

14 SEER HEAT PUMP CHARGING PROCEDURE

1. CHARGE THE SYSTEM BY WEIGHT, IF OUTDOOR TEMPERATURE IS BELOW 65°F:

OUTDOOR UNITS ARE FACTORY CHARGED WITH R410A FOR 15 FT. OF LINE SET. ADD OR REMOVE 0.6 OZ. FOR EVERY FOOT OF LINE SET DIFFERENT THAN 15 FT. FINAL CHARGE ADJUSTMENT MUST BE MADE PER ITEM (2) BELOW, ONCE THE OUTDOOR TEMPERATURE RISE ABOVE 65 °F.

2. IF OUTDOOR TEMPERATURE IS ABOVE 65°F, ADJUST CHARGE AS FOLLOWS:

- A. CHECK FOR PROPER AIR FLOW AND RUN THE SYSTEM FOR 20 MINUTES FOR STABILIZATION
- B. USE SUPERHEAT FOR ORIFICE COILS (SEE TABLE BELOW)
- C. USE SUBCOOLING FOR TXV COILS (SEE TABLE BELOW), PROVIDED THAT SUPERHEAT IS WITHIN 8-16 °F AT OUTDOOR UNIT AND THE REFERENCED PRESSURES BELOW ARE WITHIN ± 3 PSI FOR LOW SIDE AND ± 10 PSI FOR HIGH SIDE
- D. CONTACT TECHNICAL SERVICE, IF MEASURED VALUES ARE OUTSIDE THE RANGE OF THE LISTED DATA

MODELS	18	24	30	36	42	48	60			
TABLE 1 - SUBCOOLING METHOD (TXV SYSTEM) ± 1 °F										
OUTDOOR TEMP. °F	<i>LIQUID LINE SATURATION TEMPERATURE MINUS LIQUID LINE TEMPERATURE</i>									
65	5	9	6	8	6	7	6			
75	5	8	6	8	6	7	6			
85	4	7	5	7	5	7	5			
95	4	7	5	7	5	6	5			
105	4	6	5	6	4	6	5			
115	4	6	4	6	4	5	4			
TABLE 2 - APPROACH METHOD (TXV SYSTEM) ± 1 °F - FOR REFERENCE ONLY										
<i>LIQUID LINE TEMPERATURE MINUS OUTDOOR AMBIENT TEMPERATURE</i>										
TEMP. °F	3	4	6	5	5	6	7			
TABLE 3 - OPERATING PRESSURES (FOR REFERENCE)										
OUTDOOR TEMP. °F	HIGH / LOW PRESSURE (PSI) - COOLING									
65	226/145	234/142	238/140	233/137	227/134	230/129	231/126			
75	262/147	271/145	273/143	270/140	261/137	267/132	262/131			
85	303/150	315/146	319/145	312/142	305/140	310/136	308/135			
95	348/152	362/149	369/147	358/145	352/142	356/139	354/138			
105	400/154	415/151	419/150	411/146	403/145	409/142	404/140			
115	455/157	473/152	475/151	469/150	462/147	466/144	461/143			
HIGH / LOW PRESSURE (PSI) - HEATING										
50	324/119	319/113	315/108	337/107	376/110	357/96	371/105			
40	309/101	308/95	301/92	319/89	354/95	349/85	339/82			
30	292/84	294/80	287/76	306/75	342/78	340/75	324/68			
20	277/69	281/65	276/53	291/63	320/65	322/63	311/62			
TABLE 4 - SUPERHEAT METHOD (ORIFICE SYSTEM) ± 1 °F										
<i>SUCTION LINE SATURATION TEMPERATURE MINUS SUCTION LINE TEMPERATURE</i>										
OUTDOOR TEMP (°F)	60	65	70	75	80	85	90	95	100	105
SUPERHEAT (°F)	38	35	30	26	22	18	12	8	5	0

EXPANSION DEVICE	H4TXV01	H4TXV02	H4TXV03
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ALL MEASUREMENTS ARE AT THE SERVICE VALVES AND ARE BASED ON 80db/67wb INDOOR TEMPERATURE.

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