressure down to 1 or 2 psig.

The following instructions are general but include major points of consideration that will ensure proper installation and protect you from possible personal injury. Please use this as a checklist, taking each item in its order before proceeding to the next. If more information is required, please call Bristol Compressors Service Department.

1. **VERIFY PROPER APPLICATION.** Verify that the compressor being replaced and the Bristol compressor have a like capacity for the refrigerant being used and that the **voltage** and **frequency** characteristics are the same. Consult your wholesaler if you have any questions about proper compressor application.

**WARNING:** To avoid electrical shock, power to the compressor should remain off during performance of Steps 2 thru 9.

2. **DETERMINE CAUSE OF INITIAL FAILURE.** Double check system and associated controls to make sure compressor replacement is necessary. In order to prevent a second failure, the cause of the original failure must be determined. Identify the cause and make the necessary repairs. This may require thorough system monitoring after the replacement is installed and running.
- A. **BEFORE REMOVING THE FAULTY COMPRESSOR:** Remove refrigerant charge using proper recovery procedures. Bristol scrolls have no process tubes. Access to the system is normally achieved at the suction or discharge service valve or the access fittings in the low and/or high side of the system. If the system does not have access fittings, they should be installed. Because of the Bristol scrolls' internal sealing ability, refrigerant must be recovered through both the high and low side to avoid trapping refrigerant. Failure to do so could result in a hazardous condition if a torch is used to disconnect lines. Call 1-800-441-9450 for the name of the nearest Dupont authorized distributor, or 1-800-631-8138 for Genetron Representative or 1-800-ASK-KLEA (ICI) for information on their refrigerant reclaim programs.
- B. Remove the electrical leads from the compressor. Note the terminal to which each wire is connected.
- C. During the next operation, the access ports should be open so that pressure does not build up in the system. If space permits, cut both the suction and discharge lines loose as close to compressor as possible with tubing cutter. If sweating them loose is necessary, use a high temperature torch and be prepared to extinguish any remaining oil or refrigerant that may possibly ignite when lines are disconnected.
- D. **To assure excessive oil does not remain in the system, measure oil in failed compressor.**

**Oil Charge Levels.** Bristol Scroll compressors are charged with oil at the factory to the level specified on the code plate. For compressors using Refrigerant 22, the oil used is Zerol 150 with 3% Syn-O-Ad. If additional oil charge is added for in-service conditions, only Zerol 150 with Syn-O-Ad should be used. Oil levels can vary with different models and manufacturers. Refer to the individual model specification or consult your wholesaler to obtain this information.

**NOTE:** If oil level is low, flush excess from system.

**CAUTION:** The compressor may contain harmful acids — be sure to handle with extreme care using proper protection equipment. After confirming oil charge level, return oil to the compressor. The suction and discharge copper tube fittings should be securely plugged or brazed closed. This is needed to prevent further contamination of the compressor and to prevent spillage from the compressor.

3. **MOUNT THE NEW COMPRESSOR.** Do not remove dust cover or rubber shipping plugs until all other connections have been completed (i.e., filters installed and all tubing changes made — see steps 4 and 5). Compressor should not be open to the atmosphere for more than 15 minutes. Be sure to use the new

mounting grommets that were shipped with the compressor. If the mounting sleeves shipped with the compressor are used, the mounting bolts will bottom out when tight. Use care not to over-compress the mounting grommets when the mounting sleeves cannot be used.

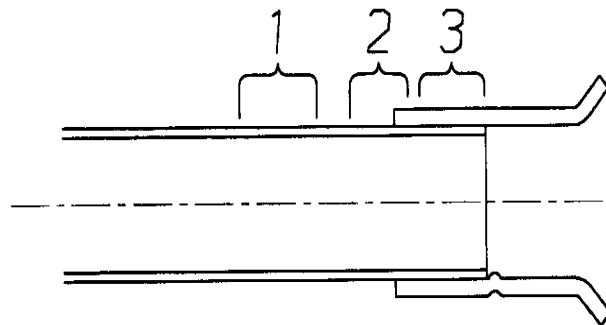
- 4. **INSTALL FILTER DRIERS.** Bristol Compressors recommends the use of adequately sized liquid and suction line driers anytime a compressor is replaced. Assure the driers are compatible with the refrigerant used in the system. If the new compressor is used to replace a compressor with a burned motor, the use of a high acid neutralizing filter drier is recommended. **For heat pumps, a suction filter drier must be installed between the accumulator and the compressor suction inlet. In addition, a bi-directional heat pump liquid line drier or factory recommended driers must be installed. NOTE: ALWAYS REMOVE OLD FILTER DRIERS.**
  
- 5. **BRAZE ON SUCTION AND DISCHARGE LINES.** Flow an inert gas, such as nitrogen or CO<sub>2</sub>, through the system at approximately 2 psig. This will reduce the possibility of oxidation inside the tubing. Braze on the suction and discharge lines.

**COPPER TUBING:** If additional copper tubing is required, use only clean, dehydrated refrigeration grade tubing with sealed ends. If a major change in tubing configuration is made, the original system's sound and vibration characteristics may be altered. Attention must be given to vibration, pressure drop, and interference.

**BRAZING ALLOYS:** **CAUTION: Do not use 95/5, 50/50 or 40/60 soft solder for brazing.** Use Sil-Fos or Phos Copper, or similar brazing alloys with high tensile strength on copper welds only. Weld steel to copper only with silver brazing alloys.

**BRAZING PROCEDURE:** To ensure properly brazed joints, Bristol Compressors recommends that the following procedure be used:

Do not bend the discharge or suction lines or force the unit piping into the compressor connections since this will increase stress and potential for failure.



*Tube Brazing*

1. Recommended brazing material: A 15% silver brazing material is recommended for copper plated steel suction and discharge fittings.
2. Clean the compressor tubing and system piping prior to assembly.
3. A double-tipped torch is recommended during brazing.
  - a. Apply heat to Area 1, moving the torch up and down and rotating around the tube in order to heat the tube evenly. It will become a dull orange color.
  - b. Move the torch to Area 2 until it reaches a dull orange color. Move the torch up and down and rotate it around tube in order to heat the tube evenly.
  - c. Add braze material to the joint while moving the torch around joint to flow braze material evenly around the circumference.

- d. After braze material flows around the joint, move torch to Area 3. This will draw the braze material into the joint. The time spent heating Area 3 should be minimal in order to keep excess braze material from entering the compressor.

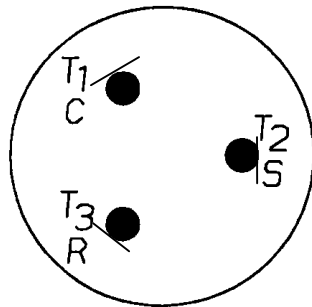
- 6. **CHECK SYSTEM FOR LEAKS.** After installation is complete, pressurize the system to 75 psig using nitrogen and a few ounces of system refrigerant. Check for leaks using a halide torch, soap bubbles or an electronic halogen leak detector. When all connections test satisfactorily, release pressure using proper recovery procedures, then proceed to next step.

**CAUTION:** Do not use the Bristol replacement compressor as an evacuation assist and never apply voltage to a compressor while it is in a vacuum as damage could result to the compressor.

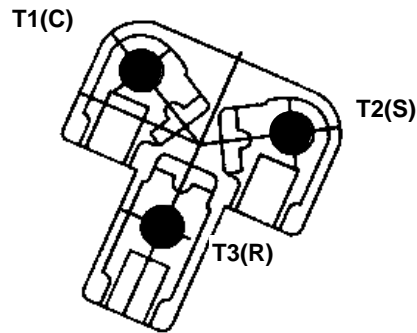
- 7. **EVACUATE THE SYSTEM.** Use a vacuum pump designed for this purpose. Vacuum must be pulled on the discharge (high side) and suction (low side) of the system. Evacuate to 200 microns or lower.
- 8. **CHECK THE ELECTRICAL SYSTEM.** While the system is evacuating, connect the electrical leads to the compressor terminals. If the ground wiring terminal is utilized, refer to page 9 or the recommended thread-cutting screw. Verify that the electrical system is wired according to the unit's manufacturer and Bristol's wiring diagram on page 8. Verify that the electrical components match those specified on the compressor electrical data sheet on page 9. It's a normal practice to replace all starting components any time a compressor is changed. Check all connections and terminals to be sure they are tight. Bristol scroll compressors do not require a crankcase heater. However, if desired, a wrap around heater can be used (see page 9). If applied, assure correct operational voltage to the heater and wire to be energized continuously.

**WARNING:** Voltage should not be applied to the compressor with the terminal cover removed as personal injury could result.

**Power Terminal Connections for Bristol Scroll**



*Compressor Power Terminal  
Diagram (Push-on)*



*Compressor Power Terminal  
(Ring) - T-Block*

- 9. **CHARGE THE SYSTEM.** When a vacuum of at least 200 microns is reached, close gauge valve, remove vacuum pump, and break the vacuum using system refrigerant vapor. Never dump liquid refrigerant into the compressor. Liquid can be used to break the vacuum if it is connected to the liquid line, not the discharge line.

Charge the system according to the manufacturer's specifications. Be sure to compensate the charge for the addition of the filter drier. The preferred superheat should be 18-20°F at the compressor on a system with a TXV, see Step 11.

**WEIGHING in the system charge to the factory specification will help point out system faults that may still exist.**

- 10. **START UP. CLAMP-ON AMMETER MUST BE IN PLACE BEFORE POWER IS APPLIED TO MONITOR START WINDING CURRENT ON START-UP!!** *See below*

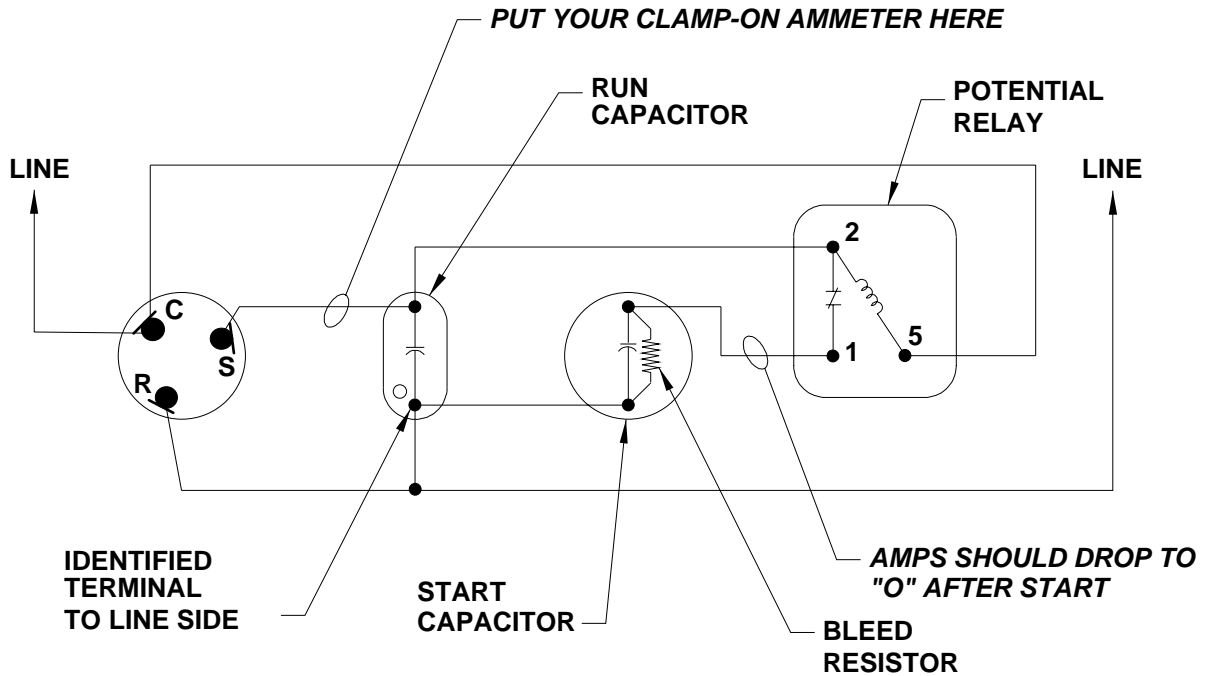
**ASSURE THESE NORMAL START WINDING CURRENTS ON START-UP**

<u>CONDITION</u>	<u>APPROX. CURRENT</u>
NORMAL START WITH RUN CAP ONLY	4 - 11 AMPS
NORMAL START WITH RUN AND START CAP	20 AMPS AND DROP TO 4-11 AFTER START

**WARNING: If above currents are exceeded for more than 5 seconds, disconnect power and correct the fault before restarting.**

**NOTE: Assure voltage to compressor does not drop below minimum allowable voltage (eg. 197 volts for 230/208-1-60) during the period the compressor is trying to start.**

**FOR CAPACITOR START/CAPACITOR RUN (CSR) MODELS**

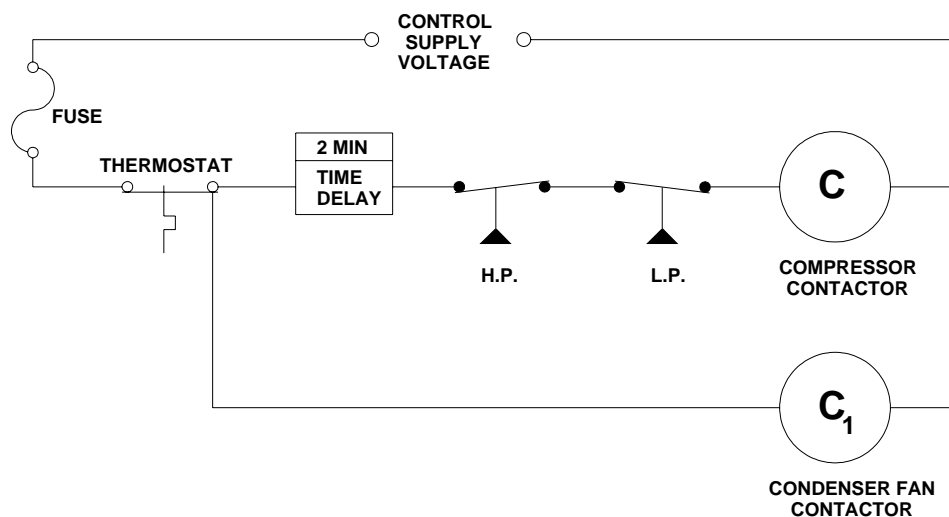


**ASSURE CORRECT ROTATION.** Bristol scroll compressors are designed to operate in one specific rotational direction. Reverse rotation can result in compressor damage and the following steps should be taken to minimize exposure to this condition.

THREE PHASE motors will start and run in either direction depending on the phase relationship of the supplied power. This requires special attention at start-up and the use of "phase monitors" to insure the compressor is phased for proper rotation. Verification of proper rotation may be accomplished by observing system pressures when the compressor is energized. Reverse rotation is indicated by a decrease in discharge pressure and an increase in suction pressure and possible noisy operation. If improper rotation is allowed to continue, the compressor internal line break overload will shut the compressor off. To correct the rotation, disconnect power and switch any two power leads at the unit contactor. **Never switch leads directly at the compressor.**

SINGLE PHASE (PSC) motors normally start and run in the correct direction and reverse rotation is generally not a concern. However, Bristol single phase scrolls may be forced into reverse direction, if subjected to a brief power interruption. At the initial interruption of power to the Bristol scroll, some of the high pressure refrigerant will flow back through the scrolls and cause the motor to rotate in the reverse direction. If, during this brief period of reverse rotation, power is re-applied, the compressor can operate under power in a reverse direction. An internal check valve is employed to minimize the possibility of this occurring. As with the three phase, reverse operation is indicated by noisy operation, a decrease in discharge pressure and an increase in suction pressure. If reverse operation continues, the compressor internal line break overload will shut the compressor off and when it resets, the compressor will start and operate in the correct direction.

To avoid reverse operation of the Bristol single phase scroll, a two minute off-cycle time delay relay (delay on break) should be installed in the control circuit. The time delay must be sensitive to momentary power interruptions. See diagram below.



11. **WORST CASE CONDITION CHECKS.**

HEAT PUMP

STEP 1: Operate system in the heating mode with outdoor fan disconnected.

STEP 2: Run system until the designed winter condition in your area is reached (may need to cover coil for this test).

STEP 3: Check suction superheat 6" from compressor inlet.

STEP 4: Superheat should not drop below 5°F (prefer no lower than 10°F).

STEP 5: Sump temperature should always be 50°F or higher above saturated suction temperature.

EXAMPLE: "R-22"

$$\begin{array}{rcl} 38 \text{ psig} & = & 16^\circ\text{F} = \text{SATURATED SUCTION} \\ + 50^\circ\text{F} & = & \text{MINIMUM TEMP. DIFFERENCE} \\ \hline & & 66^\circ\text{F} = \text{MINIMUM SUMP TEMPERATURE} \end{array}$$

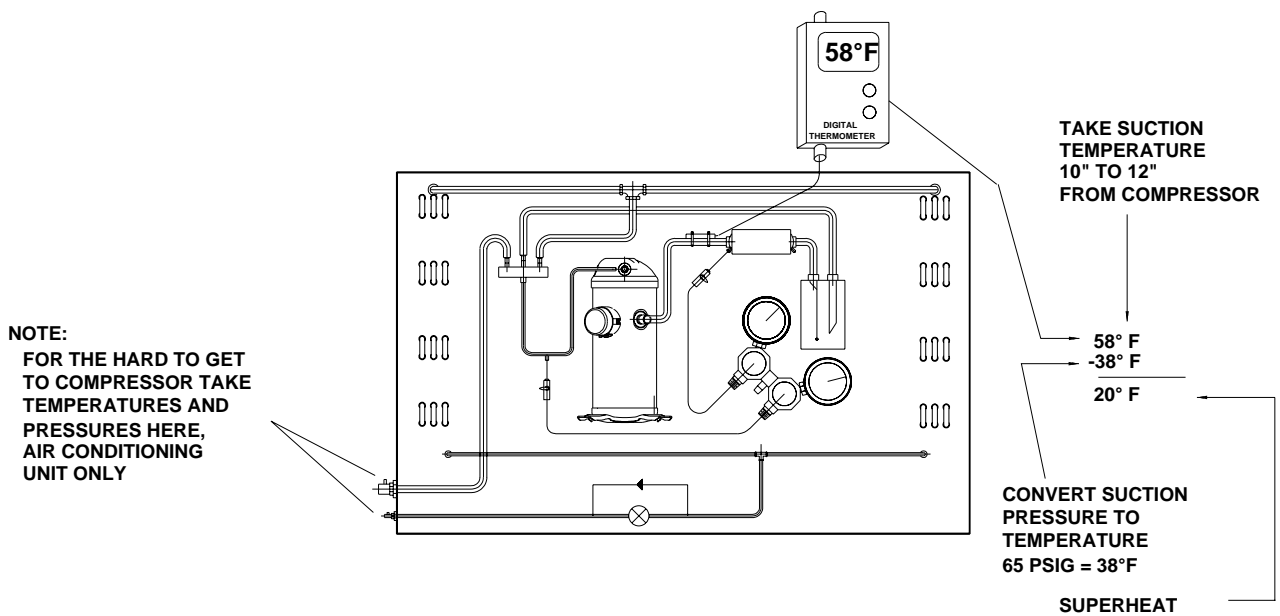
COOLING MODE (HEAT PUMP)

STEP 1: Operate system in cooling mode with indoor fan disconnected and repeat steps 3, 4 and 5.

AIR-CONDITIONING ONLY UNITS

STEP 1: Operate system in the cooling mode with indoor fan disconnected and repeat steps 3, 4 and 5.

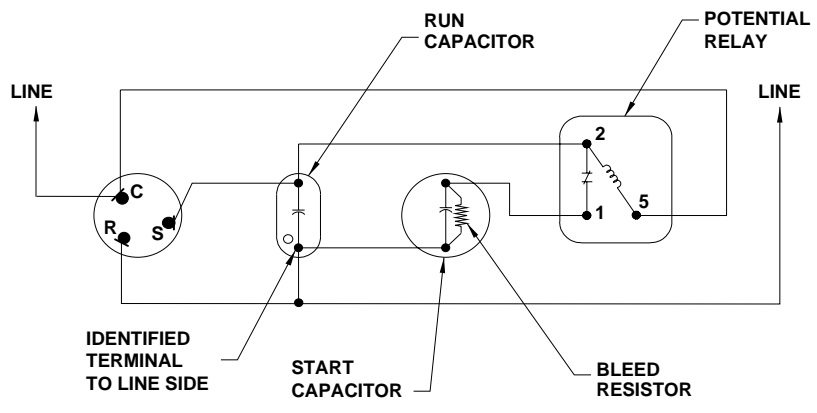
## HOW TO CHECK SUPERHEAT



**CAUTION:** Bristol scrolls can generate extremely low suction pressure, into low micron level vacuum ranges, when the suction side of the compressor is closed or severely restricted. These vacuum ranges, when achieved, may cause internal arcing, resulting in a damaged or failed compressor. Because of this characteristic, an operating Bristol scroll should never be functionally checked by closing the suction service valve to test the pump down ability.

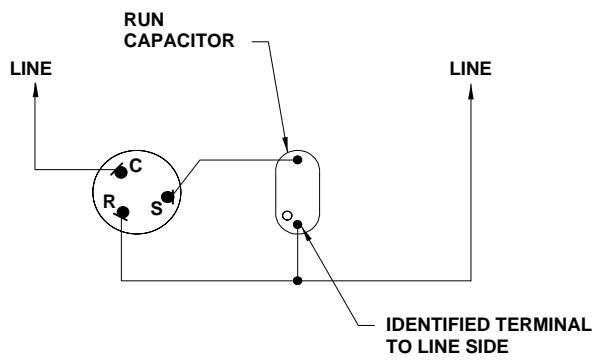
- 12. **CHECK FILTER DRIER FOR CONTAMINATION.** If internal contamination is heavy, the suction line filter drier may become clogged and ineffective. Check the pressure drop across the filter drier after approximately 8 hours running time and, if it exceeds 2 psig, replace.
- REVIEW ALL TWELVE STEPS TO MAKE SURE NOTHING WAS OVERLOOKED.**

**START ASSIST WIRING DIAGRAM (START AND RUN CAPACITORS):**



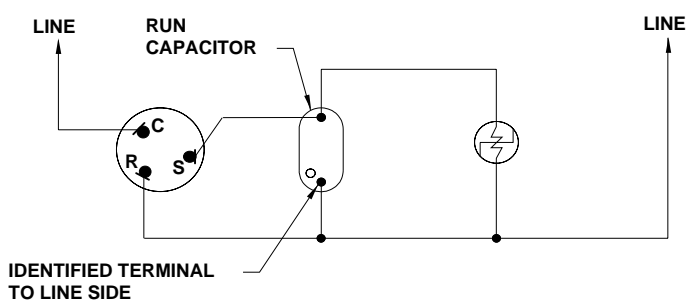
Use this diagram on systems with expansion valve and systems that don't allow pressure equalization prior to compressor start.  
 NOTE: WHEN CRANKCASE HEATER IS USED, CONNECT TO INCOMING POWER LINE SO THAT HEATER IS ENERGIZED CONTINUOUSLY.

**PERMANENT SPLIT CAPACITOR (PSC) WIRING DIAGRAM**



Use this diagram on systems that allow pressure equalization prior to compressor start.  
 NOTE: WHEN CRANKCASE HEATER IS USED, CONNECT TO INCOMING POWER LINE SO THAT HEATER IS ENERGIZED CONTINUOUSLY.

**START ASSIST WIRING DIAGRAM (PTCR AND RUN CAPACITOR):**



Use this light start assist in case of a slight low voltage condition with equalized pressures prior to compressor start.  
 NOTE: LIGHT START ASSIST (PTCR) IS REQUIRED ON SOME HIGH EFFICIENCY COMPRESSORS (SEE BOTTOM OF PAGE 9) EVEN WHEN THE SYSTEM EQUALIZES. NOT REQUIRED WHEN A START ASSIST KIT IS USED (RELAY, START CAPACITOR).

# BRISTOL INFINITY/SCROLL TECHNOLOGIES ELECTRICAL COMPONENTS FOR SINGLE PHASE MODELS

*Additional Model Specifications Available Upon Request*

MODEL		ELECTRICAL				HIGH TORQUE COMPONENTS	
Infinity	Scroll Technologies	Voltage	Hz	Run Cap	PTCR*	Start Cap.	GE Potential Relay
H20C233ABC	SCD230AC01	230/208	60	35/370	Optional	88-108/250	3ARR3*9P*
H20C303ABC	SCD300AC01	230/208	60	35/440	Optional	88-108/250	3ARR3*10S*
H20C343ABC	SCD340AC01	230/208	60	35/440	Optional	88-108/250	3ARR3*25S*
H20C373ABC	SCD370AC01	230/208	60	35/440	Optional	88-108/250	3ARR3*6S*
H20C403ABC	SCD400AC01	230/208	60	40/440	Optional	88-108/250	3ARR3*6S*
H20C423ABC	SCD420AC01	230/208	60	40/440	Optional	88-108/250	3ARR3*6S*
H20R453ABC	SRD450AC01	230/208	60	50/440	Optional	88-108/250	3ARR3*25S*
H20R483ABC	SRD480AC01	230/208	60	50/440	Optional	88-108/250	3ARR3*25S*
H20R583ABC	SRD580AC01	230/208	60	55/440	Optional	88-108/250	3ARR3*25S*
H20R603ABC	SRD600AC01	230/208	60	55/440	Optional	88-108/250	3ARR3*25S*
H21R453ABC	SRD450HC01	230/208	60	70/370	Optional	88-108/250	3ARR3*3L*
H21R483CBC	SRD480HC01	230/208	60	60/370	305C9	161-193/250	3ARR3*3L*
H21R583CBC	SRD580HC01	230/208	60	80/370	305C9	145-175/330	3ARR3*3P*
H21R603CBC	SRD600HC01	230/208	60	80/370	305C9	145-175/330	3ARR3*3P*
H20C343ABK	SCE340AC01	220/240	50	55/440	Optional	88-108/250	3ARR3*24AP*
H20C373ABK	SCE370AC01	220/240	50	55/440	Optional	88-108/250	3ARR3*24AP*
H20C403ABK	SCE400AC01	220/240	50	55/440	Optional	88-108/250	3ARR3*24AP*
H20R453ABK	SRE450AC01	220/240	50	55/440	Optional	88-108/250	3ARR3*24AP*
H20R583ABK	SRE580AC01	220/240	50	55/440	Optional	88-108/250	3ARR3*24AS*
H20R603ABK	SRE600AC01	220/240	50	55/440	Optional	88-108/250	3ARR3*24AS*

\* Source for the PTCR 305 Series

Ceramite Corporation  
1327 6th Avenue  
P. O. Box 166  
Grafton, WI 53024-0166

Phone: (414) 377-3500

\*Source for the crankcase heater

Tutco, Inc.  
500 Gould Drive  
Cookeville, TN 38506

Phone: (615) 432-4141

Part Number CH196 (240V/40 Watt)  
CH196-3 (480V/40 Watt)  
CH196-6 (575V/40 Watt)  
Fits "C" and "R" Series

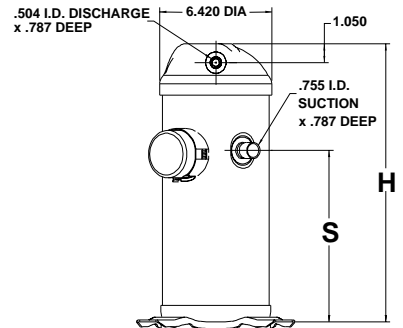
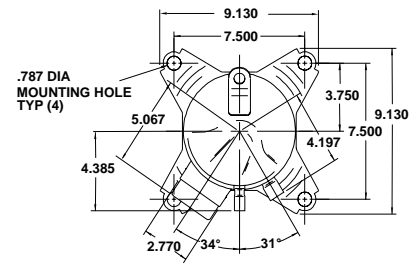
**NOTE:** All compressors with a "C" in the eighth digit of the model number require PTCR start assist if start capacitor and relay are not used. PTCR start assist is optional on models with "A" in the eighth digit. Refer to individual model specification for part number.

### GROUNDING SCREW RECOMMENDATIONS FOR "C" AND "R" SERIES HEX HEAD TAPPING SCREW-CORROSION RESISTANT STEEL

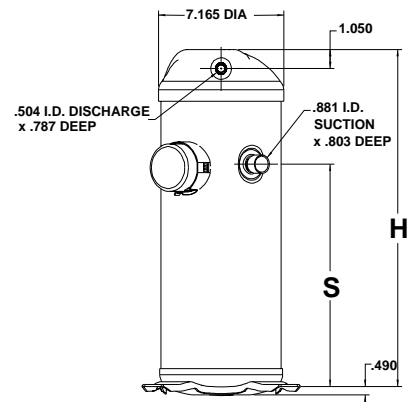
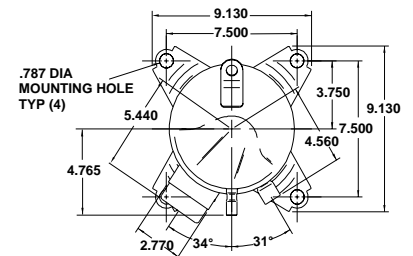
**Metric Type "1" or Type "T"**  
M5 x .8 . 12 mm

**English Type "T"**  
10-32 x ½ inch

## "C" SERIES



## "R" SERIES



# PRESSURE-TEMPERATURE RELATION CHART

PSIG	TEMPERATURE °F						
	R-22	R-502	R-12	134a	R404A	R-407C	
					Saturated Vap/Liq.	Saturated Vapor	Saturated Liquid
5*	-48	-57	-29	-22	-57	-41.0	<b>-54.0</b>
4*	-47	-55	-28	-21	-56	-39.5	<b>-52.6</b>
3*	-45	-54	-26	-19	-54	-38.1	<b>-51.2</b>
2*	-44	-52	-25	-18	-53	-36.8	<b>-49.8</b>
1*	-43	-51	-23	-16	-52	-35.5	<b>-48.5</b>
0	-41	-50	-22	-15	-50	-34.2	<b>-47.2</b>
1	-39	-47	-19	-12	-48	-31.8	<b>-44.7</b>
2	-44	-52	-25	-10	-46	-29.5	<b>-42.3</b>
3	-34	-42	-14	-8	-43	-27.2	<b>-40.1</b>
4	-32	-40	-11	-5	-41	-25.1	<b>-37.9</b>
5	-30	-38	-9	-3	-39	-23.1	<b>-35.8</b>
6	-28	-36	-7	-1	-37	-21.1	<b>-33.8</b>
7	-26	-34	-4	1	-35	-19.3	<b>-31.9</b>
8	-24	-32	-2	3	-33	-17.5	<b>-30.1</b>
9	-22	-30	0	5	-32	-15.7	<b>-28.3</b>
10	-20	-29	2	7	-30	-14.0	<b>-26.6</b>
11	-19	-27	4	8	-28	-12.4	<b>-24.9</b>
12	-17	-25	5	10	-27	-10.8	<b>-23.3</b>
13	-15	-24	7	12	-25	-9.2	<b>-21.7</b>
14	-14	-22	9	13	-23	-7.7	<b>-20.1</b>
15	-12	-20	11	15	-22	-6.3	<b>-18.6</b>
16	-11	-19	12	16	-20	-4.8	<b>-17.2</b>
17	-9	-18	14	18	-19	-3.5	<b>-15.8</b>
18	-8	-16	15	19	-18	-2.1	<b>-14.4</b>
19	-7	-15	17	21	-16	-0.8	<b>-13.0</b>
20	-5	-13	18	22	-15	0.5	<b>-11.7</b>
21	-4	-12	20	24	-14	1.8	<b>-10.4</b>
22	-3	-11	21	25	-12	3.0	<b>-9.2</b>
23	-1	-9	23	26	-11	4.2	<b>-7.9</b>
24	0	-8	24	27	-10	5.4	<b>-6.7</b>
25	1	-7	25	29	-9	6.6	<b>-5.5</b>
26	2	-6	27	30	-8	7.7	<b>-4.3</b>
27	4	-5	28	31	-6	8.9	<b>-3.2</b>
28	5	-3	29	32	-5	10.0	<b>-2.1</b>
29	6	-2	31	33	-4	11.0	<b>-1.0</b>
30	7	-1	32	35	-3	12.1	<b>0.1</b>
31	8	0	33	36	-2	-13.2	<b>1.2</b>
32	9	1	34	37	-1	14.2	<b>2.2</b>
33	10	2	35	38	0	15.2	<b>3.3</b>
34	11	3	37	39	1	16.2	<b>4.3</b>
35	12	4	38	40	2	17.2	<b>5.3</b>
36	13	5	39	41	3	18.1	<b>6.3</b>
37	14	6	40	42	4	19.1	<b>7.2</b>
38	15	7	41	43	5	20.0	<b>8.2</b>
39	16	8	42	44	6	20.9	<b>9.1</b>
40	17	9	43	45	7	21.8	<b>10.1</b>
42	19	11	45	47	8	23.6	<b>11.9</b>
44	21	13	47	49	10	25.4	<b>13.6</b>
46	23	15	49	51	12	27.1	<b>15.4</b>
48	24	16	51	52	14	28.7	<b>17.0</b>
50	26	18	53	54	16	30.3	<b>18.7</b>
52	28	20	55	56	17	31.9	<b>20.3</b>
54	29	21	57	57	19	33.4	<b>21.9</b>

PSIG	TEMPERATURE °F						
	R-22	R-502	R-12	134a	R404A	R-407C	
					Saturated Vap/Liq.	Saturated Vapor	Saturated Liquid
56	31	23	58	59	20	34.9	<b>23.4</b>
58	32	24	60	60	22	36.4	<b>24.9</b>
60	34	26	62	62	23	37.8	<b>26.3</b>
62	35	27	64	64	25	39.2	<b>27.8</b>
64	37	29	65	65	26	40.6	<b>29.2</b>
66	38	30	67	66	27	42.0	<b>30.6</b>
68	40	32	68	68	29	43.3	<b>31.9</b>
70	41	33	70	69	30	44.6	<b>33.3</b>
72	42	34	71	71	32	45.9	<b>34.6</b>
74	44	36	73	72	33	47.8	<b>36.5</b>
76	45	37	74	73	34	48.4	<b>37.1</b>
78	46	38	76	75	35	49.6	<b>38.4</b>
80	48	40	77	76	37	50.8	<b>39.6</b>
85	51	43	81	79	40	53.7	<b>42.6</b>
90	54	46	84	82	42	56.5	<b>45.4</b>
95	56	49	87	85	45	59.2	<b>48.2</b>
100	59	51	90	88	48	61.8	<b>50.9</b>
105	62	54	93	90	50	64.3	<b>53.5</b>
110	64	57	96	93	<b>52</b>	66.7	<b>56.0</b>
115	67	59	99	96	<b>55</b>	69.1	<b>58.4</b>
120	69	62	102	98	<b>57</b>	71.4	<b>60.8</b>
125	72	64	104	100	<b>59</b>	73.6	<b>63.0</b>
130	74	67	107	103	<b>62</b>	75.8	<b>65.3</b>
135	76	69	109	105	<b>64</b>	77.9	<b>67.5</b>
140	78	71	112	107	<b>66</b>	80.0	<b>69.6</b>
145	81	73	114	109	<b>68</b>	82.0	<b>71.7</b>
150	83	75	117	112	<b>70</b>	83.9	<b>73.7</b>
155	85	77	119	114	<b>72</b>	85.8	<b>75.7</b>
160	87	80	121	116	<b>74</b>	87.7	<b>77.6</b>
165	89	82	123	118	<b>76</b>	89.5	<b>79.5</b>
170	91	83	126	120	<b>78</b>	91.3	<b>81.3</b>
175	92	85	128	122	<b>80</b>	93.1	<b>83.2</b>
180	94	87	130	123	<b>82</b>	94.8	<b>84.9</b>
185	96	89	132	125	<b>83</b>	96.5	<b>86.7</b>
190	98	91	134	127	<b>85</b>	98.1	<b>88.4</b>
195	100	93	136	129	<b>87</b>	99.8	<b>90.1</b>
200	101	95	138	131	<b>88</b>	101.4	<b>91.8</b>
205	103	96	140	132	<b>90</b>	102.9	<b>93.4</b>
210	105	98	142	134	<b>92</b>	104.5	<b>95.0</b>
220	108	101	145	137	<b>95</b>	107.4	<b>98.1</b>
230	111	105	149	140	<b>98</b>	110.3	<b>101.1</b>
240	114	108	152	143	<b>101</b>	113.1	<b>104.1</b>
250	117	111	156	146	<b>104</b>	115.9	<b>106.9</b>
260	120	114	159	149	<b>107</b>	118.5	<b>109.7</b>
275	124	118	163	153	<b>111</b>	122.3	<b>113.7</b>
290	128	122	168	157	<b>115</b>	126.0	<b>117.6</b>
305	132	126	172	161	<b>118</b>	129.5	<b>121.3</b>
320	136	130	177	165	<b>122</b>	132.9	<b>124.9</b>
335	139	133	181	169	<b>126</b>	136.2	<b>128.4</b>
350	143	137	185	172	<b>129</b>	139.4	<b>131.8</b>
365	146	140	188	176	<b>132</b>	142.5	<b>135.0</b>

NOTE: FOR REFRIGERANT BLENDS (R404A, R-407C)  
 To determine superheat, use saturated vapor values (small figures)  
 To determine subcooling, use saturated liquid values (BOLD figures)

\*Inches of Mercury



