R-12 Conventional Valves (Tons)– A Series and T Series

Valve Type	Nominal Rating	Evaporator Temperature																	
		50°F						40°F						20°F					
		Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)					
		60	80	100	125	150	175	60	80	100	125	150	175	60	80	100	125	150	175
AA/AN/AAC/ANC/AFA	1/8	0.20	0.23	0.26	0.29	0.32	0.34	0.20	0.23	0.26	0.29	0.32	0.34	0.19	0.22	0.25	0.27	0.30	0.32
AA/AN/AAC/ANC/AFA	1/4	0.35	0.40	0.45	0.51	0.55	0.60	0.34	0.39	0.44	0.49	0.54	0.58	0.33	0.38	0.43	0.48	0.52	0.56
AA/AN/AAC/ANC/AFA	1/2	0.56	0.65	0.72	0.81	0.89	0.96	0.55	0.64	0.71	0.79	0.87	0.94	0.53	0.61	0.68	0.76	0.84	0.91
AA/AN/AAC/ANC/AFA	1	0.80	0.92	1.03	1.15	1.26	1.37	0.79	0.91	1.02	1.14	1.25	1.35	0.76	0.88	0.98	1.10	1.20	1.30
AA/AN/AAC/ANC/AFA	1-1/2	1.66	1.92	2.14	2.40	2.62	2.83	1.63	1.88	2.10	2.35	2.58	2.78	1.58	1.80	2.01	2.25	2.47	2.66
AA/AN/AAC/ANC/AFA	2	2.04	2.36	2.63	2.94	3.23	3.48	2.00	2.31	2.58	2.89	3.16	3.42	1.92	2.22	2.48	2.77	3.04	3.28
AA/AN/AAC/ANC/AFA	2-1/2	2.42	2.79	3.12	3.49	3.83	4.13	2.37	2.74	3.06	3.42	3.75	4.05	2.28	2.63	2.94	3.29	3.60	3.89
AA/AN/AAC/ANC/AFA	3	3.31	3.82	4.27	4.78	5.23	5.65	3.24	3.74	4.18	4.68	5.12	5.53	3.11	3.59	4.01	4.49	4.92	5.31
TCLE	1/4	0.30	0.35	0.38	0.43	0.47	0.51	0.30	0.35	0.39	0.43	0.47	0.51	0.28	0.32	0.36	0.40	0.44	0.48
TCLE	1/2	0.57	0.66	0.74	0.82	0.90	0.97	0.56	0.65	0.72	0.81	0.89	0.96	0.53	0.61	0.68	0.76	0.84	0.91
TCLE	1	1.15	1.33	1.48	1.66	1.82	1.96	1.13	1.30	1.48	1.63	1.79	1.93	1.08	1.25	1.39	1.56	1.71	1.84
TCLE	2	2.12	2.45	2.74	3.06	3.35	3.62	2.08	2.40	2.69	3.00	3.29	3.55	1.99	2.30	2.57	2.07	3.15	3.40
TCLE	3	3.09	3.57	3.99	4.46	4.89	5.28	3.03	3.50	3.91	4.37	4.79	5.17	2.90	3.35	3.74	4.19	4.59	4.95
TCLE	4	4.48	5.17	5.78	6.47	7.08	7.65	4.39	5.07	5.67	6.34	6.94	7.50	4.21	4.86	5.44	6.08	6.66	7.19
TCLE	6-1/2	6.17	7.12	7.97	8.91	9.76	10.54	6.05	6.99	7.81	8.73	9.57	10.33	5.80	6.70	7.49	8.37	9.17	9.91
TCLE	7-1/2	7.44	8.59	9.60	10.74	11.76	12.71	7.30	8.43	9.42	10.54	11.54	12.47	7.00	8.08	9.04	10.10	11.07	11.95
TJL	7	6.59	7.51	8.51	9.51	10.42	11.25	6.47	7.47	8.35	9.34	10.23	11.05	6.20	7.16	8.00	8.95	9.80	10.59
TJL	8	8.41	9.71	10.86	12.14	13.30	14.36	8.25	9.53	10.65	11.91	13.04	14.09	7.91	9.13	10.21	11.42	12.51	13.51

Note: Standard capacity is rated at 100F liquid inlet and 40F evaporator temperature; with 60 Psi pressure drop across the TXV per ARI 750-2001.

Valve Type	Nominal Rating	Evaporator Temperature																	
		0°F						-20°F						-40°F					
		Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)					
		60	80	100	125	150	175	80	100	125	150	175	200	80	100	125	150	175	200
AA/AN/AAC/ANC/AFA	1/8	0.17	0.2	0.22	0.25	0.27	0.29	0.13	0.15	0.16	0.18	0.19	0.21	0.08	0.09	0.1	0.11	0.12	0.13
AA/AN/AAC/ANC/AFA	1/4	0.29	0.33	0.37	0.42	0.46	0.5	0.23	0.26	0.29	0.31	0.34	0.36	0.15	0.17	0.19	0.21	0.22	0.24
AA/AN/AAC/ANC/AFA	1/2	0.47	0.54	0.61	0.68	0.74	0.8	0.37	0.41	0.46	0.51	0.55	0.59	0.24	0.27	0.3	0.33	0.35	0.38
AA/AN/AAC/ANC/AFA	1	0.67	0.77	0.86	0.97	1.06	1.14	0.53	0.59	0.66	0.73	0.78	0.84	0.34	0.38	0.43	0.47	0.5	0.54
AA/AN/AAC/ANC/AFA	2-1/2	1.39	1.61	1.79	2.01	2.2	2.37	1.09	1.22	1.36	1.49	1.61	1.72	0.71	0.79	0.89	0.97	1.05	1.12
AA/AN/AAC/ANC/AFA	2	1.7	1.96	2.19	2.45	2.69	2.9	1.33	1.49	1.66	1.82	1.97	2.1	0.87	0.97	1.09	1.19	1.29	1.38
AA/AN/AAC/ANC/AFA	2-1/2	2.02	2.33	2.61	2.92	3.19	3.45	1.58	1.77	1.98	2.16	2.34	2.50	1.03	1.15	1.29	1.41	1.52	1.63
AA/AN/AAC/ANC/AFA	3	2.76	3.19	3.56	3.98	4.36	4.71	2.16	2.41	2.7	2.96	3.19	3.42	1.4	1.57	1.75	1.92	2.07	2.21
TCLE	1/4	0.25	0.29	0.32	0.36	0.4	0.43	0.2	0.22	0.25	0.27	0.3	0.32	0.13	0.15	0.16	0.18	0.19	0.21
TCLE	1/2	0.47	0.54	0.61	0.68	0.74	0.8	0.37	0.41	0.46	0.51	0.55	0.59	0.24	0.27	0.3	0.33	0.35	0.38
TCLE	1	0.96	1.11	1.24	1.39	1.52	1.64	0.75	0.84	0.94	1.03	1.11	1.19	0.49	0.55	0.61	0.67	0.72	0.77
TCLE	2	1.76	2.03	2.27	2.54	2.78	3.01	1.38	1.54	1.73	1.89	2.04	2.18	0.9	1.01	1.13	1.23	1.33	1.42
TCLE	3	2.57	2.97	3.32	3.71	4.06	4.39	2.01	2.25	2.51	2.75	2.97	3.18	1.31	1.46	1.64	1.79	1.94	2.07
TCLE	4	3.73	4.31	4.82	5.38	5.9	6.37	2.92	3.26	3.65	4	4.32	4.62	1.9	2.12	2.38	2.6	2.81	3
TCLE	6-1/2	5.14	5.94	6.64	7.42	8.13	8.78	4.03	4.51	5.04	5.52	5.96	6.37	2.62	2.93	3.28	3.59	3.88	4.14
TCLE	7-1/2	6.2	7.16	8	8.95	9.8	10.59	4.86	5.43	6.08	6.65	7.19	7.68	3.16	3.53	3.95	4.33	4.67	5
TJL	7	5.49	6.34	7.09	7.92	8.68	9.38	4.3	4.81	5.38	5.89	6.36	6.8	2.8	3.13	3.5	3.83	4.14	4.43
TJL	8	7	8.08	9.04	10.1	11.07	11.95	5.49	6.14	6.86	7.52	8.12	8.68	3.57	3.99	4.46	4.89	5.28	5.64

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F.
However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-22 Conventional Valves (Tons)– A Series and T Series

Valve Type	Nominal Rating	Evaporator Temperature 50°F Pressure Drop Across Valve (PSI) 60	80	100	125	150	175	40°F Pressure Drop Across Valve (PSI) 60	80	100	125	150	175	20°F Pressure Drop Across Valve (PSI) 60	80	100	125	150	175
AA/AN/AFA	1/5	0.15	0.17	0.19	0.22	0.24	0.26	0.15	0.17	0.19	0.21	0.23	0.25	0.14	0.16	0.18	0.20	0.22	0.24
AA/AN/AAC/ANC	1/4	0.26	0.30	0.34	0.38	0.41	0.44	0.26	0.30	0.33	0.37	0.40	0.44	0.25	0.29	0.32	0.36	0.40	0.43
AA/AN/AAC/ANC/AFA	1/2	0.46	0.53	0.59	0.66	0.73	0.79	0.45	0.52	0.58	0.65	0.71	0.77	0.44	0.51	0.57	0.64	0.70	0.75
AA/AN/AAC/ANC/AFA	1	0.73	0.84	0.94	1.05	1.15	1.25	0.72	0.83	0.93	1.04	1.14	1.23	0.70	0.81	0.90	1.01	1.11	1.20
AA/AN/AAC/ANC/AFA	1-1/2	1.05	1.21	1.36	1.52	1.66	1.79	1.03	1.19	1.33	1.49	1.63	1.76	1.01	1.17	1.30	1.46	1.60	1.72
AA/AN/AAC/ANC/AFA	2	1.54	1.78	1.99	2.22	2.43	2.63	1.52	1.75	1.96	2.19	2.40	2.59	1.48	1.71	1.91	2.14	2.34	2.53
AA/AN/AAC/ANC/AFA	2-1/2	2.16	2.49	2.79	3.12	3.42	3.69	2.13	2.46	2.75	3.07	3.37	3.64	2.08	2.40	2.69	3.00	3.29	3.55
AA/AN/AAC/ANC/AFA	3	2.65	3.06	3.42	3.82	4.19	4.53	2.61	3.01	3.37	3.77	4.13	4.46	2.55	2.94	3.29	3.68	4.03	4.35
AA/AN/AAC/ANC/AFA	4	3.14	3.63	4.05	4.53	4.96	5.36	3.10	3.58	4.00	4.47	4.90	5.29	3.03	3.50	3.91	4.37	4.79	5.17
AA/AN/AAC/ANC/AFA	5	4.30	4.97	5.55	6.21	6.80	7.34	4.24	4.89	5.47	6.12	6.70	7.24	4.14	4.78	5.34	5.98	6.55	7.07
TCLE	1/2	0.39	0.45	0.50	0.56	0.62	0.67	0.39	0.45	0.50	0.56	0.61	0.66	0.38	0.44	0.49	0.55	0.60	0.65
TCLE	1	0.74	0.85	0.96	1.07	1.17	1.26	0.73	0.84	0.94	1.05	1.15	1.24	0.71	0.82	0.92	1.02	1.12	1.21
TCLE	2	1.49	1.72	1.92	2.15	2.36	2.54	1.47	1.70	1.90	2.12	2.33	2.51	1.44	1.66	1.86	2.08	2.28	2.46
TCLE	3	2.75	3.18	3.55	3.97	4.35	4.70	2.71	3.13	3.50	3.91	4.29	4.63	2.65	3.06	3.42	3.82	4.19	4.53
TCLE	5	4.01	4.63	5.18	5.79	6.34	6.85	3.95	4.56	5.10	5.70	6.25	6.75	3.86	4.46	4.98	5.57	6.10	6.59
TCLE	7-1/2	5.82	6.72	7.51	8.40	9.20	9.94	5.75	6.64	7.42	8.30	9.09	9.82	5.60	6.47	7.23	8.08	8.85	9.56
TCLE	10	8.02	9.26	10.35	11.58	12.68	13.70	7.92	9.15	10.23	11.44	12.53	13.53	7.72	8.91	9.97	11.14	12.21	13.18
TCLE	12	9.67	11.17	12.48	13.96	15.29	16.51	9.55	11.03	12.33	13.79	15.10	16.31	9.31	10.75	12.02	13.44	14.72	15.90
TJL	11	8.57	9.90	11.06	12.37	13.55	14.64	8.47	9.78	10.93	12.22	13.39	14.46	8.25	9.53	10.65	11.91	13.04	14.09
TJL	14	10.92	12.61	14.10	15.76	17.27	18.65	10.80	12.47	13.94	15.59	17.07	18.44	10.52	12.15	13.58	15.18	16.63	17.97

Note: Standard capacity is rated at 100F liquid inlet and 40F evaporator temperature; with 100 Psi pressure drop across the TXV per ARI 750-2001.

Valve Type	Nominal Rating	Evaporator Temperature 0°F Pressure Drop Across Valve (PSI) 60	80	100	125	150	175	-20°F Pressure Drop Across Valve (PSI) 80	100	125	150	175	200	-40°F Pressure Drop Across Valve (PSI) 80	100	125	150	175	200
AA/AN/AFA	1/5	0.13	0.15	0.17	0.19	0.21	0.22	0.10	0.11	0.13	0.14	0.15	0.16	0.07	0.08	0.09	0.10	0.10	0.11
AA/AN/AAC/ANC	1/4	0.23	0.27	0.30	0.33	0.36	0.39	0.18	0.20	0.23	0.25	0.27	0.28	0.12	0.13	0.15	0.16	0.18	0.19
AA/AN/AAC/ANC/AFA	1/2	0.40	0.46	0.52	0.58	0.63	0.68	0.32	0.36	0.40	0.44	0.47	0.51	0.21	0.23	0.26	0.29	0.31	0.33
AA/AN/AAC/ANC/AFA	1	0.64	0.74	0.83	0.92	1.01	1.09	0.51	0.57	0.64	0.70	0.75	0.81	0.34	0.38	0.43	0.47	0.50	0.54
AA/AN/AAC/ANC/AFA	1-1/2	0.91	1.05	1.17	1.31	1.44	1.55	0.73	0.82	0.91	1.00	1.08	1.15	0.48	0.54	0.60	0.66	0.71	0.76
AA/AN/AAC/ANC/AFA	2	1.35	1.56	1.74	1.95	2.13	2.31	1.07	1.20	1.34	1.47	1.58	1.69	0.71	0.79	0.89	0.97	1.05	1.12
AA/AN/AAC/ANC/AFA	2-1/2	1.89	2.18	2.44	2.73	2.99	3.23	1.51	1.69	1.89	2.07	2.23	2.39	0.99	1.11	1.24	1.36	1.46	1.57
AA/AN/AAC/ANC/AFA	3	2.31	2.67	2.98	3.33	3.65	3.95	1.85	2.07	2.31	2.53	2.74	2.93	1.22	1.36	1.53	1.67	1.80	1.93
AA/AN/AAC/ANC/AFA	4	2.75	3.18	3.55	3.97	4.35	4.70	2.19	2.45	2.74	3.00	3.24	3.46	1.44	1.61	1.80	1.97	2.13	2.28
AA/AN/AAC/ANC/AFA	5	3.75	4.33	4.84	5.41	5.93	6.40	3.00	3.35	3.75	4.11	4.44	4.74	1.97	2.20	2.46	2.70	2.91	3.11
TCLE	1/2	0.34	0.39	0.44	0.49	0.54	0.58	0.27	0.30	0.34	0.37	0.40	0.43	0.18	0.20	0.23	0.25	0.27	0.28
TCLE	1	0.65	0.75	0.84	0.94	1.03	1.11	0.52	0.58	0.65	0.71	0.77	0.82	0.34	0.38	0.43	0.47	0.50	0.54
TCLE	2	1.30	1.50	1.68	1.88	2.06	2.22	1.04	1.16	1.30	1.42	1.54	1.64	0.69	0.77	0.86	0.94	1.02	1.09
TCLE	3	2.40	2.77	3.10	3.46	3.79	4.10	1.92	2.15	2.40	2.63	2.84	3.04	1.26	1.41	1.58	1.73	1.86	1.99
TCLE	5	3.50	4.04	4.52	5.05	5.53	5.98	2.79	3.12	3.49	3.82	4.13	4.41	1.84	2.06	2.30	2.52	2.72	2.91
TCLE	7-1/2	5.08	5.87	6.56	7.33	8.03	8.68	4.05	4.53	5.06	5.55	5.99	6.40	2.67	2.99	3.34	3.66	3.95	4.22
TCLE	10	7.00	8.08	9.04	10.10	11.07	11.95	5.59	6.25	6.99	7.65	8.27	8.84	3.68	4.11	4.60	5.04	5.44	5.82
TCLE	12	8.44	9.75	10.90	12.18	13.34	14.41	6.74	7.54	8.43	9.23	9.97	10.66	4.44	4.96	5.55	6.08	6.57	7.02
TJL	11	7.48	8.64	9.66	10.80	11.83	12.77	5.97	6.67	7.46	8.17	8.83	9.44	3.93	4.39	4.91	5.38	5.81	6.21
TJL	14	9.54	11.02	12.32	13.77	15.08	16.29	7.62	8.52	9.53	10.43	11.27	12.05	5.02	5.61	6.28	6.87	7.42	7.94

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F.
However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-134a Conventional Valves (Tons)– A Series and T Series

Valve Type	Nominal Rating	Evaporator Temperature 50°F Pressure Drop Across Valve (PSI) 60	80	100	125	150	175	40°F 60	80	100	125	150	175	20°F 60	80	100	125	150	175
AA/AN/AFA	1/8	0.14	0.16	0.18	0.20	0.22	0.24	0.14	0.16	0.18	0.20	0.22	0.24	0.13	0.15	0.17	0.19	0.21	0.22
AA/AN/AAC/ANC/AFA	1/4	0.25	0.29	0.32	0.36	0.40	0.43	0.24	0.28	0.31	0.35	0.38	0.41	0.23	0.27	0.30	0.33	0.36	0.39
AA/AN/AAC/ANC/AFA	1/2	0.43	0.50	0.56	0.62	0.68	0.73	0.43	0.50	0.56	0.62	0.68	0.73	0.41	0.47	0.53	0.59	0.65	0.70
AA/AN/AAC/ANC/AFA	3/4	0.70	0.81	0.90	1.01	1.11	1.20	0.68	0.79	0.88	0.98	1.08	1.16	0.65	0.75	0.84	0.94	1.03	1.11
AA/AN/AAC/ANC/AFA	1	1.00	1.15	1.29	1.44	1.58	1.71	0.98	1.13	1.27	1.41	1.55	1.67	0.93	1.07	1.20	1.34	1.47	1.59
AA/AN/AAC/ANC/AFA	1-1/2	1.47	1.70	1.90	2.12	2.32	2.51	1.44	1.66	1.86	2.08	2.28	2.46	1.38	1.59	1.78	1.99	2.18	2.36
AA/AN/AAC/ANC/AFA	2	2.06	2.38	2.66	2.97	3.26	3.52	2.02	2.33	2.61	2.92	3.19	3.45	1.93	2.23	2.49	2.79	3.05	3.30
AA/AN/AAC/ANC/AFA	2-1/2	2.53	2.92	3.27	3.65	4.00	4.32	2.47	2.85	3.19	3.57	3.91	4.22	2.37	2.74	3.06	3.42	3.75	4.05
AA/AN/AAC/ANC/AFA	3	3.00	3.46	3.87	4.33	4.74	5.12	2.94	3.39	3.80	4.24	4.65	5.02	2.81	3.24	3.63	4.06	4.44	4.80
AA/AN/AAC/ANC/AFA	4	4.10	4.73	5.29	5.92	6.48	7.00	4.02	4.64	5.19	5.80	6.36	6.87	3.84	4.43	4.96	5.54	6.07	6.56
TCLE	1/4	0.37	0.43	0.48	0.53	0.59	0.63	0.37	0.43	0.48	0.53	0.59	0.63	0.35	0.40	0.45	0.51	0.55	0.60
TCLE	3/4	0.70	0.81	0.90	1.01	1.11	1.20	0.69	0.80	0.89	1.00	1.09	1.18	0.66	0.76	0.85	0.95	1.04	1.13
TCLE	1-1/2	1.42	1.64	1.83	2.05	2.25	2.43	1.39	1.61	1.79	2.01	2.20	2.37	1.33	1.54	1.72	1.92	2.10	2.27
TCLE	2-1/2	2.62	3.03	3.38	3.78	4.14	4.47	2.57	2.97	3.32	3.71	4.06	4.39	2.46	2.84	3.18	3.55	3.89	4.20
TCLE	3-1/2	3.82	4.41	4.93	5.51	6.04	6.52	3.74	4.32	4.83	5.40	5.91	6.39	3.58	4.13	4.62	5.17	5.66	6.11
TCLE	5-1/2	5.55	6.41	7.17	8.01	8.78	9.48	5.43	6.27	7.01	7.84	8.59	9.27	5.20	6.00	6.71	7.51	8.22	8.88
TCLE	7-1/2	7.65	8.83	9.88	11.04	12.10	13.06	7.49	8.65	9.67	10.81	11.84	12.79	7.16	8.27	9.24	10.33	11.32	12.23
TCLE	9	9.22	10.65	11.90	13.31	14.58	15.75	9.03	10.43	11.66	13.03	14.28	15.42	8.64	9.98	11.15	12.47	13.66	14.76
TJL	9	8.17	9.43	10.55	11.79	12.92	13.95	8.00	9.24	10.33	11.55	12.65	13.66	7.65	8.83	9.88	11.04	12.10	13.06
TJL	11	10.42	12.03	13.45	15.04	16.48	17.80	10.20	11.78	13.17	14.72	16.13	17.42	9.76	11.27	12.60	14.09	15.43	16.67

Note: Standard capacity is rated at 100F liquid inlet and 40F evaporator temperature; with 60 Psi pressure drop across the TXV per ARI 750-2001.

Valve Type	Nominal Rating	Evaporator Temperature 0°F Pressure Drop Across Valve (PSI) 60	80	100	125	150	175	-20°F 80	100	125	150	175	200	-40°F 80	100	125	150	175	200
AA/AN/AFA	1/8	0.11	0.13	0.14	0.16	0.17	0.19	0.08	0.09	0.10	0.11	0.12	0.13	0.05	0.06	0.06	0.07	0.07	0.08
AA/AN/AAC/ANC/AFA	1/4	0.19	0.22	0.25	0.27	0.30	0.32	0.14	0.16	0.18	0.19	0.21	0.22	0.09	0.10	0.11	0.12	0.13	0.14
AA/AN/AAC/ANC/AFA	1/2	0.34	0.39	0.44	0.49	0.54	0.58	0.25	0.28	0.31	0.34	0.37	0.40	0.15	0.17	0.19	0.21	0.22	0.24
AA/AN/AAC/ANC/AFA	3/4	0.54	0.62	0.70	0.78	0.85	0.92	0.40	0.45	0.50	0.55	0.59	0.63	0.25	0.28	0.31	0.34	0.37	0.40
AA/AN/AAC/ANC/AFA	1	0.77	0.89	0.99	1.11	1.22	1.32	0.57	0.64	0.71	0.78	0.84	0.90	0.35	0.39	0.44	0.48	0.52	0.55
AA/AN/AAC/ANC/AFA	1-1/2	1.13	1.30	1.46	1.63	1.79	1.93	0.85	0.95	1.06	1.16	1.26	1.34	0.52	0.58	0.65	0.71	0.77	0.82
AA/AN/AAC/ANC/AFA	2	1.59	1.84	2.05	2.29	2.51	2.72	1.19	1.33	1.49	1.63	1.76	1.88	0.73	0.82	0.91	1.00	1.08	1.15
AA/AN/AAC/ANC/AFA	2-1/2	1.95	2.25	2.52	2.81	3.08	3.33	1.45	1.62	1.81	1.99	2.14	2.29	0.89	1.00	1.11	1.22	1.32	1.41
AA/AN/AAC/ANC/AFA	3	2.31	2.67	2.98	3.33	3.65	3.95	1.72	1.92	2.15	2.36	2.54	2.72	1.06	1.19	1.33	1.45	1.57	1.68
AA/AN/AAC/ANC/AFA	4	3.16	3.65	4.08	4.56	5.00	5.40	2.36	2.64	2.95	3.23	3.49	3.73	1.45	1.62	1.81	1.99	2.14	2.29
TCLE	1/4	0.29	0.33	0.37	0.42	0.46	0.50	0.22	0.25	0.28	0.30	0.33	0.35	0.13	0.15	0.16	0.18	0.19	0.21
TCLE	3/4	0.54	0.62	0.70	0.78	0.85	0.92	0.41	0.46	0.51	0.56	0.61	0.65	0.25	0.28	0.31	0.34	0.37	0.40
TCLE	1-1/2	1.10	1.27	1.42	1.59	1.74	1.88	0.82	0.92	1.03	1.12	1.21	1.30	0.50	0.56	0.63	0.68	0.74	0.79
TCLE	2-1/2	2.02	2.33	2.61	2.92	3.19	3.45	1.51	1.69	1.89	2.07	2.23	2.39	0.93	1.04	1.16	1.27	1.38	1.47
TCLE	3-1/2	2.95	3.41	3.81	4.26	4.66	5.04	2.20	2.46	2.75	3.01	3.25	3.48	1.35	1.51	1.69	1.85	2.00	2.13
TCLE	5-1/2	4.28	4.94	5.53	6.18	6.77	7.31	3.19	3.57	3.99	4.37	4.72	5.04	1.96	2.19	2.45	2.68	2.90	3.10
TCLE	7-1/2	5.90	6.81	7.62	8.52	9.33	10.08	4.40	4.92	5.50	6.02	6.51	6.96	2.70	3.02	3.38	3.70	3.99	4.27
TCLE	9	7.11	8.21	9.18	10.26	11.24	12.14	5.30	5.93	6.63	7.26	7.84	8.38	3.26	3.64	4.08	4.46	4.82	5.15
TJL	9	6.30	7.27	8.13	9.09	9.96	10.76	4.70	5.25	5.88	6.44	6.95	7.43	2.89	3.23	3.61	3.96	4.27	4.57
TJL	11	8.03	9.27	10.37	11.59	12.70	13.71	5.99	6.70	7.49	8.20	8.86	9.47	3.68	4.11	4.60	5.04	5.44	5.82

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F.
However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-450A/R-513A Conventional Valves (Tons) A Series

Valve Type	Nominal Rating	Evaporator Temperature																	
		50°F						40°F						20°F					
		Pressure Drop Across Valve (psi)						Pressure Drop Across Valve (psi)						Pressure Drop Across Valve (psi)					
		60	80	100	125	150	175	60	80	100	125	150	175	60	80	100	125	150	175
AA/AN/AAC/ANC/AFA	1/8	0.11	0.13	0.15	0.16	0.18	0.19	0.11	0.13	0.14	0.16	0.17	0.19	0.10	0.12	0.13	0.15	0.16	0.18
AA/AN/AAC/ANC/AFA	1/5	0.19	0.22	0.25	0.28	0.30	0.33	0.19	0.22	0.24	0.27	0.30	0.32	0.18	0.21	0.23	0.26	0.28	0.31
AA/AN/AAC/ANC/AFA	1/4	0.35	0.40	0.45	0.50	0.55	0.59	0.34	0.39	0.44	0.49	0.53	0.58	0.32	0.37	0.41	0.46	0.51	0.55
AA/AN/AAC/ANC/AFA	1/2	0.55	0.63	0.70	0.79	0.86	0.93	0.53	0.62	0.69	0.77	0.84	0.91	0.51	0.58	0.65	0.73	0.80	0.86
AA/AN/AAC/ANC/AFA	3/4	0.79	0.91	1.02	1.14	1.24	1.34	0.77	0.89	0.99	1.11	1.21	1.31	0.73	0.84	0.94	1.05	1.15	1.25
AA/AN/AAC/ANC/AFA	1	1.16	1.33	1.49	1.67	1.83	1.97	1.13	1.30	1.46	1.63	1.78	1.93	1.07	1.24	1.38	1.55	1.70	1.83
AA/AN/AAC/ANC/AFA	1-1/2	1.62	1.87	2.09	2.34	2.56	2.77	1.58	1.83	2.04	2.29	2.50	2.70	1.50	1.74	1.94	2.17	2.38	2.57
AA/AN/AAC/ANC/AFA	2	1.98	2.29	2.56	2.86	3.14	3.39	1.94	2.24	2.50	2.79	3.06	3.31	1.84	2.12	2.37	2.65	2.91	3.14
AA/AN/AAC/ANC/AFA	2-1/2	2.36	2.73	3.05	3.41	3.73	4.03	2.30	2.66	2.97	3.33	3.64	3.94	2.19	2.53	2.83	3.16	3.46	3.74
AA/AN/AAC/ANC/AFA	3	3.23	3.73	4.17	4.66	5.10	5.51	3.15	3.64	4.07	4.55	4.98	5.38	2.99	3.46	3.86	4.32	4.73	5.11

Note: Standard Capacity is rated at 100F liquid inlet and 40F evaporator temperature; with 60 Psi pressure drop across the TXV.

Valve Type	Nominal Rating	Evaporator Temperature																	
		0°F						-20°F						-40°F					
		Pressure Drop Across Valve (psi)						Pressure Drop Across Valve (psi)						Pressure Drop Across Valve (psi)					
		60	80	100	125	150	175	80	100	125	150	175	200	80	100	125	150	175	200
AA/AN/AAC/ANC/AFA	1/8	0.08	0.09	0.10	0.11	0.12	0.13	0.06	0.06	0.07	0.08	0.08	0.09	0.03	0.04	0.04	0.04	0.05	0.05
AA/AN/AAC/ANC/AFA	1/5	0.13	0.15	0.17	0.19	0.21	0.22	0.10	0.11	0.12	0.13	0.15	0.16	0.06	0.06	0.07	0.08	0.08	0.09
AA/AN/AAC/ANC/AFA	1/4	0.23	0.27	0.30	0.34	0.37	0.40	0.18	0.20	0.22	0.24	0.26	0.28	0.10	0.11	0.13	0.14	0.15	0.16
AA/AN/AAC/ANC/AFA	1/2	0.37	0.42	0.47	0.53	0.58	0.63	0.28	0.31	0.35	0.38	0.41	0.44	0.16	0.18	0.20	0.22	0.24	0.25
AA/AN/AAC/ANC/AFA	3/4	0.53	0.61	0.68	0.76	0.84	0.90	0.40	0.45	0.50	0.55	0.59	0.63	0.23	0.26	0.29	0.31	0.34	0.36
AA/AN/AAC/ANC/AFA	1	0.78	0.90	1.00	1.12	1.23	1.33	0.59	0.66	0.74	0.81	0.87	0.93	0.34	0.38	0.42	0.46	0.50	0.53
AA/AN/AAC/ANC/AFA	1-1/2	1.09	1.26	1.41	1.58	1.73	1.86	0.83	0.93	1.03	1.13	1.22	1.31	0.47	0.53	0.59	0.65	0.70	0.75
AA/AN/AAC/ANC/AFA	2	1.33	1.54	1.72	1.93	2.11	2.28	1.01	1.13	1.26	1.39	1.50	1.60	0.58	0.65	0.72	0.79	0.85	0.91
AA/AN/AAC/ANC/AFA	2-1/2	1.59	1.83	2.05	2.29	2.51	2.71	1.20	1.35	1.51	1.65	1.78	1.90	0.69	0.77	0.86	0.94	1.02	1.09
AA/AN/AAC/ANC/AFA	3	2.17	2.51	2.80	3.14	3.44	3.71	1.65	1.84	2.06	2.25	2.44	2.60	0.94	1.05	1.17	1.29	1.39	1.49

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F.
However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-404A/R-507 Conventional Valves (Tons)– A Series and T Series

Valve Type	Nominal Rating	Evaporator Temperature 50°F Pressure Drop Across Valve (PSI) 60	80	100	125	150	175	40°F Pressure Drop Across Valve (PSI) 60	80	100	125	150	175	20°F Pressure Drop Across Valve (PSI) 60	80	100	125	150	175
AA/AN/AFA	1/8	0.11	0.13	0.14	0.16	0.17	0.19	0.11	0.13	0.14	0.16	0.17	0.19	0.10	0.12	0.13	0.14	0.16	0.17
AA/AN/AAC/ANC/AFA	1/4	0.19	0.22	0.25	0.27	0.30	0.32	0.19	0.22	0.25	0.27	0.30	0.32	0.18	0.21	0.23	0.26	0.28	0.31
AA/AN/AAC/ANC/AFA	1/2	0.33	0.38	0.43	0.48	0.52	0.56	0.33	0.38	0.43	0.48	0.52	0.56	0.31	0.36	0.40	0.45	0.49	0.53
AA/AN/AAC/ANC/AFA	3/4	0.54	0.62	0.70	0.78	0.85	0.92	0.52	0.60	0.67	0.75	0.82	0.89	0.50	0.58	0.65	0.72	0.79	0.85
AA/AN/AAC/ANC/AFA	1	0.77	0.89	0.99	1.11	1.22	1.32	0.75	0.87	0.97	1.08	1.19	1.28	0.71	0.82	0.92	1.02	1.12	1.21
AA/AN/AAC/ANC/AFA	1-1/4	1.13	1.30	1.46	1.63	1.79	1.93	1.10	1.27	1.42	1.59	1.74	1.88	1.05	1.21	1.36	1.52	1.66	1.79
AA/AN/AAC/ANC/AFA	2	1.58	1.82	2.04	2.28	2.50	2.70	1.55	1.79	2.00	2.24	2.45	2.65	1.47	1.70	1.90	2.12	2.32	2.51
AA/AN/AAC/ANC/AFA	2-1/4	1.94	2.24	2.50	2.80	3.07	3.31	1.89	2.18	2.44	2.73	2.99	3.23	1.80	2.08	2.32	2.60	2.85	3.07
AA/AN/AAC/ANC/AFA	2-1/2	2.30	2.66	2.97	3.32	3.64	3.93	2.25	2.60	2.90	3.25	3.56	3.84	2.14	2.47	2.76	3.09	3.38	3.65
AA/AN/AAC/ANC/AFA	3-1/2	3.15	3.64	4.07	4.55	4.98	5.38	3.08	3.56	3.98	4.45	4.87	5.26	2.92	3.37	3.77	4.21	4.62	4.99
TCLE	1/4	0.29	0.33	0.37	0.42	0.46	0.50	0.28	0.32	0.36	0.40	0.44	0.48	0.27	0.31	0.35	0.39	0.43	0.46
TCLE	1/2	0.54	0.62	0.70	0.78	0.85	0.92	0.53	0.61	0.68	0.76	0.84	0.91	0.50	0.58	0.65	0.72	0.79	0.85
TCLE	1	1.09	1.26	1.41	1.57	1.72	1.86	1.07	1.24	1.38	1.54	1.69	1.83	1.01	1.17	1.30	1.46	1.60	1.72
TCLE	2	2.01	2.32	2.59	2.90	3.18	3.43	1.97	2.27	2.54	2.84	3.11	3.36	1.87	2.16	2.41	2.70	2.96	3.19
TCLE	3	2.94	3.39	3.80	4.24	4.65	5.02	2.87	3.31	3.71	4.14	4.54	4.90	2.72	3.14	3.51	3.93	4.30	4.65
TCLE	4-1/2	4.26	4.92	5.50	6.15	6.74	7.28	4.16	4.80	5.37	6.00	6.58	7.10	3.95	4.56	5.10	5.70	6.25	6.75
TCLE	7	5.87	6.78	7.58	8.47	9.28	10.02	5.73	6.62	7.40	8.27	9.06	9.79	5.45	6.29	7.04	7.87	8.62	9.31
TCLE	8	7.08	8.18	9.14	10.22	11.19	12.09	6.91	7.98	8.92	9.97	10.93	11.80	6.57	7.59	8.48	9.48	10.39	11.22
TJL	7	6.27	7.24	8.09	9.05	9.91	10.71	6.13	7.08	7.91	8.85	9.69	10.47	5.82	6.72	7.51	8.40	9.20	9.94
TJL	9	8.00	9.24	10.33	11.55	12.65	13.66	7.81	9.02	10.08	11.27	12.35	13.34	7.42	8.57	9.58	10.71	11.73	12.67

Note: Standard capacity is rated at 100F liquid inlet and 40F evaporator temperature; with 100 Psi pressure drop across the TXV per ARI 750-2001.

Valve Type	Nominal Rating	Evaporator Temperature 0°F Pressure Drop Across Valve (PSI) 60	80	100	125	150	175	-20°F Pressure Drop Across Valve (PSI) 80	100	125	150	175	200	-40°F Pressure Drop Across Valve (PSI) 80	100	125	150	175	200
AA/AN/AFA	1/8	0.09	0.10	0.12	0.13	0.14	0.15	0.07	0.08	0.09	0.10	0.10	0.11	0.05	0.06	0.06	0.07	0.07	0.08
AA/AN/AAC/ANC/AFA	1/4	0.16	0.18	0.21	0.23	0.25	0.27	0.12	0.13	0.15	0.16	0.18	0.19	0.08	0.09	0.10	0.11	0.12	0.13
AA/AN/AAC/ANC/AFA	1/2	0.28	0.32	0.36	0.40	0.44	0.48	0.22	0.25	0.28	0.30	0.33	0.35	0.14	0.16	0.18	0.19	0.21	0.22
AA/AN/AAC/ANC/AFA	3/4	0.44	0.51	0.57	0.64	0.70	0.75	0.35	0.39	0.44	0.48	0.52	0.55	0.23	0.26	0.29	0.31	0.34	0.36
AA/AN/AAC/ANC/AFA	1	0.63	0.73	0.81	0.91	1.00	1.08	0.50	0.56	0.63	0.68	0.74	0.79	0.32	0.36	0.40	0.44	0.47	0.51
AA/AN/AAC/ANC/AFA	1-1/4	0.93	1.07	1.20	1.34	1.47	1.59	0.73	0.82	0.91	1.00	1.08	1.15	0.48	0.54	0.60	0.66	0.71	0.76
AA/AN/AAC/ANC/AFA	2	1.31	1.51	1.69	1.89	2.07	2.24	1.03	1.15	1.29	1.41	1.52	1.63	0.67	0.75	0.84	0.92	0.99	1.06
AA/AN/AAC/ANC/AFA	2-1/4	1.61	1.86	2.08	2.32	2.55	2.75	1.26	1.41	1.58	1.73	1.86	1.99	0.82	0.92	1.03	1.12	1.21	1.30
AA/AN/AAC/ANC/AFA	2-1/2	1.91	2.21	2.47	2.76	3.02	3.26	1.50	1.68	1.88	2.05	2.22	2.37	0.98	1.10	1.23	1.34	1.45	1.55
AA/AN/AAC/ANC/AFA	3-1/2	2.61	3.01	3.37	3.77	4.13	4.46	2.04	2.28	2.55	2.79	3.02	3.23	1.34	1.50	1.68	1.83	1.98	2.12
TCLE	1/4	0.24	0.28	0.31	0.35	0.38	0.41	0.19	0.21	0.24	0.26	0.28	0.30	0.12	0.13	0.15	0.16	0.18	0.19
TCLE	1/2	0.45	0.52	0.58	0.65	0.71	0.77	0.35	0.39	0.44	0.48	0.52	0.55	0.23	0.26	0.29	0.31	0.34	0.36
TCLE	1	0.91	1.05	1.17	1.31	1.44	1.55	0.71	0.79	0.89	0.97	1.05	1.12	0.46	0.51	0.58	0.63	0.68	0.73
TCLE	2	1.67	1.93	2.16	2.41	2.64	2.85	1.31	1.46	1.64	1.79	1.94	2.07	0.86	0.96	1.08	1.18	1.27	1.36
TCLE	3	2.43	2.81	3.14	3.51	3.84	4.15	1.91	2.14	2.39	2.62	2.82	3.02	1.25	1.40	1.56	1.71	1.85	1.98
TCLE	4-1/2	3.53	4.08	4.56	5.10	5.58	6.03	2.77	3.10	3.46	3.79	4.10	4.38	1.81	2.02	2.26	2.48	2.68	2.86
TCLE	7	4.86	5.61	6.27	7.01	7.68	8.30	3.81	4.26	4.76	5.22	5.64	6.02	2.49	2.78	3.11	3.41	3.68	3.94
TCLE	8	5.86	6.77	7.57	8.46	9.27	10.01	4.60	5.14	5.75	6.30	6.80	7.27	3.01	3.37	3.76	4.12	4.45	4.76
TJL	7	5.19	5.99	6.70	7.49	8.21	8.86	4.07	4.55	5.09	5.57	6.02	6.44	2.66	2.97	3.33	3.64	3.93	4.21
TJL	9	6.62	7.64	8.55	9.56	10.47	11.31	5.20	5.81	6.50	7.12	7.69	8.22	3.40	3.80	4.25	4.66	5.03	5.38

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F.
However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-448A/R-449A Conventional Valves (Tons) - A Series

Valve Type	Nominal Rating	Evaporator Temperature																	
		50°F						40°F						20°F					
		Pressure Drop Across Valve (psi)						Pressure Drop Across Valve (psi)						Pressure Drop Across Valve (psi)					
		60	80	100	125	150	175	60	80	100	125	150	175	60	80	100	125	150	175
AA/AN/AAC/ANC/AFA	1/5	0.15	0.18	0.20	0.22	0.24	0.26	0.15	0.17	0.19	0.22	0.24	0.26	0.15	0.17	0.19	0.21	0.23	0.25
AA/AN/AAC/ANC/AFA	1/4	0.27	0.31	0.34	0.38	0.42	0.45	0.26	0.30	0.34	0.38	0.41	0.45	0.26	0.30	0.33	0.37	0.40	0.44
AA/AN/AAC/ANC/AFA	1/2	0.47	0.54	0.60	0.67	0.74	0.80	0.46	0.53	0.60	0.67	0.73	0.79	0.45	0.52	0.58	0.65	0.71	0.77
AA/AN/AAC/ANC/AFA	1	0.75	0.86	0.96	1.08	1.18	1.28	0.74	0.85	0.95	1.07	1.17	1.26	0.72	0.83	0.93	1.04	1.14	1.23
AA/AN/AAC/ANC/AFA	1-1/2	1.07	1.23	1.38	1.54	1.69	1.82	1.06	1.22	1.36	1.53	1.67	1.81	1.03	1.19	1.33	1.49	1.63	1.76
AA/AN/AAC/ANC/AFA	2	1.57	1.82	2.03	2.27	2.49	2.69	1.56	1.80	2.01	2.25	2.46	2.66	1.52	1.76	1.96	2.20	2.40	2.60
AA/AN/AAC/ANC/AFA	2-3/4	2.21	2.55	2.85	3.19	3.49	3.77	2.19	2.52	2.82	3.16	3.46	3.73	2.13	2.46	2.75	3.08	3.37	3.64
AA/AN/AAC/ANC/AFA	3-1/2	2.71	3.13	3.49	3.91	4.28	4.62	2.68	3.09	3.46	3.87	4.24	4.57	2.61	3.02	3.38	3.77	4.13	4.47
AA/AN/AAC/ANC/AFA	4	3.21	3.71	4.15	4.64	5.08	5.49	3.18	3.67	4.10	4.59	5.03	5.43	3.10	3.58	4.01	4.48	4.91	5.30
AA/AN/AAC/ANC/AFA	5-1/2	4.39	5.07	5.67	6.34	6.95	7.50	4.35	5.02	5.61	6.28	6.87	7.43	4.24	4.90	5.48	6.13	6.71	7.25

Note: Standard capacity is rated at 100F liquid inlet and 40F evaporator temperature; with 100 Psi pressure drop across the TXV.

Valve Type	Nominal Rating	Evaporator Temperature																	
		0°F						-20°F						-40°F					
		Pressure Drop Across Valve (psi)						Pressure Drop Across Valve (psi)						Pressure Drop Across Valve (psi)					
		60	80	100	125	150	175	80	100	125	150	175	200	80	100	125	150	175	200
AA/AN/AAC/ANC/AFA	1/5	0.14	0.17	0.19	0.21	0.23	0.24	0.13	0.15	0.16	0.18	0.19	0.21	0.09	0.10	0.11	0.12	0.13	0.14
AA/AN/AAC/ANC/AFA	1/4	0.25	0.29	0.32	0.36	0.39	0.43	0.23	0.25	0.28	0.31	0.34	0.36	0.15	0.17	0.19	0.21	0.23	0.24
AA/AN/AAC/ANC/AFA	1/2	0.44	0.51	0.57	0.63	0.69	0.75	0.40	0.45	0.50	0.55	0.59	0.63	0.27	0.30	0.34	0.37	0.40	0.43
AA/AN/AAC/ANC/AFA	1	0.70	0.81	0.91	1.01	1.11	1.20	0.64	0.72	0.80	0.88	0.95	1.01	0.43	0.48	0.54	0.59	0.64	0.68
AA/AN/AAC/ANC/AFA	1-1/2	1.00	1.16	1.30	1.45	1.59	1.71	0.92	1.02	1.15	1.26	1.36	1.45	0.62	0.69	0.77	0.85	0.92	0.98
AA/AN/AAC/ANC/AFA	2	1.48	1.71	1.91	2.14	2.34	2.53	1.35	1.51	1.69	1.85	2.00	2.14	0.91	1.02	1.14	1.25	1.35	1.44
AA/AN/AAC/ANC/AFA	2-3/4	2.08	2.40	2.68	3.00	3.28	3.54	1.90	2.12	2.37	2.60	2.80	3.00	1.28	1.43	1.60	1.75	1.89	2.02
AA/AN/AAC/ANC/AFA	3-1/2	2.54	2.94	3.28	3.67	4.02	4.34	2.32	2.60	2.90	3.18	3.44	3.67	1.57	1.75	1.96	2.15	2.32	2.48
AA/AN/AAC/ANC/AFA	4	3.02	3.49	3.90	4.36	4.77	5.16	2.76	3.08	3.45	3.77	4.08	4.36	1.86	2.08	2.33	2.55	2.75	2.94
AA/AN/AAC/ANC/AFA	5-1/2	4.13	4.77	5.33	5.96	6.53	7.05	3.77	4.21	4.71	5.16	5.58	5.96	2.55	2.85	3.18	3.49	3.76	4.02

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F.
However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-407C Conventional Valves (Tons)– A Series and T Series

Valve Type	Nominal Rating	Evaporator Temperature																	
		50°F						40°F						20°F					
		Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)					
		60	80	100	125	150	175	60	80	100	125	150	175	60	80	100	125	150	175
AA/AN/AFA	1/5	0.14	0.16	0.18	0.20	0.22	0.24	0.14	0.16	0.18	0.20	0.22	0.24	0.14	0.16	0.18	0.20	0.22	0.24
AA/AN/AAC/ANC/AFA	1/4	0.25	0.29	0.32	0.36	0.40	0.43	0.24	0.28	0.31	0.35	0.38	0.41	0.23	0.27	0.30	0.33	0.36	0.39
AA/AN/AAC/ANC/AFA	1/2	0.44	0.51	0.57	0.64	0.70	0.75	0.43	0.50	0.56	0.62	0.68	0.73	0.41	0.47	0.53	0.59	0.65	0.70
AA/AN/AAC/ANC/AFA	1	0.70	0.81	0.90	1.01	1.11	1.20	0.69	0.80	0.89	1.00	1.09	1.18	0.66	0.76	0.85	0.95	1.04	1.13
AA/AN/AAC/ANC/AFA	1-1/4	1.00	1.15	1.29	1.44	1.58	1.71	0.98	1.13	1.27	1.41	1.55	1.67	0.95	1.10	1.23	1.37	1.50	1.62
AA/AN/AAC/ANC/AFA	2	1.48	1.71	1.91	2.14	2.34	2.53	1.45	1.67	1.87	2.09	2.29	2.48	1.39	1.61	1.79	2.01	2.20	2.37
AA/AN/AAC/ANC/AFA	2-1/2	2.07	2.39	2.67	2.99	3.27	3.54	2.04	2.36	2.63	2.94	3.23	3.48	1.95	2.25	2.52	2.81	3.08	3.33
AA/AN/AAC/ANC/AFA	3-1/4	2.54	2.93	3.28	3.67	4.02	4.34	2.49	2.88	3.21	3.59	3.94	4.25	2.39	2.76	3.09	3.45	3.78	4.08
AA/AN/AAC/ANC/AFA	4	3.02	3.49	3.90	4.36	4.78	5.16	2.96	3.42	3.82	4.27	4.68	5.06	2.84	3.28	3.67	4.10	4.49	4.85
AA/AN/AAC/ANC/AFA	5-1/4	4.12	4.76	5.32	5.95	6.51	7.04	4.05	4.68	5.23	5.85	6.40	6.92	3.89	4.49	5.02	5.61	6.15	6.64
TCLE	1/2	0.38	0.44	0.49	0.55	0.60	0.65	0.37	0.43	0.48	0.53	0.59	0.63	0.36	0.42	0.46	0.52	0.57	0.61
TCLE	1	0.71	0.82	0.92	1.02	1.12	1.21	0.70	0.81	0.90	1.01	1.11	1.20	0.67	0.77	0.86	0.97	1.06	1.14
TCLE	2	1.43	1.65	1.85	2.06	2.26	2.44	1.41	1.63	1.82	2.04	2.23	2.41	1.35	1.56	1.74	1.95	2.13	2.31
TCLE	3	2.64	3.05	3.41	3.81	4.17	4.51	2.59	2.99	3.34	3.74	4.10	4.42	2.49	2.88	3.21	3.59	3.94	4.25
TCLE	5	3.85	4.45	4.97	5.56	6.09	6.58	3.77	4.35	4.87	5.44	5.96	6.44	3.62	4.18	4.67	5.23	5.72	6.18
TCLE	7-1/2	5.58	6.44	7.20	8.05	8.82	9.53	5.48	6.33	7.07	7.91	8.66	9.36	5.26	6.07	6.79	7.59	8.32	8.98
TCLE	10	7.69	8.88	9.93	11.10	12.16	13.13	7.55	8.72	9.75	10.90	11.94	12.89	7.25	8.37	9.36	10.46	11.46	12.38
TCLE	12	9.27	10.70	11.97	13.38	14.66	15.83	9.10	10.51	11.75	13.13	14.39	15.54	8.74	10.09	11.28	12.62	13.82	14.93
TJL	11	8.22	9.49	10.61	11.86	13.00	14.04	8.07	9.32	10.42	11.65	12.76	13.78	7.75	8.95	10.01	11.19	12.25	13.24
TJL	14	10.48	12.10	13.53	15.13	16.57	17.90	10.29	11.88	13.28	14.85	16.27	17.57	9.88	11.41	12.76	14.26	15.62	16.87

Note: Standard capacity is rated at 100F liquid inlet and 40F evaporator temperature; with 100 Psi pressure drop across the TXV per ARI 750-2001.

Valve Type	Nominal Rating	Evaporator Temperature																	
		0°F						-20°F						-40°F					
		Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)					
		60	80	100	125	150	175	80	100	125	150	175	200	80	100	125	150	175	200
AA/AN/AFA	1/5	0.11	0.13	0.14	0.16	0.17	0.19	0.09	0.10	0.11	0.12	0.13	0.14	0.05	0.06	0.06	0.07	0.07	0.08
AA/AN/AAC/ANC/AFA	1/4	0.20	0.23	0.26	0.29	0.32	0.34	0.15	0.17	0.19	0.21	0.22	0.24	0.09	0.10	0.11	0.12	0.13	0.14
AA/AN/AAC/ANC/AFA	1/2	0.35	0.40	0.45	0.51	0.55	0.60	0.26	0.29	0.33	0.36	0.38	0.41	0.17	0.19	0.21	0.23	0.25	0.27
AA/AN/AAC/ANC/AFA	1	0.56	0.65	0.72	0.81	0.89	0.96	0.42	0.47	0.53	0.58	0.62	0.66	0.27	0.30	0.34	0.37	0.40	0.43
AA/AN/AAC/ANC/AFA	1-1/4	0.80	0.92	1.03	1.15	1.26	1.37	0.61	0.68	0.76	0.84	0.90	0.96	0.38	0.42	0.48	0.52	0.56	0.60
AA/AN/AAC/ANC/AFA	2	1.18	1.36	1.52	1.70	1.87	2.02	0.90	1.01	1.13	1.23	1.33	1.42	0.56	0.63	0.70	0.77	0.83	0.89
AA/AN/AAC/ANC/AFA	2-1/2	1.65	1.91	2.13	2.38	2.61	2.82	1.26	1.41	1.58	1.73	1.86	1.99	0.79	0.88	0.99	1.08	1.17	1.25
AA/AN/AAC/ANC/AFA	3-1/4	2.02	2.33	2.61	2.92	3.19	3.45	1.54	1.72	1.93	2.11	2.28	2.43	0.97	1.08	1.21	1.33	1.43	1.53
AA/AN/AAC/ANC/AFA	4	2.40	2.77	3.10	3.46	3.79	4.10	1.83	2.05	2.29	2.51	2.71	2.89	1.15	1.29	1.44	1.57	1.70	1.82
AA/AN/AAC/ANC/AFA	5-1/4	3.28	3.79	4.23	4.73	5.19	5.60	2.50	2.80	3.13	3.42	3.70	3.95	1.57	1.76	1.96	2.15	2.32	2.48
TCLE	1/2	0.30	0.35	0.39	0.43	0.47	0.51	0.23	0.26	0.29	0.31	0.34	0.36	0.14	0.16	0.18	0.19	0.21	0.22
TCLE	1	0.56	0.65	0.72	0.81	0.89	0.96	0.43	0.48	0.54	0.59	0.64	0.68	0.27	0.30	0.34	0.37	0.40	0.43
TCLE	2	1.14	1.32	1.47	1.65	1.80	1.95	0.87	0.97	1.09	1.19	1.29	1.38	0.55	0.61	0.69	0.75	0.81	0.87
TCLE	3	2.10	2.42	2.71	3.03	3.32	3.59	1.60	1.79	2.00	2.19	2.37	2.53	1.01	1.13	1.26	1.38	1.49	1.60
TCLE	5	3.06	3.53	3.95	4.42	4.84	5.23	2.33	2.61	2.91	3.19	3.45	3.68	1.47	1.64	1.84	2.01	2.17	2.32
TCLE	7-1/2	4.44	5.13	5.73	6.41	7.02	7.58	3.38	3.78	4.23	4.63	5.00	5.34	2.13	2.38	2.66	2.92	3.15	3.37
TCLE	10	6.12	7.07	7.90	8.83	9.68	10.45	4.66	5.21	5.83	6.38	6.89	7.37	2.93	3.28	3.66	4.01	4.33	4.63
TCLE	12	7.38	8.52	9.53	10.65	11.67	12.60	5.62	6.28	7.03	7.70	8.31	8.89	3.54	3.96	4.43	4.85	5.24	5.60
TJL	11	6.54	7.55	8.44	9.44	10.34	11.17	4.98	5.57	6.23	6.82	7.37	7.87	3.13	3.50	3.91	4.29	4.63	4.95
TJL	14	8.34	9.63	10.77	12.04	13.19	14.24	6.35	7.10	7.94	8.70	9.39	10.04	4.00	4.47	5.00	5.48	5.92	6.32

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F.
However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-410A Conventional Valves (Tons)– A Series

Valve Type	Nominal Rating	Evaporator Temperature																	
		50°F						40°F						20°F					
		Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)					
		110	140	160	210	245	285	110	140	160	210	245	285	110	140	160	210	245	285
AA/AN/AAC/ANC/AFA	1/4	0.34	0.38	0.41	0.47	0.51	0.55	0.34	0.38	0.41	0.47	0.51	0.55	0.33	0.37	0.40	0.46	0.49	0.53
AA/AN/AAC/ANC/AFA	1/2	0.60	0.68	0.72	0.83	0.90	0.97	0.59	0.67	0.71	0.82	0.88	0.95	0.58	0.65	0.70	0.80	0.87	0.93
AA/AN/AAC/ANC/AFA	1	0.96	1.08	1.16	1.33	1.43	1.55	0.95	1.07	1.15	1.31	1.42	1.53	0.93	1.05	1.12	1.28	1.39	1.50
AA/AN/AAC/ANC/AFA	1-1/2	1.38	1.56	1.66	1.91	2.06	2.22	1.36	1.53	1.64	1.88	2.03	2.19	1.33	1.50	1.60	1.84	1.98	2.14
AA/AN/AAC/ANC/AFA	2	2.03	2.29	2.45	2.80	3.03	3.27	2.01	2.27	2.42	2.78	3.00	3.24	1.96	2.21	2.36	2.71	2.93	3.15
AA/AN/AAC/ANC/AFA	3	2.85	3.22	3.44	3.94	4.25	4.59	2.82	3.18	3.40	3.90	4.21	4.54	2.74	3.09	3.30	3.79	4.09	4.41
AA/AN/AAC/ANC/AFA	4	3.49	3.94	4.21	4.82	5.21	5.62	3.45	3.89	4.16	4.77	5.15	5.55	3.36	3.79	4.05	4.64	5.01	5.41
AA/AN/AAC/ANC/AFA	5	4.14	4.67	4.99	5.72	6.18	6.66	4.10	4.63	4.94	5.66	6.12	6.60	3.99	4.50	4.81	5.51	5.95	6.42

Note: Standard capacity is rated at 100F liquid inlet and 40F evaporator temperature; with 160 Psi pressure drop across the TXV per ARI 750-2001.

Valve Type	Nominal Rating	Evaporator Temperature																	
		0°F						-20°F						-40°F					
		Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)					
		140	160	210	245	285	330	140	160	210	245	285	330	140	160	210	245	285	330
AA/AN/AAC/ANC/AFA	1/4	0.34	0.36	0.42	0.45	0.49	0.52	0.24	0.26	0.29	0.32	0.34	0.37	0.16	0.17	0.20	0.21	0.23	0.25
AA/AN/AAC/ANC/AFA	1/2	0.60	0.64	0.73	0.79	0.86	0.92	0.41	0.44	0.50	0.54	0.58	0.63	0.27	0.29	0.33	0.36	0.39	0.41
AA/AN/AAC/ANC/AFA	1	0.95	1.02	1.16	1.26	1.36	1.46	0.66	0.71	0.81	0.87	0.94	1.01	0.44	0.47	0.54	0.58	0.63	0.68
AA/AN/AAC/ANC/AFA	1-1/2	1.36	1.45	1.67	1.80	1.94	2.09	0.95	1.02	1.16	1.26	1.36	1.46	0.63	0.67	0.77	0.83	0.90	0.97
AA/AN/AAC/ANC/AFA	2	2.01	2.15	2.46	2.66	2.87	3.09	1.40	1.50	1.71	1.85	2.00	2.15	0.93	0.99	1.14	1.23	1.33	1.43
AA/AN/AAC/ANC/AFA	3	2.82	3.01	3.45	3.73	4.02	4.33	1.96	2.10	2.40	2.59	2.80	3.01	1.30	1.39	1.59	1.72	1.85	2.00
AA/AN/AAC/ANC/AFA	4	3.46	3.70	4.24	4.58	4.94	5.31	2.40	2.57	2.94	3.17	3.42	3.68	1.60	1.71	1.96	2.12	2.28	2.46
AA/AN/AAC/ANC/AFA	5	4.10	4.38	5.02	5.42	5.85	6.29	2.85	3.05	3.49	3.77	4.07	4.38	1.89	2.02	2.31	2.50	2.70	2.90

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F.
However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-502 Conventional Valves (Tons)– A Series and T Series

Valve Type	Nominal Rating	Evaporator Temperature																	
		50°F						40°F						20°F					
		Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)					
		60	80	100	125	150	175	60	80	100	125	150	175	60	80	100	125	150	175
AA/AN/AAC/ANC/AFA	1/8	0.17	0.20	0.22	0.25	0.27	0.29	0.17	0.20	0.22	0.25	0.27	0.29	0.16	0.18	0.21	0.23	0.25	0.27
AA/AN/AAC/ANC/AFA	1/4	0.30	0.35	0.39	0.43	0.47	0.51	0.29	0.33	0.37	0.42	0.46	0.50	0.28	0.32	0.36	0.40	0.44	0.48
AA/AN/AAC/ANC/AFA	1/2	0.48	0.55	0.62	0.69	0.76	0.82	0.47	0.54	0.61	0.68	0.74	0.80	0.45	0.52	0.58	0.65	0.71	0.77
AA/AN/AAC/ANC/AFA	1	0.68	0.79	0.88	0.98	1.08	1.16	0.67	0.77	0.86	0.97	1.06	1.14	0.64	0.74	0.83	0.92	1.01	1.09
AA/AN/AAC/ANC/AFA	1-1/2	1.41	1.63	1.82	2.04	2.23	2.41	1.38	1.59	1.78	1.99	2.18	2.36	1.32	1.52	1.70	1.91	2.09	2.25
AA/AN/AAC/ANC/AFA	2	1.73	2.00	2.23	2.50	2.74	2.95	1.69	1.95	2.18	2.44	2.67	2.89	1.62	1.87	2.09	2.34	2.56	2.77
AA/AN/AAC/ANC/AFA	2-1/2	2.05	2.37	2.65	2.96	3.24	3.50	2.01	2.32	2.59	2.90	3.18	3.43	1.92	2.22	2.48	2.77	3.04	3.28
AA/AN/AAC/ANC/AFA	3	2.81	3.24	3.63	4.06	4.44	4.80	2.75	3.18	3.55	3.97	4.35	4.70	2.62	3.03	3.38	3.78	4.14	4.47
TCLE	1/4	0.26	0.30	0.34	0.38	0.41	0.44	0.25	0.29	0.32	0.36	0.40	0.43	0.24	0.28	0.31	0.35	0.38	0.41
TCLE	1/2	0.48	0.55	0.62	0.69	0.76	0.82	0.47	0.54	0.61	0.68	0.74	0.80	0.45	0.52	0.58	0.65	0.71	0.77
TCLE	1	0.97	1.12	1.25	1.40	1.53	1.66	0.95	1.10	1.23	1.37	1.50	1.62	0.91	1.05	1.17	1.31	1.44	1.55
TCLE	2	1.80	2.08	2.32	2.60	2.85	3.07	1.76	2.03	2.27	2.54	2.78	3.01	1.68	1.94	2.17	2.42	2.66	2.87
TCLE	3	2.62	3.03	3.38	3.78	4.14	4.47	2.56	2.96	3.30	3.70	4.05	4.37	2.44	2.82	3.15	3.52	3.86	4.17
TCLE	4-1/2	3.80	4.39	4.91	5.48	6.01	6.49	3.72	4.30	4.80	5.37	5.88	6.35	3.55	4.10	4.58	5.12	5.61	6.06
TCLE	7	5.23	6.04	6.75	7.55	8.27	8.93	5.12	5.91	6.61	7.39	8.10	8.74	4.89	5.65	6.31	7.06	7.73	8.35
TCLE	8	6.31	7.29	8.15	9.11	9.98	10.78	6.18	7.14	7.98	8.92	9.77	10.55	5.90	6.81	7.62	8.52	9.33	10.08
TJL	7	5.59	6.45	7.22	8.07	8.84	9.55	5.47	6.32	7.06	7.90	8.65	9.34	5.22	6.03	6.74	7.53	8.25	8.91
TJL	9	7.13	8.23	9.20	10.29	11.27	12.18	6.98	8.06	9.01	10.07	11.04	11.92	6.66	7.69	8.60	9.61	10.53	11.37

Note: Standard capacity is rated at 100F liquid inlet and 40F evaporator temperature; with 100 Psi pressure drop across the TXV per ARI 750-2001.

Valve Type	Nominal Rating	Evaporator Temperature																	
		0°F						-20°F						-40°F					
		Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)					
		60	80	100	125	150	175	80	100	125	150	175	200	80	100	125	150	175	200
AA/AN/AAC/ANC/AFA	1/8	0.15	0.17	0.19	0.22	0.24	0.26	0.11	0.12	0.14	0.15	0.16	0.17	0.07	0.08	0.09	0.10	0.10	0.11
AA/AN/AAC/ANC/AFA	1/4	0.26	0.30	0.34	0.38	0.41	0.44	0.20	0.22	0.25	0.27	0.30	0.32	0.13	0.15	0.16	0.18	0.19	0.21
AA/AN/AAC/ANC/AFA	1/2	0.41	0.47	0.53	0.59	0.65	0.70	0.32	0.36	0.40	0.44	0.47	0.51	0.21	0.23	0.26	0.29	0.31	0.33
AA/AN/AAC/ANC/AFA	1	0.59	0.68	0.76	0.85	0.93	1.01	0.46	0.51	0.58	0.63	0.68	0.73	0.29	0.32	0.36	0.40	0.43	0.46
AA/AN/AAC/ANC/AFA	1-1/2	1.21	1.40	1.56	1.75	1.91	2.07	0.96	1.07	1.20	1.31	1.42	1.52	0.61	0.68	0.76	0.84	0.90	0.96
AA/AN/AAC/ANC/AFA	2	1.49	1.72	1.92	2.15	2.36	2.54	1.17	1.31	1.46	1.60	1.73	1.85	0.75	0.84	0.94	1.03	1.11	1.19
AA/AN/AAC/ANC/AFA	2-1/2	1.76	2.03	2.27	2.54	2.78	3.01	1.39	1.55	1.74	1.90	2.06	2.20	0.89	1.00	1.11	1.22	1.32	1.41
AA/AN/AAC/ANC/AFA	3	2.41	2.78	3.11	3.48	3.81	4.12	1.90	2.12	2.38	2.60	2.81	3.00	1.21	1.35	1.51	1.66	1.79	1.91
TCLE	1/4	0.22	0.25	0.28	0.32	0.35	0.38	0.17	0.19	0.21	0.23	0.25	0.27	0.11	0.12	0.14	0.15	0.16	0.17
TCLE	1/2	0.41	0.47	0.53	0.59	0.65	0.70	0.33	0.37	0.41	0.45	0.49	0.52	0.21	0.23	0.26	0.29	0.31	0.33
TCLE	1	0.84	0.97	1.08	1.21	1.33	1.43	0.66	0.74	0.83	0.90	0.98	1.04	0.42	0.47	0.53	0.58	0.62	0.66
TCLE	2	1.54	1.78	1.99	2.22	2.43	2.63	1.22	1.36	1.53	1.67	1.80	1.93	0.78	0.87	0.98	1.07	1.15	1.23
TCLE	3	2.25	2.60	2.90	3.25	3.56	3.84	1.78	1.99	2.23	2.44	2.63	2.81	1.13	1.26	1.41	1.55	1.67	1.79
TCLE	4-1/2	3.26	3.76	4.21	4.71	5.15	5.57	2.58	2.88	3.23	3.53	3.82	4.08	1.64	1.83	2.05	2.25	2.43	2.59
TCLE	7	4.50	5.20	5.81	6.50	7.12	7.69	3.55	3.97	4.44	4.86	5.25	5.61	2.26	2.53	2.83	3.09	3.34	3.57
TCLE	8	5.42	6.26	7.00	7.82	8.57	9.26	4.28	4.79	5.35	5.86	6.33	6.77	2.73	3.05	3.41	3.74	4.04	4.32
TJL	7	4.81	5.55	6.21	6.94	7.61	8.21	3.80	4.25	4.75	5.20	5.62	6.01	2.42	2.71	3.03	3.31	3.58	3.83
TJL	9	6.13	7.08	7.91	8.85	9.69	10.47	4.84	5.41	6.05	6.63	7.16	7.65	3.08	3.44	3.85	4.22	4.56	4.87

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F.
However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-12 Balanced Ported Valves (Tons)– B, HF, TRAE and T Series

Valve Type	Nominal Rating	Evaporator Temperature 50°F Pressure Drop Across Valve (PSI) 60	80	100	125	150	175	40°F Pressure Drop Across Valve (PSI) 60	80	100	125	150	175	20°F Pressure Drop Across Valve (PSI) 60	80	100	125	150	175
BA/BN	1/4	0.30	0.35	0.39	0.43	0.47	0.51	0.30	0.35	0.39	0.43	0.47	0.51	0.28	0.32	0.36	0.40	0.44	0.48
BA/BN	1/2	0.57	0.66	0.74	0.82	0.90	0.97	0.56	0.65	0.72	0.81	0.89	0.96	0.54	0.62	0.70	0.78	0.85	0.92
BA/BN	1	0.90	1.04	1.16	1.30	1.42	1.54	0.88	1.02	1.14	1.27	1.39	1.50	0.84	0.97	1.08	1.21	1.33	1.43
BA/BN	1-1/4	1.20	1.39	1.55	1.73	1.90	2.05	1.17	1.35	1.51	1.69	1.85	2.00	1.13	1.30	1.46	1.63	1.79	1.93
BA/BN	1-1/2	1.51	1.74	1.95	2.18	2.39	2.58	1.48	1.71	1.91	2.14	2.34	2.53	1.42	1.64	1.83	2.05	2.25	2.43
BA/BN	2	1.83	2.11	2.36	2.64	2.89	3.13	1.80	2.08	2.32	2.60	2.85	3.07	1.72	1.99	2.22	2.48	2.72	2.94
BA/BN	2-1/2	2.37	2.74	3.06	3.42	3.75	4.05	2.33	2.69	3.01	3.36	3.68	3.98	2.23	2.57	2.88	3.22	3.53	3.81
BA/BN	3	3.00	3.46	3.87	4.33	4.74	5.12	2.94	3.39	3.80	4.24	4.65	5.02	2.82	3.26	3.64	4.07	4.46	4.82
BA/BN	3-1/2	3.73	4.31	4.82	5.38	5.90	6.37	3.66	4.23	4.73	5.28	5.79	6.25	3.51	4.05	4.53	5.07	5.55	5.99
HF	1/8	0.17	0.20	0.22	0.25	0.27	0.29	0.17	0.20	0.22	0.25	0.27	0.29	0.16	0.18	0.21	0.23	0.25	0.27
HF	1/4	0.32	0.37	0.41	0.46	0.51	0.55	0.31	0.36	0.40	0.45	0.49	0.53	0.30	0.35	0.39	0.43	0.47	0.51
HF	1/2	0.57	0.66	0.74	0.82	0.90	0.97	0.56	0.65	0.72	0.81	0.89	0.96	0.54	0.62	0.70	0.78	0.85	0.92
HF	1	0.88	1.02	1.14	1.27	1.39	1.50	0.86	0.99	1.11	1.24	1.36	1.47	0.82	0.95	1.06	1.18	1.30	1.40
HF	1-1/4	1.18	1.36	1.52	1.70	1.87	2.02	1.16	1.34	1.50	1.67	1.83	1.98	1.11	1.28	1.43	1.60	1.76	1.90
HF	1-1/2	1.51	1.74	1.95	2.18	2.39	2.58	1.48	1.71	1.91	2.14	2.34	2.53	1.42	1.64	1.83	2.05	2.25	2.43
HF	2	2.00	2.31	2.58	2.89	3.16	3.42	1.96	2.26	2.53	2.83	3.10	3.35	1.88	2.17	2.43	2.71	2.97	3.21
HF	3-1/2	3.55	4.10	4.58	5.12	5.61	6.06	3.48	4.02	4.49	5.02	5.50	5.94	3.34	3.86	4.31	4.82	5.28	5.70
HF	5	4.94	5.70	6.38	7.13	7.81	8.44	4.85	5.60	6.26	7.00	7.67	8.28	4.65	5.37	6.00	6.71	7.35	7.94
HF	6	6.26	7.23	8.08	9.04	9.90	10.69	6.13	7.08	7.91	8.85	9.69	10.47	5.88	6.79	7.59	8.49	9.30	10.04
HF	9	9.28	10.72	11.98	13.39	14.67	15.85	9.10	10.51	11.75	13.13	14.39	15.54	8.73	10.08	11.27	12.60	13.80	14.91
HF	12	12.22	14.11	15.78	17.64	19.32	20.87	11.98	13.83	15.47	17.29	18.94	20.46	11.49	13.27	14.83	16.58	18.17	19.62
TRAE+	7-1/2	7.14	8.24	9.22	10.31	11.29	12.19	7.00	8.08	9.04	10.10	11.07	11.95	6.71	7.75	8.66	9.69	10.61	11.46
TRAE+	10	10.41	12.02	13.44	15.03	16.46	17.78	10.20	11.78	13.17	14.72	16.13	17.42	9.78	11.29	12.63	14.12	15.46	16.70
TRAE+	12	11.62	13.42	15.00	16.77	18.37	19.84	11.39	13.15	14.70	16.44	18.01	19.45	10.92	12.61	14.10	15.76	17.27	18.65
TRAE+	18	17.61	20.33	22.73	25.42	27.84	30.07	17.26	19.93	22.28	24.91	27.29	29.48	16.55	19.11	21.37	23.89	26.17	28.26
TRAE+	25	24.20	27.94	31.24	34.93	38.26	41.33	23.73	27.40	30.64	34.25	37.52	40.53	22.75	26.27	29.37	32.84	35.97	38.85
TRAE	30	32.67	37.72	42.18	47.16	51.66	55.79	32.03	36.99	41.35	46.23	50.64	54.70	30.72	35.47	39.66	44.34	48.57	52.46
TRAE	35	35.64	41.15	46.01	51.44	56.35	60.87	34.94	40.35	45.11	50.43	55.24	59.67	33.51	38.69	43.26	48.37	52.98	57.23
TRAE	40	42.41	48.97	54.75	61.21	67.06	72.43	41.58	48.01	53.68	60.02	65.74	71.01	39.88	46.05	51.48	57.56	63.06	68.11
TJR	8	8.89	10.27	11.48	12.83	14.06	15.18	8.72	10.07	11.26	12.59	13.79	14.89	8.36	9.65	10.79	12.07	13.22	14.28
TJR	11	10.65	12.30	13.75	15.37	16.84	18.19	10.44	12.06	13.48	15.07	16.51	17.83	10.01	11.56	12.92	14.45	15.83	17.10
TER	13	13.31	15.37	17.18	19.21	21.04	22.73	13.05	15.07	16.85	18.84	20.63	22.29	12.51	14.45	16.15	18.06	19.78	21.36
TER	15	15.73	18.16	20.31	22.70	24.87	26.86	15.42	17.81	19.91	22.26	24.38	26.33	14.79	17.08	19.09	21.35	23.39	25.26
TER	20	21.18	24.46	27.34	30.57	33.49	36.17	20.76	23.97	26.80	29.96	32.82	35.45	19.91	22.99	25.70	28.74	31.48	34.00
TER	25	27.23	31.44	35.15	39.30	43.05	46.50	26.69	30.82	34.46	38.52	42.20	45.58	25.60	29.56	33.05	36.95	40.48	43.72
TIR	35	31.29	36.13	40.40	45.16	49.47	53.44	23.63	27.29	30.51	34.11	37.36	40.36	31.29	36.13	40.40	45.16	49.47	53.44
THR	45	42.35	48.90	54.67	61.13	66.96	72.33	41.52	47.94	53.60	59.93	65.65	70.91	39.82	45.98	51.41	57.48	62.96	68.01
THR	55	51.43	59.39	66.40	74.23	81.32	87.83	50.42	58.22	65.09	72.78	79.72	86.11	48.35	55.83	62.42	69.79	76.45	82.57
TMR	55	60.50	69.86	78.11	87.32	95.66	103.32	59.32	68.50	76.58	85.62	93.79	101.31	56.89	65.69	73.44	82.11	89.95	97.16

Note: Standard capacity is rated at 100F liquid inlet and 40F evaporator temperature; with 60 Psi pressure drop across the TXV per ARI 750-2001.

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F.
However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-12 Balanced Ported Valves (Tons)– B, HF, TRAE and T Series (cont.)

Valve Type	Nominal Rating	Evaporator Temperature																	
		0°F						-20°F						-40°F					
		Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)					
		60	80	100	125	150	175	80	100	125	150	175	200	80	100	125	150	175	200
BA/BN	1/4	0.25	0.29	0.32	0.36	0.40	0.43	0.20	0.22	0.25	0.27	0.30	0.32	0.13	0.15	0.16	0.18	0.19	0.21
BA/BN	1/2	0.48	0.55	0.62	0.69	0.76	0.82	0.38	0.42	0.48	0.52	0.56	0.60	0.24	0.27	0.30	0.33	0.35	0.38
BA/BN	1	0.75	0.87	0.97	1.08	1.19	1.28	0.58	0.65	0.73	0.79	0.86	0.92	0.38	0.42	0.48	0.52	0.56	0.60
BA/BN	1-1/4	1.00	1.15	1.29	1.44	1.58	1.71	0.78	0.87	0.98	1.07	1.15	1.23	0.51	0.57	0.64	0.70	0.75	0.81
BA/BN	1-1/2	1.26	1.45	1.63	1.82	1.99	2.15	0.99	1.11	1.24	1.36	1.46	1.57	0.64	0.72	0.80	0.88	0.95	1.01
BA/BN	2	1.53	1.77	1.98	2.21	2.42	2.61	1.20	1.34	1.50	1.64	1.77	1.90	0.78	0.87	0.98	1.07	1.15	1.23
BA/BN	2-1/2	1.98	2.29	2.56	2.86	3.13	3.38	1.55	1.73	1.94	2.12	2.29	2.45	1.01	1.13	1.26	1.38	1.49	1.60
BA/BN	3	2.50	2.89	3.23	3.61	3.95	4.27	1.96	2.19	2.45	2.68	2.90	3.10	1.27	1.42	1.59	1.74	1.88	2.01
BA/BN	3-1/2	3.11	3.59	4.01	4.49	4.92	5.31	2.44	2.73	3.05	3.34	3.61	3.86	1.58	1.77	1.98	2.16	2.34	2.50
HF	1/8	0.14	0.16	0.18	0.20	0.22	0.24	0.11	0.12	0.14	0.15	0.16	0.17	0.07	0.08	0.09	0.10	0.10	0.11
HF	1/4	0.27	0.31	0.35	0.39	0.43	0.46	0.21	0.23	0.26	0.29	0.31	0.33	0.14	0.16	0.18	0.19	0.21	0.22
HF	1/2	0.48	0.55	0.62	0.69	0.76	0.82	0.38	0.42	0.48	0.52	0.56	0.60	0.24	0.27	0.30	0.33	0.35	0.38
HF	1	0.73	0.84	0.94	1.05	1.15	1.25	0.57	0.64	0.71	0.78	0.84	0.90	0.37	0.41	0.46	0.51	0.55	0.59
HF	1-1/4	0.98	1.13	1.27	1.41	1.55	1.67	0.77	0.86	0.96	1.05	1.14	1.22	0.50	0.56	0.63	0.68	0.74	0.79
HF	1-1/2	1.26	1.45	1.63	1.82	1.99	2.15	0.99	1.11	1.24	1.36	1.46	1.57	0.64	0.72	0.80	0.88	0.95	1.01
HF	2	1.66	1.92	2.14	2.40	2.62	2.83	1.30	1.45	1.63	1.78	1.92	2.06	0.85	0.95	1.06	1.16	1.26	1.34
HF	3-1/2	2.96	3.42	3.82	4.27	4.68	5.06	2.32	2.59	2.90	3.18	3.43	3.67	1.51	1.69	1.89	2.07	2.23	2.39
HF	5	4.12	4.76	5.32	5.95	6.51	7.04	3.23	3.61	4.04	4.42	4.78	5.11	2.10	2.35	2.63	2.88	3.11	3.32
HF	6	5.21	6.02	6.73	7.52	8.24	8.90	4.08	4.56	5.10	5.59	6.03	6.45	2.66	2.97	3.33	3.64	3.93	4.21
HF	9	7.73	8.93	9.98	11.16	12.22	13.20	6.06	6.78	7.58	8.30	8.96	9.58	3.94	4.41	4.93	5.40	5.83	6.23
HF	12	10.17	11.74	13.13	14.68	16.08	17.37	7.97	8.91	9.96	10.91	11.79	12.60	5.18	5.79	6.48	7.09	7.66	8.19
TRAE+	7-1/2	5.95	6.87	7.68	8.59	9.41	10.16	4.66	5.21	5.83	6.38	6.89	7.37	3.03	3.39	3.79	4.15	4.48	4.79
TRAE+	10	8.67	10.01	11.19	12.51	13.71	14.81	6.79	7.59	8.49	9.30	10.04	10.74	4.42	4.94	5.53	6.05	6.54	6.99
TRAE+	12	9.67	11.17	12.48	13.96	15.29	16.51	7.58	8.47	9.48	10.38	11.21	11.99	4.93	5.51	6.16	6.75	7.29	7.80
TRAE+	18	14.66	16.93	18.93	21.16	23.18	25.04	11.49	12.85	14.36	15.73	16.99	18.17	7.47	8.35	9.34	10.23	11.05	11.81
TRAE+	25	20.15	23.27	26.01	29.08	31.86	34.41	15.80	17.66	19.75	21.64	23.37	24.98	10.27	11.48	12.84	14.06	15.19	16.24
TRAE	30	27.21	31.42	35.13	39.27	43.02	46.47	21.33	23.85	26.66	29.21	31.55	33.73	13.87	15.51	17.34	18.99	20.51	21.93
TRAE	35	29.68	34.27	38.32	42.84	46.93	50.69	23.26	26.01	29.08	31.85	34.40	36.78	15.13	16.92	18.91	20.72	22.38	23.92
TRAE	40	35.32	40.78	45.60	50.98	55.85	60.32	27.68	30.95	34.60	37.90	40.94	43.77	18.00	20.12	22.50	24.65	26.62	28.46
TJR	8	7.41	8.56	9.57	10.70	11.72	12.65	5.81	6.50	7.26	7.96	8.59	9.19	3.77	4.21	4.71	5.16	5.58	5.96
TJR	11	8.87	10.24	11.45	12.80	14.02	15.15	6.95	7.77	8.69	9.52	10.28	10.99	4.52	5.05	5.65	6.19	6.69	7.15
TER	13	11.08	12.79	14.30	15.99	17.52	18.92	8.69	9.72	10.86	11.90	12.85	13.74	5.65	6.32	7.06	7.74	8.36	8.93
TER	15	13.10	15.13	16.91	18.91	20.71	22.37	10.27	11.48	12.84	14.06	15.19	16.24	6.68	7.47	8.35	9.15	9.88	10.56
TER	20	17.64	20.37	22.77	25.46	27.89	30.13	13.82	15.45	17.28	18.92	20.44	21.85	8.99	10.05	11.24	12.31	13.30	14.21
TER	25	22.67	26.18	29.27	32.72	35.84	38.72	17.77	19.87	22.21	24.33	26.28	28.10	11.56	12.92	14.45	15.83	17.10	18.28
TIR	35	27.71	32.00	35.77	40.00	43.81	47.32	21.72	24.28	27.15	29.74	32.12	34.34	14.12	15.79	17.65	19.33	20.88	22.33
THR	45	35.27	40.73	45.53	50.91	55.77	60.23	27.64	30.90	34.55	37.85	40.88	43.70	17.98	20.10	22.48	24.62	26.59	28.43
THR	55	42.83	49.46	55.29	61.82	67.72	73.15	33.57	37.53	41.96	45.97	49.65	53.08	21.83	24.41	27.29	29.89	32.29	34.52
TMR	55	50.39	58.19	65.05	72.73	79.67	86.06	39.49	44.15	49.36	54.07	58.41	62.44	25.68	28.71	32.10	35.16	37.98	40.60

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F. However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-22 Balanced Ported Valves (Tons)– B, HF, TFE, TRAE and T Series

Valve Type	Nominal Rating	Evaporator Temperature																	
		50°F						40°F						20°F					
		Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)					
		60	80	100	125	150	175	60	80	100	125	150	175	60	80	100	125	150	175
BA/BN	1/2	0.39	0.45	0.50	0.56	0.62	0.67	0.39	0.45	0.50	0.56	0.61	0.66	0.38	0.44	0.49	0.55	0.60	0.65
BA/BN	1	0.75	0.87	0.97	1.08	1.19	1.28	0.74	0.85	0.95	1.06	1.16	1.26	0.72	0.83	0.93	1.04	1.14	1.23
BA/BN	1-1/2	1.16	1.34	1.50	1.67	1.83	1.98	1.15	1.32	1.48	1.65	1.81	1.96	1.12	1.29	1.45	1.62	1.77	1.91
BA/BN	2	1.56	1.80	2.01	2.25	2.47	2.66	1.53	1.77	1.98	2.21	2.42	2.62	1.50	1.73	1.94	2.17	2.37	2.56
BA/BN	2-1/2	1.96	2.26	2.53	2.83	3.10	3.35	1.94	2.24	2.50	2.80	3.06	3.31	1.89	2.18	2.44	2.73	2.99	3.23
BA/BN	3	2.38	2.75	3.07	3.44	3.76	4.06	2.35	2.71	3.03	3.39	3.71	4.01	2.29	2.64	2.96	3.31	3.62	3.91
BA/BN	4	3.08	3.56	3.98	4.45	4.87	5.26	3.04	3.51	3.92	4.38	4.80	5.19	2.97	3.43	3.83	4.29	4.70	5.07
BA/BN	5	3.90	4.50	5.03	5.63	6.17	6.66	3.85	4.45	4.97	5.56	6.09	6.57	3.75	4.33	4.84	5.41	5.93	6.40
BA/BN	6	4.85	5.60	6.26	7.00	7.67	8.28	4.78	5.52	6.17	6.90	7.56	8.16	4.67	5.39	6.03	6.74	7.38	7.98
HF	1/4	0.22	0.25	0.28	0.32	0.35	0.38	0.22	0.25	0.28	0.31	0.34	0.37	0.21	0.24	0.27	0.30	0.33	0.36
HF	1/2	0.42	0.48	0.54	0.61	0.66	0.72	0.41	0.47	0.53	0.59	0.65	0.70	0.40	0.46	0.52	0.58	0.63	0.68
HF	1	0.75	0.87	0.97	1.08	1.19	1.28	0.74	0.85	0.95	1.06	1.16	1.26	0.72	0.83	0.93	1.04	1.14	1.23
HF	1-1/2	1.14	1.32	1.47	1.65	1.80	1.95	1.12	1.30	1.45	1.62	1.78	1.92	1.10	1.27	1.42	1.59	1.74	1.88
HF	2	1.53	1.77	1.98	2.21	2.42	2.61	1.52	1.75	1.96	2.19	2.40	2.59	1.48	1.71	1.91	2.14	2.34	2.53
HF	2-1/2	1.96	2.26	2.53	2.83	3.10	3.35	1.94	2.25	2.51	2.81	3.07	3.32	1.89	2.18	2.44	2.73	2.99	3.23
HF	3	2.59	2.99	3.34	3.74	4.10	4.42	2.56	2.96	3.31	3.70	4.05	4.38	2.50	2.89	3.23	3.61	3.95	4.27
HF	5-1/2	4.61	5.32	5.95	6.65	7.29	7.87	4.56	5.27	5.89	6.59	7.21	7.79	4.44	5.13	5.73	6.41	7.02	7.58
HF	8	6.42	7.41	8.29	9.27	10.15	10.96	6.34	7.33	8.19	9.16	10.03	10.83	6.18	7.14	7.98	8.92	9.77	10.55
HF	10	8.13	9.39	10.50	11.73	12.85	13.88	8.06	9.30	10.40	11.63	12.74	13.76	7.83	9.04	10.11	11.30	12.38	13.37
HF	15	12.05	13.91	15.56	17.39	19.05	20.58	11.91	13.77	15.40	17.22	18.86	20.37	11.61	13.41	14.99	16.76	18.36	19.83
HF	20	15.87	18.33	20.49	22.91	25.09	27.10	15.68	18.07	20.20	22.58	24.74	26.72	15.28	17.64	19.73	22.05	24.16	26.10
TFE	8	6.30	7.27	8.13	9.09	9.96	10.76	6.23	7.19	8.04	8.99	9.85	10.64	6.07	7.01	7.84	8.76	9.60	10.37
TFE	10	8.63	9.97	11.14	12.46	13.65	14.74	8.53	9.85	11.01	12.31	13.48	14.56	8.31	9.60	10.73	11.99	13.14	14.19
TFE	12	10.71	12.37	13.83	15.46	16.93	18.29	10.59	12.23	13.67	15.28	16.74	18.08	10.32	11.92	13.32	14.90	16.32	17.62
TFE	20	16.35	18.88	21.11	23.60	25.85	27.92	16.17	18.67	20.87	23.33	25.56	27.61	15.75	18.19	20.33	22.73	24.90	26.90
TRAE+	10	9.27	10.70	11.97	13.38	14.66	15.83	9.16	10.58	11.83	13.23	14.49	15.65	8.93	10.31	11.53	12.89	14.12	15.25
TRAE+	15	13.52	15.61	17.45	19.51	21.38	23.09	13.36	15.43	17.25	19.29	21.13	22.82	13.02	15.03	16.81	18.79	20.59	22.24
TRAE+	20	15.09	17.42	19.48	21.78	23.86	25.77	14.91	17.22	19.25	21.52	23.58	25.47	14.53	16.78	18.76	20.97	22.97	24.81
TRAE+	30	22.87	26.41	29.53	33.01	36.16	39.06	22.60	26.10	29.18	32.62	35.74	38.60	22.02	25.43	28.43	31.78	34.82	37.61
TRAE+	40	31.43	36.29	40.58	45.37	49.70	53.68	31.07	35.88	40.11	44.84	49.12	53.06	30.27	34.95	39.08	43.69	47.86	51.70
TRAE	50	42.43	48.99	54.78	61.24	67.09	72.46	41.94	48.42	54.14	60.53	66.31	71.62	40.87	47.19	52.76	58.99	64.62	69.80
TRAE	60	46.28	53.44	59.75	66.80	73.18	79.04	45.75	52.82	59.06	66.03	72.33	78.13	44.58	51.48	57.55	64.35	70.49	76.13
TRAE	70	55.09	63.61	71.12	79.52	87.10	94.08	54.45	62.87	70.29	78.59	86.09	92.98	53.06	61.27	68.50	76.59	83.90	90.62
TJR	14	11.55	13.34	14.91	16.67	18.26	19.73	11.42	13.18	14.74	16.48	18.05	19.50	11.13	12.85	14.37	16.06	17.60	19.01
TJR	18	13.83	15.97	17.85	19.96	21.87	23.62	13.67	15.79	17.65	19.73	21.62	23.35	13.32	15.38	17.20	19.23	21.06	22.75
TER	22	17.29	19.96	22.32	24.96	27.34	29.53	17.09	19.73	22.06	24.66	27.02	29.18	16.65	19.23	21.50	24.03	26.33	28.44
TER	26	20.43	23.59	26.38	29.49	32.30	34.89	20.19	23.32	26.07	29.15	31.93	34.49	19.68	22.72	25.41	28.41	31.12	33.61
TER	35	27.50	31.75	35.50	39.69	43.48	46.97	27.18	31.39	35.09	39.23	42.98	46.42	26.49	30.59	34.20	38.24	41.88	45.24
TER	45	35.36	40.83	45.65	51.04	55.91	60.39	34.95	40.36	45.12	50.45	55.26	59.69	34.06	39.33	43.97	49.16	53.85	58.17
TIR	55	43.22	49.91	55.80	62.38	68.34	73.81	42.72	49.33	55.15	61.66	67.54	72.96	41.63	48.07	53.74	60.09	65.82	71.10
THR	75	55.01	63.52	71.02	79.40	86.98	93.95	54.37	62.78	70.19	78.47	85.96	92.85	52.98	61.18	68.40	76.47	83.77	90.48
THR	85	66.79	77.12	86.23	96.40	105.60	114.07	66.02	76.23	85.23	95.29	104.39	112.75	64.33	74.28	83.05	92.85	101.71	109.86
TMR	100	78.58	90.74	101.45	113.42	124.25	134.20	77.67	89.68	100.27	112.11	122.81	132.64	75.69	87.40	97.72	109.25	119.68	129.27

Note: Standard capacity is rated at 100F liquid inlet and 40F evaporator temperature; with 100 Psi pressure drop across the TXV per ARI 750-2001.

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F.
However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-22 Balanced Ported Valves (Tons)– B, HF, TFE, TRAE and T Series (cont.)

Valve Type	Nominal Rating	Evaporator Temperature																	
		0°F						-20°F						-40°F					
		Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)					
		60	80	100	125	150	175	80	100	125	150	175	200	80	100	125	150	175	200
BA/BN	1/2	0.34	0.39	0.44	0.49	0.54	0.58	0.27	0.30	0.34	0.37	0.40	0.43	0.18	0.20	0.23	0.25	0.27	0.28
BA/BN	1	0.65	0.75	0.84	0.94	1.03	1.11	0.52	0.58	0.65	0.71	0.77	0.82	0.34	0.38	0.43	0.47	0.50	0.54
BA/BN	1-1/2	1.02	1.18	1.32	1.47	1.61	1.74	0.81	0.91	1.01	1.11	1.20	1.28	0.53	0.59	0.66	0.73	0.78	0.84
BA/BN	2	1.36	1.57	1.76	1.96	2.15	2.32	1.08	1.21	1.35	1.48	1.60	1.71	0.71	0.79	0.89	0.97	1.05	1.12
BA/BN	2-1/2	1.72	1.99	2.22	2.48	2.72	2.94	1.37	1.53	1.71	1.88	2.03	2.17	0.90	1.01	1.13	1.23	1.33	1.42
BA/BN	3	2.08	2.40	2.69	3.00	3.29	3.55	1.66	1.86	2.08	2.27	2.46	2.62	1.09	1.22	1.36	1.49	1.61	1.72
BA/BN	4	2.69	3.11	3.47	3.88	4.25	4.59	2.15	2.40	2.69	2.94	3.18	3.40	1.41	1.58	1.76	1.93	2.09	2.23
BA/BN	5	3.40	3.93	4.39	4.91	5.38	5.81	2.72	3.04	3.40	3.72	4.02	4.30	1.79	2.00	2.24	2.45	2.65	2.83
BA/BN	6	4.23	4.88	5.46	6.11	6.69	7.22	3.38	3.78	4.23	4.63	5.00	5.34	2.23	2.49	2.79	3.05	3.30	3.53
HF	1/4	0.19	0.22	0.25	0.27	0.30	0.32	0.15	0.17	0.19	0.21	0.22	0.24	0.10	0.11	0.13	0.14	0.15	0.16
HF	1/2	0.36	0.42	0.46	0.52	0.57	0.61	0.29	0.32	0.36	0.40	0.43	0.46	0.19	0.21	0.24	0.26	0.28	0.30
HF	1	0.65	0.75	0.84	0.94	1.03	1.11	0.52	0.58	0.65	0.71	0.77	0.82	0.34	0.38	0.43	0.47	0.50	0.54
HF	1-1/2	1.00	1.15	1.29	1.44	1.58	1.71	0.79	0.88	0.99	1.08	1.17	1.25	0.52	0.58	0.65	0.71	0.77	0.82
HF	2	1.34	1.55	1.73	1.93	2.12	2.29	1.07	1.20	1.34	1.47	1.58	1.69	0.70	0.78	0.88	0.96	1.04	1.11
HF	2-1/2	1.72	1.99	2.22	2.48	2.72	2.94	1.37	1.53	1.71	1.88	2.03	2.17	0.90	1.01	1.13	1.23	1.33	1.42
HF	3	2.26	2.61	2.92	3.26	3.57	3.86	1.81	2.02	2.26	2.48	2.68	2.86	1.19	1.33	1.49	1.63	1.76	1.88
HF	5-1/2	4.03	4.65	5.20	5.82	6.37	6.88	3.22	3.60	4.03	4.41	4.76	5.09	2.12	2.37	2.65	2.90	3.14	3.35
HF	8	5.61	6.48	7.24	8.10	8.87	9.58	4.48	5.01	5.60	6.13	6.63	7.08	2.95	3.30	3.69	4.04	4.36	4.66
HF	10	7.10	8.20	9.17	10.25	11.23	12.13	5.67	6.34	7.09	7.76	8.39	8.97	3.73	4.17	4.66	5.11	5.52	5.90
HF	15	10.53	12.16	13.59	15.20	16.65	17.98	8.40	9.39	10.50	11.50	12.42	13.28	5.53	6.18	6.91	7.57	8.18	8.74
HF	20	13.86	16.00	17.89	20.01	21.91	23.67	11.06	12.37	13.83	15.14	16.36	17.49	7.28	8.14	9.10	9.97	10.77	11.51
TFE	8	5.50	6.35	7.10	7.94	8.70	9.39	4.39	4.91	5.49	6.01	6.49	6.94	2.89	3.23	3.61	3.96	4.27	4.57
TFE	10	7.54	8.71	9.73	10.88	11.92	12.88	6.02	6.73	7.53	8.24	8.90	9.52	3.96	4.43	4.95	5.42	5.86	6.26
TFE	12	9.35	10.80	12.07	13.50	14.78	15.97	7.47	8.35	9.34	10.23	11.05	11.81	4.92	5.50	6.15	6.74	7.28	7.78
TFE	20	14.28	16.49	18.44	20.61	22.58	24.39	11.40	12.75	14.25	15.61	16.86	18.02	7.51	8.40	9.39	10.28	11.11	11.87
TRAE+	10	8.10	9.35	10.46	11.69	12.81	13.83	6.47	7.23	8.09	8.86	9.57	10.23	4.26	4.76	5.33	5.83	6.30	6.74
TRAE+	15	11.80	13.63	15.23	17.03	18.66	20.15	9.42	10.53	11.78	12.90	13.93	14.89	6.21	6.94	7.76	8.50	9.18	9.82
TRAE+	20	13.18	15.22	17.02	19.02	20.84	22.51	10.52	11.76	13.15	14.41	15.56	16.63	6.93	7.75	8.66	9.49	10.25	10.96
TRAE+	30	19.97	23.06	25.78	28.82	31.58	34.11	15.94	17.82	19.93	21.83	23.58	25.20	10.50	11.74	13.13	14.38	15.53	16.60
TRAE+	40	27.45	31.70	35.44	39.62	43.40	46.88	21.92	24.51	27.40	30.02	32.42	34.66	14.43	16.13	18.04	19.76	21.34	22.82
TRAE	50	37.06	42.79	47.84	53.49	58.60	63.29	29.59	33.08	36.99	40.52	43.76	46.79	19.48	21.78	24.35	26.67	28.81	30.80
TRAE	60	40.42	46.67	52.18	58.34	63.91	69.03	32.27	36.08	40.34	44.19	47.73	51.02	21.25	23.76	26.56	29.10	31.43	33.60
TRAE	70	48.11	55.55	62.11	69.44	76.07	82.16	38.41	42.94	48.01	52.60	56.81	60.73	25.29	28.28	31.61	34.63	37.40	39.99
TJR	14	10.09	11.65	13.03	14.56	15.95	17.23	8.05	9.00	10.06	11.02	11.91	12.73	5.30	5.93	6.63	7.26	7.84	8.38
TJR	18	12.08	13.95	15.60	17.44	19.10	20.63	9.64	10.78	12.05	13.20	14.26	15.24	6.35	7.10	7.94	8.70	9.39	10.04
TER	22	15.10	17.44	19.49	21.79	23.88	25.79	12.05	13.47	15.06	16.50	17.82	19.05	7.94	8.88	9.93	10.87	11.74	12.55
TER	26	17.84	20.60	23.03	25.75	28.21	30.47	14.25	15.93	17.81	19.51	21.08	22.53	9.38	10.49	11.73	12.84	13.87	14.83
TER	35	24.02	27.74	31.01	34.67	37.98	41.02	19.18	21.44	23.98	26.26	28.37	30.33	12.63	14.12	15.79	17.29	18.68	19.97
TER	45	30.88	35.66	39.87	44.57	48.83	52.74	24.66	27.57	30.83	33.77	36.47	38.99	16.24	18.16	20.30	22.24	24.02	25.68
TIR	55	37.75	43.59	48.74	54.49	59.69	64.47	30.13	33.69	37.66	41.26	44.56	47.64	19.84	22.18	24.80	27.17	29.34	31.37
THR	75	48.04	55.47	62.02	69.34	75.96	82.04	38.35	42.88	47.94	52.51	56.72	60.64	25.26	28.24	31.58	34.59	37.36	39.94
THR	85	58.33	67.35	75.30	84.19	92.23	99.62	46.57	52.07	58.21	63.77	68.88	73.63	30.67	34.29	38.34	42.00	45.36	48.49
TMR	100	68.63	79.25	88.60	99.06	108.51	117.21	54.79	61.26	68.49	75.02	81.04	86.63	36.08	40.34	45.10	49.40	53.36	57.05

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F.
However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-134a Balanced Ported Valves (Tons)– B, HF, TFE, TRAE and T Series

Valve Type	Nominal Rating	Evaporator Temperature																	
		50°F						40°F						20°F					
		Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)					
		60	80	100	125	150	175	60	80	100	125	150	175	60	80	100	125	150	175
BA/BN	1/2	0.37	0.43	0.48	0.53	0.59	0.63	0.37	0.43	0.48	0.53	0.59	0.63	0.35	0.40	0.45	0.51	0.55	0.60
BA/BN	3/4	0.71	0.82	0.92	1.02	1.12	1.21	0.70	0.81	0.90	1.01	1.11	1.20	0.67	0.77	0.86	0.97	1.06	1.14
BA/BN	1	1.11	1.28	1.43	1.60	1.76	1.90	1.09	1.26	1.41	1.57	1.72	1.86	1.04	1.20	1.34	1.50	1.64	1.78
BA/BN	1-1/2	1.48	1.71	1.91	2.14	2.34	2.53	1.45	1.67	1.87	2.09	2.29	2.48	1.39	1.61	1.79	2.01	2.20	2.37
BA/BN	2	1.87	2.16	2.41	2.70	2.96	3.19	1.84	2.12	2.38	2.66	2.91	3.14	1.76	2.03	2.27	2.54	2.78	3.01
BA/BN	2-1/4	2.27	2.62	2.93	3.28	3.59	3.88	2.22	2.56	2.87	3.20	3.51	3.79	2.13	2.46	2.75	3.07	3.37	3.64
BA/BN	3	2.94	3.39	3.80	4.24	4.65	5.02	2.88	3.33	3.72	4.16	4.55	4.92	2.75	3.18	3.55	3.97	4.35	4.70
BA/BN	3-1/2	3.72	4.30	4.80	5.37	5.88	6.35	3.64	4.20	4.70	5.25	5.76	6.22	3.48	4.02	4.49	5.02	5.50	5.94
BA/BN	4-1/4	4.62	5.33	5.96	6.67	7.30	7.89	4.53	5.23	5.85	6.54	7.16	7.74	4.33	5.00	5.59	6.25	6.85	7.39
HF	1/4	0.21	0.24	0.27	0.30	0.33	0.36	0.21	0.24	0.27	0.30	0.33	0.36	0.20	0.23	0.26	0.29	0.32	0.34
HF	1/2	0.40	0.46	0.52	0.58	0.63	0.68	0.39	0.45	0.50	0.56	0.62	0.67	0.37	0.43	0.48	0.53	0.59	0.63
HF	3/4	0.71	0.82	0.92	1.02	1.12	1.21	0.70	0.81	0.90	1.01	1.11	1.20	0.67	0.77	0.86	0.97	1.06	1.14
HF	1	1.09	1.26	1.41	1.57	1.72	1.86	1.06	1.22	1.37	1.53	1.68	1.81	1.02	1.18	1.32	1.47	1.61	1.74
HF	1-1/2	1.46	1.69	1.88	2.11	2.31	2.49	1.43	1.65	1.85	2.06	2.26	2.44	1.37	1.58	1.77	1.98	2.17	2.34
HF	1-3/4	1.87	2.16	2.41	2.70	2.96	3.19	1.84	2.12	2.38	2.66	2.91	3.14	1.76	2.03	2.27	2.54	2.78	3.01
HF	2-1/2	2.47	2.85	3.19	3.57	3.91	4.22	2.42	2.79	3.12	3.49	3.83	4.13	2.32	2.68	3.00	3.35	3.67	3.96
HF	4	4.40	5.08	5.68	6.35	6.96	7.51	4.31	4.98	5.56	6.22	6.81	7.36	4.12	4.76	5.32	5.95	6.51	7.04
HF	6	6.12	7.07	7.90	8.83	9.68	10.45	6.00	6.93	7.75	8.66	9.49	10.25	5.74	6.63	7.41	8.28	9.08	9.80
HF	7-1/2	7.75	8.95	10.01	11.19	12.25	13.24	7.59	8.76	9.80	10.96	12.00	12.96	7.26	8.38	9.37	10.48	11.48	12.40
HF	11	11.50	13.28	14.85	16.60	18.18	19.64	11.26	13.00	14.54	16.25	17.80	19.23	10.77	12.44	13.90	15.55	17.03	18.39
HF	14	15.13	17.47	19.53	21.84	23.92	25.84	14.82	17.11	19.13	21.39	23.43	25.31	14.18	16.37	18.31	20.47	22.42	24.22
TFE	6	6.01	6.94	7.76	8.67	9.50	10.26	5.89	6.80	7.60	8.50	9.31	10.06	5.63	6.50	7.27	8.13	8.90	9.62
TFE	8	8.23	9.50	10.62	11.88	13.01	14.06	8.06	9.31	10.41	11.63	12.74	13.77	7.71	8.90	9.95	11.13	12.19	13.17
TFE	10	10.22	11.80	13.19	14.75	16.16	17.45	10.01	11.56	12.92	14.45	15.83	17.10	9.57	11.05	12.35	13.81	15.13	16.34
TFE	15	15.60	18.01	20.14	22.52	24.67	26.64	15.28	17.64	19.73	22.05	24.16	26.10	14.61	16.87	18.86	21.09	23.10	24.95
TRAE+	9	8.84	10.21	11.41	12.76	13.98	15.10	8.66	10.00	11.18	12.50	13.69	14.79	8.29	9.57	10.70	11.97	13.11	14.16
TRAE+	13	12.89	14.88	16.64	18.61	20.38	22.01	12.63	14.58	16.31	18.23	19.97	21.57	12.08	13.95	15.60	17.44	19.10	20.63
TRAE+	14	14.39	16.62	18.58	20.77	22.75	24.58	14.09	16.27	18.19	20.34	22.28	24.06	13.48	15.57	17.40	19.46	21.31	23.02
TRAE+	22	21.81	25.18	28.16	31.48	34.48	37.25	21.36	24.66	27.58	30.83	33.77	36.48	20.43	23.59	26.38	29.49	32.30	34.89
TRAE+	30	29.98	34.62	38.70	43.27	47.40	51.20	29.36	33.90	37.90	42.38	46.42	50.14	28.09	32.44	36.26	40.54	44.41	47.97
TRAE	40	40.48	46.74	52.26	58.43	64.00	69.13	39.64	45.77	51.18	57.22	62.68	67.70	37.92	43.79	48.95	54.73	59.96	64.76
TRAE	45	44.15	50.98	57.00	63.73	69.81	75.40	43.24	49.93	55.82	62.41	68.37	73.85	41.36	47.76	53.40	59.70	65.40	70.64
TRAE	50	52.54	60.67	67.83	75.83	83.07	89.73	51.46	59.42	66.43	74.28	81.37	87.88	49.22	56.83	63.54	71.04	77.82	84.06
TJR	11	11.02	12.72	14.23	15.91	17.42	18.82	10.79	12.46	13.93	15.57	17.06	18.43	10.32	11.92	13.32	14.90	16.32	17.62
TJR	13	13.19	15.23	17.03	19.04	20.86	22.53	12.92	14.92	16.68	18.65	20.43	22.07	12.36	14.27	15.96	17.84	19.54	21.11
TER	16	16.49	19.04	21.29	23.80	26.07	28.16	16.15	18.65	20.85	23.31	25.54	27.58	15.45	17.84	19.95	22.30	24.43	26.39
TER	19	19.49	22.51	25.16	28.13	30.82	33.29	19.09	22.04	24.65	27.55	30.18	32.60	18.26	21.08	23.57	26.36	28.87	31.18
TER	25	26.23	30.29	33.86	37.86	41.47	44.80	25.69	29.66	33.17	37.08	40.62	43.87	24.58	28.38	31.73	35.48	38.86	41.98
TER	31	33.73	38.95	43.55	48.69	53.33	57.60	33.03	38.14	42.64	47.67	52.23	56.41	31.60	36.49	40.80	45.61	49.96	53.97
TIR	45	41.23	47.61	53.23	59.51	65.19	70.41	40.37	46.62	52.12	58.27	63.83	68.94	38.62	44.59	49.86	55.74	61.06	65.96
THR	55	52.47	60.59	67.74	75.73	82.96	89.61	51.38	59.33	66.33	74.16	81.24	87.75	49.15	56.75	63.45	70.94	77.71	83.94
THR	68	63.71	73.57	82.25	91.96	100.73	108.81	62.40	72.05	80.56	90.07	98.66	106.57	59.69	68.92	77.06	86.16	94.38	101.94
TMR	68	74.95	86.54	96.76	108.18	118.51	128.00	73.41	84.77	94.77	105.96	116.07	125.37	70.22	81.08	90.65	101.35	111.03	119.92

Note: Standard capacity is rated at 100F liquid inlet and 40F evaporator temperature; with 60 Psi pressure drop across the TXV per ARI 750-2001.

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F.
However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-134a Balanced Ported Valves (Tons)– B, HF, TFE, TRAE and T Series (cont.)

Valve Type	Nominal Rating	Evaporator Temperature																	
		0°F						-20°F						-40°F					
		Pressure Drop Across Valve (PSI))						Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)					
		60	80	100	125	150	175	80	100	125	150	175	200	80	100	125	150	175	200
BA/BN	1/2	0.29	0.33	0.37	0.42	0.46	0.50	0.22	0.25	0.28	0.30	0.33	0.35	0.13	0.15	0.16	0.18	0.19	0.21
BA/BN	3/4	0.55	0.64	0.71	0.79	0.87	0.94	0.41	0.46	0.51	0.56	0.61	0.65	0.25	0.28	0.31	0.34	0.37	0.40
BA/BN	1	0.86	0.99	1.11	1.24	1.36	1.47	0.64	0.72	0.80	0.88	0.95	1.01	0.39	0.44	0.49	0.53	0.58	0.62
BA/BN	1-1/2	1.14	1.32	1.47	1.65	1.80	1.95	0.85	0.95	1.06	1.16	1.26	1.34	0.52	0.58	0.65	0.71	0.77	0.82
BA/BN	2	1.44	1.66	1.86	2.08	2.28	2.46	1.08	1.21	1.35	1.48	1.60	1.71	0.66	0.74	0.83	0.90	0.98	1.04
BA/BN	2-1/4	1.75	2.02	2.26	2.53	2.77	2.99	1.31	1.46	1.64	1.79	1.94	2.07	0.80	0.89	1.00	1.10	1.18	1.26
BA/BN	3	2.27	2.62	2.93	3.28	3.59	3.88	1.69	1.89	2.11	2.31	2.50	2.67	1.04	1.16	1.30	1.42	1.54	1.64
BA/BN	3-1/2	2.87	3.31	3.71	4.14	4.54	4.90	2.14	2.39	2.68	2.93	3.17	3.38	1.31	1.46	1.64	1.79	1.94	2.07
BA/BN	4-1/4	3.57	4.12	4.61	5.15	5.64	6.10	2.66	2.97	3.33	3.64	3.93	4.21	1.63	1.82	2.04	2.23	2.41	2.58
HF	1/4	0.16	0.18	0.21	0.23	0.25	0.27	0.12	0.13	0.15	0.16	0.18	0.19	0.07	0.08	0.09	0.10	0.10	0.11
HF	1/2	0.31	0.36	0.40	0.45	0.49	0.53	0.23	0.26	0.29	0.31	0.34	0.36	0.14	0.16	0.18	0.19	0.21	0.22
HF	3/4	0.55	0.64	0.71	0.79	0.87	0.94	0.41	0.46	0.51	0.56	0.61	0.65	0.25	0.28	0.31	0.34	0.37	0.40
HF	1	0.84	0.97	1.08	1.21	1.33	1.43	0.63	0.70	0.79	0.86	0.93	1.00	0.38	0.42	0.48	0.52	0.56	0.60
HF	1-1/2	1.13	1.30	1.46	1.63	1.79	1.93	0.84	0.94	1.05	1.15	1.24	1.33	0.52	0.58	0.65	0.71	0.77	0.82
HF	1-3/4	1.44	1.66	1.86	2.08	2.28	2.46	1.08	1.21	1.35	1.48	1.60	1.71	0.66	0.74	0.83	0.90	0.98	1.04
HF	2-1/2	1.91	2.21	2.47	2.76	3.02	3.26	1.42	1.59	1.78	1.94	2.10	2.25	0.87	0.97	1.09	1.19	1.29	1.38
HF	4	3.39	3.91	4.38	4.89	5.36	5.79	2.53	2.83	3.16	3.46	3.74	4.00	1.55	1.73	1.94	2.12	2.29	2.45
HF	6	4.72	5.45	6.09	6.81	7.46	8.06	3.52	3.94	4.40	4.82	5.21	5.57	2.16	2.41	2.70	2.96	3.19	3.42
HF	7-1/2	5.98	6.91	7.72	8.63	9.46	10.21	4.46	4.99	5.58	6.11	6.60	7.05	2.74	3.06	3.43	3.75	4.05	4.33
HF	11	8.87	10.24	11.45	12.80	14.02	15.15	6.62	7.40	8.28	9.06	9.79	10.47	4.06	4.54	5.08	5.56	6.00	6.42
HF	14	11.67	13.48	15.07	16.84	18.45	19.93	8.71	9.74	10.89	11.93	12.88	13.77	5.34	5.97	6.68	7.31	7.90	8.44
TFE	6	4.64	5.36	5.99	6.70	7.34	7.92	3.46	3.87	4.33	4.74	5.12	5.47	2.12	2.37	2.65	2.90	3.14	3.35
TFE	8	6.35	7.33	8.20	9.17	10.04	10.84	4.74	5.30	5.93	6.49	7.01	7.49	2.91	3.25	3.64	3.98	4.30	4.60
TFE	10	7.88	9.10	10.17	11.37	12.46	13.46	5.88	6.57	7.35	8.05	8.70	9.30	3.61	4.04	4.51	4.94	5.34	5.71
TFE	15	12.03	13.89	15.53	17.36	19.02	20.55	8.97	10.03	11.21	12.28	13.27	14.18	5.51	6.16	6.89	7.54	8.15	8.71
TRAE+	9	6.82	7.88	8.80	9.84	10.78	11.65	5.09	5.69	6.36	6.97	7.53	8.05	3.12	3.49	3.90	4.27	4.61	4.93
TRAE+	13	9.94	11.48	12.83	14.35	15.72	16.98	7.42	8.30	9.28	10.16	10.97	11.73	4.55	5.09	5.69	6.23	6.73	7.19
TRAE+	14	11.1	12.82	14.33	16.02	17.55	18.96	8.28	9.26	10.35	11.34	12.25	13.09	5.08	5.68	6.35	6.96	7.51	8.03
TRAE+	22	16.82	19.42	21.71	24.28	26.59	28.73	12.55	14.03	15.69	17.18	18.56	19.84	7.70	8.61	9.63	10.54	11.39	12.17
TRAE+	30	23.12	26.70	29.85	33.37	36.56	39.48	17.25	19.29	21.56	23.62	25.51	27.27	10.59	11.84	13.24	14.50	15.66	16.74
TRAE	40	31.21	36.04	40.29	45.05	49.35	53.30	23.29	26.04	29.11	31.89	34.45	36.82	14.29	15.98	17.86	19.57	21.14	22.59
TRAE	45	34.04	39.31	43.95	49.13	53.82	58.13	25.40	28.40	31.75	34.78	37.57	40.16	15.59	17.43	19.49	21.35	23.06	24.65
TRAE	50	40.52	46.79	52.31	58.49	64.07	69.20	30.23	33.80	37.79	41.39	44.71	47.80	18.55	20.74	23.19	25.40	27.44	29.33
TJR	11	8.50	9.81	10.97	12.27	13.44	14.52	6.34	7.09	7.93	8.68	9.38	10.02	3.89	4.35	4.86	5.33	5.75	6.15
TJR	13	10.17	11.74	13.13	14.68	16.08	17.37	7.59	8.49	9.49	10.39	11.23	12.00	4.66	5.21	5.83	6.38	6.89	7.37
TER	16	12.72	14.69	16.42	18.36	20.11	21.72	9.49	10.61	11.86	12.99	14.04	15.01	5.82	6.51	7.28	7.97	8.61	9.20
TER	19	15.03	17.36	19.40	21.69	23.76	25.67	11.21	12.53	14.01	15.35	16.58	17.72	6.88	7.69	8.60	9.42	10.18	10.88
TER	25	20.23	23.36	26.12	29.20	31.99	34.55	15.09	16.87	18.86	20.66	22.32	23.86	9.26	10.35	11.58	12.68	13.70	14.64
TER	31	26.01	30.03	33.58	37.54	41.13	44.42	19.41	21.70	24.26	26.58	28.71	30.69	11.91	13.32	14.89	16.31	17.62	18.83
TIR	45	31.79	36.71	41.04	45.88	50.26	54.29	23.72	26.52	29.65	32.48	35.08	37.50	14.56	16.28	18.20	19.94	21.53	23.02
THR	55	40.46	46.72	52.23	58.40	63.97	69.10	30.19	33.75	37.74	41.34	44.65	47.73	18.53	20.72	23.16	25.37	27.41	29.30
THR	68	49.13	56.73	63.43	70.91	77.68	83.91	36.66	40.99	45.83	50.20	54.22	57.96	22.50	25.16	28.13	30.81	33.28	35.58
TMR	68	57.80	66.74	74.62	83.43	91.39	98.71	43.12	48.21	53.90	59.04	63.78	68.18	26.47	29.59	33.09	36.25	39.15	41.85

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F.
However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-450A/R-513A Conventional Valves (Tons) B Series and HF Series

Valve Type	Nominal Rating	Evaporator Temperature																	
		50°F						40°F						20°F					
		Pressure Drop Across Valve (psi)						Pressure Drop Across Valve (psi)						Pressure Drop Across Valve (psi)					
		60	80	100	125	150	175	60	80	100	125	150	175	60	80	100	125	150	175
BA/BN	1/4	0.30	0.34	0.38	0.43	0.47	0.51	0.29	0.33	0.37	0.42	0.46	0.50	0.28	0.32	0.36	0.40	0.44	0.47
BA/BN	1/2	0.56	0.65	0.73	0.81	0.89	0.96	0.55	0.63	0.71	0.79	0.87	0.94	0.52	0.60	0.67	0.75	0.82	0.89
BA/BN	3/4	0.88	1.01	1.13	1.26	1.38	1.49	0.85	0.99	1.10	1.23	1.35	1.46	0.81	0.94	1.05	1.17	1.28	1.39
BA/BN	1	1.16	1.34	1.50	1.68	1.84	1.99	1.14	1.31	1.47	1.64	1.80	1.94	1.08	1.25	1.39	1.56	1.71	1.84
BA/BN	1-1/2	1.48	1.71	1.91	2.13	2.34	2.52	1.44	1.67	1.86	2.08	2.28	2.46	1.37	1.58	1.77	1.98	2.17	2.34
BA/BN	1-3/4	1.78	2.06	2.30	2.57	2.82	3.04	1.74	2.01	2.25	2.51	2.75	2.97	1.65	1.91	2.13	2.39	2.61	2.82
BA/BN	2-1/4	2.31	2.67	2.99	3.34	3.66	3.95	2.26	2.61	2.91	3.26	3.57	3.85	2.14	2.48	2.77	3.10	3.39	3.66
BA/BN	3	2.92	3.37	3.77	4.22	4.62	4.99	2.85	3.29	3.68	4.12	4.51	4.87	2.71	3.13	3.50	3.91	4.29	4.63
BA/BN	3-1/2	3.64	4.20	4.70	5.25	5.75	6.21	3.55	4.10	4.58	5.12	5.61	6.06	3.37	3.89	4.35	4.87	5.33	5.76
HF	1/5	0.17	0.19	0.22	0.24	0.27	0.29	0.16	0.19	0.21	0.24	0.26	0.28	0.16	0.18	0.20	0.23	0.25	0.27
HF	1/4	0.31	0.36	0.40	0.45	0.50	0.53	0.31	0.35	0.39	0.44	0.48	0.52	0.29	0.34	0.37	0.42	0.46	0.50
HF	1/2	0.56	0.65	0.73	0.81	0.89	0.96	0.55	0.63	0.71	0.79	0.87	0.94	0.52	0.60	0.67	0.75	0.82	0.89
HF	3/4	0.85	0.98	1.10	1.23	1.35	1.45	0.83	0.96	1.07	1.20	1.31	1.42	0.79	0.91	1.02	1.14	1.25	1.35
HF	1	1.15	1.33	1.48	1.66	1.82	1.96	1.12	1.29	1.45	1.62	1.77	1.91	1.06	1.23	1.37	1.54	1.68	1.82
HF	1-1/2	1.48	1.71	1.91	2.13	2.34	2.52	1.44	1.67	1.86	2.08	2.28	2.46	1.37	1.58	1.77	1.98	2.17	2.34
HF	2	1.94	2.24	2.51	2.80	3.07	3.32	1.90	2.19	2.45	2.74	3.00	3.24	1.80	2.08	2.33	2.60	2.85	3.08
HF	3-1/2	3.46	4.00	4.47	4.99	5.47	5.91	3.38	3.90	4.36	4.88	5.34	5.77	3.21	3.71	4.14	4.63	5.07	5.48
HF	4-1/2	4.82	5.56	6.22	6.95	7.62	8.23	4.70	5.43	6.07	6.79	7.44	8.03	4.47	5.16	5.77	6.45	7.06	7.63
HF	6	6.09	7.04	7.87	8.80	9.63	10.41	5.95	6.87	7.68	8.59	9.41	10.16	5.65	6.53	7.30	8.16	8.94	9.65
HF	9	9.04	10.44	11.67	13.05	14.29	15.44	8.82	10.19	11.39	12.74	13.95	15.07	8.38	9.68	10.82	12.10	13.26	14.32
HF	11-1/2	11.90	13.74	15.36	17.17	18.81	20.32	11.61	13.41	14.99	16.76	18.36	19.84	11.03	12.74	14.25	15.93	17.45	18.84

Note: Standard capacity is rate at 100F liquid inlet and 40F evaporator temperature; with 60 Psi pressure drop across the TXV.

Valve Type	Nominal Rating	Evaporator Temperature																	
		0°F						-20°F						-40°F					
		Pressure Drop Across Valve (psi)						Pressure Drop Across Valve (psi)						Pressure Drop Across Valve (psi)					
		60	80	100	125	150	175	80	100	125	150	175	200	80	100	125	150	175	200
BA/BN	1/4	0.20	0.23	0.26	0.29	0.32	0.34	0.15	0.17	0.19	0.21	0.22	0.24	0.09	0.10	0.11	0.12	0.13	0.14
BA/BN	1/2	0.38	0.44	0.49	0.55	0.60	0.65	0.29	0.32	0.36	0.39	0.42	0.45	0.16	0.18	0.20	0.22	0.24	0.26
BA/BN	3/4	0.59	0.68	0.76	0.85	0.93	1.01	0.45	0.50	0.56	0.61	0.66	0.71	0.25	0.28	0.32	0.35	0.38	0.40
BA/BN	1	0.78	0.90	1.01	1.13	1.24	1.34	0.59	0.66	0.74	0.81	0.88	0.94	0.34	0.38	0.42	0.46	0.50	0.54
BA/BN	1-1/2	0.99	1.15	1.28	1.44	1.57	1.70	0.75	0.84	0.94	1.03	1.11	1.19	0.43	0.48	0.54	0.59	0.64	0.68
BA/BN	1-3/4	1.20	1.39	1.55	1.73	1.90	2.05	0.91	1.02	1.14	1.25	1.35	1.44	0.52	0.58	0.65	0.71	0.77	0.82
BA/BN	2-1/4	1.56	1.80	2.01	2.25	2.46	2.66	1.18	1.32	1.47	1.62	1.74	1.87	0.67	0.75	0.84	0.92	1.00	1.06
BA/BN	3	1.97	2.27	2.54	2.84	3.11	3.36	1.49	1.67	1.86	2.04	2.21	2.36	0.85	0.95	1.06	1.17	1.26	1.35
BA/BN	3-1/2	2.45	2.83	3.16	3.53	3.87	4.18	1.86	2.07	2.32	2.54	2.74	2.93	1.06	1.18	1.32	1.45	1.57	1.67
HF	1/5	0.11	0.13	0.15	0.16	0.18	0.19	0.09	0.10	0.11	0.12	0.13	0.14	0.05	0.05	0.06	0.07	0.07	0.08
HF	1/4	0.21	0.24	0.27	0.30	0.33	0.36	0.16	0.18	0.20	0.22	0.24	0.25	0.09	0.10	0.11	0.12	0.13	0.14
HF	1/2	0.38	0.44	0.49	0.55	0.60	0.65	0.29	0.32	0.36	0.39	0.42	0.45	0.16	0.18	0.20	0.22	0.24	0.26
HF	3/4	0.57	0.66	0.74	0.83	0.91	0.98	0.43	0.49	0.54	0.59	0.64	0.69	0.25	0.28	0.31	0.34	0.37	0.39
HF	1	0.77	0.89	1.00	1.12	1.22	1.32	0.59	0.65	0.73	0.80	0.87	0.93	0.33	0.37	0.42	0.46	0.49	0.53
HF	1-1/2	0.99	1.15	1.28	1.44	1.57	1.70	0.75	0.84	0.94	1.03	1.11	1.19	0.43	0.48	0.54	0.59	0.64	0.68
HF	2	1.31	1.51	1.69	1.89	2.07	2.23	0.99	1.11	1.24	1.36	1.47	1.57	0.57	0.63	0.71	0.77	0.84	0.89
HF	3-1/2	2.33	2.69	3.01	3.36	3.68	3.98	1.77	1.97	2.21	2.42	2.61	2.79	1.01	1.13	1.26	1.38	1.49	1.59
HF	4-1/2	3.24	3.74	4.19	4.68	5.13	5.54	2.46	2.75	3.07	3.37	3.64	3.89	1.40	1.57	1.75	1.92	2.07	2.22
HF	6	4.10	4.74	5.30	5.92	6.49	7.01	3.11	3.48	3.89	4.26	4.60	4.92	1.77	1.98	2.22	2.43	2.62	2.81
HF	9	6.09	7.03	7.86	8.78	9.62	10.39	4.61	5.16	5.77	6.32	6.82	7.29	2.63	2.94	3.29	3.60	3.89	4.16
HF	11-1/2	8.01	9.25	10.34	11.56	12.66	13.68	6.07	6.79	7.59	8.31	8.98	9.60	3.46	3.87	4.33	4.74	5.12	5.48

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	10	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.10	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	.93	.85	.78	.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	.92	.85	.77	.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F.
However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-404A/R-507 Balanced Ported Valves (Tons)– B, HF, TFE, TRAE and T Series

Valve Type	Nominal Rating	Evaporator Temperature																	
		50°F						40°F						20°F					
		Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)					
		60	80	100	125	150	175	60	80	100	125	150	175	60	80	100	125	150	175
BA/BN	1/4	0.29	0.33	0.37	0.42	0.46	0.50	0.28	0.32	0.36	0.40	0.44	0.48	0.27	0.31	0.35	0.39	0.43	0.46
BA/BN	1/2	0.55	0.64	0.71	0.79	0.87	0.94	0.53	0.61	0.68	0.76	0.84	0.91	0.51	0.59	0.66	0.74	0.81	0.87
BA/BN	1	0.85	0.98	1.10	1.23	1.34	1.45	0.83	0.96	1.07	1.20	1.31	1.42	0.79	0.91	1.02	1.14	1.25	1.35
BA/BN	1-1/4	1.14	1.32	1.47	1.65	1.80	1.95	1.11	1.28	1.43	1.60	1.76	1.90	1.06	1.22	1.37	1.53	1.68	1.81
BA/BN	1-1/2	1.44	1.66	1.86	2.08	2.28	2.46	1.41	1.63	1.82	2.04	2.23	2.41	1.34	1.55	1.73	1.93	2.12	2.29
BA/BN	2	1.74	2.01	2.25	2.51	2.75	2.97	1.70	1.96	2.19	2.45	2.69	2.90	1.62	1.87	2.09	2.34	2.56	2.77
BA/BN	2-1/2	2.26	2.61	2.92	3.26	3.57	3.86	2.20	2.54	2.84	3.18	3.48	3.76	2.09	2.41	2.70	3.02	3.30	3.57
BA/BN	3	2.85	3.29	3.68	4.11	4.51	4.87	2.79	3.22	3.60	4.03	4.41	4.76	2.65	3.06	3.42	3.82	4.19	4.53
BA/BN	4	3.55	4.10	4.58	5.12	5.61	6.06	3.47	4.01	4.48	5.01	5.49	5.93	3.29	3.80	4.25	4.75	5.20	5.62
HF	1/8	0.16	0.18	0.21	0.23	0.25	0.27	0.16	0.18	0.21	0.23	0.25	0.27	0.15	0.17	0.19	0.22	0.24	0.26
HF	1/4	0.31	0.36	0.40	0.45	0.49	0.53	0.30	0.35	0.39	0.43	0.47	0.51	0.28	0.32	0.36	0.40	0.44	0.48
HF	1/2	0.55	0.64	0.71	0.79	0.87	0.94	0.53	0.61	0.68	0.76	0.84	0.91	0.51	0.59	0.66	0.74	0.81	0.87
HF	1	0.83	0.96	1.07	1.20	1.31	1.42	0.82	0.95	1.06	1.18	1.30	1.40	0.77	0.89	0.99	1.11	1.22	1.32
HF	1-1/4	1.12	1.29	1.45	1.62	1.77	1.91	1.10	1.27	1.42	1.59	1.74	1.88	1.04	1.20	1.34	1.50	1.64	1.78
HF	1-1/2	1.44	1.66	1.86	2.08	2.28	2.46	1.41	1.63	1.82	2.04	2.23	2.41	1.34	1.55	1.73	1.93	2.12	2.29
HF	2	1.90	2.19	2.45	2.74	3.00	3.24	1.86	2.15	2.40	2.68	2.94	3.18	1.76	2.03	2.27	2.54	2.78	3.01
HF	3-1/2	3.38	3.90	4.36	4.88	5.34	5.77	3.30	3.81	4.26	4.76	5.22	5.64	3.13	3.61	4.04	4.52	4.95	5.35
HF	5	4.70	5.43	6.07	6.78	7.43	8.03	4.59	5.30	5.93	6.63	7.26	7.84	4.36	5.03	5.63	6.29	6.89	7.45
HF	7	5.95	6.87	7.68	8.59	9.41	10.16	5.81	6.71	7.50	8.39	9.19	9.92	5.52	6.37	7.13	7.97	8.73	9.43
HF	10	8.83	10.20	11.40	12.75	13.96	15.08	8.62	9.95	11.13	12.44	13.63	14.72	8.19	9.46	10.57	11.82	12.95	13.99
HF	13	11.62	13.42	15.00	16.77	18.37	19.84	11.35	13.11	14.65	16.38	17.95	19.38	10.78	12.45	13.92	15.56	17.04	18.41
TFE	5	4.62	5.33	5.96	6.67	7.30	7.89	4.51	5.21	5.82	6.51	7.13	7.70	4.28	4.94	5.53	6.18	6.77	7.31
TFE	7	6.32	7.30	8.16	9.12	9.99	10.79	6.17	7.12	7.97	8.91	9.76	10.54	5.86	6.77	7.57	8.46	9.27	10.01
TFE	9	7.84	9.05	10.12	11.32	12.40	13.39	7.66	8.85	9.89	11.06	12.11	13.08	7.28	8.41	9.40	10.51	11.51	12.43
TFE	14	11.98	13.83	15.47	17.29	18.94	20.46	11.70	13.51	15.10	16.89	18.50	19.98	11.11	12.83	14.34	16.04	17.57	18.97
TRAE+	8	6.79	7.84	8.77	9.80	10.74	11.60	6.63	7.66	8.56	9.57	10.48	11.32	6.30	7.27	8.13	9.09	9.96	10.76
TRAE+	12	9.90	11.43	12.78	14.29	15.65	16.91	9.67	11.17	12.48	13.96	15.29	16.51	9.19	10.61	11.86	13.26	14.53	15.69
TRAE+	14	11.05	12.76	14.27	15.95	17.47	18.87	10.79	12.46	13.93	15.57	17.06	18.43	10.25	11.84	13.23	14.79	16.21	17.51
TRAE+	20	16.75	19.34	21.62	24.18	26.48	28.61	16.36	18.89	21.12	23.61	25.87	27.94	15.54	17.94	20.06	22.43	24.57	26.54
TRAE+	30	23.02	26.58	29.72	33.23	36.40	39.31	22.49	25.97	29.03	32.46	35.56	38.41	21.36	24.66	27.58	30.83	33.77	36.48
TRAE	35	31.08	35.89	40.12	44.86	49.14	53.08	30.36	35.06	39.19	43.82	48.00	51.85	28.84	33.30	37.23	41.63	45.60	49.25
TRAE	40	33.90	39.14	43.76	48.93	53.60	57.90	33.11	38.23	42.74	47.79	52.35	56.55	31.45	36.32	40.60	45.39	49.73	53.71
TRAE	50	40.34	46.58	52.08	58.23	63.78	68.89	39.41	45.51	50.88	56.88	62.31	67.31	37.44	43.23	48.33	54.04	59.20	63.94
TJR	9	8.46	9.77	10.92	12.21	13.38	14.45	8.26	9.54	10.66	11.92	13.06	14.11	7.85	9.06	10.13	11.33	12.41	13.41
TJR	12	10.13	11.70	13.08	14.62	16.02	17.30	9.89	11.42	12.77	14.27	15.64	16.89	9.40	10.85	12.14	13.57	14.86	16.05
TER	14	12.66	14.62	16.34	18.27	20.02	21.62	12.37	14.28	15.97	17.85	19.56	21.13	11.75	13.57	15.17	16.96	18.58	20.07
TER	16	14.96	17.27	19.31	21.59	23.65	25.55	14.62	16.88	18.87	21.10	23.12	24.97	13.88	16.03	17.92	20.03	21.95	23.70
TER	21	20.14	23.26	26.00	29.07	31.84	34.40	19.68	22.72	25.41	28.41	31.12	33.61	18.69	21.58	24.13	26.98	29.55	31.92
TER	27	25.90	29.91	33.44	37.38	40.95	44.23	25.30	29.21	32.66	36.52	40.00	43.21	24.03	27.75	31.02	34.68	37.99	41.04
TIR	37	31.65	36.55	40.86	45.68	50.04	54.05	30.92	35.70	39.92	44.63	48.89	52.81	29.37	33.91	37.92	42.39	46.44	50.16
THR	48	40.29	46.52	52.01	58.15	63.70	68.81	39.35	45.44	50.80	56.80	62.22	67.20	37.38	43.16	48.26	53.95	59.10	63.84
THR	60	48.92	56.49	63.16	70.61	77.35	83.55	47.78	55.17	61.68	68.96	75.55	81.60	45.39	52.41	58.60	65.51	71.77	77.52
TMR	60	57.55	66.45	74.30	83.07	90.99	98.29	56.22	64.92	72.58	81.15	88.89	96.01	53.40	61.66	68.94	77.08	84.43	91.20

Note: Standard capacity is rated at 100F liquid inlet and 40F evaporator temperature; with 100 Psi pressure drop across the TXV per ARI 750-2001.

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F.
However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-404A/R-507 Balanced Ported Valves (Tons)– B, HF, TFE, TRAE and T Series (cont.)

Valve Type	Nominal Rating	Evaporator Temperature																	
		0°F						-20°F						-40°F					
		Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)					
		60	80	100	125	150	175	80	100	125	150	175	200	80	100	125	150	175	200
BA/BN	1/4	0.24	0.28	0.31	0.35	0.38	0.41	0.19	0.21	0.24	0.26	0.28	0.30	0.12	0.13	0.15	0.16	0.18	0.19
BA/BN	1/2	0.45	0.52	0.58	0.65	0.71	0.77	0.36	0.40	0.45	0.49	0.53	0.57	0.23	0.26	0.29	0.31	0.34	0.36
BA/BN	1	0.71	0.82	0.92	1.02	1.12	1.21	0.55	0.61	0.69	0.75	0.81	0.87	0.36	0.40	0.45	0.49	0.53	0.57
BA/BN	1-1/4	0.94	1.09	1.21	1.36	1.49	1.61	0.74	0.83	0.93	1.01	1.09	1.17	0.48	0.54	0.60	0.66	0.71	0.76
BA/BN	1-1/2	1.19	1.37	1.54	1.72	1.88	2.03	0.93	1.04	1.16	1.27	1.38	1.47	0.61	0.68	0.76	0.84	0.90	0.96
BA/BN	2	1.44	1.66	1.86	2.08	2.28	2.46	1.13	1.26	1.41	1.55	1.67	1.79	0.74	0.83	0.93	1.01	1.09	1.17
BA/BN	2-1/2	1.87	2.16	2.41	2.70	2.96	3.19	1.47	1.64	1.84	2.01	2.17	2.32	0.96	1.07	1.20	1.31	1.42	1.52
BA/BN	3	2.36	2.73	3.05	3.41	3.73	4.03	1.85	2.07	2.31	2.53	2.74	2.93	1.21	1.35	1.51	1.66	1.79	1.91
BA/BN	4	2.94	3.39	3.80	4.24	4.65	5.02	2.31	2.58	2.89	3.16	3.42	3.65	1.51	1.69	1.89	2.07	2.23	2.39
HF	1/8	0.13	0.15	0.17	0.19	0.21	0.22	0.10	0.11	0.13	0.14	0.15	0.16	0.07	0.08	0.09	0.10	0.10	0.11
HF	1/4	0.25	0.29	0.32	0.36	0.40	0.43	0.20	0.22	0.25	0.27	0.30	0.32	0.13	0.15	0.16	0.18	0.19	0.21
HF	1/2	0.45	0.52	0.58	0.65	0.71	0.77	0.36	0.40	0.45	0.49	0.53	0.57	0.23	0.26	0.29	0.31	0.34	0.36
HF	1	0.69	0.80	0.89	1.00	1.09	1.18	0.54	0.60	0.68	0.74	0.80	0.85	0.35	0.39	0.44	0.48	0.52	0.55
HF	1-1/4	0.93	1.07	1.20	1.34	1.47	1.59	0.73	0.82	0.91	1.00	1.08	1.15	0.48	0.54	0.60	0.66	0.71	0.76
HF	1-1/2	1.19	1.37	1.54	1.72	1.88	2.03	0.93	1.04	1.16	1.27	1.38	1.47	0.61	0.68	0.76	0.84	0.90	0.96
HF	2	1.57	1.81	2.03	2.27	2.48	2.68	1.23	1.38	1.54	1.68	1.82	1.94	0.81	0.91	1.01	1.11	1.20	1.28
HF	3-1/2	2.80	3.23	3.61	4.04	4.43	4.78	2.19	2.45	2.74	3.00	3.24	3.46	1.43	1.60	1.79	1.96	2.11	2.26
HF	5	3.89	4.49	5.02	5.61	6.15	6.64	3.05	3.41	3.81	4.18	4.51	4.82	2.00	2.24	2.50	2.74	2.96	3.16
HF	7	4.93	5.69	6.36	7.12	7.80	8.42	3.87	4.33	4.84	5.30	5.72	6.12	2.53	2.83	3.16	3.46	3.74	4.00
HF	10	7.31	8.44	9.44	10.55	11.56	12.48	5.73	6.41	7.16	7.85	8.47	9.06	3.75	4.19	4.69	5.13	5.55	5.93
HF	13	9.62	11.11	12.42	13.89	15.21	16.43	7.55	8.44	9.44	10.34	11.17	11.94	4.93	5.51	6.16	6.75	7.29	7.80
TFE	5	3.82	4.41	4.93	5.51	6.04	6.52	3.00	3.35	3.75	4.11	4.44	4.74	1.96	2.19	2.45	2.68	2.90	3.10
TFE	7	5.23	6.04	6.75	7.55	8.27	8.93	4.10	4.58	5.13	5.61	6.06	6.48	2.68	3.00	3.35	3.67	3.96	4.24
TFE	9	6.50	7.51	8.39	9.38	10.28	11.10	5.10	5.70	6.38	6.98	7.54	8.06	3.33	3.72	4.16	4.56	4.93	5.27
TFE	14	9.92	11.45	12.81	14.32	15.68	16.94	7.78	8.70	9.73	10.65	11.51	12.30	5.08	5.68	6.35	6.96	7.51	8.03
TRAE+	8	5.62	6.49	7.26	8.11	8.89	9.60	4.41	4.93	5.51	6.04	6.52	6.97	2.88	3.22	3.60	3.94	4.26	4.55
TRAE+	12	8.20	9.47	10.59	11.84	12.97	14.00	6.43	7.19	8.04	8.80	9.51	10.17	4.20	4.70	5.25	5.75	6.21	6.64
TRAE+	14	9.15	10.57	11.81	13.21	14.47	15.63	7.18	8.03	8.98	9.83	10.62	11.35	4.69	5.24	5.86	6.42	6.94	7.42
TRAE+	20	13.87	16.02	17.91	20.02	21.93	23.69	10.88	12.16	13.60	14.90	16.09	17.20	7.11	7.95	8.89	9.74	10.52	11.24
TRAE+	30	19.06	22.01	24.61	27.51	30.14	32.55	14.95	16.71	18.69	20.47	22.11	23.64	9.77	10.92	12.21	13.38	14.45	15.45
TRAE	35	25.73	29.71	33.22	37.14	40.68	43.94	20.19	22.57	25.24	27.65	29.86	31.92	13.19	14.75	16.49	18.06	19.51	20.86
TRAE	40	28.07	32.41	36.24	40.52	44.38	47.94	22.02	24.62	27.53	30.15	32.57	34.82	14.39	16.09	17.99	19.70	21.28	22.75
TRAE	50	33.41	38.58	43.13	48.22	52.83	57.06	26.20	29.29	32.75	35.88	38.75	41.43	17.13	19.15	21.41	23.46	25.34	27.08
TJR	9	7.01	8.09	9.05	10.12	11.08	11.97	5.50	6.15	6.88	7.53	8.13	8.70	3.59	4.01	4.49	4.92	5.31	5.68
TJR	12	8.39	9.69	10.83	12.11	13.27	14.33	6.58	7.36	8.23	9.01	9.73	10.40	4.30	4.81	5.38	5.89	6.36	6.80
TER	14	10.48	12.10	13.53	15.13	16.57	17.90	8.22	9.19	10.28	11.26	12.16	13.00	5.30	5.93	6.63	7.26	7.84	8.38
TER	16	12.39	14.31	16.00	17.88	19.59	21.16	9.72	10.87	12.15	13.31	14.38	15.37	6.35	7.10	7.94	8.70	9.39	10.04
TER	21	16.68	19.26	21.53	24.08	26.37	28.49	13.08	14.62	16.35	17.91	19.35	20.68	8.55	9.56	10.69	11.71	12.65	13.52
TER	27	21.45	24.77	27.69	30.96	33.92	36.63	16.82	18.81	21.03	23.03	24.88	26.59	11.00	12.30	13.75	15.06	16.27	17.39
TIR	37	26.21	30.26	33.84	37.83	41.44	44.76	20.56	22.99	25.70	28.15	30.41	32.51	13.44	15.03	16.80	18.40	19.88	21.25
THR	48	33.36	38.52	43.07	48.15	52.75	56.97	26.17	29.26	32.71	35.83	38.71	41.38	17.10	19.12	21.38	23.42	25.29	27.04
THR	60	40.51	46.78	52.30	58.47	64.05	69.18	31.77	35.52	39.71	43.50	46.99	50.23	20.77	23.22	25.96	28.44	30.72	32.84
TMR	60	47.66	55.03	61.53	68.79	75.36	81.39	37.38	41.79	46.73	51.18	55.29	59.10	24.43	27.31	30.54	33.45	36.13	38.63

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F. However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-448A/R-449A (Tons) Balance Ported Valves - B Series and H Series

Valve Type	Nominal Rating	Evaporator Temperature																	
		50°F						40°F						20°F					
		Pressure Drop Across Valve (psi)						Pressure Drop Across Valve (psi)						Pressure Drop Across Valve (psi)					
		60	80	100	125	150	175	60	80	100	125	150	175	60	80	100	125	150	175
BA/BN	1/2	0.40	0.46	0.52	0.58	0.64	0.69	0.40	0.46	0.51	0.57	0.63	0.68	0.39	0.45	0.50	0.56	0.61	0.66
BA/BN	1	0.76	0.88	0.99	1.10	1.21	1.30	0.76	0.87	0.97	1.09	1.19	1.29	0.74	0.85	0.95	1.06	1.17	1.26
BA/BN	1-1/2	1.19	1.37	1.53	1.72	1.88	2.03	1.18	1.36	1.52	1.70	1.86	2.01	1.15	1.33	1.48	1.66	1.82	1.96
BA/BN	2	1.59	1.84	2.05	2.30	2.51	2.72	1.57	1.82	2.03	2.27	2.49	2.69	1.54	1.77	1.98	2.22	2.43	2.62
BA/BN	2-1/2	2.01	2.32	2.59	2.90	3.18	3.43	1.99	2.29	2.57	2.87	3.14	3.39	1.94	2.24	2.50	2.80	3.07	3.31
BA/BN	3	2.43	2.81	3.14	3.51	3.85	4.16	2.41	2.78	3.11	3.48	3.81	4.11	2.35	2.71	3.04	3.39	3.72	4.02
BA/BN	4	3.15	3.64	4.06	4.54	4.98	5.38	3.12	3.60	4.02	4.50	4.93	5.32	3.04	3.51	3.93	4.39	4.81	5.19
BA/BN	5	3.99	4.61	5.15	5.76	6.31	6.82	3.95	4.56	5.10	5.70	6.25	6.75	3.86	4.45	4.98	5.57	6.10	6.59
BA/BN	6	4.96	5.72	6.40	7.15	7.84	8.46	4.90	5.66	6.33	7.08	7.75	8.38	4.79	5.53	6.18	6.91	7.57	8.18
HF	1/4	0.22	0.26	0.29	0.32	0.36	0.38	0.22	0.26	0.29	0.32	0.35	0.38	0.22	0.25	0.28	0.31	0.34	0.37
HF	1/2	0.43	0.49	0.55	0.61	0.67	0.73	0.42	0.49	0.54	0.61	0.67	0.72	0.41	0.47	0.53	0.59	0.65	0.70
HF	1	0.76	0.88	0.99	1.10	1.21	1.30	0.76	0.87	0.97	1.09	1.19	1.29	0.74	0.85	0.95	1.06	1.17	1.26
HF	1-1/2	1.16	1.34	1.50	1.68	1.84	1.99	1.15	1.33	1.49	1.66	1.82	1.97	1.13	1.30	1.45	1.62	1.78	1.92
HF	2	1.57	1.82	2.03	2.27	2.49	2.69	1.56	1.80	2.01	2.25	2.46	2.66	1.52	1.76	1.96	2.20	2.40	2.60
HF	2-1/2	2.02	2.33	2.60	2.91	3.19	3.44	2.00	2.30	2.58	2.88	3.15	3.41	1.95	2.25	2.51	2.81	3.08	3.33
HF	3-1/2	2.66	3.07	3.43	3.84	4.20	4.54	2.63	3.04	3.40	3.80	4.16	4.49	2.57	2.97	3.32	3.71	4.06	4.39
HF	6	4.73	5.46	6.11	6.83	7.48	8.08	4.68	5.41	6.04	6.76	7.40	8.00	4.57	5.28	5.90	6.60	7.23	7.81
HF	8-1/2	6.58	7.60	8.49	9.50	10.40	11.23	6.51	7.52	8.40	9.40	10.29	11.12	6.36	7.34	8.20	9.17	10.05	10.85
HF	10-1/2	8.35	9.65	10.78	12.06	13.21	14.27	8.27	9.55	10.67	11.93	13.07	14.12	8.07	9.32	10.42	11.65	12.76	13.78
HF	16	12.37	14.28	15.97	17.85	19.56	21.13	12.24	14.14	15.80	17.67	19.36	20.91	11.95	13.80	15.43	17.25	18.89	20.41
HF	10	16.23	18.74	20.95	23.42	25.65	27.71	16.06	18.54	20.73	23.18	25.39	27.42	15.67	18.10	20.24	22.62	24.78	26.77

Note: Standard capacity is rated at 100F liquid inlet and 40F evaporator temperature; with 100 Psi pressure drop across the TXV.

Valve Type	Nominal Rating	Evaporator Temperature																	
		0°F						-20°F						-40°F					
		Pressure Drop Across Valve (psi)						Pressure Drop Across Valve (psi)						Pressure Drop Across Valve (psi)					
		60	80	100	125	150	175	80	100	125	150	175	200	80	100	125	150	175	200
BA/BN	1/2	0.38	0.44	0.49	0.54	0.60	0.64	0.34	0.39	0.43	0.47	0.51	0.54	0.23	0.26	0.29	0.32	0.34	0.37
BA/BN	1	0.72	0.83	0.93	1.03	1.13	1.22	0.65	0.73	0.82	0.90	0.97	1.04	0.44	0.49	0.55	0.61	0.65	0.70
BA/BN	1-1/2	1.12	1.29	1.44	1.61	1.77	1.91	1.02	1.14	1.27	1.40	1.51	1.61	0.69	0.77	0.86	0.94	1.02	1.09
BA/BN	2	1.49	1.73	1.93	2.16	2.36	2.55	1.36	1.53	1.71	1.87	2.02	2.16	0.92	1.03	1.15	1.26	1.36	1.46
BA/BN	2-1/2	1.89	2.18	2.44	2.72	2.98	3.22	1.72	1.93	2.15	2.36	2.55	2.72	1.16	1.30	1.45	1.59	1.72	1.84
BA/BN	3	2.29	2.64	2.95	3.30	3.62	3.91	2.09	2.33	2.61	2.86	3.09	3.30	1.41	1.58	1.76	1.93	2.09	2.23
BA/BN	4	2.96	3.42	3.82	4.27	4.68	5.05	2.70	3.02	3.38	3.70	4.00	4.27	1.82	2.04	2.28	2.50	2.70	2.88
BA/BN	5	3.75	4.33	4.84	5.41	5.93	6.41	3.43	3.83	4.28	4.69	5.07	5.42	2.31	2.59	2.89	3.17	3.42	3.66
BA/BN	6	4.66	5.38	6.01	6.72	7.36	7.95	4.25	4.75	5.32	5.82	6.29	6.72	2.87	3.21	3.59	3.93	4.25	4.54
HF	1/4	0.21	0.24	0.27	0.31	0.33	0.36	0.19	0.22	0.24	0.26	0.29	0.31	0.13	0.15	0.16	0.18	0.19	0.21
HF	1/2	0.40	0.46	0.52	0.58	0.63	0.68	0.37	0.41	0.46	0.50	0.54	0.58	0.25	0.28	0.31	0.34	0.36	0.39
HF	1	0.72	0.83	0.93	1.03	1.13	1.22	0.65	0.73	0.82	0.90	0.97	1.04	0.44	0.49	0.55	0.61	0.65	0.70
HF	1-1/2	1.09	1.26	1.41	1.58	1.73	1.87	1.00	1.12	1.25	1.37	1.48	1.58	0.67	0.75	0.84	0.92	1.00	1.07
HF	2	1.48	1.71	1.91	2.14	2.34	2.53	1.35	1.51	1.69	1.85	2.00	2.14	0.91	1.02	1.14	1.25	1.35	1.44
HF	2-1/2	1.89	2.19	2.45	2.73	3.00	3.24	1.73	1.93	2.16	2.37	2.56	2.74	1.17	1.31	1.46	1.60	1.73	1.85
HF	3-1/2	2.50	2.88	3.23	3.61	3.95	4.27	2.28	2.55	2.85	3.12	3.37	3.61	1.54	1.72	1.93	2.11	2.28	2.44
HF	6	4.45	5.13	5.74	6.42	7.03	7.59	4.06	4.54	5.07	5.56	6.00	6.42	2.74	3.06	3.43	3.75	4.05	4.33
HF	8-1/2	6.18	7.14	7.98	8.92	9.77	10.56	5.64	6.31	7.06	7.73	8.35	8.92	3.81	4.26	4.76	5.22	5.64	6.03
HF	10-1/2	7.85	9.06	10.13	11.33	12.41	13.41	7.17	8.01	8.96	9.81	10.60	11.33	4.84	5.41	6.05	6.63	7.16	7.65
HF	16	11.62	13.42	15.01	16.78	18.38	19.85	10.61	11.87	13.27	14.53	15.70	16.78	7.17	8.01	8.96	9.81	10.60	11.33
HF	10	15.25	17.61	19.68	22.01	24.11	26.04	13.92	15.56	17.40	19.06	20.59	22.01	9.40	10.51	11.75	12.87	13.90	14.86

Refrigerant Liquid Temperature Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F.
However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-407C Balanced Ported Valves (Tons)– B, HF, TFE, TRAE and T Series

Valve Type	Nominal Rating	Evaporator Temperature																	
		50°F						40°F						20°F					
		Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)					
		60	80	100	125	150	175	60	80	100	125	150	175	60	80	100	125	150	175
BA/BN	1/2	0.38	0.44	0.49	0.55	0.60	0.65	0.37	0.43	0.48	0.53	0.59	0.63	0.36	0.42	0.46	0.52	0.57	0.61
BA/BN	1	0.72	0.83	0.93	1.04	1.14	1.23	0.70	0.81	0.90	1.01	1.11	1.20	0.68	0.79	0.88	0.98	1.08	1.16
BA/BN	1-1/2	1.12	1.29	1.45	1.62	1.77	1.91	1.10	1.27	1.42	1.59	1.74	1.88	1.05	1.21	1.36	1.52	1.66	1.79
BA/BN	2	1.49	1.72	1.92	2.15	2.36	2.54	1.47	1.70	1.90	2.12	2.32	2.51	1.41	1.63	1.82	2.04	2.23	2.41
BA/BN	2-1/2	1.88	2.17	2.43	2.71	2.97	3.21	1.85	2.14	2.39	2.67	2.93	3.16	1.78	2.06	2.30	2.57	2.81	3.04
BA/BN	3	2.28	2.63	2.94	3.29	3.60	3.89	2.24	2.59	2.89	3.23	3.54	3.83	2.15	2.48	2.78	3.10	3.40	3.67
BA/BN	4	2.96	3.42	3.82	4.27	4.68	5.06	2.90	3.35	3.74	4.19	4.59	4.95	2.79	3.22	3.60	4.03	4.41	4.76
BA/BN	5	3.74	4.32	4.83	5.40	5.91	6.39	3.67	4.24	4.74	5.30	5.80	6.27	3.52	4.06	4.54	5.08	5.57	6.01
BA/BN	6	4.65	5.37	6.00	6.71	7.35	7.94	4.57	5.28	5.90	6.60	7.23	7.80	4.38	5.06	5.65	6.32	6.93	7.48
HF	1/4	0.21	0.24	0.27	0.30	0.33	0.36	0.21	0.24	0.27	0.30	0.33	0.36	0.20	0.23	0.26	0.29	0.32	0.34
HF	1/2	0.40	0.46	0.52	0.58	0.63	0.68	0.39	0.45	0.50	0.56	0.62	0.67	0.38	0.44	0.49	0.55	0.60	0.65
HF	1	0.72	0.83	0.93	1.04	1.14	1.23	0.70	0.81	0.90	1.01	1.11	1.20	0.68	0.79	0.88	0.98	1.08	1.16
HF	1-1/2	1.09	1.26	1.41	1.57	1.72	1.86	1.07	1.24	1.38	1.54	1.69	1.83	1.03	1.19	1.33	1.49	1.63	1.76
HF	2	1.47	1.70	1.90	2.12	2.32	2.51	1.44	1.66	1.86	2.08	2.28	2.46	1.39	1.61	1.79	2.01	2.20	2.37
HF	2-1/2	1.88	2.17	2.43	2.71	2.97	3.21	1.85	2.14	2.39	2.67	2.93	3.16	1.78	2.06	2.30	2.57	2.81	3.04
HF	3	2.49	2.88	3.21	3.59	3.94	4.25	2.44	2.82	3.15	3.52	3.86	4.17	2.35	2.71	3.03	3.39	3.72	4.01
HF	5-1/2	4.43	5.12	5.72	6.39	7.00	7.57	4.34	5.01	5.60	6.26	6.86	7.41	4.17	4.82	5.38	6.02	6.59	7.12
HF	8	6.16	7.11	7.95	8.89	9.74	10.52	6.05	6.99	7.81	8.73	9.57	10.33	5.81	6.71	7.50	8.39	9.19	9.92
HF	10	7.80	9.01	10.07	11.26	12.33	13.32	7.65	8.83	9.88	11.04	12.10	13.06	7.35	8.49	9.49	10.61	11.62	12.55
HF	15	11.57	13.36	14.94	16.70	18.29	19.76	11.35	13.11	14.65	16.38	17.95	19.38	10.90	12.59	14.07	15.73	17.23	18.62
HF	20	15.22	17.57	19.65	21.97	24.06	25.99	14.94	17.25	19.29	21.56	23.62	25.51	14.35	16.57	18.53	20.71	22.69	24.51
TFE	8	6.05	6.99	7.81	8.73	9.57	10.33	5.94	6.86	7.67	8.57	9.39	10.14	5.70	6.58	7.36	8.23	9.01	9.73
TFE	10	8.28	9.56	10.69	11.95	13.09	14.14	8.13	9.39	10.50	11.73	12.85	13.88	7.80	9.01	10.07	11.26	12.33	13.32
TFE	12	10.28	11.87	13.27	14.84	16.25	17.56	10.09	11.65	13.03	14.56	15.95	17.23	9.69	11.19	12.51	13.99	15.32	16.55
TFE	20	15.69	18.12	20.26	22.65	24.81	26.80	15.40	17.78	19.88	22.23	24.35	26.30	14.79	17.08	19.09	21.35	23.39	25.26
TRAE+	10	8.90	10.28	11.49	12.85	14.07	15.20	8.73	10.08	11.27	12.60	13.80	14.91	8.39	9.69	10.83	12.11	13.27	14.33
TRAE+	15	12.97	14.98	16.74	18.72	20.51	22.15	12.73	14.70	16.43	18.37	20.13	21.74	12.22	14.11	15.78	17.64	19.32	20.87
TRAE+	20	14.48	16.72	18.69	20.90	22.89	24.73	14.21	16.41	18.35	20.51	22.47	24.27	13.64	15.75	17.61	19.69	21.57	23.29
TRAE+	30	21.94	25.33	28.32	31.67	34.69	37.47	21.45	24.77	27.69	30.96	33.92	36.63	20.68	23.88	26.70	29.85	32.70	35.32
TRAE+	40	30.16	34.83	38.94	43.53	47.69	51.51	29.60	34.18	38.21	42.72	46.80	50.55	28.43	32.83	36.70	41.04	44.95	48.55
TRAE	50	40.71	47.01	52.56	58.76	64.37	69.53	39.97	46.15	51.60	57.69	63.20	68.26	38.37	44.31	49.54	55.38	60.67	65.53
TRAE	60	44.41	51.28	57.33	64.10	70.22	75.84	43.59	50.33	56.27	62.92	68.92	74.44	41.86	48.34	54.04	60.42	66.19	71.49
TRAE	70	52.85	61.03	68.23	76.28	83.56	90.26	51.88	59.91	66.98	74.88	82.03	88.60	49.82	57.53	64.32	71.91	78.77	85.08
TJR	14	11.08	12.79	14.30	15.99	17.52	18.92	10.88	12.56	14.05	15.70	17.20	18.58	10.45	12.07	13.49	15.08	16.52	17.85
TJR	18	13.27	15.32	17.13	19.15	20.98	22.66	13.03	15.05	16.82	18.81	20.60	22.25	12.51	14.45	16.15	18.06	19.78	21.36
TER	22	16.59	19.16	21.42	23.95	26.23	28.33	16.28	18.80	21.02	23.50	25.74	27.80	15.63	18.05	20.18	22.56	24.71	26.69
TER	26	19.60	22.63	25.30	28.29	30.99	33.47	19.24	22.22	24.84	27.77	30.42	32.86	18.48	21.34	23.86	26.67	29.22	31.56
TER	35	26.39	30.47	34.07	38.09	41.73	45.07	25.90	29.91	33.44	37.38	40.95	44.23	24.87	28.72	32.11	35.90	39.32	42.47
TER	45	33.93	39.18	43.80	48.97	53.65	57.95	33.30	38.45	42.99	48.06	52.65	56.87	31.98	36.93	41.29	46.16	50.56	54.62
TIR	55	41.47	47.89	53.54	59.86	65.57	70.82	40.71	47.01	52.56	58.76	64.37	69.53	39.08	45.13	50.45	56.41	61.79	66.74
THR	75	52.78	60.95	68.14	76.18	83.45	90.14	51.81	59.83	66.89	74.78	81.92	88.48	49.74	57.43	64.21	71.79	78.65	84.95
THR	100	64.08	73.99	82.73	92.49	101.32	109.44	62.91	72.64	81.22	90.80	99.47	107.44	60.40	69.74	77.98	87.18	95.50	103.15
TMR	100	75.39	87.05	97.33	108.82	119.20	128.75	74.01	85.46	95.55	106.82	117.02	126.40	71.06	82.05	91.74	102.57	112.36	121.36

Note: Standard capacity is rated at 100°F liquid inlet and 40°F evaporator temperature; with 100 Psi pressure drop across the TXV per ARI 750-2001.

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F.
However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-407C Balanced Ported Valves (Tons)– B, HF, TFE, TRAE and T Series (cont.)

Valve Type	Nominal Rating	Evaporator Temperature																	
		0°F						-20°F						-40°F					
		Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)					
		60	80	100	125	150	175	80	100	125	150	175	200	80	100	125	150	175	200
BA/BN	1/2	0.30	0.35	0.39	0.43	0.47	0.51	0.23	0.26	0.29	0.31	0.34	0.36	0.14	0.16	0.18	0.19	0.21	0.22
BA/BN	1	0.57	0.66	0.74	0.82	0.90	0.97	0.43	0.48	0.54	0.59	0.64	0.68	0.27	0.30	0.34	0.37	0.40	0.43
BA/BN	1-1/2	0.89	1.03	1.15	1.28	1.41	1.52	0.68	0.76	0.85	0.93	1.01	1.08	0.43	0.48	0.54	0.59	0.64	0.68
BA/BN	2	1.19	1.37	1.54	1.72	1.88	2.03	0.90	1.01	1.13	1.23	1.33	1.42	0.57	0.64	0.71	0.78	0.84	0.90
BA/BN	2-1/2	1.50	1.73	1.94	2.17	2.37	2.56	1.14	1.27	1.43	1.56	1.69	1.80	0.72	0.80	0.90	0.99	1.06	1.14
BA/BN	3	1.82	2.10	2.35	2.63	2.88	3.11	1.38	1.54	1.73	1.89	2.04	2.18	0.87	0.97	1.09	1.19	1.29	1.38
BA/BN	4	2.35	2.71	3.03	3.39	3.72	4.01	1.79	2.00	2.24	2.45	2.65	2.83	1.13	1.26	1.41	1.55	1.67	1.79
BA/BN	5	2.98	3.44	3.85	4.30	4.71	5.09	2.27	2.54	2.84	3.11	3.36	3.59	1.43	1.60	1.79	1.96	2.11	2.26
BA/BN	6	3.70	4.27	4.78	5.34	5.85	6.32	2.82	3.15	3.53	3.86	4.17	4.46	1.77	1.98	2.21	2.42	2.62	2.80
HF	1/4	0.17	0.20	0.22	0.25	0.27	0.29	0.13	0.15	0.16	0.18	0.19	0.21	0.08	0.09	0.10	0.11	0.12	0.13
HF	1/2	0.32	0.37	0.41	0.46	0.51	0.55	0.24	0.27	0.30	0.33	0.35	0.38	0.15	0.17	0.19	0.21	0.22	0.24
HF	1	0.57	0.66	0.74	0.82	0.90	0.97	0.43	0.48	0.54	0.59	0.64	0.68	0.27	0.30	0.34	0.37	0.40	0.43
HF	1-1/2	0.87	1.00	1.12	1.26	1.38	1.49	0.66	0.74	0.83	0.90	0.98	1.04	0.42	0.47	0.53	0.58	0.62	0.66
HF	2	1.17	1.35	1.51	1.69	1.85	2.00	0.89	1.00	1.11	1.22	1.32	1.41	0.56	0.63	0.70	0.77	0.83	0.89
HF	2-1/2	1.50	1.73	1.94	2.17	2.37	2.56	1.14	1.27	1.43	1.56	1.69	1.80	0.72	0.80	0.90	0.99	1.06	1.14
HF	3	1.98	2.29	2.56	2.86	3.13	3.38	1.51	1.69	1.89	2.07	2.23	2.39	0.95	1.06	1.19	1.30	1.41	1.50
HF	5-1/2	3.52	4.06	4.54	5.08	5.57	6.01	2.68	3.00	3.35	3.67	3.96	4.24	1.69	1.89	2.11	2.31	2.50	2.67
HF	8	4.90	5.66	6.33	7.07	7.75	8.37	3.73	4.17	4.66	5.11	5.52	5.90	2.35	2.63	2.94	3.22	3.48	3.72
HF	10	6.20	7.16	8.00	8.95	9.80	10.59	4.72	5.28	5.90	6.46	6.98	7.46	2.97	3.32	3.71	4.07	4.39	4.70
HF	15	9.20	10.62	11.88	13.28	14.55	15.71	7.01	7.84	8.76	9.60	10.37	11.08	4.41	4.93	5.51	6.04	6.52	6.97
HF	20	12.11	13.98	15.63	17.48	19.15	20.68	9.22	10.31	11.53	12.63	13.64	14.58	5.81	6.50	7.26	7.96	8.59	9.19
TFE	8	4.81	5.55	6.21	6.94	7.61	8.21	3.66	4.09	4.58	5.01	5.41	5.79	2.31	2.58	2.89	3.16	3.42	3.65
TFE	10	6.59	7.61	8.51	9.51	10.42	11.25	5.02	5.61	6.28	6.87	7.42	7.94	3.16	3.53	3.95	4.33	4.67	5.00
TFE	12	8.18	9.45	10.56	11.81	12.93	13.97	6.23	6.97	7.79	8.53	9.21	9.85	3.92	4.38	4.90	5.37	5.80	6.20
TFE	20	12.49	14.42	16.12	18.03	19.75	21.33	9.51	10.63	11.89	13.02	14.07	15.04	5.98	6.69	7.48	8.19	8.84	9.46
TRAE+	10	7.08	8.18	9.14	10.22	11.19	12.09	5.39	6.03	6.74	7.38	7.97	8.52	3.39	3.79	4.24	4.64	5.01	5.36
TRAE+	15	10.32	11.92	13.32	14.90	16.32	17.62	7.86	8.79	9.83	10.76	11.63	12.43	4.95	5.53	6.19	6.78	7.32	7.83
TRAE+	20	11.52	13.30	14.87	16.63	18.21	19.67	8.77	9.81	10.96	12.01	12.97	13.87	5.52	6.17	6.90	7.56	8.16	8.73
TRAE+	30	17.46	20.16	22.54	25.20	27.61	29.82	13.30	14.87	16.63	18.21	19.67	21.03	8.37	9.36	10.46	11.46	12.38	13.23
TRAE+	40	24.00	27.71	30.98	34.64	37.95	40.99	18.28	20.44	22.85	25.03	27.04	28.90	11.50	12.86	14.38	15.75	17.01	18.18
TRAE	50	32.40	37.41	41.83	46.77	51.23	55.33	24.67	27.58	30.84	33.78	36.49	39.01	15.53	17.36	19.41	21.27	22.97	24.56
TRAE	60	35.34	40.81	45.62	51.01	55.88	60.35	26.91	30.09	33.64	36.85	39.80	42.55	16.94	18.94	21.18	23.20	25.05	26.78
TRAE	70	42.06	48.57	54.30	60.71	66.50	71.83	32.03	35.81	40.04	43.86	47.37	50.64	20.16	22.54	25.20	27.61	29.82	31.88
TJR	14	8.82	10.18	11.39	12.73	13.95	15.06	6.72	7.51	8.40	9.20	9.94	10.63	4.23	4.73	5.29	5.79	6.26	6.69
TJR	18	10.56	12.19	13.63	15.24	16.70	18.03	8.04	8.99	10.05	11.01	11.89	12.71	5.06	5.66	6.33	6.93	7.48	8.00
TER	22	13.20	15.24	17.04	19.05	20.87	22.54	10.05	11.24	12.56	13.76	14.86	15.89	6.33	7.08	7.91	8.67	9.36	10.01
TER	26	15.60	18.01	20.14	22.52	24.67	26.64	11.88	13.28	14.85	16.27	17.57	18.78	7.48	8.36	9.35	10.24	11.06	11.83
TER	35	21.00	24.25	27.11	30.31	33.20	35.86	15.99	17.88	19.99	21.90	23.65	25.28	10.06	11.25	12.58	13.78	14.88	15.91
TER	45	27.00	31.18	34.86	38.97	42.69	46.11	20.56	22.99	25.70	28.15	30.41	32.51	12.94	14.47	16.18	17.72	19.14	20.46
TIR	55	33.00	38.11	42.60	47.63	52.18	56.36	25.13	28.10	31.41	34.41	37.17	39.73	15.82	17.69	19.78	21.66	23.40	25.01
THR	75	42.00	48.50	54.22	60.62	66.41	71.73	31.98	35.75	39.98	43.79	47.30	50.56	20.13	22.51	25.16	27.56	29.77	31.83
THR	100	51.00	58.89	65.84	73.61	80.64	87.10	38.84	43.42	48.55	53.18	57.45	61.41	24.44	27.32	30.55	33.47	36.15	38.64
TMR	100	60.00	69.28	77.46	86.60	94.87	102.47	45.69	51.08	57.11	62.56	67.58	72.24	28.76	32.15	35.95	39.38	42.54	45.47

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F.
However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-410A Balanced Ported Valves (Tons) – B Series

Valve Type	Nominal Rating	Evaporator Temperature																						
		50 °F							40 °F							20 °F								
		Pressure Drop Across Valve (PSI)							Pressure Drop Across Valve (PSI)							Pressure Drop Across Valve (PSI)								
		75	110	140	160	210	240	285	75	110	140	160	210	240	285	75	110	140	160	210	240	285		
BA/BN	1	0.8	1.0	1.1	1.2	1.3	1.4	1.6	0.8	1.0	1.1	1.2	1.3	1.4	1.5	0.8	0.9	1.1	1.1	1.3	1.4	1.5		
	1-1/2	1.3	1.6	1.8	1.9	2.2	1.4	1.6	1.3	1.6	1.7	1.9	2.1	2.3	2.5	1.3	1.5	1.7	1.8	2.1	2.2	2.4		
	2	1.8	2.2	2.5	2.6	3.0	3.2	3.5	1.8	2.2	2.4	2.6	3.0	3.2	3.5	1.7	2.1	2.4	2.6	2.9	3.1	3.4		
	3	2.3	2.8	3.1	3.3	3.8	4.1	4.5	2.3	2.8	3.1	3.3	3.8	4.1	4.4	2.2	2.7	3.0	3.2	3.7	4.0	4.3		
	3-1/2	3.0	3.6	4.0	4.3	5.0	5.3	5.8	2.9	3.6	4.0	4.3	4.9	5.3	5.7	2.9	3.5	3.9	4.2	4.8	5.1	5.6		
	4-1/2	4.1	5.0	5.6	6.0	6.9	7.4	8.0	4.1	5.0	5.6	6.0	6.9	7.3	8.0	4.0	4.9	5.5	5.9	6.7	7.2	7.8		
	6	5.1	6.1	6.9	7.4	8.5	9.0	9.9	5.0	6.1	6.8	7.3	8.4	9.0	9.8	4.9	5.9	6.7	7.2	8.2	8.8	9.6		
	7-1/2	6.2	7.5	8.5	9.1	10.4	11.1	12.1	6.2	7.5	8.4	9.0	10.3	11.0	12.0	6.0	7.3	8.2	8.8	10.1	10.8	11.8		

Valve Type	Nominal Rating	Evaporator Temperature																						
		0 °F							-20 °F							-40 °F								
		Pressure Drop Across Valve (PSI)							Pressure Drop Across Valve (PSI)							Pressure Drop Across Valve (PSI)								
		75	110	140	160	210	240	285	75	110	140	160	210	240	285	75	110	140	160	210	240	285		
BA/BN	1	0.8	0.9	1.0	1.1	1.3	1.4	1.5	0.7	0.9	1.0	1.1	1.2	1.3	1.4	0.7	0.9	1.0	1.0	1.2	1.3	1.4		
	1-1/2	1.2	1.5	1.7	1.8	2.0	2.2	2.4	1.2	1.4	1.6	1.7	2.0	2.1	2.3	1.1	1.4	1.6	1.7	1.9	2.0	2.2		
	2	1.7	2.1	2.3	2.5	2.8	3.0	3.3	1.6	2.0	2.3	2.4	2.8	3.0	3.2	1.6	1.9	2.2	2.3	2.7	2.8	3.1		
	3	2.2	2.6	3.0	3.2	3.6	3.9	4.2	2.1	2.5	2.9	3.1	3.5	3.8	4.1	2.0	2.5	2.8	3.0	3.4	3.6	3.9		
	3-1/2	2.8	3.4	3.8	4.1	4.7	5.0	5.5	2.7	3.3	3.7	4.0	4.5	4.8	5.3	2.6	3.2	3.6	3.8	4.4	4.7	5.1		
	4-1/2	3.9	4.7	5.3	5.7	6.5	7.0	7.6	3.8	4.6	5.2	5.5	6.3	6.8	7.4	3.6	4.4	5.0	5.3	6.1	6.5	7.1		
	6	4.8	5.8	6.5	7.0	8.0	8.5	9.3	4.6	5.6	6.3	6.8	7.7	8.3	9.0	4.5	5.4	6.1	6.5	7.5	8.0	8.7		
	7-1/2	5.9	7.1	8.0	8.6	9.8	10.5	11.4	5.7	6.9	7.8	8.3	9.5	10.2	11.1	5.5	6.6	7.5	8.0	9.2	9.8	10.7		

Note: Standard capacity is rated at 100 °F liquid inlet and 40 °F evap temperature; with 160 Psi pressure drop across TXV per ARI-750-2001.
These ratings assume vapor free liquid entering the thermal expansion valve.

R-410A Balanced Ported Valves (Tons) – NXT Series

Valve Type	Nominal Rating Tons	Evaporator Temperature																						
		50 °F							40 °F							20 °F								
		Pressure Drop Across Valve (PSI)							Pressure Drop Across Valve (PSI)							Pressure Drop Across Valve (PSI)								
		75	110	140	160	210	240	285	75	110	140	160	210	240	285	75	110	140	160	210	240	285		
NXT-Series	1/2	0.4	0.5	0.5	0.6	0.6	0.7	0.8	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.4	0.5	0.5	0.5	0.6	0.7	0.7		
	1	0.7	0.8	0.9	1.0	1.2	1.2	1.3	0.7	0.8	0.9	1.0	1.1	1.2	1.3	0.7	0.8	0.9	1.0	1.1	1.2	1.3		
	1-1/2	1.0	1.3	1.4	1.5	1.7	1.9	2.0	1.0	1.2	1.4	1.5	1.7	1.8	2.0	1.0	1.2	1.4	1.5	1.7	1.8	2.0		
	2	1.4	1.7	1.9	2.0	2.3	2.5	2.7	1.4	1.7	1.9	2.0	2.3	2.4	2.7	1.3	1.6	1.8	2.0	2.2	2.4	2.6		
	3	2.1	2.5	2.8	3.0	3.5	3.7	4.0	2.1	2.5	2.8	3.0	3.4	3.7	4.0	2.0	2.4	2.7	2.9	3.4	3.6	3.9		
	4	2.8	3.3	3.8	4.0	4.6	4.9	5.4	2.7	3.3	3.7	4.0	4.6	4.9	5.3	2.7	3.2	3.7	3.9	4.5	4.8	5.2		
	5	3.5	4.2	4.7	5.0	5.8	6.2	6.7	3.4	4.1	4.7	5.0	5.7	6.1	6.7	3.3	4.1	4.6	4.9	5.6	6.0	6.5		
	6	4.1	5.0	5.7	6.1	6.9	7.4	8.1	4.1	5.0	5.6	6.0	6.9	7.3	8.0	4.0	4.9	5.5	5.9	6.7	7.2	7.8		
	7	4.8	5.9	6.6	7.1	8.1	8.6	9.4	4.8	5.8	6.5	7.0	8.0	8.6	9.3	4.7	5.7	6.4	6.8	7.8	8.4	9.1		
	8	5.8	7.0	7.9	8.5	9.7	10.4	11.3	5.7	7.0	7.8	8.4	9.6	10.3	11.2	5.6	6.8	7.7	8.2	3.4	10.1	11.0		
	10	7.1	8.6	9.7	10.4	11.9	12.7	13.9	7.1	8.5	9.6	10.3	11.8	12.6	13.8	6.9	8.4	9.4	10.1	11.6	12.4	13.5		
	12	8.7	10.6	11.9	12.7	14.6	15.6	17.0	8.6	10.5	11.8	12.6	14.5	15.5	16.9	8.5	10.2	11.6	12.4	14.2	15.1	16.5		
	15	10.2	12.4	14.0	14.9	17.1	18.3	19.9	10.1	12.3	13.8	14.8	16.9	18.1	19.7	9.9	12.0	13.5	14.5	16.6	17.7	19.3		

Valve Type	Nominal Rating Tons	Evaporator Temperature																						
		0 °F							-20 °F							-40 °F								
		Pressure Drop Across Valve (PSI)							Pressure Drop Across Valve (PSI)							Pressure Drop Across Valve (PSI)								
		75	110	140	160	210	240	285	75	110	140	160	210	240	285	75	110	140	160	210	240	285		
NXT-Series	1/2	0.4	0.4	0.5	0.5	0.6	0.7	0.7	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.3	0.4	0.5	0.6	0.6	0.6	0.7		
	1	0.7	0.8	0.9	1.0	1.1	1.2	1.3	0.6	0.6	0.9	0.9	1.1	1.1	1.2	0.6	0.7	0.8	0.9	1.0	1.1	1.2		
	1-1/2	1.0	1.2	1.3	1.4	1.6	1.8	1.9	0.9	1.1	1.3	1.4	1.6	1.7	1.8	0.9	1.1	1.2	1.3	1.5	1.6	1.8		
	2	1.3	1.6	1.8	1.9	2.2	2.3	2.5	1.3	1.5	1.7	1.8	2.1	2.3	2.5	1.2	1.5	1.7	1.8	2.0	2.2	2.4		
	3	2.0	2.4	2.7	2.9	3.3	3.5	3.8	1.9	2.3	2.6	2.8	3.2	3.4	3.7	1.8	2.2	2.5	2.7	3.1	3.3	3.6		
	4	2.6	3.2	3.6	3.8	4.4	4.7	5.1	2.5	3.1	3.5	3.7	4.2	4.5	4.9	2.4	3.0	3.3	3.6	4.1	4.4	4.8		
	5	3.3	3.9	4.5	4.8	5.5	5.8	6.4	3.2	3.8	4.3	4.6	5.3	5.7	6.2	3.0	3.7	4.2	4.5	5.1	5.5	5.9		
	6	3.9	4.7	5.3	5.7	6.5	7.0	7.6	3.8	4.6	5.2	5.5	6.3	6.8	7.4	3.7	4.4	5.0	5.3	6.1	6.5	7.1		
	7	4.8	5.9	6.6	6.7	8.1	8.6	9.4	4.4	5.4	6.0	6.5	7.4	7.9	8.6	4.3	5.2	5.8	6.2	7.1	7.6	8.3		
	8	5.5	6.6	7.5	8.0	9.2	9.8	10.7	5.3	6.4	7.2	7.7	8.9	9.5	10.3	5.1	6.2	7.0	7.5	8.6	9.2	10.0		
	10	6.7	8.1	9.2	9.8	11.3	12.0	13.1	6.5	7.9	8.9	9.5	10.9	11.7	12.7	6.3	7.6	8.6	9.2	10.5	11.2	12.3		
	12	8.2	10.0	11.3	12.0	13.8	14.7	16.1	8.0	9.7	10.9	11.7	13.4	14.3	15.6	7.7	9.3	10.5	11.2	12.9	13.8	15.0		
	15	9.6	11.7	13.2	14.1	16.1	17.3	18.8	9.3	11.3	12.8	13.7	15.6	16.7	18.2	9.0	10.3	12.3	13.2	15.1	15.1	17.6		

Note: Standard capacity is rated at 100 °F liquid inlet and 40 °F evap temperature; with 160 Psi pressure drop across TXV per ARI-750-2001.
These ratings assume vapor free liquid entering the thermal expansion valve.

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F									
	50	60	70	80	90	100	110	120	130	140
R-410A Correction Factor	1.37	1.30	1.23	1.15	1.08	1.00	0.92	0.84	0.75	0.65

These factors include corrections for liquid refrigerant density and net refrigeration effect, and are based on an average evaporator temperature of 0°F with a maximum 7°F Change in Superheat. However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-502 Balanced Ported Valves (Tons)– B, HF, TFE, TRAE and T Series

Valve Type	Nominal Rating	Evaporator Temperature																	
		50°F						40°F						20°F					
		Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)					
		60	80	100	125	150	175	60	80	100	125	150	175	60	80	100	125	150	175
BA/BN	1/4	0.26	0.30	0.34	0.38	0.41	0.44	0.25	0.29	0.32	0.36	0.40	0.43	0.24	0.28	0.31	0.35	0.38	0.41
BA/BN	1/2	0.49	0.57	0.63	0.71	0.77	0.84	0.48	0.55	0.62	0.69	0.76	0.82	0.46	0.53	0.59	0.66	0.73	0.79
BA/BN	1	0.76	0.88	0.98	1.10	1.20	1.30	0.74	0.85	0.96	1.07	1.17	1.26	0.71	0.82	0.92	1.02	1.12	1.21
BA/BN	1-1/4	1.02	1.18	1.32	1.47	1.61	1.74	0.99	1.14	1.28	1.43	1.57	1.69	0.95	1.10	1.23	1.37	1.50	1.62
BA/BN	1-1/2	1.28	1.48	1.65	1.85	2.02	2.19	1.26	1.45	1.63	1.82	1.99	2.15	1.20	1.39	1.55	1.73	1.90	2.05
BA/BN	2	1.55	1.79	2.00	2.24	2.45	2.65	1.52	1.76	1.96	2.19	2.40	2.60	1.45	1.67	1.87	2.09	2.29	2.48
BA/BN	2-1/2	2.01	2.32	2.59	2.90	3.18	3.43	1.97	2.27	2.54	2.84	3.11	3.36	1.88	2.17	2.43	2.71	2.97	3.21
BA/BN	3	2.54	2.93	3.28	3.67	4.02	4.34	2.49	2.88	3.21	3.59	3.94	4.25	2.38	2.75	3.07	3.44	3.76	4.06
BA/BN	4	3.17	3.66	4.09	4.58	5.01	5.41	3.10	3.58	4.00	4.47	4.90	5.29	2.96	3.42	3.82	4.27	4.68	5.06
HF	1/8	0.14	0.16	0.18	0.20	0.22	0.24	0.14	0.16	0.18	0.20	0.22	0.24	0.13	0.15	0.17	0.19	0.21	0.22
HF	1/4	0.27	0.31	0.35	0.39	0.43	0.46	0.27	0.31	0.35	0.39	0.43	0.46	0.25	0.29	0.32	0.36	0.40	0.43
HF	1/2	0.49	0.57	0.63	0.71	0.77	0.84	0.48	0.55	0.62	0.69	0.76	0.82	0.46	0.53	0.59	0.66	0.73	0.79
HF	1	0.74	0.85	0.96	1.07	1.17	1.26	0.73	0.84	0.94	1.05	1.15	1.25	0.70	0.81	0.90	1.01	1.11	1.20
HF	1-1/4	1.00	1.15	1.29	1.44	1.58	1.71	0.98	1.13	1.27	1.41	1.55	1.67	0.93	1.07	1.20	1.34	1.47	1.59
HF	1-1/2	1.28	1.48	1.65	1.85	2.02	2.19	1.26	1.45	1.63	1.82	1.99	2.15	1.20	1.39	1.55	1.73	1.90	2.05
HF	2	1.69	1.95	2.18	2.44	2.67	2.89	1.66	1.92	2.14	2.40	2.62	2.83	1.58	1.82	2.04	2.28	2.50	2.70
HF	3-1/2	3.01	3.48	3.89	4.34	4.76	5.14	2.95	3.41	3.81	4.26	4.66	5.04	2.81	3.24	3.63	4.06	4.44	4.80
HF	5	4.19	4.84	5.41	6.05	6.62	7.16	4.10	4.73	5.29	5.92	6.48	7.00	3.92	4.53	5.06	5.66	6.20	6.69
HF	7	5.30	6.12	6.84	7.65	8.38	9.05	5.19	5.99	6.70	7.49	8.21	8.86	4.96	5.73	6.40	7.16	7.84	8.47
HF	10	7.87	9.09	10.16	11.36	12.44	13.44	7.70	8.89	9.94	11.11	12.17	13.15	7.35	8.49	9.49	10.61	11.62	12.55
HF	13	10.36	11.96	13.37	14.95	16.38	17.69	10.14	11.71	13.09	14.64	16.03	17.32	9.68	11.18	12.50	13.97	15.31	16.53
TFE	5	4.11	4.75	5.31	5.93	6.50	7.02	4.03	4.65	5.20	5.82	6.37	6.88	3.84	4.43	4.96	5.54	6.07	6.56
TFE	7	5.63	6.50	7.27	8.13	8.90	9.62	5.51	6.36	7.11	7.95	8.71	9.41	5.26	6.07	6.79	7.59	8.32	8.98
TFE	9	6.99	8.07	9.02	10.09	11.05	11.94	6.85	7.91	8.84	9.89	10.83	11.70	6.53	7.54	8.43	9.43	10.32	11.15
TFE	14	10.68	12.33	13.79	15.42	16.89	18.24	10.45	12.07	13.49	15.08	16.52	17.85	9.97	11.51	12.87	14.39	15.76	17.03
TRAE+	8	6.05	6.99	7.81	8.73	9.57	10.33	5.93	6.85	7.66	8.56	9.38	10.13	5.66	6.54	7.31	8.17	8.95	9.67
TRAE+	12	8.82	10.18	11.39	12.73	13.95	15.06	8.64	9.98	11.15	12.47	13.66	14.76	8.24	9.51	10.64	11.89	13.03	14.07
TRAE+	14	9.85	11.37	12.72	14.22	15.57	16.82	9.64	11.13	12.45	13.91	15.24	16.46	9.20	10.62	11.88	13.28	14.55	15.71
TRAE+	20	14.93	17.24	19.27	21.55	23.61	25.50	14.61	16.87	18.86	21.09	23.10	24.95	13.95	16.11	18.01	20.14	22.06	23.82
TRAE+	30	20.52	23.69	26.49	29.62	32.44	35.04	20.09	23.20	25.94	29.00	31.77	34.31	19.17	22.14	24.75	27.67	30.31	32.74
TRAE	35	27.70	31.99	35.76	39.98	43.80	47.31	27.12	31.32	35.01	39.14	42.88	46.32	25.88	29.88	33.41	37.35	40.92	44.20
TRAE	40	30.22	34.90	39.01	43.62	47.78	51.61	29.58	34.16	38.19	42.70	46.77	50.52	28.23	32.60	36.44	40.75	44.64	48.21
TRAE	50	35.96	41.52	46.42	51.90	56.86	61.41	35.21	40.66	45.46	50.82	55.67	60.13	35.21	40.66	45.46	50.82	55.67	60.13
TJR	9	7.54	8.71	9.73	10.88	11.92	12.88	7.38	8.52	9.53	10.65	11.67	12.60	7.05	8.14	**9.10**	10.18	11.15	12.04
TJR	12	9.03	10.43	11.66	13.03	14.28	15.42	8.84	10.21	11.41	12.76	13.98	15.10	8.44	9.75	**10.90**	12.19	13.35	14.42
TER	14	11.29	13.04	14.58	16.30	17.85	19.28	11.05	12.76	14.27	15.95	17.47	18.87	10.56	12.19	**13.63**	15.24	16.70	18.03
TER	16	13.34	15.40	17.22	19.25	21.09	22.78	13.06	15.08	16.86	18.85	20.65	22.30	12.48	14.41	**16.11**	18.01	19.73	21.31
TER	21	17.96	20.74	23.19	25.92	28.40	30.67	17.58	20.30	22.70	25.37	27.80	30.02	16.80	19.39	**21.68**	24.24	26.56	28.69
TER	27	23.09	26.66	29.81	33.33	36.51	39.43	22.60	26.10	29.18	32.62	35.73	38.60	21.59	24.93	**27.87**	31.16	34.14	36.87
TIR	37	28.22	32.59	36.43	40.73	44.62	48.19	27.62	31.89	35.66	39.87	43.67	47.17	26.39	30.47	**34.06**	38.08	41.72	45.06
THR	48	35.91	41.47	46.36	51.83	56.78	61.33	35.15	40.59	45.38	50.73	55.58	60.03	33.58	38.77	**43.35**	48.47	53.09	57.35
THR	60	43.61	50.36	56.30	62.95	68.95	74.48	42.69	49.29	55.11	61.62	67.50	72.91	40.78	47.09	**52.64**	58.86	64.48	69.64
TMR	60	51.30	59.24	66.23	74.05	81.11	87.61	50.22	57.99	64.83	72.49	79.40	85.77	47.97	55.39	**61.93**	69.24	75.85	81.92

Note: Standard capacity is rated at 100F liquid inlet and 40F evaporator temperature; with 100 Psi pressure drop across the TXV per ARI 750-2001.

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F.
However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-502 Balanced Ported Valves (Tons)– B, HF, TFE, TRAE and T Series (cont.)

Valve Type	Nominal Rating	Evaporator Temperature																	
		0°F						-20°F						-40°F					
		Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)						Pressure Drop Across Valve (PSI)					
		60	80	100	125	150	175	80	100	125	150	175	200	80	100	125	150	175	200
BA/BN	1/4	0.22	0.25	0.28	0.32	0.35	0.38	0.17	0.19	0.21	0.23	0.25	0.27	0.11	0.12	0.14	0.15	0.16	0.17
BA/BN	1/2	0.42	0.48	0.54	0.61	0.66	0.72	0.33	0.37	0.41	0.45	0.49	0.52	0.21	0.23	0.26	0.29	0.31	0.33
BA/BN	1	0.65	0.75	0.84	0.94	1.03	1.11	0.52	0.58	0.65	0.71	0.77	0.82	0.33	0.37	0.41	0.45	0.49	0.52
BA/BN	1-1/4	0.87	1.00	1.12	1.26	1.38	1.49	0.69	0.77	0.86	0.94	1.02	1.09	0.44	0.49	0.55	0.60	0.65	0.70
BA/BN	1-1/2	1.10	1.27	1.42	1.59	1.74	1.88	0.87	0.97	1.09	1.19	1.29	1.38	0.55	0.61	0.69	0.75	0.81	0.87
BA/BN	2	1.34	1.55	1.73	1.93	2.12	2.29	1.05	1.17	1.31	1.44	1.55	1.66	0.67	0.75	0.84	0.92	0.99	1.06
BA/BN	2-1/2	1.73	2.00	2.23	2.50	2.74	2.95	1.36	1.52	1.70	1.86	2.01	2.15	0.87	0.97	1.09	1.19	1.29	1.38
BA/BN	3	2.19	2.53	2.83	3.16	3.46	3.74	1.73	1.93	2.16	2.37	2.56	2.74	1.10	1.23	1.38	1.51	1.63	1.74
BA/BN	4	2.72	3.14	3.51	3.93	4.30	4.65	2.15	2.40	2.69	2.94	3.18	3.40	1.37	1.53	1.71	1.88	2.03	2.17
HF	1/8	0.12	0.14	0.15	0.17	0.19	0.20	0.10	0.11	0.13	0.14	0.15	0.16	0.06	0.07	0.08	0.08	0.09	0.09
HF	1/4	0.23	0.27	0.30	0.33	0.36	0.39	0.18	0.20	0.23	0.25	0.27	0.28	0.12	0.13	0.15	0.16	0.18	0.19
HF	1/2	0.42	0.48	0.54	0.61	0.66	0.72	0.33	0.37	0.41	0.45	0.49	0.52	0.21	0.23	0.26	0.29	0.31	0.33
HF	1	0.64	0.74	0.83	0.92	1.01	1.09	0.50	0.56	0.63	0.68	0.74	0.79	0.32	0.36	0.40	0.44	0.47	0.51
HF	1-1/4	0.86	0.99	1.11	1.24	1.36	1.47	0.68	0.76	0.85	0.93	1.01	1.08	0.43	0.48	0.54	0.59	0.64	0.68
HF	1-1/2	1.10	1.27	1.42	1.59	1.74	1.88	0.87	0.97	1.09	1.19	1.29	1.38	0.55	0.61	0.69	0.75	0.81	0.87
HF	2	1.46	1.69	1.88	2.11	2.31	2.49	1.15	1.29	1.44	1.57	1.70	1.82	0.73	0.82	0.91	1.00	1.08	1.15
HF	3-1/2	2.59	2.99	3.34	3.74	4.10	4.42	1.65	1.84	2.06	2.26	2.44	2.61	1.30	1.45	1.63	1.78	1.92	2.06
HF	5	3.60	4.16	4.65	5.20	5.69	6.15	2.84	3.18	3.55	3.89	4.20	4.49	1.81	2.02	2.26	2.48	2.68	2.86
HF	7	4.56	5.27	5.89	6.58	7.21	7.79	3.60	4.02	4.50	4.93	5.32	5.69	2.29	2.56	2.86	3.14	3.39	3.62
HF	10	6.76	7.81	8.73	9.76	10.69	11.54	5.34	5.97	6.68	7.31	7.90	8.44	3.40	3.80	4.25	4.66	5.03	5.38
HF	13	8.90	10.28	11.49	12.85	14.07	15.20	7.03	7.86	8.79	9.63	10.40	11.12	4.48	5.01	5.60	6.13	6.63	7.08
TFE	5	3.54	4.09	4.57	5.11	5.60	6.05	2.79	3.12	3.49	3.82	4.13	4.41	1.78	1.99	2.23	2.44	2.63	2.81
TFE	7	4.84	5.59	6.25	6.99	7.65	8.27	3.82	4.27	4.78	5.23	5.65	6.04	2.43	2.72	3.04	3.33	3.59	3.84
TFE	9	6.01	6.94	7.76	8.67	9.50	10.26	4.75	5.31	5.94	6.50	7.03	7.51	3.02	3.38	3.78	4.14	4.47	4.78
TFE	14	9.18	10.60	11.85	13.25	14.51	15.68	7.25	8.11	9.06	9.93	10.72	11.46	4.61	5.15	5.76	6.31	6.82	7.29
TRAE+	8	5.20	6.00	6.71	7.51	8.22	8.88	4.11	4.60	5.14	5.63	6.08	6.50	2.62	2.93	3.28	3.59	3.88	4.14
TRAE+	12	7.58	8.75	9.79	10.94	11.99	12.95	5.99	6.70	7.49	8.20	8.86	9.47	3.81	4.26	4.76	5.22	5.64	6.02
TRAE+	14	8.47	9.78	10.93	12.23	13.39	14.47	6.69	7.48	8.36	9.16	9.89	10.58	4.26	4.76	5.33	5.83	6.30	6.74
TRAE+	20	12.83	14.81	16.56	18.52	20.29	21.91	10.13	11.33	12.66	13.87	14.98	16.02	6.45	7.21	8.06	8.83	9.54	10.20
TRAE+	30	17.64	20.37	22.77	25.46	27.89	30.13	13.93	15.57	17.41	19.07	20.60	22.03	8.87	9.92	11.09	12.15	13.12	14.02
TRAE	35	23.81	27.49	30.74	34.37	37.65	40.66	18.80	21.02	23.50	25.74	27.81	29.73	11.97	13.38	14.96	16.39	17.70	18.93
TRAE	40	25.97	29.99	33.53	37.48	41.06	44.35	20.51	22.93	25.64	28.08	30.33	32.43	13.06	14.60	16.33	17.88	19.32	20.65
TRAE	50	30.91	35.69	39.90	44.61	48.87	52.79	24.41	27.29	30.51	33.42	36.10	38.60	15.54	17.37	19.43	21.28	22.98	24.57
TJR	9	6.70	7.74	**8.65**	9.67	10.59	11.44	7.31	**8.17**	9.14	10.01	10.81	11.56	6.89	**7.70**	8.61	9.43	10.19	11.56
TJR	12	8.02	9.26	**10.36**	11.58	12.68	13.70	8.75	**9.78**	10.94	11.98	12.94	13.84	8.25	**9.22**	10.31	11.29	12.20	13.84
TER	14	10.03	11.58	**12.95**	14.48	15.86	17.13	10.95	**12.24**	13.68	14.99	16.19	17.31	10.31	**11.53**	12.89	14.12	15.26	17.31
TER	16	11.85	13.59	**15.30**	17.11	18.74	20.24	12.93	**14.46**	16.16	17.71	19.13	20.45	12.19	**13.63**	15.23	16.69	18.02	20.45
TER	21	15.96	18.43	**20.60**	23.03	25.23	27.26	17.14	**19.47**	21.76	23.84	25.75	27.53	16.41	**18.35**	20.51	22.47	24.27	27.53
TER	27	20.51	23.69	**26.48**	29.61	32.44	35.04	22.38	**25.02**	27.98	30.65	33.10	35.39	21.09	**23.58**	26.37	28.88	31.20	35.39
TIR	37	25.07	28.95	**32.37**	36.19	39.64	42.82	27.35	**30.58**	34.19	37.45	40.45	43.25	25.78	**28.82**	32.22	35.30	38.12	43.25
THR	48	31.90	36.84	**41.19**	46.05	50.44	54.49	34.81	**38.92**	43.51	47.66	51.48	55.04	32.80	**36.67**	41.00	44.92	48.52	55.04
THR	60	38.74	44.74	**50.02**	55.92	61.26	66.71	42.27	**47.26**	52.84	57.88	62.52	66.84	39.84	**44.54**	49.79	54.55	58.92	66.84
TMR	60	45.58	52.63	**58.84**	65.79	72.07	77.84	49.73	**55.60**	52.84	68.09	73.55	78.62	46.86	**52.39**	58.58	64.17	69.31	78.62

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F.
However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-410A Balance Ported Valves (Tons) - TFE Series

Valve Type	Nominal Rating	Evaporator Temperature																			
		50 ºF							40 ºF							20 ºF						
		Pressure Drop Across Valve (PSI)							Pressure Drop Across Valve (PSI)							Pressure Drop Across Valve (PSI)						
		75	110	140	160	210	240	285	75	110	140	160	210	240	285	75	110	140	160	210	240	285
TFES	12	8.1	9.9	11.1	11.9	13.6	14.6	15.9	8.1	9.8	11.0	11.8	13.5	14.5	15.7	7.9	9.6	10.8	11.5	13.2	14.1	15.4
	16	12.4	15.0	16.9	18.1	20.7	22.1	24.1	12.3	14.8	16.7	17.9	20.5	21.9	23.9	12.0	14.5	16.4	17.5	20.1	21.5	23.4
	20	13.3	16.1	18.2	19.5	22.3	23.8	26.0	13.2	16.0	18.1	19.3	22.1	23.6	25.8	12.9	15.7	17.7	18.9	21.6	23.1	25.2
Valve Type	Nominal Rating	Evaporator Temperature																			
		0 ºF							-20 ºF							-40 ºF						
		Pressure Drop Across Valve (PSI)							Pressure Drop Across Valve (PSI)							Pressure Drop Across Valve (PSI)						
		75	110	140	160	210	240	285	75	110	140	160	210	240	285	75	110	140	160	210	240	285
TFES	12	7.7	9.3	10.5	11.2	12.9	13.8	15.0	7.5	9.0	10.2	10.9	12.5	13.3	14.5	7.2	8.7	9.8	10.5	12.0	12.9	14.0
	16	11.7	14.1	16.0	17.1	19.5	20.9	22.8	11.3	13.7	15.5	16.5	18.9	20.2	22.1	10.9	13.2	14.9	15.9	18.3	19.5	21.3
	20	12.6	15.2	17.2	18.4	21.1	22.5	24.5	12.2	14.8	16.7	17.8	20.4	21.8	23.8	11.8	14.3	16.1	17.2	19.7	21.1	22.9

Note: Standard capacity is rated at 100 ºF liquid inlet and 40 ºF evap temperature; with 160 Psi pressure drop across TXV per ARI 750-2001.
These ratings assume vapor free liquid entering the thermal expansion valve.

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F.
However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-12 Conventional Valves (kWatts) – A Series, T Series

Valve Type	Nominal Rating	Evaporator Temperature																	
		10°C						0°C						-10°C					
		Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)					
		400	600	700	800	1000	1100	400	600	700	800	1000	1100	400	600	700	800	1000	1100
AA/AN/AAC/ANC	1/8	0.71	0.87	0.94	1.00	1.12	1.17	0.71	0.87	0.94	1.00	1.12	1.17	0.67	0.82	0.89	0.95	1.06	1.12
AA/AN/AAC/ANC/AFA	1/4	1.24	1.52	1.64	1.75	1.96	2.05	1.20	1.47	1.59	1.70	1.90	2.00	1.17	1.43	1.55	1.65	1.85	1.94
AA/AN/AAC/ANC/AFA	1/2	1.98	2.43	2.62	2.80	3.13	3.29	1.95	2.38	2.58	2.75	3.08	3.23	1.88	2.30	2.48	2.65	2.97	3.11
AA/AN/AAC/ANC/AFA	1	2.83	3.47	3.75	4.01	4.48	4.70	2.80	3.43	3.70	3.95	4.42	4.64	2.69	3.30	3.56	3.80	4.25	4.46
AA/AN/AAC/ANC/AFA	1-1/2	5.88	7.20	7.77	8.31	9.29	9.74	5.77	7.07	7.63	8.16	9.12	9.57	5.52	6.76	7.31	7.81	8.73	9.16
AA/AN/AAC/ANC/AFA	2	7.22	8.84	9.55	10.21	11.42	11.98	7.08	8.67	9.37	10.01	11.19	11.74	6.80	8.32	8.99	9.61	10.75	11.27
AA/AN/AAC/ANC	2-1/2	8.57	10.49	11.33	12.12	13.55	14.21	8.39	10.28	11.10	11.86	13.27	13.91	8.07	9.89	10.68	11.41	12.76	13.38
AA/AN/AAC/ANC/AFA	3	11.72	14.35	15.50	16.57	18.53	19.43	11.47	14.05	15.17	16.22	18.14	19.02	11.01	13.48	14.56	15.57	17.41	18.26
TCLE	1/4	1.06	1.30	1.40	1.50	1.68	1.76	1.06	1.30	1.40	1.50	1.68	1.76	0.99	1.21	1.31	1.40	1.57	1.64
TCLE	1/2	2.02	2.47	2.67	2.85	3.19	3.35	1.98	2.43	2.62	2.80	3.13	3.29	1.88	2.30	2.48	2.65	2.97	3.11
TCLE	1	4.07	4.99	5.39	5.76	6.44	6.75	4.00	4.90	5.29	5.66	6.32	6.63	3.82	4.68	5.06	5.41	6.05	6.34
TCLE	2	7.50	9.19	9.93	10.61	11.87	12.45	7.36	9.02	9.74	10.41	11.64	12.21	7.04	8.63	9.32	9.96	11.14	11.68
TCLE	3	10.94	13.40	14.47	15.47	17.30	18.14	10.73	13.14	14.19	15.17	16.96	17.79	10.27	12.57	13.58	14.52	16.23	17.02
TCLE	4	15.86	19.42	20.98	22.43	25.08	26.30	15.54	19.03	20.56	21.98	24.57	25.77	14.90	18.25	19.72	21.08	23.56	24.71
TCLE	6-1/2	21.84	26.75	28.89	30.89	34.53	36.22	21.42	26.23	28.33	30.29	33.86	35.52	20.53	25.15	27.16	29.04	32.46	34.05
TCLE	7-1/2	26.34	32.26	34.84	37.25	41.64	43.68	25.84	31.65	34.19	36.55	40.86	42.85	24.78	30.35	32.78	35.04	39.18	41.09
TJL	7	23.33	28.57	30.86	32.99	36.89	38.69	22.90	28.05	30.30	32.39	36.21	37.98	21.95	26.88	29.03	31.04	34.70	36.40
TJL	8	29.77	36.46	39.38	42.10	47.07	49.37	29.21	35.77	38.63	41.30	46.18	48.43	28.00	34.29	37.04	39.60	44.27	46.44

Valve Type	Nominal Rating	Evaporator Temperature																	
		-20°C						-30°C						-40°C					
		Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)					
		400	600	700	800	1000	1100	600	700	800	1000	1100	1200	600	700	800	1000	1100	1200
AA/AN/AAC/ANC	1/8	0.60	0.74	0.80	0.85	0.95	1.00	0.46	0.50	0.53	0.59	0.62	0.65	0.28	0.31	0.33	0.37	0.38	0.40
AA/AN/AAC/ANC/AFA	1/4	1.03	1.26	1.36	1.45	1.62	1.70	0.81	0.88	0.94	1.05	1.10	1.15	0.53	0.57	0.61	0.69	0.72	0.75
AA/AN/AAC/ANC/AFA	1/2	1.66	2.04	2.20	2.35	2.63	2.76	1.31	1.41	1.51	1.69	1.77	1.85	0.85	0.92	0.98	1.10	1.15	1.20
AA/AN/AAC/ANC/AFA	1	2.37	2.90	3.14	3.35	3.75	3.93	1.88	2.03	2.17	2.42	2.54	2.65	1.20	1.30	1.39	1.55	1.63	1.70
AA/AN/AAC/ANC/AFA	1-1/2	4.92	6.03	6.51	6.96	7.78	8.16	3.86	4.17	4.46	4.98	5.22	5.46	2.51	2.71	2.90	3.24	3.40	3.55
AA/AN/AAC/ANC/AFA	2	6.02	7.37	7.96	8.51	9.52	9.98	4.71	5.09	5.44	6.08	6.37	6.66	3.08	3.33	3.56	3.98	4.17	4.36
AA/AN/AAC/ANC	2-1/2	7.15	8.76	9.46	10.11	11.31	11.86	5.59	6.04	6.46	7.22	7.57	7.91	3.65	3.94	4.21	4.71	4.94	5.16
AA/AN/AAC/ANC/AFA	3	9.77	11.97	12.93	13.82	15.45	16.20	7.65	8.26	8.83	9.87	10.35	10.81	4.96	5.35	5.72	6.40	6.71	7.01
TCLE	1/4	0.89	1.08	1.17	1.25	1.40	1.47	0.71	0.76	0.82	0.91	0.96	1.00	0.46	0.50	0.53	0.59	0.62	0.65
TCLE	1/2	1.66	2.04	2.20	2.35	2.63	2.76	1.31	1.41	1.51	1.69	1.77	1.85	0.85	0.92	0.98	1.10	1.15	1.20
TCLE	1	3.40	4.16	4.50	4.81	5.37	5.64	2.66	2.87	3.07	3.43	3.59	3.75	1.73	1.87	2.00	2.24	2.35	2.45
TCLE	2	6.23	7.63	8.24	8.81	9.85	10.33	4.89	5.28	5.64	6.31	6.61	6.91	3.19	3.44	3.68	4.11	4.31	4.51
TCLE	3	9.10	11.14	12.04	12.87	14.38	15.09	7.12	7.69	8.22	9.19	9.63	10.06	4.64	5.01	5.35	5.99	6.28	6.56
TCLE	4	13.20	16.17	17.47	18.67	20.88	21.90	10.34	11.17	11.94	13.34	14.00	14.62	6.73	7.26	7.77	8.68	9.11	9.51
TCLE	6-1/2	18.20	22.28	24.07	25.73	28.77	30.17	14.27	15.41	16.47	18.42	19.32	20.18	9.27	10.02	10.71	11.97	12.56	13.12
TCLE	7-1/2	21.95	26.88	29.03	31.04	34.70	36.40	17.20	18.58	19.87	22.21	23.29	24.33	11.19	12.08	12.92	14.44	15.15	15.82
TJL	7	19.43	23.80	25.71	27.48	30.73	32.23	15.22	16.44	17.58	19.65	20.61	21.53	9.91	10.71	11.45	12.80	13.42	14.02
TJL	8	24.78	30.35	32.78	35.04	39.18	41.09	19.43	20.99	22.44	25.09	26.31	27.48	12.64	13.65	14.59	16.32	17.11	17.87

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F. However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-22 Conventional Valves (kWatts) – A Series, T Series

Valve Type	Nominal Rating	Evaporator Temperature 10°C Pressure Drop Across Valve (kPa) 400	600	700	800	1000	1100	0°C 400	600	700	800	1000	1100	-10°C 400	600	700	800	1000	1100
AA/AN/AFA	1/5	0.53	0.65	0.70	0.75	0.84	0.88	0.52	0.64	0.69	0.74	0.82	0.86	0.50	0.61	0.66	0.70	0.78	0.82
AA/AN/AAC/ANC	1/4	0.92	1.13	1.22	1.30	1.46	1.53	0.90	1.11	1.20	1.28	1.43	1.50	0.89	1.08	1.17	1.25	1.40	1.47
AA/AN/AAC/ANC/AFA	1/2	1.63	1.99	2.15	2.30	2.57	2.70	1.59	1.95	2.10	2.25	2.51	2.64	1.56	1.91	2.06	2.20	2.46	2.58
AA/AN/AAC/ANC/AFA	1	2.58	3.16	3.42	3.65	4.09	4.29	2.55	3.12	3.37	3.61	4.03	4.23	2.48	3.03	3.28	3.50	3.92	4.11
AA/AN/AAC/ANC/AFA	1-1/2	3.72	4.55	4.92	5.26	5.88	6.16	3.65	4.47	4.82	5.16	5.77	6.05	3.58	4.38	4.73	5.06	5.65	5.93
AA/AN/AAC/ANC/AFA	2	5.45	6.68	7.21	7.71	8.62	9.04	5.37	6.58	7.11	7.60	8.50	8.91	5.24	6.42	6.93	7.41	8.28	8.69
AA/AN/AAC/ANC/AFA	2-1/2	7.65	9.36	10.12	10.81	12.09	12.68	7.54	9.24	9.98	10.66	11.92	12.50	7.36	9.02	9.74	10.41	11.64	12.21
AA/AN/AAC/ANC/AFA	3	9.38	11.49	12.41	13.27	14.83	15.56	9.24	11.32	12.22	13.07	14.61	15.32	9.03	11.06	11.94	12.77	14.27	14.97
AA/AN/AAC/ANC	4	11.12	13.61	14.70	15.72	17.58	18.43	10.97	13.43	14.51	15.51	17.34	18.19	10.73	13.14	14.19	15.17	16.96	17.79
AA/AN/AAC/ANC/AFA	5	15.22	18.64	20.14	21.53	24.07	25.24	15.00	18.37	19.84	21.21	23.72	24.87	14.66	17.95	19.39	20.73	23.17	24.30
TCLE	1/2	1.38	1.69	1.83	1.95	2.18	2.29	1.37	1.68	1.81	1.94	2.17	2.27	1.35	1.65	1.78	1.90	2.13	2.23
TCLE	1	2.62	3.21	3.47	3.70	4.14	4.34	2.58	3.16	3.41	3.65	4.08	4.27	2.51	3.08	3.32	3.55	3.97	4.17
TCLE	2	5.27	6.46	6.98	7.46	8.34	8.75	5.21	6.38	6.89	7.37	8.24	8.64	5.10	6.24	6.74	7.21	8.06	8.45
TCLE	3	9.74	11.92	12.88	13.77	15.39	16.14	9.60	11.75	12.70	13.57	15.17	15.92	9.38	11.49	12.41	13.27	14.83	15.56
TCLE	5	14.20	17.39	18.78	20.08	22.44	23.54	13.98	17.13	18.50	19.78	22.11	23.19	13.66	16.74	18.08	19.32	21.61	22.66
TCLE	7-1/2	20.60	25.23	27.25	29.14	32.58	34.17	20.35	24.92	26.92	28.77	32.17	33.74	19.82	24.28	26.22	28.04	31.34	32.87
TCLE	10	28.39	34.77	37.56	40.15	44.89	47.08	28.05	34.36	37.11	39.67	44.35	46.52	27.33	33.47	36.15	38.65	43.21	45.32
TCLE	12	34.23	41.93	45.28	48.41	54.13	56.77	33.81	41.41	44.73	47.81	53.46	56.07	32.96	40.36	43.60	46.61	52.11	54.65
TJL	11	30.34	37.16	40.13	42.90	47.97	50.31	29.97	36.71	39.65	42.39	47.39	49.70	29.21	35.77	38.63	41.30	46.18	48.43
TJL	14	38.66	47.34	51.14	54.67	61.12	64.11	38.22	46.82	50.57	54.06	60.44	63.39	37.24	45.61	49.26	52.67	58.88	61.76

Valve Type	Nominal Rating	Evaporator Temperature -20°C Pressure Drop Across Valve (kPa) 400	600	700	800	1000	1100	-30°C 600	700	800	1000	1100	1200	-40°C 600	700	800	1000	1100	1200
AA/AN/AFA	1/5	0.46	0.56	0.61	0.65	0.73	0.76	0.35	0.38	0.41	0.46	0.48	0.50	0.25	0.27	0.29	0.32	0.34	0.35
AA/AN/AAC/ANC	1/4	0.81	1.00	1.08	1.15	1.29	1.35	0.64	0.69	0.74	0.82	0.86	0.90	0.42	0.46	0.49	0.55	0.58	0.60
AA/AN/AAC/ANC/AFA	1/2	1.42	1.73	1.87	2.00	2.24	2.35	1.13	1.22	1.31	1.46	1.53	1.60	0.74	0.80	0.86	0.96	1.01	1.05
AA/AN/AAC/ANC/AFA	1	2.27	2.77	3.00	3.20	3.58	3.76	1.81	1.95	2.08	2.33	2.44	2.55	1.20	1.30	1.39	1.55	1.63	1.70
AA/AN/AAC/ANC/AFA	1-1/2	3.22	3.95	4.26	4.56	5.09	5.34	2.58	2.79	2.98	3.34	3.50	3.65	1.70	1.84	1.96	2.19	2.30	2.40
AA/AN/AAC/ANC/AFA	2	4.78	5.85	6.32	6.76	7.56	7.93	3.79	4.09	4.37	4.89	5.13	5.36	2.51	2.71	2.90	3.24	3.40	3.55
AA/AN/AAC/ANC/AFA	2-1/2	6.69	8.19	8.85	9.46	10.58	11.10	5.35	5.77	6.17	6.90	7.24	7.56	3.50	3.79	4.05	4.52	4.75	4.96
AA/AN/AAC/ANC/AFA	3	8.18	10.02	10.82	11.56	12.93	13.56	6.55	7.07	7.56	8.45	8.87	9.26	4.32	4.66	4.99	5.58	5.85	6.11
AA/AN/AAC/ANC	4	9.74	11.92	12.88	13.77	15.39	16.14	7.75	8.37	8.95	10.01	10.50	10.96	5.10	5.51	5.89	6.58	6.90	7.21
AA/AN/AAC/ANC/AFA	5	13.28	16.26	17.56	18.77	20.99	22.01	10.62	11.47	12.26	13.71	14.38	15.02	6.97	7.53	8.05	9.00	9.44	9.86
TCLE	1/2	1.20	1.47	1.59	1.70	1.90	2.00	0.96	1.03	1.10	1.23	1.29	1.35	0.64	0.69	0.74	0.82	0.86	0.90
TCLE	1	2.30	2.82	3.04	3.25	3.64	3.82	1.84	1.99	2.13	2.38	2.49	2.60	1.20	1.30	1.39	1.55	1.63	1.70
TCLE	2	4.60	5.64	6.09	6.51	7.28	7.63	3.68	3.98	4.25	4.75	4.98	5.21	2.44	2.64	2.82	3.15	3.31	3.45
TCLE	3	8.50	10.41	11.24	12.02	13.43	14.09	6.80	7.34	7.85	8.77	9.20	9.61	4.46	4.82	5.15	5.76	6.04	6.31
TCLE	5	12.39	15.17	16.39	17.52	19.59	20.55	9.88	10.67	11.40	12.75	13.37	13.97	6.51	7.04	7.52	8.41	8.82	9.21
TCLE	7-1/2	17.98	22.02	23.79	25.43	28.43	29.82	14.34	15.49	16.55	18.51	19.41	20.28	9.45	10.21	10.91	12.20	12.80	13.37
TCLE	10	24.78	30.35	32.78	35.04	39.18	41.09	19.79	21.37	22.85	25.55	26.79	27.99	13.03	14.07	15.04	16.82	17.64	18.42
TCLE	12	29.88	36.59	39.52	42.25	47.24	49.55	23.86	25.77	27.55	30.80	32.31	33.74	15.72	16.98	18.15	20.29	21.28	22.23
TJL	11	26.48	32.43	35.03	37.45	41.87	43.91	21.13	22.83	24.40	27.28	28.62	29.89	13.91	15.03	16.06	17.96	18.84	19.67
TJL	14	33.77	41.36	44.68	47.76	53.40	56.00	26.97	29.14	31.15	34.82	36.52	38.15	17.77	19.19	20.52	22.94	24.06	25.13

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F. However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-134a Conventional Valves (kWatts) – A Series, T Series

Valve Type	Nominal Rating	Evaporator Temperature 10°C Pressure Drop Across Valve (kPa) 400	600	700	800	1000	1100	0°C 400	600	700	800	1000	1100	-10°C 400	600	700	800	1000	1100
AA/AN/AFA	1/8	0.50	0.61	0.66	0.70	0.78	0.82	0.50	0.61	0.66	0.70	0.78	0.82	0.46	0.56	0.61	0.65	0.73	0.76
AA/AN/AAC/ANC	1/4	0.89	1.08	1.17	1.25	1.40	1.47	0.85	1.04	1.12	1.20	1.34	1.41	0.81	1.00	1.08	1.15	1.29	1.35
AA/AN/AAC/ANC/AFA	1/2	1.52	1.86	2.01	2.15	2.41	2.52	1.52	1.86	2.01	2.15	2.41	2.52	1.45	1.78	1.92	2.05	2.29	2.41
AA/AN/AAC/ANC/AFA	3/4	2.48	3.03	3.28	3.50	3.92	4.11	2.41	2.95	3.18	3.40	3.81	3.99	2.30	2.82	3.04	3.25	3.64	3.82
AA/AN/AAC/ANC/AFA	1	3.54	4.34	4.68	5.01	5.60	5.87	3.47	4.25	4.59	4.91	5.49	5.75	3.29	4.03	4.36	4.66	5.21	5.46
AA/AN/AAC/ANC/AFA	1-1/2	5.20	6.37	6.88	7.36	8.23	8.63	5.10	6.24	6.74	7.21	8.06	8.45	4.89	5.98	6.46	6.91	7.72	8.10
AA/AN/AAC/ANC/AFA	2	7.29	8.93	9.65	10.31	11.53	12.09	7.15	8.76	9.46	10.11	11.31	11.86	6.83	8.37	9.04	9.66	10.80	11.33
AA/AN/AAC/ANC/AFA	2-1/2	8.96	10.97	11.85	12.67	14.16	14.85	8.74	10.71	11.57	12.37	13.83	14.50	8.39	10.28	11.10	11.86	13.27	13.91
AA/AN/AAC/ANC	3	10.62	13.01	14.05	15.02	16.79	17.61	10.41	12.75	13.77	14.72	16.46	17.26	9.95	12.18	13.16	14.07	15.73	16.50
AA/AN/AAC/ANC/AFA	4	14.51	17.78	19.20	20.53	22.95	24.07	14.23	17.43	18.83	20.13	22.50	23.60	13.59	16.65	17.98	19.22	21.49	22.54
TCLE	1/4	1.31	1.60	1.73	1.85	2.07	2.17	1.31	1.60	1.73	1.85	2.07	2.17	1.24	1.52	1.64	1.75	1.96	2.05
TCLE	3/4	2.48	3.03	3.28	3.50	3.92	4.11	2.44	2.99	3.23	3.45	3.86	4.05	2.34	2.86	3.09	3.30	3.69	3.87
TCLE	1-1/2	5.03	6.16	6.65	7.11	7.95	8.34	4.92	6.03	6.51	6.96	7.78	8.16	4.71	5.77	6.23	6.66	7.44	7.81
TCLE	2-1/2	9.27	11.36	12.27	13.12	14.66	15.38	9.10	11.14	12.04	12.87	14.38	15.09	8.71	10.67	11.52	12.32	13.77	14.44
TCLE	3-1/2	13.52	16.56	17.89	19.12	21.38	22.43	13.24	16.22	17.51	18.72	20.93	21.96	12.67	15.52	16.77	17.92	20.04	21.02
TCLE	5-1/2	19.65	24.06	25.99	27.79	31.06	32.58	19.22	23.54	25.43	27.18	30.39	31.88	18.41	22.55	24.35	26.03	29.11	30.53
TCLE	7-1/2	27.08	33.17	35.82	38.30	42.82	44.91	26.51	32.47	35.08	37.50	41.92	43.97	25.35	31.04	33.53	35.85	40.08	42.03
TCLE	9	32.64	39.97	43.18	46.16	51.61	54.13	31.97	39.15	42.29	45.21	50.54	53.01	30.59	37.46	40.46	43.25	48.36	50.72
TJL	9	28.92	35.42	38.26	40.90	45.73	47.96	28.32	34.68	37.46	40.05	44.78	46.96	27.08	33.17	35.82	38.30	42.82	44.91
TJL	11	36.89	45.18	48.80	52.17	58.32	61.17	36.11	44.22	47.77	51.06	57.09	59.88	34.55	42.32	45.71	48.86	54.63	57.30

Valve Type	Nominal Rating	Evaporator Temperature -20°C Pressure Drop Across Valve (kPa) 400	600	700	800	1000	1100	-30°C 600	700	800	1000	1100	1200	-40°C 600	700	800	1000	1100	1200
AA/AN/AFA	1/8	0.39	0.48	0.52	0.55	0.62	0.65	0.28	0.31	0.33	0.37	0.38	0.40	0.18	0.19	0.20	0.23	0.24	0.25
AA/AN/AAC/ANC	1/4	0.67	0.82	0.89	0.95	1.06	1.12	0.50	0.54	0.57	0.64	0.67	0.70	0.32	0.34	0.37	0.41	0.43	0.45
AA/AN/AAC/ANC/AFA	1/2	1.20	1.47	1.59	1.70	1.90	2.00	0.89	0.96	1.02	1.14	1.20	1.25	0.53	0.57	0.61	0.69	0.72	0.75
AA/AN/AAC/ANC/AFA	3/4	1.91	2.34	2.53	2.70	3.02	3.17	1.42	1.53	1.64	1.83	1.92	2.00	0.89	0.96	1.02	1.14	1.20	1.25
AA/AN/AAC/ANC/AFA	1	2.73	3.34	3.61	3.85	4.31	4.52	2.02	2.18	2.33	2.60	2.73	2.85	1.24	1.34	1.43	1.60	1.68	1.75
AA/AN/AAC/ANC/AFA	1-1/2	4.00	4.90	5.29	5.66	6.32	6.63	3.01	3.25	3.47	3.88	4.07	4.26	1.84	1.99	2.13	2.38	2.49	2.60
AA/AN/AAC/ANC/AFA	2	5.63	6.89	7.45	7.96	8.90	9.33	4.21	4.55	4.86	5.44	5.70	5.96	2.58	2.79	2.98	3.34	3.50	3.65
AA/AN/AAC/ANC/AFA	2-1/2	6.90	8.45	9.13	9.76	10.91	11.45	5.13	5.54	5.93	6.63	6.95	7.26	3.15	3.40	3.64	4.07	4.27	4.46
AA/AN/AAC/ANC	3	8.18	10.02	10.82	11.56	12.93	13.56	6.09	6.58	7.03	7.86	8.24	8.61	3.75	4.05	4.33	4.84	5.08	5.31
AA/AN/AAC/ANC/AFA	4	11.19	13.70	14.80	15.82	17.69	18.55	8.35	9.02	9.65	10.79	11.31	11.81	5.13	5.54	5.93	6.63	6.95	7.26
TCLE	1/4	1.03	1.26	1.36	1.45	1.62	1.70	0.78	0.84	0.90	1.01	1.05	1.10	0.46	0.50	0.53	0.59	0.62	0.65
TCLE	3/4	1.91	2.34	2.53	2.70	3.02	3.17	1.45	1.57	1.68	1.87	1.97	2.05	0.89	0.96	1.02	1.14	1.20	1.25
TCLE	1-1/2	3.89	4.77	5.15	5.51	6.16	6.46	2.90	3.14	3.35	3.75	3.93	4.11	1.77	1.91	2.04	2.29	2.40	2.50
TCLE	2-1/2	7.15	8.76	9.46	10.11	11.31	11.86	5.35	5.77	6.17	6.90	7.24	7.56	3.29	3.56	3.80	4.25	4.46	4.66
TCLE	3-1/2	10.44	12.79	13.81	14.77	16.51	17.32	7.79	8.41	8.99	10.05	10.55	11.01	4.78	5.16	5.52	6.17	6.47	6.76
TCLE	5-1/2	15.15	18.56	20.04	21.43	23.96	25.13	11.29	12.20	13.04	14.58	15.29	15.97	6.94	7.49	8.01	8.96	9.39	9.81
TCLE	7-1/2	20.89	25.58	27.63	29.54	33.02	34.64	15.58	16.82	17.99	20.11	21.09	22.03	9.56	10.32	11.04	12.34	12.94	13.52
TCLE	9	25.17	30.83	33.30	35.59	39.80	41.74	18.76	20.27	21.66	24.22	25.40	26.53	11.54	12.47	13.33	14.90	15.63	16.32
TJL	9	22.30	27.31	29.50	31.54	35.26	36.98	16.64	17.97	19.21	21.48	22.53	23.53	10.23	11.05	11.81	13.21	13.85	14.47
TJL	11	28.43	34.81	37.60	40.20	44.95	47.14	21.20	22.90	24.48	27.38	28.71	29.99	13.03	14.07	15.04	16.82	17.64	18.42

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F. However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-450A/R-513A Conventional Valves (kWatts) A Series

Valve Type	Nominal Rating	Evaporator Temperature																	
		10°C						0°C						-10°C					
		Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)					
		400	600	700	800	1000	1100	400	600	700	800	1000	1100	400	600	700	800	1000	1100
AA/AN/AAC/ANC/AFA	1/8	0.40	0.46	0.51	0.57	0.63	0.68	0.39	0.45	0.50	0.56	0.61	0.66	0.37	0.42	0.47	0.53	0.58	0.63
AA/AN/AAC/ANC/AFA	1/5	0.68	0.78	0.88	0.98	1.07	1.16	0.66	0.76	0.85	0.96	1.05	1.13	0.63	0.73	0.81	0.91	0.99	1.07
AA/AN/AAC/ANC/AFA	1/4	1.22	1.40	1.57	1.75	1.92	2.08	1.19	1.37	1.53	1.71	1.88	2.03	1.13	1.30	1.45	1.63	1.78	1.92
AA/AN/AAC/ANC/AFA	1/2	1.92	2.22	2.48	2.77	3.04	3.28	1.88	2.17	2.42	2.71	2.97	3.20	1.78	2.06	2.30	2.57	2.82	3.04
AA/AN/AAC/ANC/AFA	3/4	2.77	3.20	3.58	4.00	4.38	4.73	2.70	3.12	3.49	3.90	4.27	4.62	2.57	2.97	3.32	3.71	4.06	4.39
AA/AN/AAC/ANC/AFA	1	4.07	4.70	5.25	5.87	6.43	6.95	3.97	4.59	5.13	5.73	6.28	6.78	3.77	4.36	4.87	5.45	5.97	6.45
AA/AN/AAC/ANC/AFA	1-1/2	5.71	6.59	7.37	8.24	9.03	9.75	5.57	6.43	7.19	8.04	8.81	9.52	5.29	6.11	6.83	7.64	8.37	9.04
AA/AN/AAC/ANC/AFA	2	6.98	8.06	9.01	10.08	11.04	11.92	6.81	7.87	8.80	9.84	10.77	11.64	6.47	7.47	8.36	9.34	10.24	11.06
AA/AN/AAC/ANC/AFA	2-1/2	8.31	9.59	10.73	11.99	13.14	14.19	8.11	9.37	10.47	11.71	12.82	13.85	7.71	8.90	9.95	11.12	12.18	13.16
AA/AN/AAC/ANC/AFA	3	11.36	13.12	14.67	16.40	17.96	19.40	11.09	12.81	14.32	16.01	17.53	18.94	10.54	12.17	13.60	15.21	16.66	17.99

Valve Type	Nominal Rating	Evaporator Temperature																	
		-20°C						-30°C						-40°C					
		Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)					
		400	600	700	800	1000	1100	400	600	700	800	1000	1100	400	600	700	800	1000	1100
AA/AN/AAC/ANC/AFA	1/8	0.27	0.31	0.34	0.38	0.42	0.45	0.20	0.23	0.25	0.28	0.30	0.32	0.12	0.13	0.14	0.16	0.17	0.18
AA/AN/AAC/ANC/AFA	1/5	0.46	0.53	0.59	0.66	0.72	0.78	0.35	0.39	0.43	0.47	0.51	0.55	0.20	0.22	0.25	0.27	0.29	0.31
AA/AN/AAC/ANC/AFA	1/4	0.82	0.94	1.06	1.18	1.29	1.40	0.62	0.69	0.78	0.85	0.92	0.98	0.35	0.40	0.44	0.48	0.52	0.56
AA/AN/AAC/ANC/AFA	1/2	1.29	1.49	1.67	1.87	2.05	2.21	0.98	1.10	1.23	1.34	1.45	1.55	0.56	0.63	0.70	0.77	0.83	0.88
AA/AN/AAC/ANC/AFA	3/4	1.86	2.15	2.41	2.69	2.95	3.18	1.41	1.58	1.77	1.93	2.09	2.23	0.81	0.90	1.01	1.10	1.19	1.28
AA/AN/AAC/ANC/AFA	1	2.74	3.16	3.54	3.95	4.33	4.68	2.08	2.32	2.60	2.84	3.07	3.28	1.19	1.32	1.48	1.62	1.75	1.87
AA/AN/AAC/ANC/AFA	1-1/2	3.84	4.44	4.96	5.55	6.08	6.56	2.91	3.26	3.64	3.99	4.31	4.61	1.66	1.86	2.08	2.28	2.46	2.63
AA/AN/AAC/ANC/AFA	2	4.70	5.43	6.07	6.78	7.43	8.02	3.56	3.98	4.45	4.88	5.27	5.63	2.03	2.27	2.54	2.78	3.01	3.21
AA/AN/AAC/ANC/AFA	2-1/2	5.59	6.46	7.22	8.07	8.84	9.55	4.24	4.74	5.30	5.80	6.27	6.70	2.42	2.71	3.02	3.31	3.58	3.83
AA/AN/AAC/ANC/AFA	3	7.65	8.83	9.87	11.04	12.09	13.06	5.80	6.48	7.25	7.94	8.57	9.17	3.31	3.70	4.14	4.53	4.89	5.23

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F.
However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-404A/R-507 Conventional Valves (kWatts) – A Series, T Series

Valve Type	Nominal Rating	Evaporator Temperature 10°C Pressure Drop Across Valve (kPa) 400	600	700	800	1000	1100	0°C Pressure Drop Across Valve(kPa) 400	600	700	800	1000	1100	-10°C Pressure Drop Across Valve (kPa) 400	600	700	800	1000	1100
AA/AN/AFA	1/8	0.39	0.48	0.52	0.55	0.62	0.65	0.39	0.48	0.52	0.55	0.62	0.65	0.35	0.43	0.47	0.50	0.56	0.59
AA/AN/AAC/ANC	1/4	0.67	0.82	0.89	0.95	1.06	1.12	0.67	0.82	0.89	0.95	1.06	1.12	0.64	0.78	0.84	0.90	1.01	1.06
AA/AN/AAC/ANC/AFA	1/2	1.17	1.43	1.55	1.65	1.85	1.94	1.17	1.43	1.55	1.65	1.85	1.94	1.10	1.34	1.45	1.55	1.74	1.82
AA/AN/AAC/ANC/AFA	3/4	1.91	2.34	2.53	2.70	3.02	3.17	1.84	2.25	2.44	2.60	2.91	3.05	1.77	2.17	2.34	2.50	2.80	2.94
AA/AN/AAC/ANC/AFA	1	2.73	3.34	3.61	3.85	4.31	4.52	2.66	3.25	3.51	3.75	4.20	4.40	2.51	3.08	3.32	3.55	3.97	4.17
AA/AN/AAC/ANC/AFA	1-1/2	4.00	4.90	5.29	5.66	6.32	6.63	3.89	4.77	5.15	5.51	6.16	6.46	3.72	4.55	4.92	5.26	5.88	6.16
AA/AN/AAC/ANC/AFA	2	5.59	6.85	7.40	7.91	8.84	9.28	5.49	6.72	7.26	7.76	8.68	9.10	5.20	6.37	6.88	7.36	8.23	8.63
AA/AN/AAC/ANC/AFA	2-1/2	6.87	8.41	9.08	9.71	10.86	11.39	6.69	8.19	8.85	9.46	10.58	11.10	6.37	7.80	8.43	9.01	10.08	10.57
AA/AN/AAC/ANC	3	8.14	9.97	10.77	11.51	12.87	13.50	7.97	9.76	10.54	11.26	12.59	13.21	7.58	9.28	10.02	10.71	11.98	12.56
AA/AN/AAC/ANC/AFA	4	11.15	13.66	14.75	15.77	17.63	18.49	10.90	13.35	14.42	15.42	17.24	18.08	10.34	12.66	13.67	14.62	16.34	17.14
TCLE	1/4	1.03	1.26	1.36	1.45	1.62	1.70	0.99	1.21	1.31	1.40	1.57	1.64	0.96	1.17	1.26	1.35	1.51	1.59
TCLE	3/4	1.91	2.34	2.53	2.70	3.02	3.17	1.88	2.30	2.48	2.65	2.97	3.11	1.77	2.17	2.34	2.50	2.80	2.94
TCLE	1-1/2	3.86	4.73	5.10	5.46	6.10	6.40	3.79	4.64	5.01	5.36	5.99	6.28	3.58	4.38	4.73	5.06	5.65	5.93
TCLE	2-1/2	7.12	8.71	9.41	10.06	11.25	11.80	6.97	8.54	9.23	9.86	11.03	11.56	6.62	8.11	8.76	9.36	10.47	10.98
TCLE	3-1/2	10.41	12.75	13.77	14.72	16.46	17.26	10.16	12.44	13.44	14.37	16.06	16.85	9.63	11.79	12.74	13.62	15.22	15.97
TCLE	5-1/2	15.08	18.47	19.95	21.33	23.84	25.01	14.73	18.04	19.48	20.83	23.28	24.42	13.98	17.13	18.50	19.77	22.11	23.19
TCLE	7-1/2	20.78	25.45	27.49	29.39	32.86	34.46	20.28	24.84	26.83	28.69	32.07	33.64	19.29	23.63	25.52	27.28	30.50	31.99
TCLE	9	25.06	30.70	33.16	35.44	39.63	41.56	24.46	29.96	32.36	34.59	38.68	40.56	23.26	28.48	30.77	32.89	36.77	38.57
TJL	9	22.20	27.18	29.36	31.39	35.09	36.81	21.70	26.58	28.71	30.69	34.31	35.99	20.60	25.23	27.25	29.14	32.58	34.17
TJL	11	28.32	34.68	37.46	40.05	44.78	46.96	27.65	33.86	36.57	39.10	43.71	45.85	26.27	32.17	34.75	37.15	41.53	43.56

Valve Type	Nominal Rating	Evaporator Temperature -20°C Pressure Drop Across Valve (kPa) 400	600	700	800	1000	1100	-30°C Pressure Drop Across Valve (kPa) 600	700	800	1000	1100	1200	-40°C Pressure Drop Across Valve (kPa) 600	700	800	1000	1100	1200
AA/AN/AFA	1/8	0.32	0.39	0.42	0.45	0.50	0.53	0.25	0.30	0.33	0.35	0.39	0.41	0.18	0.22	0.23	0.25	0.28	0.29
AA/AN/AAC/ANC	1/4	0.57	0.69	0.75	0.80	0.90	0.94	0.42	0.52	0.56	0.60	0.67	0.70	0.28	0.35	0.37	0.40	0.45	0.47
AA/AN/AAC/ANC/AFA	1/2	0.99	1.21	1.31	1.40	1.57	1.64	0.78	0.95	1.03	1.10	1.23	1.29	0.50	0.61	0.66	0.70	0.78	0.82
AA/AN/AAC/ANC/AFA	3/4	1.56	1.91	2.06	2.20	2.46	2.58	1.24	1.52	1.64	1.75	1.96	2.05	0.81	1.00	1.08	1.15	1.29	1.35
AA/AN/AAC/ANC/AFA	1	2.23	2.73	2.95	3.15	3.53	3.70	1.77	2.17	2.34	2.50	2.80	2.94	1.13	1.39	1.50	1.60	1.79	1.88
AA/AN/AAC/ANC/AFA	1-1/2	3.29	4.03	4.36	4.66	5.21	5.46	2.58	3.16	3.42	3.65	4.09	4.29	1.70	2.08	2.25	2.40	2.69	2.82
AA/AN/AAC/ANC/AFA	2	4.64	5.68	6.13	6.56	7.33	7.69	3.65	4.47	4.82	5.16	5.77	6.05	2.37	2.90	3.14	3.35	3.75	3.93
AA/AN/AAC/ANC/AFA	2-1/2	5.70	6.98	7.54	8.06	9.01	9.45	4.46	5.46	5.90	6.31	7.05	7.40	2.90	3.56	3.84	4.11	4.59	4.81
AA/AN/AAC/ANC	3	6.76	8.28	8.94	9.56	10.69	11.21	5.31	6.50	7.02	7.51	8.40	8.81	3.47	4.25	4.59	4.91	5.49	5.75
AA/AN/AAC/ANC/AFA	4	9.24	11.32	12.22	13.07	14.61	15.32	7.22	8.84	9.55	10.21	11.42	11.98	4.74	5.81	6.28	6.71	7.50	7.87
TCLE	1/4	0.85	1.04	1.12	1.20	1.34	1.41	0.67	0.82	0.89	0.95	1.06	1.12	0.42	0.52	0.56	0.60	0.67	0.70
TCLE	3/4	1.59	1.95	2.11	2.25	2.52	2.64	1.24	1.52	1.64	1.75	1.96	2.05	0.81	1.00	1.08	1.15	1.29	1.35
TCLE	1-1/2	3.22	3.95	4.26	4.56	5.09	5.34	2.51	3.08	3.32	3.55	3.97	4.17	1.63	1.99	2.15	2.30	2.57	2.70
TCLE	2-1/2	5.91	7.24	7.82	8.36	9.35	9.80	4.64	5.68	6.13	6.56	7.33	7.69	3.04	3.73	4.03	4.31	4.81	5.05
TCLE	3-1/2	8.60	10.54	11.38	12.17	13.60	14.27	6.76	8.28	8.94	9.56	10.69	11.21	4.43	5.42	5.85	6.26	7.00	7.34
TCLE	5-1/2	12.50	15.30	16.53	17.67	19.76	20.72	9.81	12.01	12.97	13.87	15.50	16.26	6.41	7.85	8.48	9.06	10.13	10.63
TCLE	7-1/2	17.20	21.07	22.76	24.33	27.20	28.53	13.49	16.52	17.84	19.07	21.33	22.37	8.81	10.80	11.66	12.47	13.94	14.62
TCLE	9	20.74	25.41	27.44	29.34	32.80	34.40	16.28	19.94	21.54	23.03	25.75	27.00	10.66	13.05	14.10	15.07	16.85	17.67
TJL	9	18.37	22.50	24.30	25.98	29.05	30.47	14.41	17.65	19.06	20.38	22.78	23.89	9.42	11.53	12.46	13.32	14.89	15.62
TJL	11	23.43	28.70	31.00	33.14	37.05	38.86	18.41	22.55	24.35	26.03	29.11	30.53	12.04	14.74	15.92	17.02	19.03	19.96

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F. However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-448A/R-449A Conventional Valves (kWatts) - A Series

Valve Type	Nominal Rating	Evaporator Temperature																	
		10°C						0°C						-10°C					
		Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)					
		400	600	700	800	1000	1100	400	600	700	800	1000	1100	400	600	700	800	1000	1100
AA/AN/AAC/ANC/AFA	1/5	0.54	0.62	0.69	0.78	0.85	0.92	0.53	0.61	0.69	0.77	0.84	0.91	0.52	0.60	0.67	0.75	0.82	0.89
AA/AN/AAC/ANC/AFA	1/4	0.93	1.08	1.20	1.35	1.48	1.59	0.92	1.07	1.19	1.33	1.46	1.58	0.90	1.04	1.16	1.30	1.43	1.54
AA/AN/AAC/ANC/AFA	1/2	1.64	1.89	2.12	2.37	2.59	2.80	1.62	1.87	2.10	2.34	2.57	2.77	1.58	1.83	2.05	2.29	2.50	2.71
AA/AN/AAC/ANC/AFA	1	2.63	3.04	3.39	3.80	4.16	4.49	2.60	3.00	3.36	3.76	4.11	4.44	2.54	2.93	3.28	3.67	4.02	4.34
AA/AN/AAC/ANC/AFA	1-1/2	3.76	4.34	4.85	5.43	5.95	6.42	3.72	4.30	4.80	5.37	5.88	6.36	3.63	4.19	4.69	5.24	5.74	6.20
AA/AN/AAC/ANC/AFA	2	5.54	6.40	7.15	8.00	8.76	9.46	5.48	6.33	7.08	7.92	8.67	9.37	5.35	6.18	6.91	7.73	8.46	9.14
AA/AN/AAC/ANC/AFA	2-3/4	7.78	8.98	10.04	11.22	12.29	13.28	7.69	8.88	9.93	11.11	12.17	13.14	7.51	8.67	9.70	10.84	11.88	12.83
AA/AN/AAC/ANC/AFA	3-1/2	9.53	11.00	12.30	13.75	15.07	16.27	9.43	10.89	12.17	13.61	14.91	16.10	9.20	10.63	11.88	13.29	14.55	15.72
AA/AN/AAC/ANC/AFA	4	11.31	13.06	14.60	16.32	17.88	19.31	11.19	12.92	14.45	16.15	17.70	19.11	10.93	12.62	14.10	15.77	17.27	18.66
AA/AN/AAC/ANC/AFA	5-1/2	15.47	17.86	19.97	22.32	24.45	26.41	15.31	17.67	19.76	22.09	24.20	26.14	14.94	17.25	19.29	21.56	23.62	25.52

Valve Type	Nominal Rating	Evaporator Temperature																	
		-20°C						-30°C						-40°C					
		Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)					
		400	600	700	800	1000	1100	400	600	700	800	1000	1100	400	600	700	800	1000	1100
AA/AN/AAC/ANC/AFA	1/5	0.50	0.58	0.65	0.73	0.80	0.86	0.46	0.52	0.58	0.63	0.68	0.73	0.31	0.35	0.39	0.43	0.46	0.49
AA/AN/AAC/ANC/AFA	1/4	0.88	1.01	1.13	1.27	1.39	1.50	0.80	0.90	1.00	1.10	1.18	1.27	0.54	0.60	0.68	0.74	0.80	0.85
AA/AN/AAC/ANC/AFA	1/2	1.54	1.78	1.99	2.22	2.44	2.63	1.41	1.57	1.76	1.93	2.08	2.22	0.95	1.06	1.19	1.30	1.41	1.50
AA/AN/AAC/ANC/AFA	1	2.47	2.85	3.19	3.57	3.91	4.22	2.26	2.52	2.82	3.09	3.34	3.57	1.52	1.70	1.90	2.09	2.25	2.41
AA/AN/AAC/ANC/AFA	1-1/2	3.53	4.08	4.56	5.10	5.59	6.03	3.23	3.61	4.03	4.42	4.77	5.10	2.18	2.44	2.72	2.98	3.22	3.44
AA/AN/AAC/ANC/AFA	2	5.21	6.01	6.72	7.52	8.23	8.89	4.75	5.32	5.94	6.51	7.03	7.52	3.21	3.59	4.01	4.40	4.75	5.08
AA/AN/AAC/ANC/AFA	2-3/4	7.31	8.44	9.43	10.55	11.55	12.48	6.67	7.46	8.34	9.13	9.87	10.55	4.50	5.04	5.63	6.17	6.66	7.12
AA/AN/AAC/ANC/AFA	3-1/2	8.95	10.34	11.56	12.92	14.16	15.29	8.18	9.14	10.22	11.19	12.09	12.93	5.52	6.17	6.90	7.56	8.16	8.73
AA/AN/AAC/ANC/AFA	4	10.63	12.27	13.72	15.34	16.80	18.15	9.70	10.85	12.13	13.29	14.35	15.34	6.55	7.33	8.19	8.97	9.69	10.36
AA/AN/AAC/ANC/AFA	5-1/2	14.53	16.78	18.76	20.98	22.98	24.82	13.27	14.84	16.59	18.17	19.63	20.98	8.96	10.02	11.20	12.27	13.25	14.17

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F.
However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-407C Conventional Valves (kWatts) – A Series, T Series

Valve Type	Nominal Rating	Evaporator Temperature																	
		10°C						0°C						-10°C					
		Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)					
		400	600	700	800	1000	1100	400	600	700	800	1000	1100	400	600	700	800	1000	1100
AA/AN/AFA	1/8	0.50	0.61	0.66	0.70	0.78	0.82	0.50	0.61	0.66	0.70	0.78	0.82	0.50	0.61	0.66	0.70	0.78	0.82
AA/AN/AAC/ANC	1/4	0.89	1.08	1.17	1.25	1.40	1.47	0.85	1.04	1.12	1.20	1.34	1.41	0.81	1.00	1.08	1.15	1.29	1.35
AA/AN/AAC/ANC/AFA	1/2	1.56	1.91	2.06	2.20	2.46	2.58	1.52	1.86	2.01	2.15	2.41	2.52	1.45	1.78	1.92	2.05	2.29	2.41
AA/AN/AAC/ANC/AFA	3/4	2.48	3.03	3.28	3.50	3.92	4.11	2.44	2.99	3.23	3.45	3.86	4.05	2.34	2.86	3.09	3.30	3.69	3.87
AA/AN/AAC/ANC/AFA	1	3.54	4.34	4.68	5.01	5.60	5.87	3.47	4.25	4.59	4.91	5.49	5.75	3.36	4.12	4.45	4.76	5.32	5.58
AA/AN/AAC/ANC/AFA	1-1/2	5.24	6.42	6.93	7.41	8.28	8.69	5.13	6.29	6.79	7.26	8.12	8.51	4.92	6.03	6.51	6.96	7.78	8.16
AA/AN/AAC/ANC/AFA	2	7.33	8.97	9.69	10.36	11.59	12.15	7.22	8.84	9.55	10.21	11.42	11.98	6.90	8.45	9.13	9.76	10.91	11.45
AA/AN/AAC/ANC/AFA	2-1/2	8.99	11.01	11.89	12.72	14.22	14.91	8.81	10.80	11.66	12.47	13.94	14.62	8.46	10.36	11.19	11.97	13.38	14.03
AA/AN/AAC/ANC	3	10.69	13.09	14.14	15.12	16.90	17.73	10.48	12.83	13.86	14.82	16.57	17.38	10.05	12.31	13.30	14.22	15.90	16.67
AA/AN/AAC/ANC/AFA	4	14.58	17.86	19.29	20.63	23.06	24.19	14.34	17.56	18.97	20.28	22.67	23.78	13.77	16.87	18.22	19.47	21.77	22.84
TCLE	1/4	1.35	1.65	1.78	1.90	2.13	2.23	1.31	1.60	1.73	1.85	2.07	2.17	1.27	1.56	1.69	1.80	2.02	2.11
TCLE	3/4	2.51	3.08	3.32	3.55	3.97	4.17	2.48	3.03	3.28	3.50	3.92	4.11	2.37	2.90	3.14	3.35	3.75	3.93
TCLE	1-1/2	5.06	6.20	6.70	7.16	8.00	8.39	4.99	6.11	6.60	7.06	7.89	8.28	4.78	5.85	6.32	6.76	7.56	7.93
TCLE	2-1/2	9.35	11.45	12.36	13.22	14.78	15.50	9.17	11.23	12.13	12.97	14.50	15.20	8.81	10.80	11.66	12.47	13.94	14.62
TCLE	3-1/2	13.63	16.69	18.03	19.27	21.55	22.60	13.35	16.35	17.65	18.87	21.10	22.13	12.81	15.69	16.95	18.12	20.26	21.25
TCLE	5-1/2	19.75	24.19	26.13	27.94	31.23	32.76	19.40	23.76	25.66	27.43	30.67	32.17	18.62	22.81	24.63	26.33	29.44	30.88
TCLE	7-1/2	27.22	33.34	36.01	38.50	43.04	45.14	26.73	32.73	35.36	37.80	42.26	44.32	25.67	31.43	33.95	36.30	40.58	42.56
TCLE	9	32.82	40.19	43.41	46.41	51.89	54.42	32.21	39.45	42.62	45.56	50.93	53.42	30.94	37.89	40.93	43.76	48.92	51.31
TJL	9	29.10	35.64	38.49	41.15	46.01	48.25	28.57	34.99	37.79	40.40	45.17	47.37	27.44	33.60	36.29	38.80	43.38	45.50
TJL	11	37.10	45.44	49.08	52.47	58.66	61.52	36.43	44.61	48.19	51.51	57.60	60.41	34.98	42.84	46.27	49.46	55.30	58.00

Valve Type	Nominal Rating	Evaporator Temperature																	
		-20°C						-30°C						-40°C					
		Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)					
		400	600	700	800	1000	1100	600	700	800	1000	1100	1200	600	700	800	1000	1100	1200
AA/AN/AFA	1/8	0.39	0.48	0.52	0.55	0.62	0.65	0.32	0.39	0.42	0.45	0.50	0.53	0.18	0.22	0.23	0.25	0.28	0.29
AA/AN/AAC/ANC	1/4	0.71	0.87	0.94	1.00	1.12	1.17	0.53	0.65	0.70	0.75	0.84	0.88	0.32	0.39	0.42	0.45	0.50	0.53
AA/AN/AAC/ANC/AFA	1/2	1.24	1.52	1.64	1.75	1.96	2.05	0.92	1.13	1.22	1.30	1.46	1.53	0.60	0.74	0.80	0.85	0.95	1.00
AA/AN/AAC/ANC/AFA	3/4	1.98	2.43	2.62	2.80	3.13	3.29	1.49	1.82	1.97	2.10	2.35	2.47	0.96	1.17	1.26	1.35	1.51	1.59
AA/AN/AAC/ANC/AFA	1	2.83	3.47	3.75	4.01	4.48	4.70	2.16	2.64	2.86	3.05	3.41	3.58	1.35	1.65	1.78	1.90	2.13	2.23
AA/AN/AAC/ANC/AFA	1-1/2	4.18	5.12	5.53	5.91	6.60	6.93	3.19	3.90	4.21	4.51	5.04	5.28	1.98	2.43	2.62	2.80	3.13	3.29
AA/AN/AAC/ANC/AFA	2	5.84	7.15	7.73	8.26	9.24	9.69	4.46	5.46	5.90	6.31	7.05	7.40	2.80	3.43	3.70	3.95	4.42	4.64
AA/AN/AAC/ANC/AFA	2-1/2	7.15	8.76	9.46	10.11	11.31	11.86	5.45	6.68	7.21	7.71	8.62	9.04	3.43	4.21	4.54	4.86	5.43	5.69
AA/AN/AAC/ANC	3	8.50	10.41	11.24	12.02	13.43	14.09	6.48	7.93	8.57	9.16	10.24	10.74	4.07	4.99	5.39	5.76	6.44	6.75
AA/AN/AAC/ANC/AFA	4	11.61	14.22	15.36	16.42	18.36	19.25	8.85	10.84	11.71	12.52	13.99	14.68	5.56	6.81	7.35	7.86	8.79	9.22
TCLE	1/4	1.06	1.30	1.40	1.50	1.68	1.76	0.81	1.00	1.08	1.15	1.29	1.35	0.50	0.61	0.66	0.70	0.78	0.82
TCLE	3/4	1.98	2.43	2.62	2.80	3.13	3.29	1.52	1.86	2.01	2.15	2.41	2.52	0.96	1.17	1.26	1.35	1.51	1.59
TCLE	1-1/2	4.04	4.94	5.34	5.71	6.38	6.69	3.08	3.77	4.07	4.36	4.87	5.11	1.95	2.38	2.58	2.75	3.08	3.23
TCLE	2-1/2	7.43	9.10	9.83	10.51	11.75	12.33	5.66	6.94	7.49	8.01	8.96	9.39	3.58	4.38	4.73	5.06	5.65	5.93
TCLE	3-1/2	10.83	13.27	14.33	15.32	17.13	17.96	8.25	10.10	10.91	11.66	13.04	13.68	5.20	6.37	6.88	7.36	8.23	8.63
TCLE	5-1/2	15.72	19.25	20.79	22.23	24.85	26.06	11.97	14.65	15.83	16.92	18.92	19.84	7.54	9.23	9.97	10.66	11.92	12.50
TCLE	7-1/2	21.66	26.53	28.66	30.64	34.26	35.93	16.50	20.20	21.82	23.33	26.08	27.36	10.37	12.70	13.72	14.67	16.40	17.20
TCLE	9	26.13	32.00	34.56	36.95	41.31	43.32	19.89	24.37	26.32	28.14	31.46	32.99	12.53	15.35	16.58	17.72	19.81	20.78
TJL	9	23.15	28.35	30.63	32.74	36.61	38.39	17.63	21.59	23.32	24.93	27.87	29.23	11.08	13.57	14.66	15.67	17.52	18.37
TJL	11	29.52	36.16	39.06	41.75	46.68	48.96	22.48	27.53	29.74	31.79	35.54	37.28	14.16	17.34	18.73	20.03	22.39	23.48

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F. However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-410A Conventional Valves (kWatts)– A Series

Valve Type	Nominal Rating	Evaporator Temperature 10°C Pressure Drop Across Valve (kPa) 750	1000	1100	1450	1700	2000	0°C 750	1000	1100	1450	1700	2000	-10°C 750	1000	1100	1450	1700	2000
AA/AN/AAC/ANC	1/4	1.20	1.39	1.46	1.67	1.81	1.97	1.20	1.39	1.46	1.67	1.81	1.97	1.17	1.35	1.41	1.62	1.76	1.91
AA/AN/AAC/ANC/AFA	1/2	2.12	2.45	2.57	2.95	3.20	3.47	2.09	2.41	2.53	2.90	3.14	3.41	2.05	2.37	2.49	2.85	3.09	3.35
AA/AN/AAC/ANC/AFA	1	3.40	3.92	4.12	4.73	5.12	5.55	3.36	3.88	4.07	4.68	5.06	5.49	3.29	3.80	3.99	4.58	4.96	5.38
AA/AN/AAC/ANC/AFA	1-1/2	4.89	5.64	5.92	6.79	7.35	7.98	4.81	5.56	5.83	6.69	7.25	7.86	4.71	5.44	5.70	6.55	7.09	7.69
AA/AN/AAC/ANC/AFA	2	7.19	8.30	8.70	9.99	10.82	11.74	7.12	8.22	8.62	9.89	10.71	11.62	6.94	8.01	8.40	9.65	10.45	11.33
AA/AN/AAC/ANC/AFA	3	10.09	11.65	12.22	14.03	15.19	16.48	9.98	11.53	12.09	13.88	15.03	16.30	9.70	11.20	11.75	13.49	14.60	15.84
AA/AN/AAC/ANC/AFA	4	12.35	14.27	14.96	17.18	18.60	20.17	12.21	14.10	14.79	16.98	18.39	19.94	11.89	13.73	14.40	16.54	17.91	19.42
AA/AN/AAC/ANC	5	14.66	16.92	17.75	20.38	22.06	23.93	14.51	16.76	17.58	20.18	21.85	23.70	14.12	16.31	17.11	19.64	21.27	23.07

Valve Type	Nominal Rating	Evaporator Temperature -20°C Pressure Drop Across Valve (kPa) 1000	1100	1450	1700	2000	2300	-30°C 1000	1100	1450	1700	2000	2300	-40°C 1000	1100	1450	1700	2000	2300
AA/AN/AAC/ANC	1/4	1.20	1.26	1.45	1.57	1.70	1.83	0.85	0.89	1.02	1.11	1.20	1.29	0.57	0.59	0.68	0.74	0.80	0.86
AA/AN/AAC/ANC/AFA	1/2	2.12	2.23	2.56	2.77	3.00	3.22	1.45	1.52	1.75	1.89	2.05	2.20	0.96	1.00	1.15	1.25	1.35	1.45
AA/AN/AAC/ANC/AFA	1	3.36	3.53	4.05	4.38	4.76	5.10	2.34	2.45	2.81	3.05	3.30	3.54	1.56	1.63	1.88	2.03	2.20	2.36
AA/AN/AAC/ANC/AFA	1-1/2	4.81	5.05	5.80	6.28	6.81	7.30	3.36	3.53	4.05	4.38	4.76	5.10	2.23	2.34	2.69	2.91	3.15	3.38
AA/AN/AAC/ANC/AFA	2	7.12	7.46	8.57	9.28	10.06	10.79	4.96	5.20	5.97	6.46	7.01	7.52	3.29	3.45	3.96	4.29	4.66	4.99
AA/AN/AAC/ANC/AFA	3	9.98	10.47	12.02	13.02	14.12	15.14	6.94	7.28	8.35	9.05	9.81	10.52	4.60	4.83	5.54	6.00	6.51	6.98
AA/AN/AAC/ANC/AFA	4	12.25	12.85	14.75	15.97	17.32	18.58	8.50	8.91	10.23	11.08	12.02	12.88	5.66	5.94	6.82	7.38	8.01	8.59
AA/AN/AAC/ANC	5	14.51	15.22	17.48	18.92	20.53	22.01	10.09	10.58	12.15	13.15	14.27	15.30	6.69	7.02	8.06	8.72	9.46	10.15

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F. However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-502 Conventional Valves (kWatts)– A Series, T Series

Valve Type	Nominal Rating	Evaporator Temperature 10°C Pressure Drop Across Valve (kPa) 400	600	700	800	1000	1100	0°C Pressure Drop Across Valve (kPa) 400	600	700	800	1000	1100	-10°C Pressure Drop Across Valve (kPa) 400	600	700	800	1000	1100
AA/AN/AAC/ANC	1/4	0.60	0.74	0.80	0.85	0.95	1.00	0.60	0.74	0.80	0.85	0.95	1.00	0.57	0.69	0.75	0.80	0.90	0.94
AA/AN/AAC/ANC/AFA	1/2	1.06	1.30	1.40	1.50	1.68	1.76	1.03	1.26	1.36	1.45	1.62	1.70	0.99	1.21	1.31	1.40	1.57	1.64
AA/AN/AAC/ANC/AFA	3/4	1.70	2.08	2.25	2.40	2.69	2.82	1.66	2.04	2.20	2.35	2.63	2.76	1.59	1.95	2.11	2.25	2.52	2.64
AA/AN/AAC/ANC/AFA	1	2.41	2.95	3.18	3.40	3.81	3.99	2.37	2.90	3.14	3.35	3.75	3.93	2.27	2.77	3.00	3.20	3.58	3.76
AA/AN/AAC/ANC/AFA	2	4.99	6.11	6.60	7.06	7.89	8.28	4.89	5.98	6.46	6.91	7.72	8.10	4.67	5.72	6.18	6.61	7.39	7.75
AA/AN/AAC/ANC/AFA	2-1/2	6.12	7.50	8.10	8.66	9.68	10.16	5.98	7.33	7.91	8.46	9.46	9.92	5.73	7.02	7.59	8.11	9.07	9.51
AA/AN/AAC/ANC	3	7.26	8.89	9.60	10.26	11.47	12.03	7.12	8.71	9.41	10.06	11.25	11.80	6.80	8.32	8.99	9.61	10.75	11.27
AA/AN/AAC/ANC/AFA	4	9.95	12.18	13.16	14.07	15.73	16.50	9.74	11.92	12.88	13.77	15.39	16.14	9.27	11.36	12.27	13.12	14.66	15.38
TCLE	1/4	0.92	1.13	1.22	1.30	1.46	1.53	0.89	1.08	1.17	1.25	1.40	1.47	0.85	1.04	1.12	1.20	1.34	1.41
TCLE	3/4	1.70	2.08	2.25	2.40	2.69	2.82	1.66	2.04	2.20	2.35	2.63	2.76	1.59	1.95	2.11	2.25	2.52	2.64
TCLE	1-1/2	3.43	4.21	4.54	4.86	5.43	5.69	3.36	4.12	4.45	4.76	5.32	5.58	3.22	3.95	4.26	4.56	5.09	5.34
TCLE	2-1/2	6.37	7.80	8.43	9.01	10.08	10.57	6.23	7.63	8.24	8.81	9.85	10.33	5.95	7.28	7.87	8.41	9.40	9.86
TCLE	3-1/2	9.27	11.36	12.27	13.12	14.66	15.38	9.06	11.10	11.99	12.82	14.33	15.03	8.64	10.58	11.43	12.22	13.66	14.32
TCLE	5-1/2	13.45	16.48	17.80	19.02	21.27	22.31	13.17	16.13	17.42	18.62	20.82	21.84	12.57	15.39	16.62	17.77	19.87	20.84
TCLE	7-1/2	18.51	22.68	24.49	26.18	29.27	30.70	18.12	22.20	23.98	25.63	28.66	30.06	17.31	21.20	22.90	24.48	27.37	28.71
TCLE	9	22.34	27.36	29.55	31.59	35.32	37.04	21.88	26.79	28.94	30.94	34.59	36.28	20.89	25.58	27.63	29.54	33.02	34.64
TJL	9	19.79	24.24	26.18	27.99	31.29	32.82	19.36	23.72	25.62	27.38	30.62	32.11	18.48	22.63	24.45	26.13	29.22	30.64
TJL	11	25.24	30.91	33.39	35.70	39.91	41.86	24.71	30.26	32.69	34.94	39.07	40.98	23.58	28.88	31.19	33.34	37.28	39.10

Valve Type	Nominal Rating	Evaporator Temperature -20°C Pressure Drop Across Valve (kPa) 400	600	700	800	1000	1100	-30°C Pressure Drop Across Valve (kPa) 600	700	800	1000	1100	1200	-40°C Pressure Drop Across Valve (kPa) 600	700	800	1000	1100	1200
AA/AN/AAC/ANC	1/4	0.53	0.65	0.70	0.75	0.84	0.88	0.39	0.42	0.45	0.50	0.53	0.55	0.25	0.27	0.29	0.32	0.34	0.35
AA/AN/AAC/ANC/AFA	1/2	0.92	1.13	1.22	1.30	1.46	1.53	0.71	0.76	0.82	0.91	0.96	1.00	0.46	0.50	0.53	0.59	0.62	0.65
AA/AN/AAC/ANC/AFA	3/4	1.45	1.78	1.92	2.05	2.29	2.41	1.13	1.22	1.31	1.46	1.53	1.60	0.74	0.80	0.86	0.96	1.01	1.05
AA/AN/AAC/ANC/AFA	1	2.09	2.56	2.76	2.95	3.30	3.46	1.63	1.76	1.88	2.10	2.20	2.30	1.03	1.11	1.19	1.33	1.39	1.45
AA/AN/AAC/ANC/AFA	2	4.28	5.25	5.67	6.06	6.77	7.10	3.40	3.67	3.92	4.39	4.60	4.81	2.16	2.33	2.49	2.79	2.92	3.05
AA/AN/AAC/ANC/AFA	2-1/2	5.27	6.46	6.98	7.46	8.34	8.75	4.14	4.47	4.78	5.35	5.61	5.86	2.66	2.87	3.07	3.43	3.59	3.75
AA/AN/AAC/ANC	3	6.23	7.63	8.24	8.81	9.85	10.33	4.92	5.31	5.68	6.35	6.66	6.96	3.15	3.40	3.64	4.07	4.27	4.46
AA/AN/AAC/ANC/AFA	4	8.53	10.45	11.29	12.07	13.49	14.15	6.73	7.26	7.77	8.68	9.11	9.51	4.28	4.63	4.95	5.53	5.80	6.06
TCLE	1/4	0.78	0.95	1.03	1.10	1.23	1.29	0.60	0.65	0.69	0.78	0.81	0.85	0.39	0.42	0.45	0.50	0.53	0.55
TCLE	3/4	1.45	1.78	1.92	2.05	2.29	2.41	1.17	1.26	1.35	1.51	1.58	1.65	0.74	0.80	0.86	0.96	1.01	1.05
TCLE	1-1/2	2.97	3.64	3.93	4.21	4.70	4.93	2.34	2.52	2.70	3.02	3.16	3.30	1.49	1.61	1.72	1.92	2.01	2.10
TCLE	2-1/2	5.45	6.68	7.21	7.71	8.62	9.04	4.32	4.66	4.99	5.58	5.85	6.11	2.76	2.98	3.19	3.56	3.74	3.90
TCLE	3-1/2	7.97	9.76	10.54	11.26	12.59	13.21	6.30	6.81	7.28	8.13	8.53	8.91	4.00	4.32	4.62	5.16	5.42	5.66
TCLE	5-1/2	11.54	14.13	15.27	16.32	18.25	19.14	9.13	9.86	10.55	11.79	12.37	12.92	5.81	6.27	6.70	7.49	7.86	8.21
TCLE	7-1/2	15.93	19.51	21.07	22.53	25.19	26.42	12.57	13.57	14.51	16.22	17.02	17.77	8.00	8.64	9.24	10.33	10.83	11.31
TCLE	9	19.19	23.50	25.38	27.13	30.34	31.82	15.15	16.37	17.50	19.56	20.51	21.43	9.66	10.44	11.16	12.48	13.09	13.67
TJL	9	17.03	20.85	22.53	24.08	26.92	28.24	13.45	14.53	15.53	17.37	18.21	19.02	8.57	9.25	9.89	11.06	11.60	12.12
TJL	11	21.70	26.58	28.71	30.69	34.31	35.99	17.13	18.51	19.78	22.12	23.20	24.23	10.90	11.78	12.59	14.08	14.76	15.42

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F. However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-12 Balanced Ported Valves (kWatts)– B, HF, TRAE and T Series

Valve Type	Nominal Rating	Evaporator Temperature																	
		10°C						0°C						-10°C					
		Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)					
		400	600	700	800	1000	1100	400	600	700	800	1000	1100	400	600	700	800	1000	1100
BA/BN	1/4	1.06	1.30	1.40	1.50	1.68	1.76	1.06	1.30	1.40	1.50	1.68	1.76	0.99	1.21	1.31	1.40	1.57	1.64
BA/BN	1/2	2.02	2.47	2.67	2.85	3.19	3.35	1.98	2.43	2.62	2.80	3.13	3.29	1.91	2.34	2.53	2.70	3.02	3.17
BA/BN	1	3.19	3.90	4.21	4.51	5.04	5.28	3.12	3.82	4.12	4.41	4.93	5.17	2.97	3.64	3.93	4.21	4.70	4.93
BA/BN	1-1/4	4.25	5.20	5.62	6.01	6.72	7.04	4.14	5.07	5.48	5.86	6.55	6.87	4.00	4.90	5.29	5.66	6.32	6.63
BA/BN	1-1/2	5.35	6.55	7.07	7.56	8.45	8.86	5.24	6.42	6.93	7.41	8.28	8.69	5.03	6.16	6.65	7.11	7.95	8.34
BA/BN	2	6.48	7.93	8.57	9.16	10.24	10.74	6.37	7.80	8.43	9.01	10.08	10.57	6.09	7.46	8.05	8.61	9.63	10.10
BA/BN	2-1/2	8.39	10.28	11.10	11.86	13.27	13.91	8.25	10.10	10.91	11.66	13.04	13.68	7.89	9.67	10.44	11.16	12.48	13.09
BA/BN	3	10.62	13.01	14.05	15.02	16.79	17.61	10.41	12.75	13.77	14.72	16.46	17.26	9.98	12.23	13.21	14.12	15.78	16.55
BA/BN	3-1/2	13.20	16.17	17.47	18.67	20.88	21.90	12.96	15.87	17.14	18.32	20.49	21.49	12.43	15.22	16.44	17.57	19.65	20.61
HF/HN	1/8	0.60	0.74	0.80	0.85	0.95	1.00	0.60	0.74	0.80	0.85	0.95	1.00	0.57	0.69	0.75	0.80	0.90	0.94
HF/HN	1/4	1.13	1.39	1.50	1.60	1.79	1.88	1.10	1.34	1.45	1.55	1.74	1.82	1.06	1.30	1.40	1.50	1.68	1.76
HF/HN	1/2	2.02	2.47	2.67	2.85	3.19	3.35	1.98	2.43	2.62	2.80	3.13	3.29	1.91	2.34	2.53	2.70	3.02	3.17
HF/HN	1	3.12	3.82	4.12	4.41	4.93	5.17	3.04	3.73	4.03	4.31	4.81	5.05	2.90	3.56	3.84	4.11	4.59	4.81
HF/HN	1-1/4	4.18	5.12	5.53	5.91	6.60	6.93	4.11	5.03	5.43	5.81	6.49	6.81	3.93	4.81	5.20	5.56	6.21	6.52
HF/HN	1-1/2	5.35	6.55	7.07	7.56	8.45	8.86	5.24	6.42	6.93	7.41	8.28	8.69	5.03	6.16	6.65	7.11	7.95	8.34
HF/HN	2	7.08	8.67	9.37	10.01	11.19	11.74	6.94	8.50	9.18	9.81	10.97	11.51	6.66	8.15	8.80	9.41	10.52	11.04
HF/HN	3-1/2	12.57	15.39	16.62	17.77	19.87	20.84	12.32	15.09	16.30	17.42	19.48	20.43	11.82	14.48	15.64	16.72	18.69	19.61
HF/HN	5	17.49	21.42	23.13	24.73	27.65	29.00	17.17	21.03	22.71	24.28	27.15	28.47	16.46	20.16	21.78	23.28	26.03	27.30
HF/HN	6	22.16	27.14	29.32	31.34	35.04	36.75	21.70	26.58	28.71	30.69	34.31	35.99	20.82	25.49	27.54	29.44	32.91	34.52
HF/HN	9	32.85	40.23	43.46	46.46	51.94	54.48	32.21	39.45	42.62	45.56	50.93	53.42	30.90	37.85	40.88	43.71	48.86	51.25
HF/HN	12	43.26	52.98	57.23	61.18	68.40	71.74	42.41	51.94	56.10	59.98	67.05	70.33	40.67	49.82	53.81	57.52	64.31	67.45
TRAE+	7-1/2	25.28	30.96	33.44	35.75	39.96	41.91	24.78	30.35	32.78	35.04	39.18	41.09	23.75	29.09	31.42	33.59	37.56	39.39
TRAE+	10	36.85	45.13	48.75	52.12	58.27	61.11	36.11	44.22	47.77	51.06	57.09	59.88	34.62	42.40	45.80	48.96	54.74	57.41
TRAE+	12	41.13	50.38	54.42	58.17	65.04	68.21	40.32	49.38	53.34	57.02	63.75	66.86	38.66	47.34	51.14	54.67	61.12	64.11
TRAE+	18	62.34	76.35	82.47	88.16	98.57	103.38	61.10	74.83	80.83	86.41	96.61	101.32	58.59	71.75	77.50	82.85	92.63	97.16
TRAE+	25	85.67	104.92	113.33	121.15	135.45	142.06	84.00	102.88	111.13	118.80	132.82	139.31	80.54	98.63	106.54	113.89	127.34	133.55
TRAE	30	115.65	141.64	152.99	163.56	182.86	191.79	113.39	138.87	150.00	160.35	179.28	188.03	108.75	133.19	143.86	153.79	171.95	180.34
TRAE	35	126.17	154.52	166.90	178.43	199.49	209.22	123.69	151.49	163.62	174.92	195.57	205.11	118.63	145.29	156.93	167.76	187.56	196.72
TRAE	40	150.13	183.87	198.61	212.32	237.38	248.96	147.19	180.27	194.72	208.16	232.73	244.09	141.18	172.90	186.76	199.65	223.22	234.11
TJR	8	31.47	38.54	41.63	44.51	49.76	52.19	30.87	37.81	40.84	43.66	48.81	51.19	29.59	36.25	39.15	41.85	46.79	49.08
TJR	11	37.70	46.17	49.87	53.32	59.61	62.52	36.96	45.26	48.89	52.27	58.44	61.29	35.44	43.40	46.88	50.11	56.03	58.76
TER	13	47.12	57.71	62.33	66.63	74.50	78.14	46.20	56.58	61.11	65.33	73.04	76.61	44.29	54.24	58.58	62.63	70.02	73.44
TER	15	55.68	68.20	73.66	78.75	88.04	92.34	54.59	66.85	72.21	77.20	86.31	90.52	52.36	64.12	69.26	74.04	82.78	86.82
TER	20	74.98	91.83	99.19	106.03	118.55	124.34	73.49	90.01	97.22	103.93	116.20	121.87	70.48	86.32	93.24	99.68	111.44	116.88
TER	25	96.39	118.06	127.52	136.32	152.41	159.85	94.48	115.72	124.99	133.62	149.39	156.68	90.62	110.99	119.88	128.16	143.29	150.28
TIR	35	110.77	135.66	146.53	156.65	175.14	183.69	83.65	102.45	110.66	118.30	132.26	138.72	110.77	135.66	146.53	156.65	175.14	183.69
THR	45	149.92	183.61	198.32	212.02	237.04	248.61	146.98	180.01	194.44	207.86	232.40	243.74	140.96	172.64	186.48	199.35	222.88	233.76
THR	55	182.06	222.98	240.85	257.47	287.87	301.92	178.49	218.60	236.12	252.42	282.21	295.99	171.16	209.63	226.42	242.06	270.63	283.84
TMR	55	214.17	262.30	283.32	302.88	338.63	355.16	209.99	257.19	277.79	296.97	332.03	348.23	201.39	246.65	266.41	284.81	318.43	333.97

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F. However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-12 Balanced Ported Valves (kWatts)– B, HF, TRAE and T Series

Valve Type	Nominal Rating	Evaporator Temperature																	
		-20°C						-30°C						-40°C					
		Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)					
		400	600	700	800	1000	1100	600	700	800	1000	1100	1200	600	700	800	1000	1100	1200
BA/BN	1/4	0.89	1.08	1.17	1.25	1.40	1.47	0.71	0.76	0.82	0.91	0.96	1.00	0.46	0.50	0.53	0.59	0.62	0.65
BA/BN	1/2	1.70	2.08	2.25	2.40	2.69	2.82	1.35	1.45	1.55	1.74	1.82	1.90	0.85	0.92	0.98	1.10	1.15	1.20
BA/BN	1	2.66	3.25	3.51	3.75	4.20	4.40	2.05	2.22	2.37	2.65	2.78	2.90	1.35	1.45	1.55	1.74	1.82	1.90
BA/BN	1-1/4	3.54	4.34	4.68	5.01	5.60	5.87	2.76	2.98	3.19	3.56	3.74	3.90	1.81	1.95	2.08	2.33	2.44	2.55
BA/BN	1-1/2	4.46	5.46	5.90	6.31	7.05	7.40	3.50	3.79	4.05	4.52	4.75	4.96	2.27	2.45	2.62	2.92	3.07	3.20
BA/BN	2	5.42	6.63	7.16	7.66	8.56	8.98	4.25	4.59	4.91	5.48	5.75	6.01	2.76	2.98	3.19	3.56	3.74	3.90
BA/BN	2-1/2	7.01	8.58	9.27	9.91	11.08	11.62	5.49	5.93	6.34	7.08	7.43	7.76	3.58	3.86	4.13	4.62	4.84	5.06
BA/BN	3	8.85	10.84	11.71	12.52	13.99	14.68	6.94	7.49	8.01	8.96	9.39	9.81	4.50	4.86	5.19	5.80	6.09	6.36
BA/BN	3-1/2	11.01	13.48	14.56	15.57	17.41	18.26	8.64	9.33	9.97	11.15	11.70	12.22	5.59	6.04	6.46	7.22	7.57	7.91
HF/HN	1/8	0.50	0.61	0.66	0.70	0.78	0.82	0.39	0.42	0.45	0.50	0.53	0.55	0.25	0.27	0.29	0.32	0.34	0.35
HF/HN	1/4	0.96	1.17	1.26	1.35	1.51	1.59	0.74	0.80	0.86	0.96	1.01	1.05	0.50	0.54	0.57	0.64	0.67	0.70
HF/HN	1/2	1.70	2.08	2.25	2.40	2.69	2.82	1.35	1.45	1.55	1.74	1.82	1.90	0.85	0.92	0.98	1.10	1.15	1.20
HF/HN	1	2.58	3.16	3.42	3.65	4.09	4.29	2.02	2.18	2.33	2.60	2.73	2.85	1.31	1.41	1.51	1.69	1.77	1.85
HF/HN	1-1/4	3.47	4.25	4.59	4.91	5.49	5.75	2.73	2.94	3.15	3.52	3.69	3.85	1.77	1.91	2.04	2.29	2.40	2.50
HF/HN	1-1/2	4.46	5.46	5.90	6.31	7.05	7.40	3.50	3.79	4.05	4.52	4.75	4.96	2.27	2.45	2.62	2.92	3.07	3.20
HF/HN	2	5.88	7.20	7.77	8.31	9.29	9.74	4.60	4.97	5.31	5.94	6.23	6.51	3.01	3.25	3.47	3.88	4.07	4.26
HF/HN	3-1/2	10.48	12.83	13.86	14.82	16.57	17.38	8.21	8.87	9.48	10.60	11.12	11.61	5.35	5.77	6.17	6.90	7.24	7.56
HF/HN	5	14.58	17.86	19.29	20.63	23.06	24.19	11.43	12.35	13.20	14.76	15.48	16.17	7.43	8.03	8.58	9.60	10.07	10.51
HF/HN	6	18.44	22.59	24.40	26.08	29.16	30.58	14.44	15.60	16.68	18.65	19.56	20.43	9.42	10.17	10.87	12.16	12.75	13.32
HF/HN	9	27.36	33.51	36.20	38.70	43.27	45.38	21.45	23.17	24.77	27.69	29.05	30.34	13.95	15.07	16.11	18.01	18.89	19.72
HF/HN	12	36.00	44.09	47.63	50.91	56.92	59.70	28.21	30.47	32.58	36.42	38.20	39.90	18.34	19.81	21.17	23.67	24.83	25.93
TRAE+	7-1/2	21.06	25.80	27.86	29.79	33.30	34.93	16.50	17.82	19.05	21.30	22.34	23.33	10.73	11.59	12.39	13.85	14.52	15.17
TRAE+	10	30.69	37.59	40.60	43.40	48.53	50.90	24.04	25.96	27.76	31.03	32.55	33.99	15.65	16.90	18.07	20.20	21.19	22.13
TRAE+	12	34.23	41.93	45.28	48.41	54.13	56.77	26.83	28.98	30.98	34.64	36.33	37.95	17.45	18.85	20.15	22.53	23.63	24.68
TRAE+	18	51.90	63.56	68.65	73.39	82.06	86.06	40.67	43.93	46.97	52.51	55.07	57.52	26.44	28.56	30.53	34.14	35.81	37.40
TRAE+	25	71.33	87.36	94.36	100.88	112.78	118.29	55.93	60.41	64.58	72.21	75.73	79.10	36.36	39.27	41.98	46.94	49.23	51.41
TRAE	30	96.32	117.97	127.42	136.22	152.30	159.73	75.51	81.56	87.19	97.48	102.24	106.78	49.10	53.03	56.70	63.39	66.48	69.44
TRAE	35	105.07	128.68	138.99	148.59	166.13	174.23	82.34	88.94	95.08	106.30	111.49	116.45	53.56	57.85	61.85	69.15	72.52	75.75
TRAE	40	125.03	153.13	165.40	176.82	197.69	207.34	97.99	105.84	113.15	126.50	132.68	138.57	63.72	68.83	73.58	82.26	86.28	90.11
TJR	8	26.23	32.13	34.70	37.10	41.48	43.50	20.57	22.22	23.75	26.55	27.85	29.09	13.35	14.42	15.41	17.23	18.07	18.87
TJR	11	31.40	38.46	41.54	44.41	49.65	52.07	24.60	26.57	28.41	31.76	33.31	34.79	16.00	17.28	18.48	20.66	21.67	22.63
TER	13	39.22	48.04	51.89	55.47	62.02	65.04	30.76	33.23	35.52	39.71	41.65	43.50	20.00	21.60	23.10	25.82	27.08	28.29
TER	15	46.37	56.80	61.35	65.58	73.32	76.90	36.36	39.27	41.98	46.94	49.23	51.41	23.65	25.54	27.31	30.53	32.02	33.44
TER	20	62.45	76.48	82.61	88.31	98.74	103.55	48.92	52.84	56.49	63.16	66.24	69.19	31.82	34.37	36.75	41.09	43.09	45.01
TER	25	80.25	98.29	106.16	113.49	126.89	133.08	62.91	67.95	72.64	81.21	85.17	88.96	40.92	44.20	47.25	52.83	55.41	57.87
TIR	35	98.09	120.14	129.77	138.73	155.10	162.67	76.89	83.05	88.78	99.26	104.11	108.74	49.98	53.99	57.72	64.53	67.68	70.69
THR	45	124.86	152.92	165.17	176.57	197.41	207.05	97.85	105.69	112.98	126.32	132.48	138.37	63.65	68.75	73.50	82.17	86.18	90.01
THR	55	151.62	185.69	200.57	214.42	239.73	251.43	118.84	128.36	137.22	153.42	160.91	168.06	77.28	83.47	89.23	99.77	104.64	109.29
TMR	55	178.38	218.47	235.98	252.27	282.04	295.81	139.79	151.00	161.42	180.47	189.28	197.70	90.91	98.19	104.97	117.36	123.09	128.56

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F. However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-22 Balanced Ported Valves (kWatts)– B, HF, TFE, TRAE and T Series

Valve Type	Nominal Rating	Evaporator Temperature																	
		10°C						0°C						-10°C					
		Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)					
		400	600	700	800	1000	1100	400	600	700	800	1000	1100	400	600	700	800	1000	1100
BA/BN	1/2	1.38	1.69	1.83	1.95	2.18	2.29	1.37	1.68	1.81	1.94	2.17	2.27	1.35	1.65	1.78	1.90	2.13	2.23
BA/BN	1	2.66	3.25	3.51	3.75	4.20	4.40	2.60	3.19	3.45	3.68	4.12	4.32	2.55	3.12	3.37	3.60	4.03	4.23
BA/BN	1-1/2	4.11	5.03	5.43	5.81	6.49	6.81	4.06	4.97	5.37	5.74	6.42	6.73	3.96	4.86	5.24	5.61	6.27	6.57
BA/BN	2	5.52	6.76	7.31	7.81	8.73	9.16	5.43	6.65	7.18	7.68	8.58	9.00	5.31	6.50	7.02	7.51	8.40	8.81
BA/BN	2-1/2	6.94	8.50	9.18	9.81	10.97	11.51	6.86	8.40	9.07	9.69	10.84	11.37	6.69	8.19	8.85	9.46	10.58	11.10
BA/BN	3	8.43	10.32	11.15	11.92	13.32	13.97	8.31	10.18	10.99	11.75	13.14	13.78	8.11	9.93	10.72	11.46	12.82	13.44
BA/BN	4	10.90	13.35	14.42	15.42	17.24	18.08	10.75	13.16	14.22	15.20	17.00	17.83	10.51	12.88	13.91	14.87	16.62	17.44
BA/BN	5	13.81	16.91	18.26	19.52	21.83	22.89	13.63	16.69	18.03	19.27	21.55	22.60	13.28	16.26	17.56	18.77	20.99	22.01
BA/BN	6	17.17	21.03	22.71	24.28	27.15	28.47	16.92	20.72	22.38	23.93	26.75	28.06	16.53	20.25	21.87	23.38	26.14	27.41
HF/HN	1/4	0.78	0.95	1.03	1.10	1.23	1.29	0.77	0.94	1.02	1.09	1.21	1.27	0.74	0.91	0.98	1.05	1.18	1.23
HF/HN	1/2	1.49	1.82	1.97	2.10	2.35	2.47	1.45	1.78	1.92	2.06	2.30	2.41	1.42	1.73	1.87	2.00	2.24	2.35
HF/HN	1	2.66	3.25	3.51	3.75	4.20	4.40	2.60	3.19	3.45	3.68	4.12	4.32	2.55	3.12	3.37	3.60	4.03	4.23
HF/HN	1-1/2	4.04	4.94	5.34	5.71	6.38	6.69	3.98	4.87	5.26	5.62	6.29	6.59	3.89	4.77	5.15	5.51	6.16	6.46
HF/HN	2	5.42	6.63	7.16	7.66	8.56	8.98	5.37	6.58	7.11	7.60	8.50	8.91	5.24	6.42	6.93	7.41	8.28	8.69
HF/HN	2-1/2	6.94	8.50	9.18	9.81	10.97	11.51	6.88	8.43	9.10	9.73	10.88	11.41	6.69	8.19	8.85	9.46	10.58	11.10
HF/HN	3	9.17	11.23	12.13	12.97	14.50	15.20	9.08	11.12	12.01	12.84	14.35	15.05	8.85	10.84	11.71	12.52	13.99	14.68
HF/HN	5-1/2	16.32	19.99	21.59	23.08	25.80	27.06	16.15	19.78	21.37	22.84	25.54	26.78	15.72	19.25	20.79	22.23	24.85	26.06
HF/HN	8	22.73	27.83	30.06	32.14	35.93	37.69	22.46	27.50	29.71	31.76	35.51	37.24	21.88	26.79	28.94	30.94	34.59	36.28
HF/HN	10	28.78	35.25	38.07	40.70	45.51	47.73	28.52	34.93	37.73	40.33	45.09	47.29	27.72	33.95	36.67	39.20	43.83	45.97
HF/HN	15	42.83	52.46	56.66	60.58	67.73	71.03	42.23	51.72	55.86	59.72	66.77	70.03	41.10	50.34	54.37	58.12	64.98	68.16
HF/HN	20	56.29	68.94	74.46	79.60	89.00	93.34	55.39	67.84	73.27	78.33	87.58	91.85	54.09	66.25	71.56	76.50	85.53	89.70
TFE	8	22.30	27.31	29.50	31.54	35.26	36.98	22.05	27.00	29.16	31.18	34.86	36.56	21.49	26.32	28.43	30.39	33.98	35.63
TFE	10	30.55	37.42	40.41	43.20	48.30	50.66	30.19	36.98	39.94	42.70	47.73	50.06	29.42	36.03	38.92	41.60	46.51	48.78
TFE	12	37.91	46.43	50.15	53.62	59.95	62.87	37.48	45.91	49.59	53.01	59.27	62.16	36.53	44.74	48.33	51.67	57.76	60.58
TFE	20	57.88	70.89	76.57	81.85	91.51	95.98	57.23	70.09	75.70	80.93	90.48	94.90	54.98	67.33	72.73	77.75	86.93	91.17
TRAE+	10	32.82	40.19	43.41	46.41	51.89	54.42	32.44	39.73	42.91	45.88	51.29	53.79	31.61	38.72	41.82	44.71	49.98	52.42
TRAE+	15	47.86	58.62	63.31	67.69	75.67	79.37	47.30	57.93	62.57	66.89	74.79	78.44	46.09	56.45	60.97	65.18	72.88	76.43
TRAE+	20	53.42	65.42	70.67	75.55	84.46	88.58	52.78	64.65	69.83	74.65	83.46	87.53	51.44	63.00	68.04	72.74	81.33	85.30
TRAE+	30	80.96	99.16	107.10	114.49	128.01	134.26	80.01	98.00	105.85	113.16	126.51	132.69	77.95	95.47	103.12	110.24	123.25	129.27
TRAE+	40	111.26	136.27	147.19	157.35	175.92	184.51	109.98	134.70	145.50	155.54	173.90	182.39	107.16	131.24	141.75	151.54	169.43	177.70
TRAE	50	150.20	183.96	198.70	212.42	237.49	249.08	148.46	181.82	196.39	209.95	234.73	246.19	144.68	177.20	191.39	204.61	228.76	239.92
TRAE	60	163.83	200.65	216.73	231.69	259.04	271.68	161.95	198.34	214.24	229.03	256.06	268.56	157.81	193.28	208.77	223.18	249.52	261.70
TRAE	70	195.02	238.85	257.99	275.80	308.35	323.40	192.74	236.06	254.97	272.58	304.75	319.62	187.83	230.05	248.48	265.64	296.99	311.48
TJR	14	40.89	50.08	54.09	57.82	64.65	67.80	36.14	44.26	47.81	51.11	57.14	59.93	39.40	48.26	52.12	55.72	62.30	65.34
TJR	18	48.96	59.96	64.77	69.24	77.41	81.19	48.40	59.27	64.02	68.44	76.52	80.26	47.15	57.75	62.38	66.68	74.56	78.19
TER	22	61.21	74.96	80.97	86.56	96.78	101.50	60.49	74.08	80.02	85.55	95.64	100.31	58.94	72.19	77.97	83.36	93.19	97.74
TER	26	72.32	88.58	95.67	102.28	114.35	119.93	63.95	78.32	84.59	90.43	101.11	106.04	69.67	85.32	92.16	98.52	110.15	115.53
TER	35	97.35	119.23	128.78	137.67	153.92	161.44	96.22	117.84	127.29	136.07	152.14	159.56	93.77	114.85	124.05	132.62	148.27	155.51
TER	45	125.17	153.31	165.59	177.02	197.92	207.58	123.72	151.53	163.67	174.97	195.62	205.17	120.57	147.67	159.50	170.52	190.64	199.95
TIR	55	153.00	187.38	202.40	216.37	241.91	253.72	151.23	185.21	200.05	213.86	239.11	250.78	147.37	180.49	194.95	208.41	233.01	244.39
THR	70	194.74	238.50	257.61	275.40	307.90	322.93	192.47	235.72	254.61	272.19	304.32	319.17	187.55	229.70	248.10	265.23	296.54	311.02
THR	85	236.44	289.57	312.78	334.37	373.84	392.09	233.71	286.23	309.17	330.51	369.52	387.56	227.73	278.91	301.26	322.06	360.07	377.64
TMR	100	278.17	340.69	367.99	393.40	439.83	461.30	274.95	336.74	363.72	388.83	434.73	455.95	267.94	328.16	354.45	378.93	423.65	444.33

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F. However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-22 Balanced Ported Valves (kWatts)– B, HF, TFE, TRAE and T Series

Valve Type	Nominal Rating	Evaporator Temperature																	
		-20°C						-30°C						-40°C					
		Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)					
		400	600	700	800	1000	1100	600	700	800	1000	1100	1200	600	700	800	1000	1100	1200
BA/BN	1/2	1.20	1.47	1.59	1.70	1.90	2.00	0.96	1.03	1.10	1.23	1.29	1.35	0.64	0.69	0.74	0.82	0.86	0.90
BA/BN	1	2.30	2.82	3.04	3.25	3.64	3.82	1.84	1.99	2.13	2.38	2.49	2.60	1.20	1.30	1.39	1.55	1.63	1.70
BA/BN	1-1/2	3.61	4.42	4.78	5.11	5.71	5.99	2.87	3.10	3.31	3.70	3.88	4.06	1.88	2.03	2.17	2.42	2.54	2.65
BA/BN	2	4.81	5.90	6.37	6.81	7.61	7.98	3.82	4.13	4.41	4.94	5.18	5.41	2.51	2.71	2.90	3.24	3.40	3.55
BA/BN	2-1/2	6.09	7.46	8.05	8.61	9.63	10.10	4.85	5.24	5.60	6.26	6.57	6.86	3.19	3.44	3.68	4.11	4.31	4.51
BA/BN	3	7.36	9.02	9.74	10.41	11.64	12.21	5.88	6.35	6.79	7.59	7.96	8.31	3.86	4.17	4.46	4.98	5.22	5.46
BA/BN	4	9.52	11.66	12.60	13.47	15.06	15.79	7.61	8.22	8.79	9.83	10.31	10.76	4.99	5.39	5.76	6.44	6.76	7.06
BA/BN	5	12.04	14.74	15.92	17.02	19.03	19.96	9.63	10.40	11.12	12.43	13.04	13.62	6.34	6.84	7.32	8.18	8.58	8.96
BA/BN	6	14.97	18.34	19.81	21.18	23.68	24.83	11.97	12.92	13.82	15.45	16.20	16.92	7.89	8.53	9.12	10.19	10.69	11.16
HF/HN	1/4	0.67	0.82	0.89	0.95	1.06	1.12	0.53	0.57	0.61	0.69	0.72	0.75	0.35	0.38	0.41	0.46	0.48	0.50
HF/HN	1/2	1.27	1.56	1.69	1.80	2.02	2.11	1.03	1.11	1.19	1.33	1.39	1.45	0.67	0.73	0.78	0.87	0.91	0.95
HF/HN	1	2.30	2.82	3.04	3.25	3.64	3.82	1.84	1.99	2.13	2.38	2.49	2.60	1.20	1.30	1.39	1.55	1.63	1.70
HF/HN	1-1/2	3.54	4.34	4.68	5.01	5.60	5.87	2.80	3.02	3.23	3.61	3.79	3.95	1.84	1.99	2.13	2.38	2.49	2.60
HF/HN	2	4.74	5.81	6.28	6.71	7.50	7.87	3.79	4.09	4.37	4.89	5.13	5.36	2.48	2.68	2.86	3.20	3.36	3.50
HF/HN	2-1/2	6.09	7.46	8.05	8.61	9.63	10.10	4.21	4.55	4.86	5.44	5.70	5.96	3.19	3.44	3.68	4.11	4.31	4.51
HF/HN	3	8.00	9.80	10.58	11.31	12.65	13.27	6.41	6.92	7.40	8.27	8.68	9.06	4.21	4.55	4.86	5.44	5.70	5.96
HF/HN	5-1/2	14.27	17.47	18.87	20.18	22.56	23.66	11.40	12.31	13.16	14.72	15.43	16.12	7.50	8.11	8.67	9.69	10.16	10.61
HF/HN	8	19.86	24.32	26.27	28.09	31.40	32.93	15.86	17.13	18.31	20.47	21.47	22.43	10.44	11.28	12.06	13.48	14.14	14.77
HF/HN	10	25.13	30.78	33.25	35.54	39.74	41.68	20.07	21.68	23.18	25.91	27.18	28.39	13.20	14.26	15.25	17.05	17.88	18.67
HF/HN	15	37.17	45.52	49.17	52.57	58.77	61.64	29.74	32.12	34.34	38.39	40.26	42.05	19.58	21.14	22.60	25.27	26.51	27.68
HF/HN	20	49.21	60.26	65.09	69.59	77.80	81.60	39.15	42.29	45.21	50.55	53.01	55.37	25.77	27.84	29.76	33.27	34.89	36.45
TFE	8	19.47	23.85	25.76	27.53	30.78	32.29	15.54	16.79	17.94	20.06	21.04	21.98	10.23	11.05	11.81	13.21	13.85	14.47
TFE	10	26.69	32.69	35.31	37.75	42.20	44.26	21.31	23.02	24.61	27.51	28.85	30.14	14.02	15.14	16.19	18.10	18.98	19.83
TFE	12	33.10	40.54	43.79	46.81	52.33	54.89	26.44	28.56	30.53	34.14	35.81	37.40	17.42	18.81	20.11	22.48	23.58	24.63
TFE	20	50.55	61.91	66.87	71.49	79.93	83.83	40.36	43.59	46.60	52.10	54.64	57.07	26.59	28.72	30.70	34.32	36.00	37.60
TRAE+	10	28.67	35.12	37.93	40.55	45.34	47.55	22.90	24.74	26.45	29.57	31.01	32.39	15.08	16.29	17.41	19.47	20.42	21.33
TRAE+	15	41.77	51.16	55.26	59.07	66.05	69.27	33.35	36.02	38.51	43.05	45.15	47.16	21.98	23.74	25.38	28.38	29.77	31.09
TRAE+	20	46.66	57.14	61.72	65.98	73.77	77.37	37.24	40.22	43.00	48.08	50.42	52.67	24.53	26.50	28.33	31.67	33.22	34.69
TRAE+	30	70.69	86.58	93.52	99.98	111.78	117.23	56.43	60.95	65.16	72.85	76.40	79.80	37.17	40.15	42.92	47.99	50.33	52.57
TRAE+	40	97.17	119.01	128.55	137.42	153.64	161.14	77.60	83.81	89.60	100.18	105.07	109.74	51.08	55.18	58.98	65.95	69.17	72.24
TRAE	50	131.19	160.68	173.55	185.53	207.43	217.56	104.75	113.14	120.95	135.23	141.83	148.14	68.96	74.48	79.63	89.03	93.37	97.52
TRAE	60	143.09	175.24	189.29	202.36	226.24	237.28	114.24	123.39	131.91	147.48	154.68	161.55	75.23	81.25	86.86	97.12	101.86	106.38
TRAE	70	170.31	208.59	225.30	240.85	269.28	282.43	135.97	146.87	157.01	175.54	184.11	192.29	89.53	96.70	103.38	115.58	121.22	126.61
TJR	14	35.72	43.75	47.25	50.51	56.48	59.23	28.50	30.78	32.91	36.79	38.59	40.30	18.76	20.27	21.66	24.22	25.40	26.53
TJR	18	42.76	52.37	56.57	60.48	67.61	70.91	34.13	36.86	39.40	44.06	46.21	48.26	22.48	24.28	25.96	29.02	30.44	31.79
TER	22	53.45	65.47	70.71	75.60	84.52	88.64	42.66	46.07	49.26	55.07	57.76	60.33	28.11	30.36	32.46	36.29	38.06	39.75
TER	26	63.15	77.35	83.54	89.31	99.85	104.73	50.45	54.49	58.25	65.12	68.30	71.34	33.21	35.87	38.34	42.87	44.96	46.96
TER	35	85.03	104.14	112.49	120.25	134.45	141.01	67.90	73.34	78.40	87.65	91.93	96.02	44.71	48.29	51.63	57.72	60.54	63.23
TER	45	109.32	133.88	144.61	154.60	172.84	181.28	87.30	94.29	100.80	112.70	118.20	123.46	57.49	62.10	66.38	74.22	77.84	81.30
TIR	55	133.64	163.67	176.78	188.99	211.30	221.61	106.66	115.21	123.16	137.70	144.42	150.84	70.23	75.86	81.10	90.67	95.10	99.33
THR	70	170.06	208.28	224.97	240.50	268.89	282.02	135.76	146.64	156.76	175.26	183.82	191.99	89.42	96.59	103.25	115.44	121.08	126.46
THR	100	206.49	252.90	273.16	292.02	326.49	342.42	164.86	178.07	190.36	212.83	223.22	233.14	108.57	117.27	125.37	140.17	147.01	153.54
TMR	100	242.95	297.55	321.39	343.58	384.14	402.89	193.96	209.50	223.96	250.40	262.62	274.30	127.72	137.96	147.48	164.89	172.94	180.63

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F. However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-134a Balanced Ported Valves (kWatts)– B, HF, TFE, TRAE and T Series

Valve Type	Nominal Rating	Evaporator Temperature																	
		10°C						0°C						-10°C					
		Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)					
		400	600	700	800	1000	1100	400	600	700	800	1000	1100	400	600	700	800	1000	1100
BA/BN	1/2	1.31	1.60	1.73	1.85	2.07	2.17	1.31	1.60	1.73	1.85	2.07	2.17	1.24	1.52	1.64	1.75	1.96	2.05
BA/BN	3/4	2.51	3.08	3.32	3.55	3.97	4.17	2.48	3.03	3.28	3.50	3.92	4.11	2.37	2.90	3.14	3.35	3.75	3.93
BA/BN	1	3.93	4.81	5.20	5.56	6.21	6.52	3.86	4.73	5.10	5.46	6.10	6.40	3.68	4.51	4.87	5.21	5.82	6.11
BA/BN	1-1/2	5.24	6.42	6.93	7.41	8.28	8.69	5.13	6.29	6.79	7.26	8.12	8.51	4.92	6.03	6.51	6.96	7.78	8.16
BA/BN	2	6.62	8.11	8.76	9.36	10.47	10.98	6.51	7.98	8.62	9.21	10.30	10.80	6.23	7.63	8.24	8.81	9.85	10.33
BA/BN	2-1/4	8.04	9.84	10.63	11.36	12.71	13.33	7.86	9.63	10.40	11.11	12.43	13.03	7.54	9.23	9.97	10.66	11.92	12.50
BA/BN	3	10.41	12.75	13.77	14.72	16.46	17.26	10.20	12.49	13.49	14.42	16.12	16.91	9.74	11.92	12.88	13.77	15.39	16.14
BA/BN	3-1/2	13.17	16.13	17.42	18.62	20.82	21.84	12.89	15.78	17.05	18.22	20.37	21.37	12.32	15.09	16.30	17.42	19.48	20.43
BA/BN	4-1/4	16.35	20.03	21.64	23.13	25.86	27.12	16.04	19.64	21.21	22.68	25.36	26.59	15.33	18.77	20.28	21.68	24.24	25.42
HF/HN	1/4	0.74	0.91	0.98	1.05	1.18	1.23	0.74	0.91	0.98	1.05	1.18	1.23	0.71	0.87	0.94	1.00	1.12	1.17
HF/HN	1/2	1.42	1.73	1.87	2.00	2.24	2.35	1.38	1.69	1.83	1.95	2.18	2.29	1.31	1.60	1.73	1.85	2.07	2.17
HF/HN	3/4	2.51	3.08	3.32	3.55	3.97	4.17	2.48	3.03	3.28	3.50	3.92	4.11	2.37	2.90	3.14	3.35	3.75	3.93
HF/HN	1	3.86	4.73	5.10	5.46	6.10	6.40	3.75	4.60	4.96	5.31	5.93	6.22	3.61	4.42	4.78	5.11	5.71	5.99
HF/HN	1-1/2	5.17	6.33	6.84	7.31	8.17	8.57	5.06	6.20	6.70	7.16	8.00	8.39	4.85	5.94	6.42	6.86	7.67	8.04
HF/HN	1-3/4	6.62	8.11	8.76	9.36	10.47	10.98	6.51	7.98	8.62	9.21	10.30	10.80	6.23	7.63	8.24	8.81	9.85	10.33
HF/HN	2-1/2	8.74	10.71	11.57	12.37	13.83	14.50	8.57	10.49	11.33	12.12	13.55	14.21	8.21	10.06	10.86	11.61	12.99	13.62
HF/HN	4	15.58	19.08	20.61	22.03	24.63	25.83	15.26	18.69	20.18	21.58	24.12	25.30	14.58	17.86	19.29	20.63	23.06	24.19
HF/HN	6	21.66	26.53	28.66	30.64	34.26	35.93	21.24	26.01	28.10	30.04	33.58	35.22	20.32	24.89	26.88	28.74	32.13	33.70
HF/HN	7-1/2	27.44	33.60	36.29	38.80	43.38	45.50	26.87	32.91	35.54	38.00	42.48	44.56	25.70	31.48	34.00	36.35	40.64	42.62
HF/HN	11	40.71	49.86	53.85	57.57	64.37	67.51	39.86	48.82	52.73	56.37	63.02	66.10	38.13	46.69	50.44	53.92	60.28	63.22
HF/HN	14	53.56	65.60	70.85	75.75	84.69	88.82	52.46	64.25	69.40	74.19	82.95	87.00	50.20	61.48	66.40	70.99	79.37	83.24
TFE	6	21.28	26.06	28.14	30.09	33.64	35.28	20.85	25.54	27.58	29.49	32.97	34.58	19.93	24.41	26.37	28.19	31.51	33.05
TFE	8	29.13	35.68	38.54	41.20	46.07	48.31	28.53	34.94	37.74	40.35	45.11	47.32	27.29	33.43	36.11	38.60	43.15	45.26
TFE	10	36.18	44.31	47.86	51.16	57.20	60.00	35.44	43.40	46.88	50.11	56.03	58.76	33.88	41.49	44.82	47.91	53.57	56.18
TFE	15	55.22	67.64	73.05	78.10	87.32	91.58	54.09	66.25	71.56	76.50	85.53	89.70	51.72	63.34	68.42	73.14	81.78	85.77
TRAE+	9	31.29	38.33	41.40	44.26	49.48	51.89	30.66	37.55	40.55	43.35	48.47	50.84	29.35	35.94	38.82	41.50	46.40	48.67
TRAE+	13	45.63	55.89	60.36	64.53	72.15	75.67	44.71	54.76	59.15	63.23	70.69	74.14	42.76	52.37	56.57	60.48	67.61	70.91
TRAE+	14	50.94	62.39	67.39	72.04	80.54	84.48	49.88	61.09	65.98	70.54	78.86	82.71	47.72	58.44	63.13	67.49	75.45	79.13
TRAE+	22	77.21	94.56	102.14	109.19	122.08	128.03	75.61	92.61	100.03	106.93	119.56	125.39	72.32	88.58	95.67	102.28	114.35	119.93
TRAE+	30	106.13	129.98	140.40	150.09	167.80	176.00	103.93	127.29	137.49	146.99	164.33	172.36	99.44	121.79	131.54	140.63	157.23	164.90
TRAE	40	143.30	175.50	189.57	202.66	226.58	237.63	140.33	171.86	185.63	198.45	221.87	232.70	134.24	164.41	177.58	189.84	212.25	222.61
TRAE	45	156.29	191.42	206.75	221.03	247.12	259.18	153.07	187.47	202.49	216.47	242.02	253.84	146.41	179.32	193.69	207.06	231.50	242.80
TRAE	50	185.99	227.79	246.04	263.03	294.08	308.43	182.17	223.11	240.99	257.63	288.03	302.09	174.24	213.40	230.50	246.41	275.50	288.94
TJR	11	39.01	47.78	51.61	55.17	61.68	64.69	38.20	46.78	50.53	54.02	60.39	63.34	36.53	44.74	48.33	51.67	57.76	60.58
TJR	13	46.69	57.19	61.77	66.03	73.83	77.43	45.74	56.02	60.50	64.68	72.32	75.85	43.75	53.59	57.88	61.88	69.18	72.56
TER	16	58.37	71.49	77.22	82.55	92.30	96.80	57.17	70.02	75.63	80.85	90.40	94.81	54.69	66.98	72.35	77.35	86.48	90.70
TER	19	68.99	84.50	91.27	97.57	109.09	114.41	67.58	82.77	89.40	95.57	106.85	112.07	64.64	79.17	85.51	91.42	102.21	107.19
TER	25	92.85	113.72	122.83	131.32	146.82	153.98	90.94	111.38	120.31	128.61	143.79	150.81	87.01	106.57	115.11	123.06	137.58	144.30
TER	31	119.40	146.24	157.96	168.86	188.79	198.01	116.93	143.20	154.68	165.36	184.88	193.90	111.86	137.00	147.98	158.20	176.87	185.51
TIR	45	145.95	178.76	193.08	206.41	230.77	242.04	142.91	175.03	189.05	202.10	225.96	236.99	136.71	167.44	180.86	193.34	216.17	226.72
THR	55	185.74	227.49	245.72	262.68	293.69	308.02	181.89	222.76	240.61	257.22	287.59	301.62	173.99	213.09	230.17	246.06	275.10	288.53
THR	68	225.53	276.22	298.35	318.95	356.60	374.00	220.90	270.54	292.22	312.39	349.27	366.31	211.30	258.79	279.53	298.83	334.10	350.41
TMR	68	265.32	324.95	350.99	375.22	419.51	439.99	259.87	318.28	343.78	367.51	410.89	430.95	248.58	304.45	328.84	351.54	393.04	412.22

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F. However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-134a Balanced Ported Valves (kWatts)– B, HF, TFE, TRAE and T Series

Valve Type	Nominal Rating	Evaporator Temperature																	
		-20°C						-30°C						-40°C					
		Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)					
		400	600	700	800	1000	1100	600	700	800	1000	1100	1200	600	700	800	1000	1100	1200
BA/BN	1/2	1.03	1.26	1.36	1.45	1.62	1.70	0.78	0.84	0.90	1.01	1.05	1.10	0.46	0.50	0.53	0.59	0.62	0.65
BA/BN	3/4	1.95	2.38	2.58	2.75	3.08	3.23	1.45	1.57	1.68	1.87	1.97	2.05	0.89	0.96	1.02	1.14	1.20	1.25
BA/BN	1	3.04	3.73	4.03	4.31	4.81	5.05	2.27	2.45	2.62	2.92	3.07	3.20	1.38	1.49	1.59	1.78	1.87	1.95
BA/BN	1-1/2	4.04	4.94	5.34	5.71	6.38	6.69	3.01	3.25	3.47	3.88	4.07	4.26	1.84	1.99	2.13	2.38	2.49	2.60
BA/BN	2	5.10	6.24	6.74	7.21	8.06	8.45	3.82	4.13	4.41	4.94	5.18	5.41	2.34	2.52	2.70	3.02	3.16	3.30
BA/BN	2-1/4	6.20	7.59	8.20	8.76	9.80	10.27	4.64	5.01	5.35	5.99	6.28	6.56	2.83	3.06	3.27	3.66	3.83	4.01
BA/BN	3	8.04	9.84	10.63	11.36	12.71	13.33	5.98	6.46	6.91	7.72	8.10	8.46	3.68	3.98	4.25	4.75	4.98	5.21
BA/BN	3-1/2	10.16	12.44	13.44	14.37	16.06	16.85	7.58	8.18	8.75	9.78	10.26	10.71	4.64	5.01	5.35	5.99	6.28	6.56
BA/BN	4-1/4	12.64	15.48	16.72	17.87	19.98	20.96	9.42	10.17	10.87	12.16	12.75	13.32	5.77	6.23	6.66	7.45	7.81	8.16
HF/HN	1/4	0.57	0.69	0.75	0.80	0.90	0.94	0.42	0.46	0.49	0.55	0.58	0.60	0.25	0.27	0.29	0.32	0.34	0.35
HF/HN	1/2	1.10	1.34	1.45	1.55	1.74	1.82	0.81	0.88	0.94	1.05	1.10	1.15	0.50	0.54	0.57	0.64	0.67	0.70
HF/HN	3/4	1.95	2.38	2.58	2.75	3.08	3.23	1.45	1.57	1.68	1.87	1.97	2.05	0.89	0.96	1.02	1.14	1.20	1.25
HF/HN	1	2.97	3.64	3.93	4.21	4.70	4.93	2.23	2.41	2.58	2.88	3.02	3.15	1.35	1.45	1.55	1.74	1.82	1.90
HF/HN	1-1/2	4.00	4.90	5.29	5.66	6.32	6.63	2.97	3.21	3.43	3.84	4.03	4.21	1.84	1.99	2.13	2.38	2.49	2.60
HF/HN	1-3/4	5.10	6.24	6.74	7.21	8.06	8.45	3.82	4.13	4.41	4.94	5.18	5.41	2.34	2.52	2.70	3.02	3.16	3.30
HF/HN	2-1/2	6.76	8.28	8.94	9.56	10.69	11.21	5.03	5.43	5.80	6.49	6.81	7.11	3.08	3.33	3.56	3.98	4.17	4.36
HF/HN	4	12.00	14.70	15.88	16.97	18.97	19.90	8.96	9.67	10.34	11.56	12.13	12.67	5.49	5.93	6.34	7.08	7.43	7.76
HF/HN	6	16.71	20.46	22.10	23.63	26.42	27.71	12.46	13.46	14.39	16.09	16.87	17.62	7.65	8.26	8.83	9.87	10.35	10.81
HF/HN	7-1/2	21.17	25.93	28.00	29.94	33.47	35.11	15.79	17.05	18.23	20.38	21.38	22.33	9.70	10.48	11.20	12.52	13.13	13.72
HF/HN	11	31.40	38.46	41.54	44.41	49.65	52.07	23.43	25.31	27.06	30.25	31.73	33.14	14.37	15.52	16.60	18.55	19.46	20.33
HF/HN	14	41.31	50.60	54.65	58.42	65.32	68.51	30.83	33.30	35.60	39.81	41.75	43.61	18.90	20.42	21.83	24.40	25.60	26.73
TFE	6	16.43	20.12	21.73	23.23	25.97	27.24	12.25	13.23	14.14	15.81	16.58	17.32	7.50	8.11	8.67	9.69	10.16	10.61
TFE	8	22.48	27.53	29.74	31.79	35.54	37.28	16.78	18.12	19.38	21.66	22.72	23.73	10.30	11.13	11.90	13.30	13.95	14.57
TFE	10	27.90	34.16	36.90	39.45	44.11	46.26	20.82	22.48	24.04	26.87	28.18	29.44	12.78	13.80	14.76	16.50	17.30	18.07
TFE	15	42.59	52.16	56.34	60.23	67.33	70.62	31.75	34.30	36.67	40.99	42.99	44.91	19.51	21.07	22.52	25.18	26.41	27.58
TRAE+	9	24.14	29.57	31.94	34.14	38.17	40.04	18.02	19.46	20.81	23.26	24.40	25.48	11.04	11.93	12.75	14.26	14.95	15.62
TRAE+	13	35.19	43.10	46.55	49.76	55.64	58.35	26.27	28.37	30.33	33.91	35.57	37.15	16.11	17.40	18.60	20.79	21.81	22.78
TRAE+	14	39.29	48.13	51.98	55.57	62.13	65.16	29.31	31.66	33.85	37.84	39.69	41.45	17.98	19.42	20.77	23.22	24.35	25.43
TRAE+	22	59.54	72.92	78.77	84.21	94.15	98.74	44.43	47.99	51.30	57.36	60.15	62.83	27.26	29.44	31.47	35.19	36.91	38.55
TRAE+	30	81.84	100.24	108.27	115.75	129.41	135.72	61.07	65.96	70.51	78.83	82.68	86.36	37.49	40.49	43.29	48.40	50.76	53.02
TRAE	40	110.48	135.31	146.16	156.25	174.69	183.22	82.45	89.05	95.20	106.44	111.63	116.60	50.59	54.64	58.41	65.31	68.49	71.54
TRAE	45	120.50	147.58	159.41	170.41	190.53	199.83	89.92	97.12	103.83	116.08	121.75	127.16	55.19	59.61	63.73	71.25	74.73	78.05
TRAE	50	143.44	175.68	189.75	202.86	226.80	237.87	107.01	115.59	123.57	138.15	144.90	151.34	65.67	70.93	75.83	84.78	88.91	92.87
TJR	11	30.09	36.85	39.81	42.55	47.58	49.90	22.44	24.24	25.92	28.97	30.39	31.74	13.77	14.87	15.90	17.78	18.65	19.47
TJR	13	36.00	44.09	47.63	50.91	56.92	59.70	26.87	29.02	31.03	34.69	36.38	38.00	16.50	17.82	19.05	21.30	22.34	23.33
TER	16	45.03	55.15	59.57	63.68	71.20	74.67	33.59	36.29	38.79	43.37	45.49	47.51	20.60	22.25	23.79	26.60	27.90	29.14
TER	19	53.21	65.16	70.39	75.24	84.13	88.23	39.68	42.86	45.82	51.23	53.73	56.12	24.36	26.31	28.12	31.44	32.98	34.44
TER	25	71.61	87.71	94.74	101.28	113.23	118.76	53.42	57.70	61.68	68.96	72.33	75.55	32.78	35.41	37.85	42.32	44.38	46.36
TER	31	92.08	112.77	121.80	130.21	145.58	152.69	68.71	74.22	79.34	88.71	93.04	97.17	42.16	45.54	48.68	54.43	57.09	59.63
TIR	45	112.54	137.83	148.87	159.15	177.94	186.62	83.97	90.70	96.96	108.40	113.69	118.75	51.54	55.67	59.52	66.54	69.79	72.89
THR	55	143.23	175.42	189.47	202.56	226.46	237.52	106.87	115.44	123.41	137.97	144.71	151.14	65.60	70.85	75.74	84.68	88.82	92.77
THR	68	173.92	213.01	230.07	245.96	274.99	288.41	129.78	140.17	149.85	167.54	175.72	183.53	79.65	86.03	91.97	102.83	107.85	112.64

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F. However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-450A/R-513A Balance Ported Valves (kWatts) - B Series and HF Series

Valve Type	Nominal Rating	Evaporator Temperature																	
		10°C						0°C						-10°C					
		Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)					
		400	600	700	800	1000	1100	400	600	700	800	1000	1100	400	600	700	800	1000	1100
BA/BN	1/4	1.05	1.21	1.35	1.51	1.65	1.79	1.02	1.18	1.32	1.47	1.61	1.74	0.97	1.12	1.25	1.40	1.53	1.66
BA/BN	1/2	1.98	2.28	2.55	2.86	3.13	3.38	1.93	2.23	2.49	2.79	3.05	3.30	1.83	2.12	2.37	2.65	2.90	3.13
BA/BN	3/4	3.08	3.56	3.98	4.45	4.87	5.26	3.01	3.47	3.88	4.34	4.75	5.14	2.86	3.30	3.69	4.12	4.52	4.88
BA/BN	1	4.10	4.73	5.29	5.91	6.48	7.00	4.00	4.62	5.16	5.77	6.32	6.83	3.80	4.39	4.91	5.49	6.01	6.49
BA/BN	1-1/2	5.20	6.00	6.71	7.51	8.22	8.88	5.08	5.86	6.55	7.33	8.03	8.67	4.82	5.57	6.23	6.96	7.62	8.24
BA/BN	1-3/4	6.27	7.24	8.10	9.06	9.92	10.71	6.12	7.07	7.91	8.84	9.68	10.46	5.82	6.72	7.51	8.40	9.20	9.94
BA/BN	2-1/4	8.14	9.40	10.51	11.75	12.87	13.90	7.95	9.17	10.26	11.47	12.56	13.57	7.55	8.72	9.74	10.89	11.93	12.89
BA/BN	3	10.29	11.88	13.28	14.85	16.26	17.57	10.04	11.60	12.96	14.49	15.88	17.15	9.54	11.02	12.32	13.77	15.08	16.29
BA/BN	3-1/2	12.80	14.78	16.53	18.48	20.24	21.86	12.50	14.43	16.13	18.04	19.76	21.34	11.87	13.71	15.33	17.14	18.77	20.28
HF	1/5	0.59	0.69	0.77	0.86	0.94	1.01	0.58	0.67	0.75	0.84	0.92	0.99	0.55	0.64	0.71	0.79	0.87	0.94
HF	1/4	1.10	1.27	1.42	1.59	1.74	1.88	1.08	1.24	1.39	1.55	1.70	1.84	1.02	1.18	1.32	1.48	1.62	1.75
HF	1/2	1.98	2.28	2.55	2.86	3.13	3.38	1.93	2.23	2.49	2.79	3.05	3.30	1.83	2.12	2.37	2.65	2.90	3.13
HF	3/4	3.00	3.46	3.87	4.32	4.74	5.12	2.92	3.38	3.78	4.22	4.62	4.99	2.78	3.21	3.59	4.01	4.39	4.74
HF	1	4.04	4.67	5.22	5.83	6.39	6.90	3.94	4.56	5.09	5.69	6.24	6.74	3.75	4.33	4.84	5.41	5.93	6.40
HF	1-1/2	5.20	6.00	6.71	7.51	8.22	8.88	5.08	5.86	6.55	7.33	8.03	8.67	4.82	5.57	6.23	6.96	7.62	8.24
HF	2	6.84	7.90	8.83	9.87	10.81	11.68	6.68	7.71	8.62	9.64	10.56	11.40	6.34	7.32	8.19	9.15	10.03	10.83
HF	3-1/2	12.18	14.06	15.72	17.58	19.26	20.80	11.89	13.73	15.35	17.16	18.80	20.31	11.30	13.04	14.58	16.30	17.86	19.29
HF	4-1/2	16.96	19.58	21.89	24.47	26.81	28.96	16.55	19.11	21.37	23.89	26.17	28.27	15.73	18.16	20.30	22.70	24.86	26.86
HF	6	21.45	24.77	27.69	30.96	33.91	36.63	20.94	24.18	27.03	30.22	33.11	35.76	19.89	22.97	25.68	28.71	31.45	33.97
HF	9	31.82	36.74	41.08	45.93	50.31	54.34	31.06	35.87	40.10	44.84	49.11	53.05	29.51	34.08	38.10	42.60	46.66	50.40
HF	11-1/2	41.88	48.36	54.07	60.45	66.22	71.53	40.88	47.21	52.78	59.01	64.64	69.82	38.84	44.85	50.14	56.06	61.41	66.33

Valve Type	Nominal Rating	Evaporator Temperature																	
		-20°C						-30°C						-40°C					
		Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)					
		400	600	700	800	1000	1100	400	600	700	800	1000	1100	400	600	700	800	1000	1100
BA/BN	1/4	0.70	0.81	0.91	1.02	1.11	1.20	0.53	0.60	0.67	0.73	0.79	0.84	0.30	0.34	0.38	0.42	0.45	0.48
BA/BN	1/2	1.33	1.54	1.72	1.92	2.11	2.27	1.01	1.13	1.26	1.38	1.49	1.60	0.58	0.64	0.72	0.79	0.85	0.91
BA/BN	3/4	2.07	2.39	2.68	2.99	3.28	3.54	1.57	1.76	1.96	2.15	2.32	2.49	0.90	1.00	1.12	1.23	1.33	1.42
BA/BN	1	2.76	3.19	3.56	3.98	4.36	4.71	2.09	2.34	2.61	2.86	3.09	3.31	1.19	1.33	1.49	1.63	1.76	1.89
BA/BN	1-1/2	3.50	4.04	4.52	5.05	5.53	5.98	2.65	2.97	3.32	3.63	3.92	4.20	1.51	1.69	1.89	2.07	2.24	2.39
BA/BN	1-3/4	4.22	4.88	5.45	6.10	6.68	7.21	3.20	3.58	4.00	4.38	4.73	5.06	1.83	2.04	2.28	2.50	2.70	2.89
BA/BN	2-1/4	5.48	6.33	7.07	7.91	8.66	9.36	4.15	4.64	5.19	5.69	6.14	6.57	2.37	2.65	2.96	3.25	3.51	3.75
BA/BN	3	6.92	8.00	8.94	10.00	10.95	11.83	5.25	5.87	6.56	7.19	7.76	8.30	3.00	3.35	3.74	4.10	4.43	4.74
BA/BN	3-1/2	8.62	9.95	11.13	12.44	13.63	14.72	6.53	7.30	8.16	8.94	9.66	10.33	3.73	4.17	4.66	5.10	5.51	5.89
HF	1/5	0.40	0.46	0.52	0.58	0.63	0.68	0.30	0.34	0.38	0.41	0.45	0.48	0.17	0.19	0.22	0.24	0.26	0.27
HF	1/4	0.74	0.86	0.96	1.07	1.17	1.27	0.56	0.63	0.70	0.77	0.83	0.89	0.32	0.36	0.40	0.44	0.47	0.51
HF	1/2	1.33	1.54	1.72	1.92	2.11	2.27	1.01	1.13	1.26	1.38	1.49	1.60	0.58	0.64	0.72	0.79	0.85	0.91
HF	3/4	2.02	2.33	2.60	2.91	3.19	3.44	1.53	1.71	1.91	2.09	2.26	2.42	0.87	0.98	1.09	1.19	1.29	1.38
HF	1	2.72	3.14	3.51	3.93	4.30	4.65	2.06	2.31	2.58	2.82	3.05	3.26	1.18	1.32	1.47	1.61	1.74	1.86
HF	1-1/2	3.50	4.04	4.52	5.05	5.53	5.98	2.65	2.97	3.32	3.63	3.92	4.20	1.51	1.69	1.89	2.07	2.24	2.39
HF	2	4.60	5.32	5.94	6.65	7.28	7.86	3.49	3.90	4.36	4.78	5.16	5.52	1.99	2.23	2.49	2.73	2.95	3.15
HF	3-1/2	8.20	9.47	10.59	11.83	12.96	14.00	6.21	6.95	7.77	8.51	9.19	9.83	3.55	3.97	4.43	4.86	5.25	5.61
HF	4-1/2	11.41	13.18	14.74	16.48	18.05	19.49	8.65	9.67	10.81	11.85	12.80	13.68	4.94	5.52	6.17	6.76	7.30	7.81
HF	6	14.44	16.67	18.64	20.84	22.83	24.66	10.94	12.24	13.68	14.99	16.19	17.30	6.25	6.98	7.81	8.55	9.24	9.88
HF	9	21.42	24.73	27.65	30.92	33.87	36.58	16.24	18.15	20.30	22.23	24.01	25.67	9.27	10.36	11.58	12.69	13.71	14.65
HF	11-1/2	28.19	32.56	36.40	40.69	44.58	48.15	21.37	23.89	26.71	29.26	31.61	33.79	12.20	13.64	15.25	16.70	18.04	19.28

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	10	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.10	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	.93	.85	.78	.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	.92	.85	.77	.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F.
However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-404A/R-507 Balanced Ported Valves (kWatts)– B, HF, TFE, TRAE and T Series

Valve Type	Nominal Rating	Evaporator Temperature																	
		10°C						0°C						-10°C					
		Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)					
		400	600	700	800	1000	1100	400	600	700	800	1000	1100	400	600	700	800	1000	1100
BA/BN	1/2	1.03	1.26	1.36	1.45	1.62	1.70	0.99	1.21	1.31	1.40	1.57	1.64	0.96	1.17	1.26	1.35	1.51	1.59
BA/BN	3/4	1.95	2.38	2.58	2.75	3.08	3.23	1.88	2.30	2.48	2.65	2.97	3.11	1.81	2.21	2.39	2.55	2.85	2.99
BA/BN	1	3.01	3.69	3.98	4.26	4.76	4.99	2.94	3.60	3.89	4.16	4.65	4.87	2.80	3.43	3.70	3.95	4.42	4.64
BA/BN	1-1/2	4.04	4.94	5.34	5.71	6.38	6.69	3.93	4.81	5.20	5.56	6.21	6.52	3.75	4.60	4.96	5.31	5.93	6.22
BA/BN	2	5.10	6.24	6.74	7.21	8.06	8.45	4.99	6.11	6.60	7.06	7.89	8.28	4.74	5.81	6.28	6.71	7.50	7.87
BA/BN	2-1/4	6.16	7.54	8.15	8.71	9.74	10.21	6.02	7.37	7.96	8.51	9.52	9.98	5.73	7.02	7.59	8.11	9.07	9.51
BA/BN	3	8.00	9.80	10.58	11.31	12.65	13.27	7.79	9.54	10.30	11.01	12.31	12.91	7.40	9.06	9.79	10.46	11.70	12.27
BA/BN	3-1/2	10.09	12.36	13.35	14.27	15.95	16.73	9.88	12.10	13.07	13.97	15.62	16.38	9.38	11.49	12.41	13.27	14.83	15.56
BA/BN	4-1/4	12.57	15.39	16.62	17.77	19.87	20.84	12.28	15.04	16.25	17.37	19.42	20.37	11.65	14.26	15.41	16.47	18.41	19.31
HF/HN	1/4	0.57	0.69	0.75	0.80	0.90	0.94	0.57	0.69	0.75	0.80	0.90	0.94	0.53	0.65	0.70	0.75	0.84	0.88
HF/HN	1/2	1.10	1.34	1.45	1.55	1.74	1.82	1.06	1.30	1.40	1.50	1.68	1.76	0.99	1.21	1.31	1.40	1.57	1.64
HF/HN	3/4	1.95	2.38	2.58	2.75	3.08	3.23	1.88	2.30	2.48	2.65	2.97	3.11	1.81	2.21	2.39	2.55	2.85	2.99
HF/HN	1	2.94	3.60	3.89	4.16	4.65	4.87	2.90	3.56	3.84	4.11	4.59	4.81	2.73	3.34	3.61	3.85	4.31	4.52
HF/HN	1-1/2	3.96	4.86	5.24	5.61	6.27	6.57	3.89	4.77	5.15	5.51	6.16	6.46	3.68	4.51	4.87	5.21	5.82	6.11
HF/HN	1-3/4	5.10	6.24	6.74	7.21	8.06	8.45	4.99	6.11	6.60	7.06	7.89	8.28	4.74	5.81	6.28	6.71	7.50	7.87
HF/HN	2-1/2	6.73	8.24	8.90	9.51	10.63	11.15	6.58	8.06	8.71	9.31	10.41	10.92	6.23	7.63	8.24	8.81	9.85	10.33
HF/HN	4	11.97	14.65	15.83	16.92	18.92	19.84	11.68	14.31	15.45	16.52	18.47	19.37	11.08	13.57	14.66	15.67	17.52	18.37
HF/HN	6	16.64	20.38	22.01	23.53	26.31	27.59	16.25	19.90	21.49	22.98	25.69	26.95	15.43	18.90	20.42	21.83	24.40	25.60
HF/HN	7-1/2	21.06	25.80	27.86	29.79	33.30	34.93	20.57	25.19	27.21	29.09	32.52	34.11	19.54	23.93	25.85	27.63	30.90	32.40
HF/HN	11	31.26	38.28	41.35	44.21	49.42	51.84	30.51	37.37	40.37	43.15	48.25	50.60	28.99	35.51	38.35	41.00	45.84	48.08
HF/HN	14	41.13	50.38	54.42	58.17	65.04	68.21	40.18	49.21	53.15	56.82	63.53	66.63	38.16	46.74	50.48	53.97	60.34	63.28
TFE	6	16.35	20.03	21.64	23.13	25.86	27.12	15.97	19.55	21.12	22.58	25.24	26.48	15.15	18.56	20.04	21.43	23.96	25.13
TFE	8	22.37	27.40	29.60	31.64	35.37	37.10	21.84	26.75	28.89	30.89	34.53	36.22	20.74	25.41	27.44	29.34	32.80	34.40
TFE	10	27.75	33.99	36.71	39.25	43.88	46.02	27.12	33.21	35.87	38.35	42.87	44.97	25.77	31.56	34.09	36.45	40.75	42.74
TFE	15	42.41	51.94	56.10	59.98	67.05	70.33	41.42	50.73	54.79	58.57	65.49	68.68	39.33	48.17	52.03	55.62	62.19	65.22
TRAE+	9	24.04	29.44	31.80	33.99	38.01	39.86	23.47	28.75	31.05	33.19	37.11	38.92	22.30	27.31	29.50	31.54	35.26	36.98
TRAE+	13	35.05	42.92	46.36	49.56	55.41	58.12	34.23	41.93	45.28	48.41	54.13	56.77	32.53	39.84	43.04	46.01	51.44	53.95
TRAE+	14	39.12	47.91	51.75	55.32	61.85	64.87	38.20	46.78	50.53	54.02	60.39	63.34	36.29	44.44	48.00	51.31	57.37	60.17
TRAE+	22	59.30	72.62	78.44	83.86	93.75	98.33	57.91	70.93	76.61	81.90	91.57	96.04	55.01	67.38	72.77	77.80	86.98	91.23
TRAE+	30	81.49	99.81	107.80	115.25	128.85	135.14	79.61	97.51	105.32	112.59	125.88	132.03	75.61	92.61	100.03	106.93	119.56	125.39
TRAE	40	110.02	134.75	145.55	155.60	173.96	182.45	107.47	131.63	142.18	151.99	169.93	178.23	102.09	125.04	135.06	144.38	161.42	169.30
TRAE	45	120.01	146.98	158.75	169.71	189.75	199.01	117.21	143.55	155.05	165.76	185.32	194.37	111.33	136.35	147.28	157.45	176.03	184.62
TRAE	50	142.80	174.90	188.91	201.95	225.79	236.81	139.51	170.87	184.56	197.30	220.59	231.35	132.54	162.32	175.33	187.44	209.56	219.79
TJR	11	29.95	36.68	39.62	42.35	47.35	49.66	29.24	35.81	38.68	41.35	46.23	48.49	27.79	34.03	36.76	39.30	43.94	46.08
TJR	13	35.86	43.92	47.44	50.71	56.70	59.47	35.01	42.88	46.31	49.51	55.36	58.06	33.28	40.75	44.02	47.06	52.61	55.18
TER	16	44.82	54.89	59.29	63.38	70.86	74.32	43.79	53.63	57.93	61.93	69.24	72.62	41.60	50.94	55.03	58.82	65.77	68.98
TER	19	52.96	64.86	70.06	74.89	83.73	87.82	51.75	63.39	68.47	73.19	81.83	85.83	49.14	60.18	65.00	69.49	77.69	81.48
TER	25	71.30	87.32	94.32	100.83	112.73	118.23	69.67	85.32	92.16	98.52	110.15	115.53	66.16	81.03	87.52	93.57	104.61	109.72
TER	31	91.69	112.29	121.29	129.66	144.97	152.04	89.56	109.69	118.48	126.66	141.61	148.52	85.07	104.18	112.53	120.30	134.50	141.07
TIR	45	112.04	137.22	148.22	158.45	177.15	185.80	109.46	134.06	144.80	154.80	173.07	181.51	103.97	127.34	137.54	147.04	164.39	172.41
THR	55	142.63	174.68	188.68	201.70	225.51	236.52	139.30	170.61	184.28	197.00	220.25	231.00	132.33	162.06	175.05	187.14	209.22	219.44
THR	68	173.18	212.10	229.09	244.91	273.82	287.18	169.14	207.15	223.75	239.20	267.44	280.49	160.68	196.79	212.56	227.24	254.06	266.46
TMR	68	203.73	249.51	269.51	288.11	322.12	337.84	199.02	243.75	263.28	281.46	314.68	330.04	189.04	231.52	250.07	267.34	298.89	313.48

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F. However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-404A/R-507 Balanced Ported Valves (kWatts)– B, HF, TFE, TRAE and T Series (cont.)

Valve Type	Nominal Rating	Evaporator Temperature																	
		-20°C						-30°C						-40°C					
		Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)					
		400	600	700	800	1000	1100	600	700	800	1000	1100	1200	600	700	800	1000	1100	1200
BA/BN	1/2	0.85	0.98	1.10	1.23	1.34	1.45	0.67	0.73	0.78	0.87	0.91	0.95	0.42	0.46	0.49	0.55	0.58	0.60
BA/BN	3/4	1.59	1.84	2.06	2.30	2.52	2.72	1.27	1.38	1.47	1.65	1.73	1.80	0.81	0.88	0.94	1.05	1.10	1.15
BA/BN	1	2.51	2.90	3.24	3.63	3.97	4.29	1.95	2.10	2.25	2.51	2.64	2.75	1.27	1.38	1.47	1.65	1.73	1.80
BA/BN	1-1/2	3.33	3.84	4.30	4.80	5.26	5.68	2.62	2.83	3.02	3.38	3.55	3.70	1.70	1.84	1.96	2.19	2.30	2.40
BA/BN	2	4.21	4.86	5.44	6.08	6.66	7.19	3.29	3.56	3.80	4.25	4.46	4.66	2.16	2.33	2.49	2.79	2.92	3.05
BA/BN	2-1/4	5.10	5.89	6.58	7.36	8.06	8.71	4.00	4.32	4.62	5.16	5.42	5.66	2.62	2.83	3.02	3.38	3.55	3.70
BA/BN	3	6.62	7.64	8.55	9.55	10.47	11.31	5.20	5.62	6.01	6.72	7.05	7.36	3.40	3.67	3.92	4.39	4.60	4.81
BA/BN	3-1/2	8.35	9.65	10.79	12.06	13.21	14.27	6.55	7.07	7.56	8.45	8.87	9.26	4.28	4.63	4.95	5.53	5.80	6.06
BA/BN	4-1/4	10.41	12.02	13.44	15.02	16.46	17.77	8.18	8.83	9.44	10.56	11.07	11.56	5.35	5.77	6.17	6.90	7.24	7.56
HF/HN	1/4	0.46	0.53	0.59	0.66	0.73	0.79	0.35	0.38	0.41	0.46	0.48	0.50	0.25	0.27	0.29	0.32	0.34	0.35
HF/HN	1/2	0.89	1.02	1.14	1.28	1.40	1.51	0.71	0.76	0.82	0.91	0.96	1.00	0.46	0.50	0.53	0.59	0.62	0.65
HF/HN	3/4	1.59	1.84	2.06	2.30	2.52	2.72	1.27	1.38	1.47	1.65	1.73	1.80	0.81	0.88	0.94	1.05	1.10	1.15
HF/HN	1	2.44	2.82	3.15	3.53	3.86	4.17	1.91	2.06	2.21	2.47	2.59	2.70	1.24	1.34	1.43	1.60	1.68	1.75
HF/HN	1-1/2	3.29	3.80	4.25	4.75	5.21	5.62	2.58	2.79	2.98	3.34	3.50	3.65	1.70	1.84	1.96	2.19	2.30	2.40
HF/HN	1-3/4	4.21	4.86	5.44	6.08	6.66	7.19	3.29	3.56	3.80	4.25	4.46	4.66	2.16	2.33	2.49	2.79	2.92	3.05
HF/HN	2-1/2	5.56	6.42	7.18	8.02	8.79	9.49	4.35	4.70	5.03	5.62	5.90	6.16	2.87	3.10	3.31	3.70	3.88	4.06
HF/HN	4	9.91	11.45	12.80	14.31	15.67	16.93	7.75	8.37	8.95	10.01	10.50	10.96	5.06	5.47	5.85	6.54	6.85	7.16
HF/HN	6	13.77	15.90	17.78	19.88	21.77	23.52	10.80	11.66	12.47	13.94	14.62	15.27	7.08	7.65	8.18	9.14	9.59	10.01
HF/HN	7-1/2	17.45	20.15	22.53	25.19	27.59	29.81	13.70	14.80	15.82	17.69	18.55	19.37	8.96	9.67	10.34	11.56	12.13	12.67
HF/HN	11	25.88	29.88	33.41	37.35	40.92	44.19	20.28	21.91	23.42	26.19	27.46	28.69	13.28	14.34	15.33	17.14	17.97	18.77
HF/HN	14	34.05	39.32	43.96	49.15	53.85	58.16	26.73	28.87	30.86	34.50	36.19	37.80	17.45	18.85	20.15	22.53	23.63	24.68
TFE	6	13.52	15.61	17.46	19.52	21.38	23.09	10.62	11.47	12.26	13.71	14.38	15.02	6.94	7.49	8.01	8.96	9.39	9.81
TFE	8	18.51	21.38	23.90	26.72	29.27	31.62	14.51	15.68	16.76	18.74	19.65	20.53	9.49	10.25	10.95	12.25	12.85	13.42
TFE	10	23.01	26.57	29.71	33.21	36.38	39.30	18.05	19.50	20.85	23.31	24.45	25.53	11.79	12.73	13.61	15.22	15.96	16.67
TFE	15	35.12	40.55	45.34	50.69	55.52	59.97	27.54	29.75	31.80	35.56	37.29	38.95	17.98	19.42	20.77	23.22	24.35	25.43
TRAE+	9	19.89	22.97	25.68	28.72	31.46	33.98	15.61	16.86	18.03	20.15	21.14	22.08	10.20	11.01	11.77	13.16	13.80	14.42
TRAE+	13	29.03	33.52	37.47	41.90	45.90	49.57	22.76	24.59	26.28	29.39	30.82	32.19	14.87	16.06	17.17	19.19	20.13	21.03
TRAE+	14	32.39	37.40	41.82	46.75	51.21	55.32	25.42	27.45	29.35	32.81	34.42	35.95	16.60	17.93	19.17	21.43	22.48	23.48
TRAE+	22	49.10	56.70	63.39	70.87	77.63	83.85	38.52	41.60	44.47	49.72	52.15	54.47	25.17	27.19	29.06	32.49	34.08	35.59
TRAE+	30	67.47	77.91	87.11	97.39	106.68	115.23	52.92	57.16	61.11	68.32	71.66	74.84	34.59	37.36	39.94	44.65	46.83	48.91
TRAE	40	91.08	105.17	117.59	131.47	144.02	155.56	71.47	77.20	82.53	92.27	96.77	101.08	46.69	50.43	53.92	60.28	63.22	66.03
TRAE	45	99.37	114.74	128.28	143.43	157.11	169.70	77.95	84.20	90.01	100.63	105.55	110.24	50.94	55.02	58.82	65.76	68.97	72.04
TRAE	50	118.27	136.57	152.69	170.71	187.00	201.99	92.75	100.18	107.10	119.74	125.58	131.17	60.64	65.50	70.02	78.29	82.11	85.76
TJR	11	24.82	28.65	32.04	35.82	39.24	42.38	19.47	21.03	22.48	25.14	26.36	27.53	12.71	13.73	14.67	16.41	17.21	17.97
TJR	13	29.70	34.30	38.34	42.87	46.96	50.72	23.29	25.16	26.90	30.07	31.54	32.94	15.22	16.44	17.58	19.65	20.61	21.53
TER	16	37.10	42.84	47.89	53.55	58.66	63.36	29.10	31.43	33.60	37.57	39.40	41.15	18.76	20.27	21.66	24.22	25.40	26.53
TER	19	43.86	50.65	56.62	63.31	69.35	74.91	34.41	37.17	39.73	44.42	46.59	48.66	22.48	24.28	25.96	29.02	30.44	31.79
TER	25	59.05	68.18	76.23	85.23	93.36	100.84	46.30	50.01	53.47	59.78	62.69	65.48	30.27	32.69	34.95	39.07	40.98	42.80
TER	31	75.93	87.68	98.03	109.60	120.06	129.68	59.54	64.31	68.75	76.87	80.62	84.21	38.94	42.06	44.96	50.27	52.73	55.07
TIR	45	94.20	108.77	121.61	135.97	148.94	160.88	72.78	78.61	84.04	93.96	98.55	102.93	47.58	51.39	54.94	61.42	64.42	67.28
THR	55	118.09	136.36	152.46	170.45	186.72	201.68	92.64	100.06	106.97	119.60	125.44	131.02	60.53	65.38	69.90	78.15	81.96	85.61
THR	68	143.41	165.59	185.14	206.99	226.74	244.91	112.47	121.48	129.86	145.19	152.28	159.05	73.53	79.42	84.90	94.92	99.55	103.98
TMR	68	168.72	194.82	217.81	243.52	266.76	288.14	132.33	142.93	152.80	170.83	179.17	187.14	86.48	93.41	99.86	111.65	117.10	122.30

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F. However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-448A/R-449A (kWatts) Balance Ported Valves - B Series and H Series

Valve Type	Nominal Rating	Evaporator Temperature																	
		10°C						0°C						-10°C					
		Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)					
		400	600	700	800	1000	1100	400	600	700	800	1000	1100	400	600	700	800	1000	1100
BA/BN	1/2	1.41	1.63	1.83	2.04	2.24	2.41	1.40	1.62	1.81	2.02	2.21	2.39	1.37	1.58	1.76	1.97	2.16	2.33
BA/BN	1	2.69	3.10	3.47	3.88	4.25	4.59	2.66	3.07	3.43	3.84	4.20	4.54	2.59	3.00	3.35	3.75	4.10	4.43
BA/BN	1-1/2	4.18	4.83	5.40	6.04	6.62	7.15	4.14	4.78	5.35	5.98	6.55	7.07	4.04	4.67	5.22	5.83	6.39	6.90
BA/BN	2	5.60	6.46	7.23	8.08	8.85	9.56	5.54	6.40	7.15	8.00	8.76	9.46	5.41	6.24	6.98	7.81	8.55	9.24
BA/BN	2-1/2	7.07	8.16	9.13	10.20	11.18	12.07	7.00	8.08	9.03	10.10	11.06	11.95	6.83	7.88	8.82	9.86	10.80	11.66
BA/BN	3	8.57	9.89	11.06	12.37	13.55	14.63	8.48	9.79	10.95	12.24	13.40	14.48	8.28	9.56	10.68	11.95	13.09	14.13
BA/BN	4	11.08	12.80	14.31	16.00	17.52	18.93	10.97	12.66	14.16	15.83	17.34	18.73	10.71	12.36	13.82	15.45	16.93	18.29
BA/BN	5	14.05	16.23	18.14	20.28	22.22	24.00	13.91	16.06	17.95	20.07	21.99	23.75	13.57	15.67	17.53	19.59	21.46	23.18
BA/BN	6	17.45	20.14	22.52	25.18	27.58	29.79	17.26	19.93	22.29	24.92	27.30	29.48	16.85	19.46	21.76	24.32	26.65	28.78
HF	1/4	0.79	0.91	1.02	1.14	1.25	1.35	0.78	0.90	1.01	1.13	1.24	1.34	0.76	0.88	0.99	1.10	1.21	1.31
HF	1/2	1.50	1.73	1.93	2.16	2.37	2.56	1.48	1.71	1.91	2.14	2.34	2.53	1.45	1.67	1.87	2.09	2.29	2.47
HF	1	2.69	3.10	3.47	3.88	4.25	4.59	2.66	3.07	3.43	3.84	4.20	4.54	2.59	3.00	3.35	3.75	4.10	4.43
HF	1-1/2	4.10	4.73	5.29	5.92	6.48	7.00	4.06	4.68	5.24	5.86	6.41	6.93	3.96	4.57	5.11	5.72	6.26	6.76
HF	2	5.54	6.40	7.15	8.00	8.76	9.46	5.48	6.33	7.08	7.92	8.67	9.37	5.35	6.18	6.91	7.73	8.46	9.14
HF	2-1/2	7.10	8.19	9.16	10.24	11.22	12.12	7.02	8.11	9.07	10.14	11.10	11.99	6.86	7.92	8.85	9.90	10.84	11.71
HF	3-1/2	9.36	10.81	12.08	13.51	14.80	15.98	9.26	10.69	11.96	13.37	14.64	15.82	9.04	10.44	11.67	13.05	14.29	15.44
HF	6	16.65	19.23	21.50	24.04	26.33	28.44	16.48	19.03	21.28	23.79	26.06	28.15	16.09	18.58	20.77	23.22	25.44	27.48
HF	8-1/2	23.16	26.74	29.89	33.42	36.61	39.55	22.92	26.46	29.58	33.08	36.23	39.14	22.37	25.83	28.88	32.29	35.37	38.20
HF	10-1/2	29.40	33.95	37.96	42.44	46.49	50.22	29.10	33.60	37.57	42.00	46.01	49.70	28.41	32.80	36.67	41.00	44.91	48.51
HF	16	43.54	50.28	56.21	62.85	68.85	74.36	43.09	49.76	55.63	62.19	68.13	73.59	42.06	48.57	54.30	60.71	66.51	71.84
HF	10	57.11	65.95	73.73	82.44	90.30	97.54	56.52	65.26	72.97	81.58	89.37	96.53	55.17	63.71	71.23	79.64	87.24	94.23

Valve Type	Nominal Rating	Evaporator Temperature																	
		-20°C						-30°C						-40°C					
		Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)					
		400	600	700	800	1000	1100	400	600	700	800	1000	1100	400	600	700	800	1000	1100
BA/BN	1/2	1.33	1.53	1.72	1.92	2.10	2.27	1.21	1.36	1.52	1.66	1.79	1.92	0.82	0.92	1.02	1.12	1.21	1.29
BA/BN	1	2.52	2.91	3.26	3.64	3.99	4.31	2.30	2.58	2.88	3.16	3.41	3.64	1.56	1.74	1.95	2.13	2.30	2.46
BA/BN	1-1/2	3.93	4.54	5.08	5.68	6.22	6.72	3.59	4.01	4.49	4.92	5.31	5.68	2.42	2.71	3.03	3.32	3.59	3.83
BA/BN	2	5.26	6.07	6.79	7.59	8.32	8.98	4.80	5.37	6.00	6.58	7.10	7.59	3.24	3.63	4.05	4.44	4.80	5.13
BA/BN	2-1/2	6.64	7.67	8.58	9.59	10.50	11.34	6.06	6.78	7.58	8.30	8.97	9.59	4.10	4.58	5.12	5.61	6.06	6.47
BA/BN	3	8.05	9.30	10.39	11.62	12.73	13.75	7.35	8.22	9.19	10.07	10.87	11.62	4.96	5.55	6.20	6.80	7.34	7.85
BA/BN	4	10.41	12.03	13.45	15.03	16.47	17.79	9.51	10.63	11.89	13.02	14.06	15.04	6.42	7.18	8.03	8.79	9.50	10.15
BA/BN	5	13.20	15.25	17.05	19.06	20.88	22.55	12.06	13.48	15.07	16.51	17.83	19.06	8.14	9.10	10.18	11.15	12.04	12.87
BA/BN	6	16.39	18.93	21.16	23.66	25.92	28.00	14.97	16.73	18.71	20.50	22.14	23.67	10.11	11.30	12.63	13.84	14.95	15.98
HF	1/4	0.74	0.86	0.96	1.07	1.18	1.27	0.68	0.76	0.85	0.93	1.00	1.07	0.46	0.51	0.57	0.63	0.68	0.73
HF	1/2	1.41	1.63	1.82	2.03	2.23	2.40	1.29	1.44	1.61	1.76	1.90	2.03	0.87	0.97	1.09	1.19	1.28	1.37
HF	1	2.52	2.91	3.26	3.64	3.99	4.31	2.30	2.58	2.88	3.16	3.41	3.64	1.56	1.74	1.95	2.13	2.30	2.46
HF	1-1/2	3.85	4.45	4.97	5.56	6.09	6.58	3.52	3.93	4.40	4.82	5.20	5.56	2.38	2.66	2.97	3.25	3.51	3.76
HF	2	5.21	6.01	6.72	7.52	8.23	8.89	4.75	5.32	5.94	6.51	7.03	7.52	3.21	3.59	4.01	4.40	4.75	5.08
HF	2-1/2	6.67	7.70	8.61	9.63	10.54	11.39	6.09	6.81	7.61	8.34	9.01	9.63	4.11	4.60	5.14	5.63	6.08	6.50
HF	3-1/2	8.79	10.15	11.35	12.69	13.90	15.02	8.03	8.98	10.04	11.00	11.88	12.70	5.42	6.06	6.78	7.42	8.02	8.57
HF	6	15.65	18.07	20.20	22.59	24.74	26.73	14.29	15.98	17.86	19.57	21.13	22.59	9.65	10.79	12.06	13.21	14.27	15.26
HF	8-1/2	21.76	25.13	28.09	31.41	34.41	37.16	19.87	22.21	24.84	27.21	29.39	31.41	13.42	15.00	16.77	18.37	19.84	21.21
HF	10-1/2	27.63	31.91	35.67	39.88	43.69	47.19	25.23	28.21	31.54	34.55	37.31	39.89	17.04	19.05	21.29	23.33	25.20	26.94
HF	16	40.92	47.25	52.82	59.06	64.69	69.88	37.36	41.77	46.70	51.16	55.25	59.07	25.23	28.20	31.53	34.54	37.31	39.89
HF	10	53.67	61.97	69.29	77.46	84.86	91.66	49.00	54.79	61.25	67.10	72.48	77.48	33.09	36.99	41.36	45.31	48.94	52.32

Refrigerant Liquid Temperature Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F. However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-407C Balanced Ported Valves (kWatts)– B, HF, TFE, TRAE and T Series

Valve Type	Nominal Rating	Evaporator Temperature																	
		10°C						0°C						-10°C					
		Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)					
		400	600	700	800	1000	1100	400	600	700	800	1000	1100	400	600	700	800	1000	1100
BA/BN	1/2	1.35	1.65	1.78	1.90	2.13	2.23	1.31	1.60	1.73	1.85	2.07	2.17	1.27	1.56	1.69	1.80	2.02	2.11
BA/BN	3/4	2.55	3.12	3.37	3.60	4.03	4.23	2.48	3.03	3.28	3.50	3.92	4.11	2.41	2.95	3.18	3.40	3.81	3.99
BA/BN	1	3.96	4.86	5.24	5.61	6.27	6.57	3.89	4.77	5.15	5.51	6.16	6.46	3.72	4.55	4.92	5.26	5.88	6.16
BA/BN	1-1/2	5.27	6.46	6.98	7.46	8.34	8.75	5.20	6.37	6.88	7.36	8.23	8.63	4.99	6.11	6.60	7.06	7.89	8.28
BA/BN	2	6.66	8.15	8.80	9.41	10.52	11.04	6.55	8.02	8.66	9.26	10.35	10.86	6.30	7.72	8.34	8.91	9.96	10.45
BA/BN	2-1/4	8.07	9.89	10.68	11.41	12.76	13.38	7.93	9.71	10.49	11.21	12.54	13.15	7.61	9.32	10.07	10.76	12.03	12.62
BA/BN	3	10.48	12.83	13.86	14.82	16.57	17.38	10.27	12.57	13.58	14.52	16.23	17.02	9.88	12.10	13.07	13.97	15.62	16.38
BA/BN	3-1/2	13.24	16.22	17.51	18.72	20.93	21.96	12.99	15.91	17.19	18.37	20.54	21.54	12.46	15.26	16.48	17.62	19.70	20.66
BA/BN	4-1/4	16.46	20.16	21.78	23.28	26.03	27.30	16.18	19.81	21.40	22.88	25.58	26.83	15.51	18.99	20.51	21.93	24.52	25.71
HF/HN	1/4	0.74	0.91	0.98	1.05	1.18	1.23	0.74	0.91	0.98	1.05	1.18	1.23	0.71	0.87	0.94	1.00	1.12	1.17
HF/HN	1/2	1.42	1.73	1.87	2.00	2.24	2.35	1.38	1.69	1.83	1.95	2.18	2.29	1.35	1.65	1.78	1.90	2.13	2.23
HF/HN	3/4	2.55	3.12	3.37	3.60	4.03	4.23	2.48	3.03	3.28	3.50	3.92	4.11	2.41	2.95	3.18	3.40	3.81	3.99
HF/HN	1	3.86	4.73	5.10	5.46	6.10	6.40	3.79	4.64	5.01	5.36	5.99	6.28	3.65	4.47	4.82	5.16	5.77	6.05
HF/HN	1-1/2	5.20	6.37	6.88	7.36	8.23	8.63	5.10	6.24	6.74	7.21	8.06	8.45	4.92	6.03	6.51	6.96	7.78	8.16
HF/HN	1-3/4	6.66	8.15	8.80	9.41	10.52	11.04	6.55	8.02	8.66	9.26	10.35	10.86	6.30	7.72	8.34	8.91	9.96	10.45
HF/HN	2-1/2	8.81	10.80	11.66	12.47	13.94	14.62	8.64	10.58	11.43	12.22	13.66	14.32	8.32	10.19	11.01	11.76	13.15	13.80
HF/HN	4	15.68	19.21	20.75	22.18	24.80	26.01	15.36	18.82	20.32	21.73	24.29	25.48	14.76	18.08	19.53	20.88	23.34	24.48
HF/HN	6	21.81	26.71	28.85	30.84	34.48	36.16	21.42	26.23	28.33	30.29	33.86	35.52	20.57	25.19	27.21	29.09	32.52	34.11
HF/HN	7-1/2	27.61	33.82	36.53	39.05	43.66	45.79	27.08	33.17	35.82	38.30	42.82	44.91	26.02	31.87	34.42	36.80	41.14	43.15
HF/HN	11	40.96	50.16	54.18	57.92	64.76	67.92	40.18	49.21	53.15	56.82	63.53	66.63	38.59	47.26	51.04	54.57	61.01	63.99
HF/HN	14	53.88	65.99	71.27	76.20	85.19	89.35	52.89	64.77	69.96	74.79	83.62	87.70	50.80	62.22	67.20	71.84	80.32	84.24
TFE	6	21.42	26.23	28.33	30.29	33.86	35.52	21.03	25.75	27.82	29.74	33.25	34.87	20.18	24.71	26.69	28.54	31.90	33.46
TFE	8	29.31	35.90	38.78	41.45	46.35	48.61	28.78	35.25	38.07	40.70	45.51	47.73	27.61	33.82	36.53	39.05	43.66	45.79
TFE	10	36.39	44.57	48.14	51.46	57.54	60.35	35.72	43.75	47.25	50.51	56.48	59.23	34.30	42.01	45.38	48.51	54.24	56.88
TFE	15	55.54	68.03	73.48	78.55	87.82	92.11	54.52	66.77	72.12	77.10	86.20	90.40	52.36	64.12	69.26	74.04	82.78	86.82
TRAE+	9	31.51	38.59	41.68	44.56	49.82	52.25	30.90	37.85	40.88	43.71	48.86	51.25	29.70	36.38	39.29	42.00	46.96	49.25
TRAE+	13	45.91	56.23	60.74	64.93	72.60	76.14	45.06	55.19	59.61	63.73	71.25	74.73	43.26	52.98	57.23	61.18	68.40	71.74
TRAE+	14	51.26	62.78	67.81	72.49	81.05	85.00	50.30	61.61	66.55	71.14	79.54	83.42	48.29	59.14	63.88	68.29	76.35	80.07
TRAE+	22	77.67	95.12	102.74	109.84	122.80	128.80	75.93	93.00	100.45	107.39	120.06	125.92	73.21	89.66	96.84	103.53	115.75	121.40
TRAE+	30	106.77	130.76	141.24	150.99	168.81	177.05	104.78	128.33	138.62	148.19	165.68	173.76	100.64	123.26	133.14	142.33	159.13	166.90
TRAE	40	144.11	176.50	190.64	203.81	227.86	238.99	141.49	173.29	187.18	200.10	223.72	234.64	135.83	166.36	179.69	192.09	214.77	225.25
TRAE	45	157.21	192.54	207.97	222.33	248.57	260.71	154.31	188.99	204.13	218.23	243.98	255.89	148.18	181.49	196.03	209.56	234.30	245.74
TRAE	50	187.09	229.14	247.50	264.58	295.81	310.25	183.66	224.93	242.95	259.73	290.38	304.56	176.36	216.00	233.31	249.41	278.85	292.46
TJR	11	39.22	48.04	51.89	55.47	62.02	65.04	38.52	47.17	50.95	54.47	60.90	63.87	36.99	45.31	48.94	52.32	58.49	61.35
TJR	13	46.13	56.49	61.02	65.23	72.93	76.49	46.13	56.49	61.02	65.23	72.93	76.49	44.29	54.24	58.58	62.63	70.02	73.44
TER	16	58.73	71.93	77.69	83.05	92.86	97.39	57.63	70.58	76.24	81.50	91.12	95.57	55.33	67.77	73.19	78.25	87.48	91.75
TER	19	69.38	84.98	91.79	98.12	109.71	115.06	68.11	83.42	90.10	96.32	107.69	112.95	65.42	80.12	86.54	92.52	103.44	108.49
TER	25	93.42	114.42	123.58	132.12	147.71	154.92	91.69	112.29	121.29	129.66	144.97	152.04	88.04	107.83	116.47	124.51	139.20	146.00
TER	31	120.11	147.11	158.89	169.86	189.91	199.18	117.88	144.38	155.94	166.71	186.39	195.49	113.21	138.65	149.76	160.10	179.00	187.74
TIR	45	146.80	179.80	194.20	207.61	232.12	243.45	144.11	176.50	190.64	203.81	227.86	238.99	138.34	169.44	183.01	195.65	218.74	229.42
THR	55	186.84	228.83	247.17	264.23	295.42	309.84	183.41	224.63	242.63	259.38	289.99	304.15	176.08	215.65	232.93	249.01	278.41	291.99
THR	68	226.84	277.83	300.09	320.80	358.67	376.18	222.70	272.75	294.61	314.95	352.12	369.31	213.82	261.87	282.85	302.38	338.07	354.57
TMR	68	266.88	326.86	353.05	377.43	421.98	442.57	262.00	320.88	346.59	370.52	414.25	434.47	251.55	308.09	332.77	355.75	397.74	417.15

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F. However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-407C Balanced Ported Valves (kWatts)– B, HF, TFE, TRAE and T Series (cont.)

Valve Type	Nominal Rating	Evaporator Temperature																	
		-20°C						-30°C						-40°C					
		Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)					
		400	600	700	800	1000	1100	600	700	800	1000	1100	1200	600	700	800	1000	1100	1200
BA/BN	1/2	1.06	1.30	1.40	1.50	1.68	1.76	0.81	0.88	0.94	1.05	1.10	1.15	0.50	0.54	0.57	0.64	0.67	0.70
BA/BN	3/4	2.02	2.47	2.67	2.85	3.19	3.35	1.52	1.64	1.76	1.97	2.06	2.15	0.96	1.03	1.10	1.23	1.29	1.35
BA/BN	1	3.15	3.86	4.17	4.46	4.98	5.22	2.41	2.60	2.78	3.11	3.26	3.40	1.52	1.64	1.76	1.97	2.06	2.15
BA/BN	1-1/2	4.21	5.16	5.57	5.96	6.66	6.99	3.19	3.44	3.68	4.11	4.31	4.51	2.02	2.18	2.33	2.60	2.73	2.8
BA/BN	2	5.31	6.50	7.02	7.51	8.40	8.81	4.04	4.36	4.66	5.21	5.46	5.71	2.55	2.75	2.94	3.29	3.45	3.60
BA/BN	2-1/4	6.44	7.89	8.52	9.11	10.19	10.68	4.89	5.28	5.64	6.31	6.61	6.91	3.08	3.33	3.56	3.98	4.17	4.36
BA/BN	3	8.32	10.19	11.01	11.76	13.15	13.80	6.34	6.84	7.32	8.18	8.58	8.96	4.00	4.32	4.62	5.16	5.42	5.66
BA/BN	3-1/2	10.55	12.92	13.96	14.92	16.68	17.49	8.04	8.68	9.28	10.37	10.88	11.36	5.06	5.47	5.85	6.54	6.85	7.16
BA/BN	4-1/4	13.10	16.04	17.33	18.52	20.71	21.72	9.98	10.78	11.53	12.89	13.52	14.12	6.27	6.77	7.24	8.09	8.48	8.86
HF/HN	1/4	0.60	0.74	0.80	0.85	0.95	1.00	0.46	0.50	0.53	0.59	0.62	0.65	0.28	0.31	0.33	0.37	0.38	0.40
HF/HN	1/2	1.13	1.39	1.50	1.60	1.79	1.88	0.85	0.92	0.98	1.10	1.15	1.20	0.53	0.57	0.61	0.69	0.72	0.75
HF/HN	3/4	2.02	2.47	2.67	2.85	3.19	3.35	1.52	1.64	1.76	1.97	2.06	2.15	0.96	1.03	1.10	1.23	1.29	1.35
HF/HN	1	3.08	3.77	4.07	4.36	4.87	5.11	2.34	2.52	2.70	3.02	3.16	3.30	1.49	1.61	1.72	1.92	2.01	2.10
HF/HN	1-1/2	4.14	5.07	5.48	5.86	6.55	6.87	3.15	3.40	3.64	4.07	4.27	4.46	1.98	2.14	2.29	2.56	2.68	2.80
HF/HN	1-3/4	5.31	6.50	7.02	7.51	8.40	8.81	4.04	4.36	4.66	5.21	5.46	5.71	2.55	2.75	2.94	3.29	3.45	3.60
HF/HN	2-1/2	7.01	8.58	9.27	9.91	11.08	11.62	5.35	5.77	6.17	6.90	7.24	7.56	3.36	3.63	3.88	4.34	4.55	4.76
HF/HN	4	12.46	15.26	16.48	17.62	19.70	20.66	9.49	10.25	10.95	12.25	12.85	13.42	5.98	6.46	6.91	7.72	8.10	8.46
HF/HN	6	17.35	21.24	22.95	24.53	27.43	28.77	13.20	14.26	15.25	17.05	17.88	18.67	8.32	8.99	9.61	10.74	11.26	11.76
HF/HN	7-1/2	21.95	26.88	29.03	31.04	34.70	36.40	16.71	18.05	19.29	21.57	22.62	23.63	10.51	11.36	12.14	13.57	14.24	14.87
HF/HN	11	32.57	39.89	43.08	46.06	51.49	54.01	24.82	26.80	28.65	32.04	33.60	35.09	15.61	16.86	18.03	20.15	21.14	22.08
HF/HN	14	42.87	52.50	56.71	60.63	67.78	71.09	32.64	35.25	37.69	42.14	44.19	46.16	20.57	22.22	23.75	26.55	27.85	29.09
TFE	6	17.03	20.85	22.53	24.08	26.92	28.24	12.96	13.99	14.96	16.73	17.54	18.32	8.18	8.83	9.44	10.56	11.07	11.56
TFE	8	23.33	28.57	30.86	32.99	36.89	38.69	17.77	19.19	20.52	22.94	24.06	25.13	11.19	12.08	12.92	14.44	15.15	15.82
TFE	10	28.96	35.47	38.31	40.95	45.79	48.02	22.05	23.82	25.47	28.47	29.86	31.19	13.88	14.99	16.02	17.91	18.79	19.62
TFE	15	44.21	54.15	58.49	62.53	69.91	73.32	33.67	36.36	38.87	43.46	45.58	47.61	21.17	22.87	24.44	27.33	28.66	29.94
TRAE+	9	25.06	30.70	33.16	35.44	39.63	41.56	19.08	20.61	22.03	24.63	25.84	26.98	12.00	12.96	13.86	15.49	16.25	16.97
TRAE+	13	36.53	44.74	48.33	51.67	57.76	60.58	27.82	30.05	32.13	35.92	37.67	39.35	17.52	18.93	20.23	22.62	23.73	24.78
TRAE+	14	40.78	49.95	53.95	57.67	64.48	67.63	31.05	33.53	35.85	40.08	42.04	43.91	19.54	21.11	22.56	25.23	26.46	27.63
TRAE+	22	61.81	75.70	81.76	87.41	97.73	102.50	47.08	50.85	54.37	60.78	63.75	66.58	29.63	32.00	34.21	38.25	40.12	41.90
TRAE+	30	84.96	104.05	112.39	120.15	134.33	140.89	64.71	69.90	74.72	83.54	87.62	91.52	40.71	43.97	47.01	52.56	55.12	57.57
TRAE	40	114.70	140.47	151.73	162.20	181.35	190.20	87.33	94.33	100.84	112.74	118.25	123.51	54.98	59.38	63.48	70.97	74.44	77.75
TRAE	45	125.10	153.22	165.50	176.92	197.81	207.46	95.26	102.89	110.00	122.98	128.98	134.72	59.97	64.77	69.24	77.42	81.20	84.81
TRAE	50	148.89	182.36	196.97	210.57	235.42	246.91	113.39	122.47	130.93	146.38	153.53	160.35	71.37	77.08	82.41	92.13	96.63	100.93
TJR	11	31.22	38.24	41.30	44.16	49.37	51.78	23.79	25.69	27.47	30.71	32.21	33.64	14.97	16.17	17.29	19.33	20.28	21.18
TJR	13	37.38	45.78	49.45	52.87	59.11	61.99	28.46	30.74	32.86	36.74	38.54	40.25	17.91	19.35	20.68	23.12	24.25	25.33
TER	16	46.73	57.23	61.82	66.08	73.88	77.49	35.58	38.43	41.08	45.93	48.17	50.31	22.41	24.20	25.87	28.93	30.34	31.69
TER	19	55.22	67.64	73.05	78.10	87.32	91.58	42.06	45.42	48.56	54.29	56.94	59.48	26.48	28.60	30.58	34.18	35.85	37.45
TER	25	74.34	91.05	98.34	105.13	117.54	123.28	56.60	61.14	65.36	73.08	76.64	80.05	35.61	38.47	41.12	45.98	48.22	50.36
TER	31	95.58	117.06	126.44	135.17	151.13	158.50	72.78	78.61	84.04	93.96	98.55	102.93	45.81	49.48	52.89	59.14	62.02	64.78
TIR	45	116.82	143.07	154.54	165.21	184.71	193.72	88.96	96.09	102.72	114.85	120.45	125.81	56.00	60.49	64.67	72.30	75.83	79.20
THR	55	148.68	182.10	196.69	210.27	235.08	246.56	113.21	122.28	130.72	146.15	153.29	160.10	71.26	76.97	82.28	92.00	96.49	100.78
THR	68	180.54	221.12	238.83	255.32	285.46	299.39	137.49	148.51	158.76	177.50	186.17	194.45	86.52	93.45	99.90	111.69	117.15	122.35
TMR	68	212.40	260.14	280.98	300.38	335.83	352.23	161.74	174.70	186.76	208.81	219.00	228.74	101.81	109.97	117.56	131.44	137.85	143.98

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F. However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-410A Balanced Ported Valves (kWatts)– B Series

Valve Type	Nominal Rating	Evaporator Temperature																						
		10 °C							4 °C							-7 °C								
		Pressure Drop Across Valve (kPa)							Pressure Drop Across Valve (kPa)							Pressure Drop Across Valve (kPa)								
		500	800	1000	1100	1400	1700	2000	500	800	1000	1100	1400	1700	2000	500	800	1000	1100	1400	1700	2000		
BA/BN	1	2.8	3.4	3.8	4.1	4.7	5.0	5.5	2.8	3.4	3.8	4.1	4.7	5.0	5.4	2.7	3.3	3.7	4.0	4.6	4.9	5.3		
	1-1/2	4.5	5.5	6.2	6.6	7.6	5.0	5.5	4.5	5.4	6.1	6.6	7.5	8.0	8.8	4.4	5.3	6.0	6.4	7.4	7.9	8.6		
	2	6.3	7.7	8.6	9.2	10.6	11.3	12.3	6.3	7.6	8.6	9.2	10.5	11.2	12.2	6.1	7.4	8.4	9.0	10.3	11.0	12.0		
	3	8.0	9.7	11.0	11.8	13.5	14.4	15.7	8.0	9.7	10.9	11.7	13.4	14.3	15.6	7.8	9.5	10.7	11.4	13.1	14.0	15.2		
	3-1/2	10.4	12.6	14.2	15.2	17.4	18.6	20.3	10.3	12.5	14.1	15.1	17.3	18.4	20.1	10.1	12.2	13.8	14.7	16.9	18.0	19.7		
	4-1/2	14.5	17.6	19.8	21.2	24.3	25.9	28.3	14.4	17.4	19.6	21.0	24.0	25.7	28.0	14.1	17.0	19.2	20.5	23.5	25.2	27.4		
	6	17.7	21.5	24.2	25.9	29.7	31.7	34.6	17.6	21.3	24.0	25.7	29.4	31.5	34.3	17.2	20.8	23.5	25.1	28.8	30.8	33.6		
	7	21.8	26.4	29.8	31.9	36.5	39.0	42.5	21.6	26.2	29.5	31.6	36.2	38.7	42.2	21.2	25.6	28.9	30.9	35.4	37.9	41.3		
Valve Type	Nominal Rating	Evaporator Temperature																						
		-18 °C							-29 °C							-40 °C								
		Pressure Drop Across Valve (kPa)							Pressure Drop Across Valve (kPa)							Pressure Drop Across Valve (kPa)								
		500	800	1000	1100	1400	1700	2000	500	800	1000	1100	1400	1700	2000	500	800	1000	1100	1400	1700	2000		
BA/BN	1	2.7	3.2	3.6	3.9	4.4	4.8	5.2	2.6	3.1	3.5	3.8	4.3	4.6	5.0	2.5	3.0	3.4	3.6	4.2	4.4	4.8		
	1-1/2	4.3	5.2	5.8	6.3	7.2	7.7	8.3	4.1	5.0	5.7	6.1	6.9	7.4	8.1	4.0	4.8	5.5	5.8	6.7	7.2	7.8		
	2	6.0	7.2	8.2	8.7	10.0	10.7	11.6	5.8	7.0	7.9	8.5	9.7	10.4	11.3	5.6	6.8	7.6	8.2	9.3	10.0	10.9		
	3	7.6	9.2	10.4	11.1	12.7	13.6	14.8	7.4	8.9	10.1	10.8	12.3	13.2	14.4	7.1	8.6	9.7	10.4	11.9	12.7	13.9		
	3-1/2	9.8	11.9	13.4	14.3	16.4	17.6	19.1	9.5	11.5	13.0	13.9	15.9	17.0	18.5	9.2	11.1	12.5	13.4	15.4	16.4	17.9		
	4-1/2	13.7	16.6	18.7	20.0	22.9	24.5	26.7	13.3	16.1	18.1	19.4	22.2	23.7	25.9	12.8	15.5	17.5	18.7	21.4	22.9	24.9		
	6	16.8	20.3	22.9	24.5	28.0	30.0	32.7	16.2	19.7	22.2	23.7	27.2	29.0	31.7	15.7	19.0	21.4	22.9	26.2	28.0	30.5		
	7	20.6	25.0	28.1	30.1	34.5	36.9	40.2	20.0	24.2	27.3	29.2	33.4	35.7	38.9	19.3	23.3	26.3	28.1	32.2	34.5	37.5		

Note: 1. These ratings assume vapor free liquid enetering the termal expansion valve.
2. Standard capacity is rated at 38°C liquid inlet and 4.4°C evap temperture, with 11 bar pressure drop across TXV.

R-410A Balanced Ported Valves (kWatts) – NXT Series

Valve Type	Nominal Rating Tons	Evaporator Temperature																						
		10 °C							4 °C							-7 °C								
		Pressure Drop Across valve (kPa)							Pressure Drop Across valve (kPa)							Pressure Drop Across valve (kPa)								
		500	750	1000	1100	1450	1700	2000	500	750	1000	1100	1450	1700	2000	500	750	1000	1100	1450	1700	2000		
NXT-Series	1/2	1.4	1.6	1.9	2.0	2.3	2.4	2.6	1.3	1.6	1.8	2.0	2.3	2.4	2.6	1.3	1.6	1.8	1.9	2.2	2.4	2.6		
	1	2.4	2.9	3.3	3.5	4.1	4.3	4.7	2.4	2.9	3.3	3.5	4.0	4.3	4.7	2.4	2.8	3.2	3.4	3.9	4.2	4.6		
	1-1/2	3.6	4.4	5.0	5.3	6.1	6.5	7.1	3.6	4.4	4.9	5.3	6.0	6.4	7.0	3.5	4.3	4.8	5.2	5.9	6.3	6.9		
	2	4.8	5.9	6.6	7.1	8.1	8.7	9.4	4.8	5.8	6.6	7.0	8.0	8.6	9.4	4.7	5.7	6.4	6.9	7.9	8.4	9.2		
	3	7.3	8.8	9.9	10.6	12.2	13.0	14.2	7.2	8.7	9.8	10.5	12.1	12.9	14.1	7.1	8.5	9.6	10.3	11.8	12.6	13.8		
	4	9.7	11.7	13.2	14.2	16.2	17.3	18.9	9.6	11.6	13.1	14.0	16.1	17.2	18.7	9.4	11.4	12.9	13.7	15.7	16.8	18.3		
	5	12.1	14.7	16.6	17.7	20.3	21.7	23.6	12.0	14.6	16.4	17.6	20.1	21.5	23.4	11.8	14.2	16.1	17.2	19.7	21.0	22.9		
	6	14.5	17.6	19.9	21.2	24.3	26.0	28.3	14.4	17.5	19.7	21.1	24.1	25.8	28.1	14.1	17.1	19.3	20.6	23.6	25.2	27.5		
	7	17.0	20.5	23.2	24.8	28.4	30.3	33.1	16.8	20.4	23.0	24.6	28.1	30.1	32.8	16.5	19.9	22.5	24.0	27.5	29.4	32.1		
	8	20.3	24.5	27.8	29.7	34.0	36.4	39.6	20.2	24.4	27.5	29.4	33.7	36.1	39.9	19.7	23.9	27.0	28.8	33.0	35.3	38.5		
	10	25.0	30.3	34.1	36.5	41.8	44.7	48.7	24.8	30.0	33.9	36.2	41.5	44.3	48.3	24.2	29.4	33.1	35.4	40.6	43.4	47.3		
	12	30.6	37.1	41.8	44.7	51.2	54.8	59.7	30.4	36.8	41.5	44.3	50.8	54.3	59.2	29.7	36.0	40.6	43.4	49.7	53.1	57.9		
	15	35.8	43.4	49.0	52.4	60.0	64.1	69.9	35.5	43.0	48.6	51.9	59.5	63.6	69.3	34.8	42.1	47.5	50.8	58.2	62.2	67.8		
Valve Type	Nominal Rating Tons	Evaporator Temperature																						
		-18 °C							-29 °C							-40 °C								
		Pressure Drop Across valve (kPa)							Pressure Drop Across valve (kPa)							Pressure Drop Across valve (kPa)								
		500	750	1000	1100	1450	1700	2000	500	750	1000	1100	1450	1700	2000	500	750	1000	1100	1450	1700	2000		
NXT-Series	1/2	1.3	1.6	1.8	1.9	2.1	2.3	2.5	1.2	1.5	1.7	1.8	2.1	2.2	2.4	1.2	1.5	1.6	1.8	2.0	2.1	2.3		
	1	2.3	2.9	3.1	3.3	3.8	4.1	4.5	2.2	2.7	3.0	3.2	3.7	4.0	4.3	2.1	2.6	2.9	3.1	3.6	3.8	4.2		
	1-1/2	3.4	4.2	4.7	5.0	5.7	6.1	6.7	3.3	4.0	4.5	4.9	5.6	6.0	6.5	3.2	3.9	4.4	4.7	5.4	5.7	6.3		
	2	4.6	5.5	6.3	6.7	7.7	8.2	8.9	4.4	5.4	6.1	6.5	7.4	7.9	8.6	4.3	5.2	5.8	6.3	7.2	7.7	8.3		
	3	6.9	8.3	9.4	10.0	11.5	12.3	13.4	6.7	8.1	9.1	9.7	11.1	11.9	13.0	6.4	7.8	8.8	9.4	10.7	11.5	12.5		
	4	9.2	11.1	12.5	13.4	15.3	16.4	17.9	8.9	10.7	12.1	13.0	14.8	15.9	17.3	8.6	10.4	11.7	12.5	14.3	15.3	16.7		
	5	11.4	13.9	15.6	16.7	19.2	20.5	22.3	11.1	13.4	15.2	16.2	18.6	19.8	21.6	10.7	13.0	14.6	15.6	17.9	19.1	20.9		
	6	13.7	16.6	18.8	20.1	23.0	24.6	26.8	13.3	16.1	18.2	19.4	22.3	23.8	25.9	12.8	15.6	17.5	18.8	21.5	23.0	25.0		
	7	17.0	20.5	23.2	23.4	28.4	30.3	33.1	15.5	18.8	21.2	22.7	26.0	27.8	30.3	15.0	18.1	20.5	21.9	25.1	26.8	29.2		
	8	19.3	23.3	26.2	28.1	32.1	34.4	37.4	18.6	22.5	25.4	27.2	31.1	33.3	36.3	18.0	21.7	24.5	26.2	30.0	32.1	35.0		
	10	23.6	28.6	32.2	34.5	39.5	42.2	46.0	22.9	27.7	31.2	33.4	38.3	40.9	44.6	22.1	26.7	30.1	32.2	36.9	39.5	43.0		
	12	28.9	35.0	39.5	42.2	48.4	51.7	56.4	28.0	33.9	38.3	40.9	46.9	50.1	54.6	27.0	32.7	36.9	39.5	45.2	48.4	52.7		
	15	33.9	41.0	46.3	49.5	56.7	60.6	66.0	32.8	39.7	44.8	47.9	54.9	58.7	64.0	31.7	38.3	43.2	46.2	53.0	56.6	67.8		

Note: 1. These ratings assume vapor free liquid enetering the termal expansion valve.
2. Standard capacity is rated at 38°C liquid inlet and 4.4°C evap temperture, with 11 bar pressure drop across TXV.

Refrigerant Liquid Temperature Correction Factors

	Refrigerant Liquid Temperature °C									
	10	16	21	27	32	38	43	49	54	60
R-410A Correction Factor	1.37	1.30	1.23	1.15	1.08	1.00	0.92	0.84	0.75	0.65

These factors include corrections for liquid refrigerant density and net refrigeration effect, and are based on an average evaporator temperature of 4.4°C with a maximum 14°C Change in Superheat. However, they may be used for other evaporator temperatures.

R-502 Balanced Ported Valves (kWatts)– B, HF, TFE, TRAE and T Series

Valve Type	Nominal Rating	Evaporator Temperature																	
		10°C						0°C						-10°C					
		Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)					
		400	600	700	800	1000	1100	400	600	700	800	1000	1100	400	600	700	800	1000	1100
BA/BN	1/2	0.92	1.13	1.22	1.30	1.46	1.53	0.89	1.08	1.17	1.25	1.40	1.47	0.85	1.04	1.12	1.20	1.34	1.41
BA/BN	3/4	1.73	2.12	2.29	2.45	2.74	2.88	1.70	2.08	2.25	2.40	2.69	2.82	1.63	1.99	2.15	2.30	2.57	2.70
BA/BN	1	2.69	3.30	3.56	3.80	4.25	4.46	2.62	3.21	3.47	3.70	4.14	4.34	2.51	3.08	3.32	3.55	3.97	4.17
BA/BN	1-1/2	3.61	4.42	4.78	5.11	5.71	5.99	3.50	4.29	4.64	4.96	5.54	5.81	3.36	4.12	4.45	4.76	5.32	5.58
BA/BN	2	4.53	5.55	5.99	6.41	7.16	7.51	4.46	5.46	5.90	6.31	7.05	7.40	4.25	5.20	5.62	6.01	6.72	7.04
BA/BN	2-1/4	5.49	6.72	7.26	7.76	8.68	9.10	5.38	6.59	7.12	7.61	8.51	8.92	5.13	6.29	6.79	7.26	8.12	8.51
BA/BN	3	7.12	8.71	9.41	10.06	11.25	11.80	6.97	8.54	9.23	9.86	11.03	11.56	6.66	8.15	8.80	9.41	10.52	11.04
BA/BN	3-1/2	8.99	11.01	11.89	12.72	14.22	14.91	8.81	10.80	11.66	12.47	13.94	14.62	8.43	10.32	11.15	11.92	13.32	13.97
BA/BN	4-1/4	11.22	13.74	14.85	15.87	17.74	18.61	10.97	13.44	14.52	15.52	17.35	18.20	10.48	12.83	13.86	14.82	16.57	17.38
HF/HN	1/4	0.50	0.61	0.66	0.70	0.78	0.82	0.50	0.61	0.66	0.70	0.78	0.82	0.46	0.56	0.61	0.65	0.73	0.76
HF/HN	1/2	0.96	1.17	1.26	1.35	1.51	1.59	0.96	1.17	1.26	1.35	1.51	1.59	0.89	1.08	1.17	1.25	1.40	1.47
HF/HN	3/4	1.73	2.12	2.29	2.45	2.74	2.88	1.70	2.08	2.25	2.40	2.69	2.82	1.63	1.99	2.15	2.30	2.57	2.70
HF/HN	1	2.62	3.21	3.47	3.70	4.14	4.34	2.58	3.16	3.42	3.65	4.09	4.29	2.48	3.03	3.28	3.50	3.92	4.11
HF/HN	1-1/2	3.54	4.34	4.68	5.01	5.60	5.87	3.47	4.25	4.59	4.91	5.49	5.75	3.29	4.03	4.36	4.66	5.21	5.46
HF/HN	1-3/4	4.53	5.55	5.99	6.41	7.16	7.51	4.46	5.46	5.90	6.31	7.05	7.40	4.25	5.20	5.62	6.01	6.72	7.04
HF/HN	2-1/2	5.98	7.33	7.91	8.46	9.46	9.92	5.88	7.20	7.77	8.31	9.29	9.74	5.59	6.85	7.40	7.91	8.84	9.28
HF/HN	4	10.66	13.05	14.10	15.07	16.85	17.67	10.44	12.79	13.81	14.77	16.51	17.32	9.95	12.18	13.16	14.07	15.73	16.50
HF/HN	6	14.83	18.17	19.62	20.98	23.45	24.60	14.51	17.78	19.20	20.53	22.95	24.07	13.88	17.00	18.36	19.62	21.94	23.01
HF/HN	7-1/2	18.76	22.98	24.82	26.53	29.67	31.11	18.37	22.50	24.30	25.98	29.05	30.47	17.56	21.50	23.23	24.83	27.76	29.12
HF/HN	11	27.86	34.12	36.86	39.40	44.05	46.20	27.26	33.38	36.06	38.55	43.10	45.20	26.02	31.87	34.42	36.80	41.14	43.15
HF/HN	14	36.67	44.92	48.52	51.87	57.99	60.82	35.90	43.96	47.49	50.76	56.76	59.53	34.27	41.97	45.33	48.46	54.18	56.83
TFE	6	14.55	17.82	19.25	20.58	23.00	24.13	14.27	17.47	18.87	20.18	22.56	23.66	13.59	16.65	17.98	19.22	21.49	22.54
TFE	8	19.93	24.41	26.37	28.19	31.51	33.05	19.51	23.89	25.80	27.58	30.84	32.35	18.62	22.81	24.63	26.33	29.44	30.88
TFE	10	24.74	30.31	32.73	34.99	39.12	41.03	24.25	29.70	32.08	34.29	38.34	40.21	23.12	28.31	30.58	32.69	36.55	38.33
TFE	15	37.81	46.30	50.01	53.47	59.78	62.70	36.99	45.31	48.94	52.32	58.49	61.35	35.29	43.23	46.69	49.91	55.80	58.53
TRAE+	9	21.42	26.23	28.33	30.29	33.86	35.52	20.99	25.71	27.77	29.69	33.19	34.81	20.04	24.54	26.51	28.34	31.68	33.23
TRAE+	13	31.22	38.24	41.30	44.16	49.37	51.78	30.59	37.46	40.46	43.25	48.36	50.72	29.17	35.73	38.59	41.25	46.12	48.37
TRAE+	14	34.87	42.71	46.13	49.31	55.13	57.82	34.13	41.80	45.14	48.26	53.96	56.59	32.57	39.89	43.08	46.06	51.49	54.01
TRAE+	22	52.85	64.73	69.92	74.74	83.57	87.65	51.72	63.34	68.42	73.14	81.78	85.77	49.38	60.48	65.33	69.84	78.08	81.89
TRAE+	30	72.64	88.97	96.09	102.73	114.86	120.46	71.12	87.10	94.08	100.58	112.45	117.94	67.86	83.11	89.77	95.97	107.30	112.54
TRAE	40	98.06	120.10	129.72	138.67	155.04	162.61	96.00	117.58	127.00	135.77	151.80	159.21	91.62	112.21	121.20	129.56	144.86	151.93
TRAE	45	106.98	131.02	141.52	151.29	169.15	177.40	104.71	128.25	138.52	148.09	165.57	173.65	99.93	122.39	132.20	141.33	158.01	165.72
TRAE	50	127.30	155.91	168.40	180.03	201.28	211.10	124.64	152.66	164.89	176.27	197.08	206.70	124.64	152.66	164.89	176.27	197.08	206.70
TJR	11	26.69	32.69	35.31	37.75	42.20	44.26	26.13	32.00	34.56	36.95	41.31	43.32	11.54	14.13	15.27	16.32	18.25	19.14
TJR	13	31.97	39.15	42.29	45.21	50.54	53.01	31.29	38.33	41.40	44.26	49.48	51.89	13.81	16.91	18.26	19.52	21.83	22.89
TER	16	39.97	48.95	52.87	56.52	63.19	66.28	39.12	47.91	51.75	55.32	61.85	64.87	17.28	21.16	22.85	24.43	27.31	28.65
TER	19	47.22	57.84	62.47	66.78	74.67	78.31	46.23	56.62	61.16	65.38	73.10	76.67	20.39	24.97	26.97	28.84	32.24	33.81
TER	25	63.58	77.87	84.11	89.91	100.53	105.43	62.23	76.22	82.33	88.01	98.40	103.20	27.47	33.64	36.34	38.85	43.43	45.55
TER	31	81.74	100.11	108.13	115.60	129.24	135.55	80.00	97.98	105.84	113.14	126.50	132.67	35.29	43.23	46.69	49.91	55.80	58.53
TIR	45	99.90	122.35	132.15	141.28	157.95	165.66	97.77	119.75	129.34	138.27	154.60	162.14	43.15	52.85	57.09	61.03	68.23	71.56
THR	55	127.12	155.69	168.17	179.78	201.00	210.81	124.43	152.40	164.61	175.97	196.74	206.35	54.94	67.29	72.68	77.70	86.87	91.11
THR	68	154.38	189.08	204.22	218.33	244.10	256.01	151.12	185.09	199.92	213.72	238.95	250.61	66.69	81.68	88.23	94.32	105.45	110.60
TMR	60	181.60	222.42	240.24	256.82	287.14	301.15	177.78	217.73	235.18	251.42	281.09	294.81	78.48	96.12	103.82	110.99	124.09	130.15

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F. However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-502 Balanced Ported Valves (kWatts)– B, HF, TFE, TRAE and T Series (cont.)

Valve Type	Nominal Rating	Evaporator Temperature																	
		-20°C						-30°C						-40°C					
		Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)						Pressure Drop Across Valve (kPa)					
		400	600	700	800	1000	1100	600	700	800	1000	1100	1200	600	700	800	1000	1100	1200
BA/BN	1/2	0.78	0.95	1.03	1.10	1.23	1.29	0.60	0.65	0.69	0.78	0.81	0.85	0.39	0.42	0.45	0.50	0.53	0.55
BA/BN	3/4	1.49	1.82	1.97	2.10	2.35	2.47	1.17	1.26	1.35	1.51	1.58	1.65	0.74	0.80	0.86	0.96	1.01	1.05
BA/BN	1	2.30	2.82	3.04	3.25	3.64	3.82	1.84	1.99	2.13	2.38	2.49	2.60	1.17	1.26	1.35	1.51	1.58	1.65
BA/BN	1-1/2	3.08	3.77	4.07	4.36	4.87	5.11	2.44	2.64	2.82	3.15	3.31	3.45	1.56	1.68	1.80	2.01	2.11	2.20
BA/BN	2	3.89	4.77	5.15	5.51	6.16	6.46	3.08	3.33	3.56	3.98	4.17	4.36	1.95	2.10	2.25	2.51	2.64	2.75
BA/BN	2-1/4	4.74	5.81	6.28	6.71	7.50	7.87	3.72	4.01	4.29	4.80	5.03	5.26	2.37	2.56	2.74	3.06	3.21	3.35
BA/BN	3	6.12	7.50	8.10	8.66	9.68	10.16	4.81	5.20	5.56	6.22	6.52	6.81	3.08	3.33	3.56	3.98	4.17	4.36
BA/BN	3-1/2	7.75	9.49	10.26	10.96	12.26	12.86	6.12	6.61	7.07	7.91	8.29	8.66	3.89	4.21	4.50	5.03	5.27	5.51
BA/BN	4-1/4	9.63	11.79	12.74	13.62	15.22	15.97	7.61	8.22	8.79	9.83	10.31	10.76	4.85	5.24	5.60	6.26	6.57	6.86
HF/HN	1/4	0.42	0.52	0.56	0.60	0.67	0.70	0.35	0.38	0.41	0.46	0.48	0.50	0.21	0.23	0.25	0.27	0.29	0.30
HF/HN	1/2	0.81	1.00	1.08	1.15	1.29	1.35	0.64	0.69	0.74	0.82	0.86	0.90	0.42	0.46	0.49	0.55	0.58	0.60
HF/HN	3/4	1.49	1.82	1.97	2.10	2.35	2.47	1.17	1.26	1.35	1.51	1.58	1.65	0.74	0.80	0.86	0.96	1.01	1.05
HF/HN	1	2.27	2.77	3.00	3.20	3.58	3.76	1.77	1.91	2.04	2.29	2.40	2.50	1.13	1.22	1.31	1.46	1.53	1.60
HF/HN	1-1/2	3.04	3.73	4.03	4.31	4.81	5.05	2.41	2.60	2.78	3.11	3.26	3.40	1.52	1.64	1.76	1.97	2.06	2.15
HF/HN	1-3/4	3.89	4.77	5.15	5.51	6.16	6.46	3.08	3.33	3.56	3.98	4.17	4.36	1.95	2.10	2.25	2.51	2.64	2.75
HF/HN	2-1/2	5.17	6.33	6.84	7.31	8.17	8.57	4.07	4.40	4.70	5.26	5.51	5.76	2.58	2.79	2.98	3.34	3.50	3.65
HF/HN	4	9.17	11.23	12.13	12.97	14.50	15.20	5.84	6.31	6.74	7.54	7.91	8.26	4.60	4.97	5.31	5.94	6.23	6.51
HF/HN	6	12.74	15.61	16.86	18.02	20.15	21.13	10.05	10.86	11.61	12.98	13.61	14.22	6.41	6.92	7.40	8.27	8.68	9.06
HF/HN	7-1/2	16.14	19.77	21.35	22.83	25.52	26.77	12.74	13.77	14.72	16.45	17.26	18.02	8.11	8.76	9.36	10.47	10.98	11.46
HF/HN	11	23.93	29.31	31.66	33.84	37.84	39.68	18.90	20.42	21.83	24.40	25.60	26.73	12.04	13.00	13.90	15.54	16.30	17.02
HF/HN	14	31.51	38.59	41.68	44.56	49.82	52.25	24.89	26.88	28.74	32.13	33.70	35.19	15.86	17.13	18.31	20.47	21.47	22.43
TFE	6	12.53	15.35	16.58	17.72	19.81	20.78	9.88	10.67	11.40	12.75	13.37	13.97	6.30	6.81	7.28	8.13	8.53	8.91
TFE	8	17.13	20.98	22.67	24.23	27.09	28.41	13.52	14.61	15.61	17.46	18.31	19.12	8.60	9.29	9.93	11.11	11.65	12.17
TFE	10	21.28	26.06	28.14	30.09	33.64	35.28	16.82	18.16	19.42	21.71	22.77	23.78	10.69	11.55	12.34	13.80	14.48	15.12
TFE	15	32.50	39.80	42.99	45.96	51.38	53.89	25.67	27.72	29.64	33.13	34.75	36.30	16.32	17.63	18.84	21.07	22.10	23.08
TRAE+	9	18.41	22.55	24.35	26.03	29.11	30.53	14.55	15.72	16.80	18.78	19.70	20.58	9.27	10.02	10.71	11.97	12.56	13.12
TRAE+	13	26.83	32.86	35.50	37.95	42.43	44.50	21.20	22.90	24.48	27.38	28.71	29.99	13.49	14.57	15.57	17.41	18.26	19.07
TRAE+	14	29.98	36.72	39.66	42.40	47.41	49.72	23.68	25.58	27.35	30.57	32.07	33.49	15.08	16.29	17.41	19.47	20.42	21.33
TRAE+	22	45.42	55.63	60.08	64.23	71.81	75.32	35.86	38.73	41.41	46.30	48.55	50.71	22.83	24.66	26.37	29.48	30.92	32.29
TRAE+	30	62.45	76.48	82.61	88.31	98.74	103.55	49.31	53.26	56.94	63.66	66.77	69.74	31.40	33.92	36.26	40.54	42.52	44.41
TRAE	40	84.29	103.23	111.50	119.20	133.27	139.77	66.55	71.88	76.85	85.92	90.11	94.12	42.37	45.77	48.93	54.70	57.37	59.93
TRAE	45	91.93	112.60	121.62	130.01	145.36	152.45	72.61	78.42	83.84	93.73	98.31	102.68	46.23	49.94	53.38	59.69	62.60	65.38
TRAE	50	109.42	134.01	144.75	154.75	173.01	181.45	86.41	93.33	99.78	111.56	117.00	122.20	55.01	59.42	63.52	71.02	74.49	77.80
TJR	11	22.94	28.09	30.35	32.44	36.27	38.04	18.12	19.58	20.93	23.40	24.54	25.63	11.54	12.47	13.33	14.90	15.63	16.32
TJR	13	27.47	33.64	36.34	38.85	43.43	45.55	21.70	23.44	25.06	28.01	29.38	30.69	13.81	14.91	15.94	17.82	18.69	19.52
TER	16	34.34	42.06	45.42	48.56	54.29	56.94	27.12	29.29	31.31	35.01	36.72	38.35	17.28	18.66	19.95	22.30	23.39	24.43
TER	19	40.60	49.73	53.71	57.42	64.20	67.33	32.04	34.60	36.99	41.36	43.38	45.31	20.39	22.02	23.54	26.32	27.61	28.84
TER	25	54.62	66.90	72.26	77.25	86.37	90.58	43.15	46.61	49.83	55.71	58.43	61.03	27.47	29.67	31.72	35.46	37.20	38.85
TER	31	70.23	86.02	92.91	99.33	111.05	116.47	55.47	59.92	64.05	71.61	75.11	78.45	35.29	38.12	40.75	45.56	47.79	49.91
TIR	45	85.85	105.14	113.56	121.40	135.73	142.36	67.79	73.22	78.28	87.52	91.79	95.87	43.15	46.61	49.83	55.71	58.43	61.03
THR	55	109.28	133.84	144.56	154.54	172.79	181.22	86.27	93.18	99.62	111.37	116.81	122.00	54.94	59.34	63.44	70.93	74.39	77.70
THR	68	132.68	162.50	175.52	187.64	209.78	220.02	104.78	113.18	120.99	135.28	141.88	148.19	66.69	72.04	77.01	86.10	90.30	94.32
TMR	60	156.11	191.20	206.52	220.78	246.84	258.89	123.26	133.14	142.33	159.13	166.90	174.32	78.48	84.77	90.62	101.32	106.26	110.99

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F. However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.

R-410A Balanced Ported Valves (kWatts) - TFE Series

Valve Type	Nominal Rating	Evaporator Temperature																				
		10 °C							4 °C							-7 °C						
		Pressure Drop Across Valve (kPa)							Pressure Drop Across Valve (kPa)							Pressure Drop Across Valve (kPa)						
		500	800	1000	1100	1400	1700	2000	500	800	1000	1100	1400	1700	2000	500	800	1000	1100	1400	1700	2000
TFES	42	28.6	34.6	39.1	41.8	47.9	51.2	55.8	28.4	34.3	38.7	41.4	47.5	50.7	55.3	27.7	33.6	37.9	40.5	46.4	49.6	54.1
	56	43.4	52.5	59.3	63.4	72.6	77.6	84.6	43.0	52.1	58.8	62.8	72.0	76.9	83.9	42.1	51.0	57.5	61.5	70.4	75.3	82.1
	70	46.8	56.6	63.9	68.3	78.3	83.7	91.2	46.4	56.2	63.4	67.7	77.6	83.0	90.4	45.4	55.0	62.0	66.3	75.9	81.2	88.5
Valve Type	Nominal Rating	Evaporator Temperature																				
		-18 °C							-29 °C							-40 °C						
		Pressure Drop Across Valve (kPa)							Pressure Drop Across Valve (kPa)							Pressure Drop Across Valve (kPa)						
		500	800	1000	1100	1400	1700	2000	500	800	1000	1100	1400	1700	2000	500	800	1000	1100	1400	1700	2000
TFES	42	27.0	32.7	36.9	39.5	45.2	48.3	52.7	26.2	31.7	35.8	38.2	43.8	46.8	51.0	25.3	30.6	34.5	36.9	42.3	45.2	49.2
	56	41.0	49.6	56.0	59.9	68.6	73.3	79.9	39.7	48.1	54.2	58.0	66.4	71.0	77.4	38.3	46.4	52.3	56.0	64.1	68.5	74.7
	70	44.2	53.5	60.4	64.5	73.9	79.0	86.1	42.8	51.8	58.5	62.5	71.6	76.6	83.5	41.3	50.0	56.4	60.3	69.1	73.9	80.5

Note: 1. These ratings assume vapor free liquid entering the thermal expansion valve.
2. Standard capacity is rated at 38 °C liquid inlet and 4.4 °C evap temperature; with 11 bar pressure drop across TXV per ARI 750-2001.

Refrigerant Liquid Temperature Valve Capacity Multiplier Correction Factors

	Refrigerant Liquid Temperature °F														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
R-12 Correction Factor	1.60	1.54	1.48	1.42	1.36	1.30	1.24	1.18	1.12	1.06	1.00	.94	.88	.82	.75
R-134a Correction Factor	1.70	1.63	1.56	1.49	1.42	1.36	1.29	1.21	1.14	1.07	1.00	.93	.85	.78	.71
R-22 Correction Factor	1.56	1.51	1.45	1.40	1.34	1.29	1.23	1.17	1.12	1.06	1.00	.94	.88	.82	.76
R-404A/R-507 Correction Factor	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10	1.00	.90	.80	.70	.50
R-450A/R-513A Correction Factor	1.73	1.65	1.58	1.51	1.44	1.36	1.29	1.22	1.15	1.07	1.00	0.93	0.85	0.78	0.70
R-448A/R-449A Correction Factor	1.71	1.64	1.57	1.50	1.43	1.36	1.29	1.22	1.15	1.07	1.00	0.92	0.85	0.77	0.69

These factors include corrections for liquid refrigerant density and net refrigerating effect and are based on an average evaporator temperature of 0°F.
However, they may be used for any evaporator temperature from -40°F to +40°F since the variation in the actual factors across this range is insignificant.