

HFC-410A CHARGING INFORMATION

FOR COMPLETE CHARGING DETAILS, REFER TO THE OUTDOOR UNIT INSTALLATION INSTRUCTION.

Maintenance checks using the Normal Operating Pressures table

Table 1 may be used to help perform maintenance checks. This table is not a procedure for charging the system and any minor variations in the pressures may be expected due to differences in installations. However, significant deviations could mean that the system is not properly charged or that a problem exists with some component in the system.

Matchups/Charge Levels and Line Set Lengths

Table 2 lists all the Lennox recommended indoor unit matchups along with the charge levels for the various sizes of outdoor units. **Charge levels on the unit nameplate are based on installations with 15' (4.6m) line sets; be sure to consider any difference in line set length (see Installation Instructions for more details).**

Charge Using the Weigh-in Method

If the system is void of refrigerant, locate and repair any leaks and then weigh in the refrigerant charge into the unit. For charge adjustments, be sure to consider line set length differences and, referring to table 2, adjust for the matchup difference.

- 1 - Weigh in the unit nameplate charge, adjusting for matchup and line set length differences. If weighing facilities are not available use the Subcooling method.
- 2 - Conduct leak check; evacuate as previously outlined.
- 3 - Recover the refrigerant from the unit.

Charge Using the Subcooling Method

Cooling Mode—When the outdoor ambient temperature is 60°F and above, use the cooling mode to adjust the charge using the subcooling method. Target subcooling values in table 2 are based on 70 to 80°F indoor return air temperature.

Heating Mode—When the outdoor ambient temperature is below 60°F, use the heating mode to adjust the charge using the subcooling charge levels (table). Target subcooling values in table 2 are based on 65-75°F indoor return air temperature.

Table 1 - Normal Operating Pressures (Liquid ±10 and Suction ±5 psig)
The values in this table are “most-popular-match-up” pressures; indoor match up, indoor air quantity, and indoor load will cause the pressures to vary.

Model	-036	-042	-048	-060
°F*	Liquid Line Pressure/Vapor Line Pressure			
COOLING	LIQ./VAP.	LIQ./VAP.	LIQ./VAP.	LIQ./VAP.
65	264 / 133	246 / 136	245 / 135	259 / 131
70	284 / 134	265 / 137	265 / 136	272 / 132
75	305 / 134	286 / 139	285 / 137	294 / 133
80	327 / 136	308 / 140	307 / 138	315 / 134
85	350 / 136	330 / 141	330 / 139	343 / 135
90	372 / 137	355 / 143	354 / 140	356 / 136
95	399 / 138	379 / 144	381 / 142	388 / 137
100	425 / 138	406 / 145	409 / 142	416 / 138
105	452 / 139	432 / 145	438 / 143	443 / 139
110	480 / 139	461 / 146	469 / 144	474 / 140
115	510 / 140	492 / 147	505 / 147	494 / 142
HEATING	LIQ./VAP.	LIQ./VAP.	LIQ./VAP.	LIQ./VAP.
60	353 / 128	338 / 123	316 / 95	339 / 113
50	335 / 110	323 / 105	309 / 92	326 / 101
40	301 / 98	282 / 65	299 / 84	293 / 88
30	309 / 87	279 / 60	286 / 71	287 / 76
20	289 / 78	265 / 47	274 / 59	275 / 63
*Temperature of the air entering the outdoor coil.				

Table 2 - Indoor Units Matchups and Subcooling Charge Levels

INDOOR MATCHUPS	Target Subcooling		*Add charge	INDOOR MATCHUPS	Target Subcooling		*Add charge	INDOOR MATCHUPS	Target Subcooling		*Add charge
	Heating (+5°F)	Cooling (+1°F)			Heating (+5°F)	Cooling (+1°F)			Heating (+5°F)	Cooling (+1°F)	
TPA036S4N4			lb oz	CBX32MV-036	8	6	0 0	CH33-50/60C	9	7	1 6
CBX25UH-036	19	15	0 0	CBX32MV-048	6	13	1 4	CH33-60D	7	6	0 11
CBX27UH-036	8	13	1 2	CBX40UHV-036	8	6	0 0	CR33-50/60C	7	6	0 12
CBX32M-036	8	13	1 2	CBX40UHV-042	6	20	2 3	CR33-60D	7	6	0 12
CBX32MV-036	8	13	1 2	CBX40UHV-048	6	20	2 3	CX34-49C	6	7	0 0
CBX40UHV-030	8	13	1 2	CX34-43C	7	12	1 2	CX34-60D	9	5	0 0
CBX40UHV-036	8	13	1 2	CX34-50/60C	8	11	0 9	TPA060S4N4			lb oz
CH33-36C	8	12	0 5	TPA048S4N4			lb oz	CBX25UH-060	6	8	2 5
CH33-42B	8	7	0 0	CBX25UH-048	6	7	0 0	CBX27UH-060	6	8	2 1
CH33-31B	8	7	0 0	CBX27UH-048	10	8	1 5	CBX32MV-060	6	7	0 15
CR33-48B/C	9	6	0 8	CBX27UH-060	8	10	1 9	CBX32MV-068	8	11	2 2
CX34-38A/B	8	16	1 2	CBX32M-048	10	8	1 5	CBX40UHV-060	6	7	0 15
CX34-44/48B/C	8	19	1 6	CBX32M-060	9	6	0 9	CH33-62D	7	11	2 1
TPA042S4N4			lb oz	CBX32MV-048	10	8	1 5	CR33-60D	10	6	1 6
CBX25UH-042	7	5	1 9	CBX32MV-060	9	6	0 9	CX34-62C	7	8	1 6
CBX27UH-042	6	13	1 4	CBX40UHV-042	10	8	1 5	CX34-62D	7	7	0 0
CBX27UH-048	6	13	1 4	CBX40UHV-048	10	8	1 5	*Amount of charge required in additional to charge shown on unit nameplate. (Remember to consider line set length difference.)			
CBX32M-048	6	13	1 4	CBX40UHV-060	9	8	1 3				

