KGB/KCB074S & H Refrigerant Charge and Check - All-Aluminum Coil

WARNING-Do not exceed nameplate charge under any condition. This unit is factory charged and should require no further adjustment. If the system requires additional refrigerant, reclaim the charge, evacuate the system, and add required nameplate charge.

NOTE - System charging is not recommended below 60° F (15° C). In temperatures below 60°F (15°C), the charge must be weighed into the system.

If weighing facilities are not available, or to check the charge, use the following procedure:

IMPORTANT - Charge unit in standard cooling mode high stage ONLY.

- 1-Make sure outdoor coil is clean. Attach gauge manifolds and operate unit at full CFM in cooling mode with economizer disabled until system stabilizes (approximately five minutes). Make sure all outdoor air dampers are closed.
- 2-Compare the normal operating pressures to the pressures obtained from the gauges. Check unit components if there are significant differences.
- 3- Measure the outdoor ambient temperature and the suction pressure. Refer to the charging curve to determine a target liquid temperature.
- Note Pressures are listed for sea level applications.
- 4- Use the same thermometer to accurately measure the liquid temperature (in the outdoor section).
 - If measured liquid temperature is higher than the target liquid temperature, add refrigerant to the system.
 - If measured liquid temperature is lower than the target liquid temperature, recover some refrigerant from the system.
- 5-Add or remove charge in increments. Allow the system to stabilize each time refrigerant is added or removed.
- 6- Continue the process until measured liquid temperature agrees with the target liquid temperature. Do not go below the target liquid temperature when adjusting charge. Note that suction pressure can change as charge is adjusted.

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7- Example: At 95°F outdoor ambient and a measured suction pressure of 130psig, the target liquid temperature is 100°F. For a measured liquid temperature of 106°F, add charge in increments until measured liquid temperature agrees with the target liquid temperature.

Normal Operating Pressures Outdoor Coil Entering Air Temperature 75 105 65 115 95 Suct Disc Suct Suct Disc Disc Disc Disc Disc Suct Suct Suct (psig) 112 257 113 298 114 348 116 403 118 476 121 602 347 120 261 122 301 123 124 403 127 466 129 556 271 140 310 143 354 145 401 145 460 147 525 136 154 290 157 327 161 370 165 416 168 468 171 526



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WARNING-Do not exceed nameplate charge under any condition.	Normal Operating Pressures											
This unit is factory charged and should require no further adjustment. If the system requires additional refrigerant, <u>reclaim the charge</u> , <u>evacuate</u> <u>the system</u> , and <u>add required nameplate charge</u> . NOTE - System charging is not recommended below $60^{\circ} F$ (15° C).	Outdoor Coil Entering Air Temperature											
	65 °F		75 °F		85 °F		95 °F		105 °F		115 °F	
	Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)
to the system.	112	257	113	298	114	348	116	403	118	476	121	602
If weighing facilities are not available, or to check the charge, use the	120	261	122	301	123	347	124	403	127	466	129	556
following procedure:	136	271	140	310	143	354	145	401	145	460	147	525
IMPORTANT - Charge unit in standard cooling mode high	154	290	157	327	161	370	165	416	168	468	171	526

stage ONLY.

- 1-Make sure outdoor coil is clean. Attach gauge manifolds and operate unit at full CFM in cooling mode with economizer disabled until system stabilizes (approximately five minutes). Make sure all outdoor air dampers are closed.
- 2-Compare the normal operating pressures to the pressures obtained from the gauges. Check unit components if there are significant differences
- 3- Measure the outdoor ambient temperature and the suction pressure. Refer to the charging curve to determine a target liquid temperature. Note - Pressures are listed for sea level applications.
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- 5-Add or remove charge in increments. Allow the system to stabilize each time refrigerant is added or removed.
- 6- Continue the process until measured liquid temperature agrees with the target liquid temperature. Do not go below the target liquid temperature when adjusting charge. Note that suction pressure can change as charge is adjusted.
- 7- Example: At 95°F outdoor ambient and a measured suction pressure of 130psig, the target liquid temperature is 100°F. For a measured liquid temperature of 106°F, add charge in increments until measured liquid temperature agrees with the target liquid temperature.

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