

# Target Superheat

Fixed orifice indoor coils. Measured at the insulated vapor line entering the outdoor unit.

Condenser entering air dry bulb °F	Evaporator entering air wet bulb °F															
	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80
40	11	14	17	20	25	29	33	37	40	43	45	47	50	53	56	—
45	11	13	16	19	23	27	31	34	37	40	43	45	47	50	53	57
50	10	13	15	18	22	25	29	32	35	38	40	42	45	47	50	54
55	9	12	14	17	20	23	26	29	32	35	37	40	42	45	48	51
60	7	10	12	15	18	21	24	27	30	33	35	38	40	43	46	49
65	4	6	10	13	16	19	21	24	27	30	33	36	38	41	44	47
70	—	3	6	10	13	16	19	21	24	27	30	33	36	39	42	45
75	—	—	1	6	9	12	15	18	21	24	28	31	34	37	40	43
80	—	—	—	1	5	8	12	15	18	21	25	28	31	35	38	41
85	—	—	—	—	0	6	8	13	15	19	22	26	30	33	37	40
90	—	—	—	—	—	1	5	10	13	16	20	24	27	31	35	39
95	—	—	—	—	—	—	2	6	10	14	18	22	25	29	34	37
100	—	—	—	—	—	—	—	3	8	12	15	20	23	28	32	36
105	—	—	—	—	—	—	—	—	5	9	13	17	22	26	30	35
110	—	—	—	—	—	—	—	—	2	6	11	15	20	24	29	34
115	—	—	—	—	—	—	—	—	—	4	8	14	18	23	28	33

Use caution at conditions under five degrees superheat, compressor flooding may occur. Consider weighing in correct charge.

# Evaporator Leaving Air Temperature

Evaporator entering air dry bulb °F	Evaporator entering air wet bulb °F																									
	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
68	47	48	50	50	51	51	52	52	53	54	54	55	56	57	—	—	—	—	—	—	—	—	—	—	—	—
70	49	50	51	51	52	52	53	53	54	55	55	56	57	58	59	60	—	—	—	—	—	—	—	—	—	—
72	50	51	51	52	53	53	54	55	55	56	57	57	58	59	60	61	62	63	—	—	—	—	—	—	—	—
74	51	52	52	53	53	54	55	55	56	57	58	58	59	60	61	62	63	64	65	—	—	—	—	—	—	—
76	52	53	53	54	54	55	55	56	57	57	58	58	60	61	62	63	64	65	66	67	68	69	—	—	—	—
78	53	54	54	55	55	56	56	57	57	58	59	60	61	62	63	64	65	66	67	68	69	70	70	71	—	—
80	54	55	55	56	56	56	57	58	58	59	60	61	62	63	64	65	66	67	68	69	70	70	71	72	72	73
82	55	56	56	57	57	57	58	59	60	60	61	62	63	64	65	66	67	68	69	70	70	71	72	72	73	74
84	56	57	57	58	59	59	60	60	61	61	62	63	63	64	65	66	67	68	69	70	71	72	72	73	74	75
86	57	58	58	58	59	59	60	60	61	62	63	64	65	66	67	68	69	70	71	72	73	73	74	74	75	76
88	58	59	59	59	60	60	61	61	62	63	64	65	66	67	68	69	70	71	71	72	73	74	74	75	76	77

Leaving air temperatures 3° lower than the charts value indicates low airflow. Increase fan speed or correct airflow problem.

## Condenser Temperature Rise

## Subcooling

System SEER	Condenser Saturation Temperature Over Outdoor Ambient		Thermal Expansion Valve: consult manufactures data (4° to 20°) or charge to 12°  Fixed orifice subcooling will vary with conditions from 0° up to 10° or 35° (depending on SEER)
	8 or less	25° to 35°	
	9 or 10	20° to 30°	
	11 or 12	15° to 25°	
13 and above	10° to 20°	If higher than chart indicates; remedy outdoor airflow, refrigerant overcharge, unknown mixture or non condensables.	

Condenser saturation temperature over ambient is determined by the coil size, the greater the area, the lower the temperature rise. Note that a coil with more capacity than the compressor, as well as low ambient temperatures, can have a lower rise than the chart indicates. Long lines and high indoor unit elevations can have a higher temperature rise than the chart.