HFC-410A CHARGING INFORMATION – FOR COMPLETE CHARGING PROCEDURES, REFER TO THE APPLICABLE INSTALLATION OR SERVICE MANUAL

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. Minor variations in the pressures can 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.

Matched System Components/Charge Levels/Line Set Length/Liquid Line Sizing

Table 2 lists all the Lennox recommended indoor unit matches 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; consider line set length and liquid line sizing differences when calculating charge adjustments. For each additional foot of 3/8" liquid line set, add 0.6 ounces or for 1/2" liquid lines, add 1.0 ounce of additional charge.

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

Charge Using the Subcooling Method

Cooling Mode—When the outdoor ambient temperature is 60°F (15°C) 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 (21-27°C) indoor return air temperature.

Heating Mode—When the outdoor ambient temperature is below 60°F (15°C), 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 (18-24°C) indoor return air temperature.

Table 1 - Normal Operating Pressures (Liquid ±10 and Suction ±5 psig)

SL18XP1	-024	-030	-036	-042	-048	-060
°F (°C)*	Liquid Line Pressure / Vapor Line Pressure					
Heating Operation						
20 (-7)	284 / 64	282 / 78	290 / 65	287 / 61	300 / 61	292 / 60
30 (-1)	295 / 78	307 / 77	302 / 77	300 / 76	318 / 76	316 / 76
40 (4)	310 / 95	322 / 91	320 / 91	315 / 91	335 / 91	332 / 90
50 (10)	325 / 110	337 / 109	334 / 108	328 / 109	354 / 108	348 / 106
Cooling Operation						
65 (18)	225 / 142	233 / 138	230 / 135	232 / 139	240 / 130	240 / 129
70 (21)	240 / 145	250 / 140	250 / 135	249 / 141	259 / 132	260 / 132
75 (24)	260 / 145	270 / 140	270 / 138	267 / 142	278 / 135	272 / 134
80 (27)	280 / 147	290 / 142	290 / 140	288 / 144	300 / 136	296 / 137
85 (29)	300 / 148	312 / 143	312 / 142	310 / 145	322 / 138	318 / 138
90 (32)	325 / 148	335 / 145	334 / 143	333 / 147	346 / 139	341 / 140
95 (35)	347 / 150	360 / 146	358 / 145	360 / 147	372 / 140	367 / 141
100 (38)	370 / 150	384 / 147	381 / 147	382 / 148	395 / 142	392 / 142
105 (41)	400 / 152	410 / 148	410 / 147	411 / 148	422 / 144	420 / 144
110 (43)	425 / 152	438 / 150	440 / 146	439 / 149	450 / 145	448 / 145
115 (46)	452 / 153	468 / 151	472 / 146	469 / 150	490 / 145	480 / 146

Table 2 - Indoor Unit Matchups and Subcooling Charge Levels

INDOOR MATCHUP HEAT PUMP	Target Subcooling Heating (±5ºF)	Target Subcooling Cooling (±1ºF)	*Add charge lb	*Add charge oz
SL18XP1-024			lb	oz
CBX27UH-024	14	4	0	8
CBX27UH-030	15	8	0	5
CBX32M-030	14	4	0	8
CBX32MV-024/030	14	4	0	8
CBX32M-036	15	8	0	5
CBX32MV-036	15	8	0	5
CBX40UHV-024	15	8	0	5
CBX40UHV-030	15	8	0	5
CBX40UHV-036	15	8	0	5
CH33-44/48B	14	11	0	14
CR33-48	21	4	0	0
C33-38	11	7	1	12
CX34-38	11	7	1	12
SL18XP1-030			lb	oz
CBX27UH-030	11	5	0	0
CBX27UH-036	11	5	0	0
CBX32M-030	12	7	1	9
CBX32M-036	11	5	0	0
CBX32MV-024/030	12	7	1	9
CBX32MV-036	11	5	0	0
CBX40UHV-024	11	5	0	0
CBX40UHV-030	11	5	0	0
CBX40UHV-036	11	5	0	0
CH33-44/48B	11	9	0	10
CR33-48	22	4	0	4
C33 / CX34-38	10	7	0	4
C33 / CX34-43	11	11	2	0
C33 / CX34-50/60	11	11	2	0
SL18XP1-036			lb	oz
CBX27UH-036	13	6	0	12
CBX27UH-042	10	9	1	8
CBX32M-036	13	6	0	12
CBX32M-042	13	6	0	12
CBX32M-048	10	9	1	8
CBX32MV-036	13	6	0	12
CBX32MV-048	10	9	1	8
CBX40UHV-036	13	6	0	12
CBX40UHV-042	10	9	1	8
CBX40UHV-048	10	9	1	8
CH33-43B	12	13	3	5
CH33-49C	12	12	2	3
CH33-50/60C	12	12	2	3
CR33-50/60	8	5	0	0
C33 / CX34-43	10	6	0	5
C33 / CX34-49	10	9	2	0
C33 / CX34-50/60	10	6	0	5
SL18XP1-042			lb	oz
CBX27UH-042	9	7	2	7
CBX27UH-048	9	7	2	7
CBX32M-048	9	7	2	7
CBX32MV-048	9	7	2	7
CBX40UHV-042	9	7	2	7
CBX40UHV-048	9	7	2	7
CH33-43B	8	7	0	0
CH33-49C	9	9	2	5
CH33-50/60C	9	9	2	5
CR33-50/60	10	7	1	7
CR33-60D	10	7	1	7
C33 / CX34-43	14	7	1	3
C33 / CX34-49	11	11	3	8
C33 / CX34-50/60	14	7	1	3
SL18XP1-048			lb	oz
CBX27UH-048	12	6	0	0
CBX27UH-060	12	10	2	11
CBX32M-048	12	6	0	0
CBX32M-060	11	9	1	5
CBX32MV-048	12	6	0	0
CBX32MV-060	11	9	1	5
CBX40UHV-048	12	6	0	0
CBX40UHV-060	11	9	1	5
CH33-49C	10	8	0	15
CH33-50/60C	10	8	0	15
CH33-62D	13	8	1	15
CR33-50/60C	13	7	0	15
CR33-60D	13	7	0	15
C33 / CX34-62C	10	12	2	6
C33 / CX34-62D	10	10	2	12
SL18XP1-060			lb	oz
CBX27UH-060	10	6	2	11
CBX32M-060	9	6	1	2
CBX32MV-060	9	6	1	2
CBX32MV-068	10	7	2	5
CBX40UHV-060	9	6	1	2
CH33-49C	11	8	2	5
CH33-50/60C	11	8	2	5
CH33-62D	13	9	2	8
CR33-50/60C	13	8	0	0
CR33-60D	13	8	0	0
C33 / CX34-62C	8	6	3	6
C33 / CX34-62D	9	8	2	14

***Amount of charge required in additional to charge shown on unit nameplate. (Remember to consider line set length difference.)**