

## Cooling Capacities (cont)

### 48/50 030 (30 TON) STANDARD CAPACITY COIL — SUBCOOLING MODE

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm																			
		6,000					7,500					9,000					10,500				
		Evaporator Air — Ewb (F)																			
		75	72	67	62	57	75	72	67	62	57	75	72	67	62	57	75	72	67	62	57
75	TC SHC kW BF	341	322	293	266	243	361	340	309	282	260	375	353	321	293	273	385	363	330	301	283
		97	118	151	185	218	104	128	168	209	244	112	138	184	231	266	118	149	200	252	283
		23.7	23.2	22.4	21.8	21.3	24.3	23.7	22.9	22.2	21.6	24.8	24.2	23.2	22.5	21.9	25.1	24.5	23.5	22.7	22.2
		0.00	0.03	0.07	0.08	0.09	0.03	0.07	0.09	0.10	0.15	0.05	0.10	0.12	0.12	0.21	0.10	0.13	0.14	0.15	0.26
85	TC SHC kW BF	320	301	274	249	227	335	316	288	262	244	346	327	298	271	256	355	335	305	279	264
		78	100	135	170	205	83	108	150	192	229	89	117	164	213	249	94	125	179	232	264
		25.8	25.3	24.5	24.0	23.5	26.4	25.8	25.0	24.3	23.8	26.8	26.2	25.3	24.6	24.1	27.1	26.5	25.6	24.8	24.3
		0.00	0.03	0.07	0.08	0.10	0.03	0.07	0.09	0.10	0.16	0.06	0.10	0.12	0.12	0.22	0.10	0.13	0.14	0.15	0.28
95	TC SHC kW BF	297	280	254	231	212	310	293	266	242	227	319	301	274	250	238	326	308	280	257	245
		60	82	119	155	193	62	88	131	175	213	66	95	144	195	231	70	102	158	213	245
		28.2	27.7	27.0	26.5	26.0	28.7	28.1	27.4	26.7	26.3	29.1	28.5	27.6	27.0	26.6	29.4	28.7	27.9	27.1	26.8
		0.00	0.04	0.07	0.08	0.10	0.03	0.07	0.09	0.10	0.17	0.06	0.10	0.12	0.12	0.23	0.10	0.13	0.14	0.15	0.29
105	TC SHC kW BF	274	258	234	212	198	284	268	244	222	211	291	275	250	229	220	296	280	254	234	225
		42	65	102	140	179	42	68	113	158	197	43	73	125	177	214	46	80	137	194	225
		30.9	30.4	29.8	29.2	28.8	31.3	30.8	30.1	29.5	29.1	31.6	31.0	30.3	29.7	29.3	31.8	31.3	30.4	29.8	29.5
		0.00	0.04	0.07	0.08	0.13	0.04	0.07	0.09	0.10	0.18	0.06	0.10	0.12	0.13	0.24	0.10	0.13	0.14	0.16	0.30
115	TC SHC kW BF	250	236	214	194	183	257	243	221	201	194	262	247	225	207	201	266	251	228	213	205
		23	47	86	125	164	21	49	95	142	181	20	52	105	159	196	21	56	116	176	205
		33.9	33.4	32.8	32.3	32.1	34.2	33.7	33.0	32.5	32.2	34.4	33.9	33.2	32.7	32.4	34.6	34.0	33.3	32.8	32.6
		0.01	0.04	0.07	0.08	0.14	0.04	0.08	0.10	0.10	0.20	0.07	0.11	0.12	0.13	0.25	0.10	0.13	0.14	0.17	0.32

### 48/50 030 (30 TON) STANDARD CAPACITY COIL — SUBCOOLING MODE (cont)

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm														
		12,000					13,500					15,000				
		Evaporator Air — Ewb (F)														
		75	72	67	62	57	75	72	67	62	57	75	72	67	62	57
75	TC SHC kW BF	395	372	337	308	294	401	378	343	314	304	309	411	385	348	319
		127	159	216	271	294	132	169	231	287	304	309	442	479	546	599
		25.5	24.8	23.8	22.9	22.5	25.7	25.0	24.0	23.1	22.8	22.9	26.1	25.2	24.1	23.2
		0.12	0.15	0.15	0.18	0.33	0.15	0.16	0.17	0.21	0.39	0.40	0.17	0.18	0.19	0.25
85	TC SHC kW BF	363	342	311	274	285	368	348	316	290	282	374	352	321	296	290
		100	134	193	274	255	105	143	208	263	282	112	152	222	276	290
		27.4	26.7	25.8	24.6	24.9	27.6	27.0	26.0	25.1	24.9	27.9	27.1	26.1	25.3	25.1
		0.13	0.15	0.15	0.34	0.19	0.15	0.17	0.17	0.22	0.40	0.17	0.18	0.19	0.26	0.45
95	TC SHC kW BF	331	313	285	262	253	336	318	289	268	261	340	321	292	272	267
		74	110	171	230	253	79	119	185	241	261	84	126	198	253	267
		29.6	29.0	28.0	27.3	27.0	29.8	29.2	28.2	27.5	27.2	30.0	29.3	28.3	27.6	27.5
		0.13	0.15	0.15	0.19	0.35	0.15	0.17	0.17	0.23	0.41	0.17	0.18	0.19	0.27	0.45
105	TC SHC kW BF	301	284	258	241	233	304	287	261	245	239	307	289	263	249	244
		49	86	149	208	233	53	93	161	219	239	57	100	174	230	244
		32.0	31.4	30.6	30.0	29.7	32.2	31.6	30.7	30.1	29.9	32.4	31.7	30.8	30.2	30.1
		0.13	0.15	0.16	0.21	0.37	0.15	0.17	0.17	0.24	0.42	0.17	0.18	0.19	0.28	0.46
115	TC SHC kW BF	268	253	231	218	211	271	255	233	222	216	273	257	234	224	221
		24	62	127	186	211	26	68	139	197	216	29	74	150	207	221
		34.7	34.1	33.4	32.9	32.7	34.8	34.3	33.5	33.0	32.9	34.9	34.3	33.6	33.1	33.0
		0.13	0.15	0.16	0.22	0.38	0.15	0.17	0.17	0.26	0.43	0.17	0.19	0.19	0.29	0.48

#### LEGEND

48/50 VAV units only.

**BF** — Bypass Factor      **kW** — Compressor Motor Power Input  
**Edb** — Entering Dry Bulb      **SHC** — Sensible Heat Cap. (1000 Btu/h)  
**Ewb** — Entering Wet Bulb      **TC** — Total Cap. (1000 Btu/h) Gross

#### NOTES:

- The SHC is based on 80°F edb temperature of air entering evaporator coil. For edb temperatures other than 80°F, adjust SHC by multiplying the correction factor and the cfm and then adding or subtracting the value from the SHC.

- Interpolation is permissible.
- Correction Factor =  $1.10 \times (1 - BF) \times (edb - 80)$ .
- Cooling capacities are gross and do not include deduction for indoor fan motor heat.
- SHC values provided are in subcooling mode with the gas bypass valve closed and reflect the maximum SHC in subcooling mode. The P Series innovative modulating valve system can reduce SHC as needed to meet the supply air set point requirement with minimal change in latent capacity. This will provide variable SHC to meet the space load.

## Cooling Capacities (cont)

### 48/50 030 (30 TON) HIGH-CAPACITY COIL — SUBCOOL MODE

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm																			
		6,000					7,500					9,000					10,500				
		Evaporator Air — Ewb (F)																			
		75	72	67	62	57	75	72	67	62	57	75	72	67	62	57	75	72	67	62	57
75	TC	353	332	300	272	249	374	351	318	288	268	389	365	330	300	282	398	377	340	309	292
	SHC	98	119	153	188	225	106	131	171	214	252	114	142	190	239	275	121	155	208	262	292
	kW	24.1	23.5	22.6	22.0	21.4	24.8	24.1	23.2	22.4	21.8	25.3	24.6	23.6	22.7	22.2	25.6	25.0	23.9	23.0	22.5
	BF	0.00	0.01	0.03	0.03	0.05	0.01	0.03	0.04	0.05	0.11	0.02	0.04	0.05	0.06	0.16	0.04	0.06	0.07	0.08	0.22
85	TC	329	310	280	254	233	346	326	294	267	251	359	337	305	277	263	369	346	313	285	272
	SHC	78	100	136	172	211	83	109	151	196	236	90	119	168	219	257	97	129	185	241	272
	kW	26.2	25.6	24.8	24.2	23.7	26.8	26.2	25.2	24.5	24.0	27.3	26.6	25.6	24.8	24.3	27.6	26.9	25.9	25.0	24.6
	BF	0.00	0.01	0.03	0.03	0.05	0.01	0.03	0.04	0.05	0.12	0.02	0.04	0.05	0.06	0.17	0.04	0.06	0.07	0.09	0.23
95	TC	306	287	259	234	219	319	300	271	246	234	329	309	279	254	244	337	317	286	261	251
	SHC	59	81	118	155	198	61	87	131	177	219	65	95	146	199	238	70	104	162	220	251
	kW	28.6	28.0	27.3	26.7	26.3	29.1	28.5	27.6	27.0	26.6	29.5	28.8	27.9	27.2	26.8	29.8	29.1	28.1	27.4	27.1
	BF	0.00	0.01	0.03	0.03	0.07	0.01	0.03	0.04	0.05	0.13	0.02	0.04	0.05	0.07	0.18	0.04	0.06	0.07	0.09	0.25
105	TC	281	264	238	215	204	291	273	247	224	216	299	280	253	231	225	305	286	257	239	229
	SHC	39	62	101	140	183	38	65	112	160	202	40	71	124	180	219	44	79	138	200	229
	kW	31.2	30.7	30.1	29.5	29.2	31.7	31.1	30.3	29.7	29.4	32.0	31.4	30.5	29.9	29.6	32.3	31.6	30.7	30.1	29.8
	BF	0.00	0.01	0.03	0.03	0.09	0.01	0.03	0.04	0.05	0.14	0.03	0.05	0.06	0.07	0.19	0.04	0.06	0.07	0.11	0.26
115	TC	256	240	216	195	188	263	246	222	202	198	267	251	226	208	205	271	254	229	216	207
	SHC	19	43	84	124	168	15	44	92	142	185	15	47	103	162	200	17	53	115	177	207
	kW	34.2	33.8	33.2	32.9	32.8	34.5	34.0	33.3	32.9	32.7	34.7	34.2	33.4	32.9	32.8	34.9	34.3	33.6	33.1	32.9
	BF	0.00	0.02	0.03	0.03	0.10	0.01	0.03	0.04	0.05	0.16	0.03	0.05	0.06	0.08	0.21	0.04	0.06	0.07	0.13	0.28

### 48/50 030 (30 TON) HIGH-CAPACITY COIL — SUBCOOL MODE (cont)

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm														
		12,000					13,500					15,000				
		Evaporator Air — Ewb (F)														
		75	72	67	62	57	75	72	67	62	57	75	72	67	62	57
75	TC	396	386	348	316	305	405	388	355	324	316	409	401	361	331	326
	SHC	123	167	226	282	305	130	174	245	298	316	132	192	263	314	326
	kW	25.5	25.3	24.2	23.2	22.9	25.6	25.4	24.4	23.4	23.2	25.8	25.8	24.6	23.7	23.5
	BF	0.06	0.07	0.08	0.12	0.30	0.07	0.09	0.09	0.16	0.36	0.09	0.10	0.11	0.19	0.41
85	TC	375	354	319	293	282	383	359	325	300	292	389	365	329	306	300
	SHC	102	140	202	258	282	111	151	219	273	292	114	162	235	289	300
	kW	27.9	27.2	26.1	25.2	24.9	28.2	27.4	26.3	25.5	25.2	28.4	27.6	26.5	25.7	25.5
	BF	0.06	0.07	0.08	0.13	0.30	0.07	0.09	0.09	0.17	0.36	0.08	0.10	0.11	0.20	0.41
95	TC	343	322	291	269	260	348	327	295	275	268	352	331	298	279	275
	SHC	76	114	177	235	260	82	123	193	249	268	88	133	208	263	275
	kW	30.1	29.4	28.3	27.6	27.3	30.3	29.6	28.5	27.8	27.6	30.5	29.7	28.6	27.9	27.8
	BF	0.06	0.07	0.08	0.14	0.31	0.08	0.09	0.10	0.18	0.37	0.09	0.10	0.11	0.21	0.42
105	TC	310	290	261	245	237	313	293	264	250	243	317	297	267	253	249
	SHC	48	87	153	212	237	53	95	167	225	243	59	105	181	238	249
	kW	32.5	31.8	30.8	30.2	30.0	32.7	32.0	31.0	30.4	30.2	32.8	32.1	31.1	30.5	30.4
	BF	0.06	0.07	0.08	0.16	0.33	0.08	0.09	0.10	0.19	0.38	0.09	0.10	0.11	0.22	0.43
115	TC	275	257	231	221	213	277	259	234	224	218	279	261	235	227	223
	SHC	20	59	129	189	213	23	67	142	201	218	28	75	156	212	223
	kW	35.1	34.5	33.7	33.2	33.0	35.2	34.6	33.7	33.3	33.2	35.4	34.7	33.8	33.4	33.3
	BF	0.06	0.08	0.08	0.17	0.34	0.08	0.09	0.10	0.21	0.40	0.09	0.10	0.12	0.24	0.44

#### LEGEND

48/50 VAV units only.

**BF** — Bypass Factor      **kW** — Compressor Motor Power Input  
**Edb** — Entering Dry Bulb      **SHC** — Sensible Heat Cap. (1000 Btu/h)  
**Ewb** — Entering Wet Bulb      **TC** — Total Cap. (1000 Btu/h) Gross

#### NOTES:

- The SHC is based on 80°F edb temperature of air entering evaporator coil. For edb temperatures other than 80°F, adjust SHC by multiplying the correction factor and the cfm and then adding or subtracting the value from the SHC.

- Interpolation is permissible.
- Correction Factor =  $1.10 \times (1 - BF) \times (edb - 80)$ .
- Cooling capacities are gross and do not include deduction for indoor fan motor heat.
- SHC values provided are in subcooling mode with the gas bypass valve closed and reflect the maximum SHC in subcooling mode. The P Series innovative modulating valve system can reduce SHC as needed to meet the supply air set point requirement with minimal change in latent capacity. This will provide variable SHC to meet the space load.

## Cooling Capacities (cont)

### 48/50 035 (35 TON) STANDARD CAPACITY COIL — SUBCOOL MODE

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm																			
		7,000					8,750					9,625					10,500				
		Evaporator Air — Ewb (F)																			
		75	72	67	62	57	75	72	67	62	57	75	72	67	62	57	75	72	67	62	57
75	TC	388	364	328	297	270	410	385	346	313	290	413	393	354	319	297	419	401	360	325	304
	SHC	112	134	172	211	249	123	149	194	241	281	124	157	206	255	294	127	165	217	270	304
	kW	26.3	25.6	24.5	23.7	23.0	27.0	26.2	25.1	24.2	23.5	27.2	26.5	25.3	24.3	23.7	27.3	26.8	25.6	24.5	23.9
	BF	0.00	0.01	0.04	0.04	0.05	0.01	0.04	0.05	0.06	0.12	0.02	0.05	0.06	0.07	0.15	0.03	0.06	0.07	0.08	0.19
85	TC	360	337	304	275	251	378	355	319	289	270	386	362	325	294	276	392	368	330	299	282
	SHC	88	112	151	192	233	97	125	171	220	261	102	131	181	234	273	106	138	192	247	282
	kW	28.4	27.7	26.7	25.9	25.3	29.1	28.3	27.2	26.3	25.7	29.4	28.6	27.4	26.5	25.9	29.6	28.8	27.6	26.6	26.1
	BF	0.00	0.02	0.04	0.04	0.06	0.01	0.04	0.05	0.06	0.13	0.02	0.05	0.06	0.07	0.16	0.04	0.06	0.07	0.08	0.20
95	TC	331	311	280	253	235	346	324	292	265	250	352	330	297	269	255	357	335	302	273	259
	SHC	65	89	130	173	218	71	99	148	199	242	74	105	157	212	253	78	111	167	224	259
	kW	30.8	30.1	29.1	28.4	27.9	31.4	30.7	29.6	28.8	28.3	31.7	30.9	29.8	28.9	28.4	31.9	31.1	30.0	29.1	28.6
	BF	0.00	0.02	0.04	0.04	0.08	0.02	0.04	0.05	0.06	0.14	0.02	0.05	0.06	0.07	0.17	0.04	0.06	0.07	0.08	0.22
105	TC	303	284	256	230	217	314	294	265	240	229	318	298	269	244	225	322	301	272	247	236
	SHC	42	67	110	154	200	44	74	125	178	222	47	78	133	190	223	49	83	142	202	236
	kW	33.5	32.8	32.0	31.3	30.9	34.0	33.3	32.3	31.6	31.2	34.2	33.5	32.5	31.7	31.2	34.4	33.7	32.6	31.8	31.5
	BF	0.00	0.02	0.04	0.04	0.09	0.02	0.04	0.05	0.06	0.16	0.03	0.05	0.06	0.07	0.19	0.04	0.06	0.07	0.08	0.23
115	TC	274	256	230	207	188	281	263	237	216	198	284	266	239	207	199	287	269	237	210	200
	SHC	18	45	90	135	172	18	49	103	153	192	19	52	110	160	199	20	56	112	169	200
	kW	36.5	35.9	35.2	34.6	34.0	36.9	36.3	35.4	34.8	34.3	37.1	36.4	35.5	34.7	34.4	37.2	36.5	35.5	34.8	34.5
	BF	0.00	0.02	0.04	0.04	0.11	0.02	0.04	0.05	0.06	0.17	0.03	0.05	0.06	0.08	0.20	0.04	0.06	0.07	0.09	0.25

### 48/50 035 (35 TON) STANDARD CAPACITY COIL — SUBCOOL MODE (cont)

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm														
		12,225					14,000					15,000				
		Evaporator Air — Ewb (F)														
		75	72	67	62	57	75	72	67	62	57	75	72	67	62	57
75	TC	435	407	372	335	320	451	413	377	343	334	441	427	381	349	342
	SHC	142	175	239	297	320	159	186	258	322	334	150	204	269	331	342
	kW	27.9	27.0	25.9	24.8	24.4	28.4	27.2	26.1	25.1	24.8	28.0	27.6	26.2	25.3	25.1
	BF	0.06	0.07	0.08	0.10	0.28	0.08	0.09	0.10	0.13	0.35	0.09	0.10	0.10	0.16	0.38
85	TC	402	378	340	307	296	404	386	347	315	307	420	391	350	320	314
	SHC	114	152	213	272	296	118	165	233	291	307	134	174	244	302	314
	kW	30.0	29.2	27.9	26.9	26.5	30.0	29.5	28.2	27.2	26.9	30.6	29.7	28.3	27.3	27.1
	BF	0.06	0.07	0.08	0.11	0.29	0.08	0.09	0.10	0.15	0.36	0.09	0.10	0.10	0.17	0.39
95	TC	366	343	308	277	271	373	349	313	288	281	376	353	316	292	287
	SHC	85	122	186	247	271	93	135	205	265	281	97	142	216	275	287
	kW	32.3	31.4	30.2	29.2	29.0	32.5	31.7	30.5	29.5	29.3	32.7	31.9	30.6	29.7	29.5
	BF	0.06	0.08	0.08	0.11	0.30	0.08	0.09	0.10	0.16	0.37	0.09	0.10	0.11	0.18	0.40
105	TC	328	307	277	255	246	334	312	281	261	255	337	314	283	264	259
	SHC	55	93	159	223	246	62	104	177	239	255	66	110	187	248	259
	kW	34.7	33.9	32.8	32.0	31.8	35.0	34.2	33.0	32.3	32.1	35.1	34.3	33.1	32.4	32.2
	BF	0.06	0.08	0.08	0.13	0.31	0.08	0.09	0.10	0.17	0.38	0.09	0.10	0.11	0.20	0.41
115	TC	291	272	240	219	208	295	275	243	223	215	296	276	245	224	219
	SHC	24	64	128	187	208	29	74	145	202	215	33	78	155	209	219
	kW	37.5	36.7	35.6	35.0	34.8	37.7	36.9	35.8	35.2	35.1	37.8	37.0	35.9	35.3	35.2
	BF	0.06	0.08	0.08	0.15	0.33	0.08	0.09	0.10	0.19	0.39	0.09	0.10	0.11	0.21	0.42

#### LEGEND

48/50 VAV units only.

**BF** — Bypass Factor      **kW** — Compressor Motor Power Input  
**Edb** — Entering Dry Bulb      **SHC** — Sensible Heat Cap. (1000 Btu/h)  
**Ewb** — Entering Wet Bulb      **TC** — Total Cap. (1000 Btu/h) Gross

#### NOTES:

- The SHC is based on 80°F edb temperature of air entering evaporator coil. For edb temperatures other than 80°F, adjust SHC by multiplying the correction factor and the cfm and then adding or subtracting the value from the SHC.

- Interpolation is permissible.
- Correction Factor =  $1.10 \times (1 - BF) \times (edb - 80)$ .
- Cooling capacities are gross and do not include deduction for indoor fan motor heat.
- SHC values provided are in subcooling mode with the gas bypass valve closed and reflect the maximum SHC in subcooling mode. The P Series innovative modulating valve system can reduce SHC as needed to meet the supply air set point requirement with minimal change in latent capacity. This will provide variable SHC to meet the space load.

## Cooling Capacities (cont)

### 48/50 040 (40 TON) STANDARD CAPACITY COIL — SUBCOOL MODE

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm																			
		8,000					10,000					12,000					14,000				
		Evaporator Air — Ewb (F)																			
		75	72	67	62	57	75	72	67	62	57	75	72	67	62	57	75	72	67	62	57
75	TC SHC kW BF	453	431	395	358	329	479	450	418	379	340	498	473	433	393	363	513	486	455	406	377
		162	177	207	247	288	175	185	233	275	313	178	201	252	300	342	183	212	281	326	362
		24.6	24.2	23.5	22.9	23.5	25.1	24.5	23.9	23.3	22.7	25.5	25.0	24.2	23.5	23.1	25.8	25.3	25.6	23.8	23.3
		0.00	0.00	0.00	0.12	0.30	0.00	0.00	0.14	0.37	0.34	0.00	0.00	0.14	0.36	0.37	0.00	0.18	0.43	0.36	0.42
85	TC SHC kW BF	434	413	379	344	308	460	437	401	363	329	478	453	416	377	349	490	465	426	388	361
		148	161	193	235	269	156	177	220	263	302	157	186	239	288	329	167	197	255	311	347
		27.1	26.7	26.1	25.5	25.1	27.6	27.1	26.5	25.8	25.4	28.0	27.5	26.7	26.1	25.6	28.2	27.7	26.9	26.3	25.8
		0.00	0.00	0.19	0.12	0.31	0.00	0.00	0.14	0.37	0.34	0.00	0.20	0.14	0.36	0.38	0.00	0.17	0.42	0.37	0.43
95	TC SHC kW BF	416	396	362	325	294	439	418	384	357	316	456	445	397	373	332	467	459	406	360	345
		134	146	180	220	257	141	163	206	261	290	142	177	224	289	312	151	197	241	287	330
		29.9	29.6	29.0	28.4	28.1	30.4	30.0	29.4	29.9	28.4	30.8	30.9	29.6	30.0	28.6	31.0	31.5	29.8	29.0	28.8
		0.00	0.00	0.16	0.12	0.31	0.00	0.00	0.13	0.36	0.34	0.00	0.18	0.14	0.35	0.40	0.00	0.17	0.42	0.37	0.44
105	TC SHC kW BF	391	377	346	322	287	418	397	364	340	300	434	414	376	353	316	444	422	385	345	328
		114	133	164	221	254	126	148	192	249	275	126	153	209	273	296	134	166	225	277	314
		33.3	32.9	32.4	33.0	32.7	33.7	33.3	32.7	33.6	31.8	34.0	33.6	33.0	34.0	32.0	34.3	33.8	33.1	33.1	32.2
		0.00	0.00	0.15	0.11	0.32	0.00	0.00	0.13	0.36	0.36	0.00	0.17	0.14	0.36	0.41	0.00	0.16	0.41	0.36	0.45
115	TC SHC kW BF	374	360	325	305	261	395	374	342	309	283	409	389	354	320	299	418	398	362	329	309
		103	123	154	209	226	108	132	176	222	259	110	136	194	245	280	117	149	209	266	296
		37.0	36.8	36.2	37.0	35.2	37.4	37.0	36.5	36.0	35.6	37.7	37.3	36.8	36.2	35.9	37.9	37.5	36.9	36.4	36.1
		0.00	0.00	0.13	0.11	0.37	0.00	0.18	0.12	0.35	0.37	0.00	0.16	0.13	0.35	0.42	0.20	0.15	0.41	0.37	0.46

### 48/50 040 (40 TON) STANDARD CAPACITY COIL — SUBCOOL MODE (cont)

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm														
		16,000					18,000					20,000				
		Evaporator Air — Ewb (F)														
		75	72	67	62	57	75	72	67	62	57	75	72	67	62	57
75	TC	523	496	452	414	393	532	504	460	420	405	540	511	466	427	404
	SHC	192	225	285	346	380	196	236	301	364	405	199	246	316	376	385
	kW	26.0	25.5	24.6	23.9	24.6	26.2	25.6	24.8	24.0	24.9	26.4	25.8	24.9	24.2	23.8
	BF	0.00	0.18	0.42	0.38	0.45	0.23	0.18	0.42	0.41	0.49	0.21	0.50	0.42	0.44	0.57
85	TC	500	474	434	397	368	508	482	442	416	378	515	489	434	419	388
	SHC	175	209	271	332	368	179	220	278	356	378	182	230	288	377	388
	kW	28.4	27.9	27.1	26.4	25.9	28.6	28.1	27.3	27.8	26.1	28.8	28.2	27.2	27.4	26.3
	BF	0.25	0.17	0.41	0.38	0.45	0.21	0.17	0.42	0.40	0.47	0.20	0.49	0.42	0.43	0.51
95	TC	476	453	414	377	351	484	476	421	381	363	491	466	441	390	373
	SHC	158	193	256	316	351	161	219	271	333	363	165	214	300	348	373
	kW	31.2	30.7	30.0	29.3	28.9	31.4	31.9	30.1	29.4	29.1	31.6	31.0	31.6	29.6	29.3
	BF	0.22	0.17	0.41	0.39	0.46	0.20	0.17	0.41	0.41	0.50	0.19	0.48	0.42	0.44	0.54
105	TC	452	430	392	358	335	459	437	389	362	346	466	459	395	369	356
	SHC	141	177	240	301	335	144	187	245	315	346	148	213	260	323	356
	kW	34.5	34.0	33.3	32.7	32.3	34.6	34.1	33.2	32.8	32.5	34.8	35.3	33.4	32.9	32.7
	BF	0.20	0.16	0.41	0.40	0.46	0.19	0.16	0.41	0.42	0.51	0.19	0.47	0.42	0.44	0.55
115	TC	427	405	369	335	316	450	411	375	344	327	441	416	380	351	336
	SHC	119	159	224	284	316	143	169	239	298	327	132	178	252	310	336
	kW	38.1	37.7	37.1	36.5	36.2	39.2	37.8	37.2	36.7	36.4	38.5	38.0	37.3	36.8	36.5
	BF	0.18	0.16	0.41	0.41	0.48	0.18	0.16	0.41	0.44	0.52	0.18	0.47	0.42	0.46	0.56

#### LEGEND

48/50 VAV units only.

**BF** — Bypass Factor      **kW** — Compressor Motor Power Input  
**Edb** — Entering Dry Bulb      **SHC** — Sensible Heat Cap. (1000 Btu/h)  
**Ewb** — Entering Wet Bulb      **TC** — Total Cap. (1000 Btu/h) Gross

#### NOTES:

- The SHC is based on 80°F edb temperature of air entering evaporator coil. For edb temperatures other than 80°F, adjust SHC by multiplying the correction factor and the cfm and then adding or subtracting the value from the SHC.

- Interpolation is permissible.
- Correction Factor =  $1.10 \times (1 - BF) \times (edb - 80)$ .
- Cooling capacities are gross and do not include deduction for indoor fan motor heat.
- SHC values provided are in subcooling mode with the gas bypass valve closed and reflect the maximum SHC in subcooling mode. The P Series innovative modulating valve system can reduce SHC as needed to meet the supply air set point requirement with minimal change in latent capacity. This will provide variable SHC to meet the space load.

## Cooling Capacities (cont)

### 48/50 040 (40 TON) HIGH-CAPACITY COIL — SUBCOOL MODE

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm																			
		8,000					10,000					12,000					14,000				
		Evaporator Air — Ewb (F)																			
		75	72	67	62	57	75	72	67	62	57	75	72	67	62	57	75	72	67	62	57
75	TC SHC kW BF	445	418	373	335	300	479	451	403	363	337	495	467	424	385	358	518	486	440	401	382
		133	154	191	234	273	148	174	224	275	322	152	190	252	314	352	170	211	279	348	381
		24.9	24.4	23.5	22.8	22.3	25.6	25.0	24.0	23.3	22.8	25.8	25.3	24.4	23.7	23.2	26.4	25.7	24.7	23.9	23.6
		0.00	0.00	0.06	0.13	0.12	0.00	0.08	0.17	0.13	0.17	0.12	0.08	0.16	0.14	0.24	0.10	0.22	0.17	0.16	0.30
85	TC SHC kW BF	414	389	347	313	279	443	416	377	340	318	466	437	398	362	339	482	453	414	378	362
		106	129	167	213	254	117	143	200	254	304	128	165	229	293	332	139	183	256	328	361
		27.2	26.6	25.8	25.2	24.7	27.7	27.2	26.4	25.7	25.2	28.2	27.6	26.7	26.0	25.6	28.5	27.9	27.0	26.3	26.0
		0.00	0.13	0.06	0.13	0.12	0.00	0.07	0.17	0.13	0.18	0.11	0.07	0.16	0.14	0.25	0.10	0.22	0.17	0.16	0.31
95	TC SHC kW BF	384	361	322	290	261	412	387	351	317	299	433	407	372	338	318	449	424	388	354	339
		80	104	144	193	236	90	118	177	234	285	99	138	206	273	311	111	158	234	307	339
		29.7	29.2	28.5	28.0	27.5	30.3	29.8	29.1	28.5	28.2	30.8	30.2	29.5	28.9	28.5	31.1	30.5	29.8	29.1	28.8
		0.00	0.10	0.05	0.13	0.14	0.00	0.07	0.17	0.13	0.19	0.10	0.07	0.16	0.14	0.26	0.09	0.22	0.17	0.17	0.30
105	TC SHC kW BF	355	333	295	265	239	380	356	323	292	279	401	376	343	312	300	416	393	358	331	318
		53	80	121	172	217	63	92	154	213	266	72	112	183	251	293	84	132	210	284	317
		32.7	32.3	31.7	31.3	31.0	33.3	32.8	32.3	31.8	31.6	33.8	33.3	32.7	32.2	31.9	34.1	33.6	33.0	32.4	32.2
		0.00	0.09	0.05	0.13	0.13	0.15	0.07	0.16	0.13	0.20	0.09	0.07	0.16	0.14	0.25	0.09	0.21	0.17	0.18	0.31
115	TC SHC kW BF	324	303	266	239	220	346	323	294	264	259	365	343	313	284	276	381	358	329	300	295
		27	56	99	151	199	35	65	131	192	248	44	85	159	229	269	56	105	187	255	295
		36.2	35.9	35.4	35.4	35.5	36.8	36.4	36.0	36.0	35.9	37.3	36.9	36.5	36.3	36.1	37.7	37.3	36.8	36.4	36.3
		0.00	0.08	0.05	0.12	0.15	0.11	0.06	0.16	0.13	0.21	0.09	0.07	0.16	0.15	0.27	0.08	0.21	0.17	0.18	0.34

### 48/50 040 (40 TON) HIGH-CAPACITY COIL — SUBCOOL MODE (cont)

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm														
		16,000					18,000					20,000				
		Evaporator Air — Ewb (F)														
		75	72	67	62	57	75	72	67	62	57	75	72	67	62	57
75	TC	523	498	452	414	399	540	508	462	426	413	549	516	471	428	419
	SHC	176	227	304	377	399	194	243	327	394	413	205	257	350	406	419
	kW	26.4	25.9	24.9	24.2	23.9	26.8	26.1	25.1	24.4	24.2	27.0	26.3	25.3	24.5	24.3
	BF	0.10	0.21	0.18	0.19	0.36	0.28	0.22	0.19	0.23	0.40	0.26	0.22	0.20	0.26	0.46
85	TC	493	466	426	393	378	504	477	435	407	396	513	485	444	419	405
	SHC	152	200	281	356	378	164	217	304	379	396	174	232	327	400	405
	kW	28.7	28.1	27.3	26.6	26.3	29.0	28.3	27.5	26.8	26.6	29.1	28.5	27.6	27.1	26.8
	BF	0.09	0.21	0.18	0.20	0.37	0.27	0.22	0.19	0.24	0.42	0.26	0.22	0.20	0.28	0.45
95	TC	462	439	400	370	357	473	449	409	384	370	480	454	417	398	382
	SHC	125	177	259	333	357	138	192	282	357	370	146	205	305	380	382
	kW	31.4	30.8	30.0	29.4	29.1	31.6	31.0	30.2	29.7	29.4	31.7	31.2	30.4	29.9	29.6
	BF	0.09	0.21	0.18	0.21	0.38	0.27	0.22	0.19	0.25	0.43	0.26	0.22	0.20	0.28	0.46
105	TC	428	408	371	346	335	439	417	380	361	348	449	422	388	377	361
	SHC	97	151	235	311	335	110	167	259	335	348	122	179	281	360	361
	kW	34.4	34.0	33.3	32.7	32.5	34.7	34.2	33.5	33.0	32.8	34.9	34.3	33.6	33.4	33.0
	BF	0.09	0.21	0.18	0.22	0.39	0.26	0.21	0.19	0.26	0.44	0.26	0.22	0.20	0.29	0.48
115	TC	393	374	338	322	310	403	385	347	335	324	412	390	354	347	334
	SHC	70	126	210	288	310	82	142	233	310	324	93	155	255	327	334
	kW	38.1	37.6	37.0	36.7	36.5	38.4	37.9	37.3	36.9	36.7	38.6	38.1	37.5	37.2	36.9
	BF	0.08	0.21	0.18	0.23	0.40	0.27	0.21	0.19	0.27	0.45	0.25	0.22	0.20	0.29	0.49

#### LEGEND

48/50 VAV units only.

**BF** — Bypass Factor      **kW** — Compressor Motor Power Input  
**Edb** — Entering Dry Bulb      **SHC** — Sensible Heat Cap. (1000 Btuh)  
**Ewb** — Entering Wet Bulb      **TC** — Total Cap. (1000 Btuh) Gross

#### NOTES:

- The SHC is based on 80°F edb temperature of air entering evaporator coil. For edb temperatures other than 80°F, adjust SHC by multiplying the correction factor and the cfm and then adding or subtracting the value from the SHC.

- Interpolation is permissible.
- Correction Factor =  $1.10 \times (1 - BF) \times (edb - 80)$ .
- Cooling capacities are gross and do not include deduction for indoor fan motor heat.
- SHC values provided are in subcooling mode with the gas bypass valve closed and reflect the maximum SHC in subcooling mode. The P Series innovative modulating valve system can reduce SHC as needed to meet the supply air set point requirement with minimal change in latent capacity. This will provide variable SHC to meet the space load.



## Cooling Capacities (cont)

### 48/50 050 (50 TON) STANDARD CAPACITY COIL — SUBCOOL MODE

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm																			
		10,000					12,500					15,000					17,500				
		Evaporator Air — Ewb (F)																			
		75	72	67	62	57	75	72	67	62	57	75	72	67	62	57	75	72	67	62	57
75	TC	590	563	519	472	450	625	598	549	502	465	652	619	571	524	491	671	638	588	551	513
	SHC	206	233	275	329	413	219	248	308	370	450	228	256	336	406	480	235	281	362	473	513
	kW	33.2	32.7	32.1	31.5	31.8	33.8	33.3	32.5	31.9	31.4	34.2	33.7	32.9	32.3	31.6	34.5	34.0	33.2	32.5	32.0
	BF	0.02	0.00	0.13	0.08	0.13	0.00	0.00	0.11	0.28	0.18	0.00	0.16	0.35	0.28	0.25	0.00	0.14	0.33	0.20	0.32
85	TC	565	538	493	450	429	598	572	525	479	445	620	590	545	500	467	638	610	562	513	492
	SHC	184	213	256	312	397	194	228	290	353	431	206	234	317	388	467	212	260	343	420	492
	kW	36.7	36.2	35.6	35.2	35.5	37.3	36.8	36.1	35.6	35.0	37.7	37.2	36.5	35.9	35.4	38.0	37.5	36.8	36.2	35.8
	BF	0.00	0.00	0.11	0.08	0.14	0.00	0.00	0.10	0.27	0.19	0.00	0.15	0.34	0.28	0.26	0.00	0.13	0.32	0.29	0.34
95	TC	538	513	466	424	407	568	544	498	451	436	593	563	517	473	444	607	581	533	487	467
	SHC	163	195	236	293	380	172	208	270	332	424	177	215	296	369	444	189	238	322	402	467
	kW	40.8	40.4	39.9	39.5	40.4	41.4	41.0	40.4	39.9	40.6	41.9	41.4	40.8	40.3	39.9	42.2	41.7	41.1	40.5	40.1
	BF	0.00	0.00	0.10	0.28	0.14	0.00	0.00	0.10	0.26	0.21	0.00	0.13	0.33	0.27	0.27	0.00	0.13	0.32	0.29	0.35
105	TC	507	483	439	398	383	537	511	469	423	398	559	533	486	445	420	572	547	502	458	442
	SHC	140	174	216	274	360	148	177	250	311	388	154	196	275	350	420	164	215	301	382	442
	kW	45.6	45.3	44.9	45.0	46.4	46.2	45.9	45.4	45.3	45.3	46.7	46.3	45.8	45.5	45.5	46.9	46.6	46.1	45.8	45.6
	BF	0.00	0.00	0.09	0.26	0.15	0.00	0.15	0.09	0.26	0.22	0.00	0.13	0.33	0.27	0.29	0.17	0.12	0.31	0.29	0.36
115	TC	474	454	429	399	343	501	477	454	408	375	521	497	470	424	394	534	510	483	434	415
	SHC	116	145	224	294	321	124	155	253	320	366	129	173	280	357	394	138	191	305	388	415
	kW	51.1	51.0	51.3	52.7	52.2	51.7	51.5	51.6	52.1	52.3	52.1	51.9	51.9	52.1	52.3	52.4	52.2	52.0	52.1	52.2
	BF	0.00	0.00	0.15	0.13	0.18	0.00	0.13	0.17	0.16	0.24	0.00	0.12	0.19	0.18	0.31	0.15	0.12	0.21	0.21	0.38

### 48/50 050 (50 TON) STANDARD CAPACITY COIL — SUBCOOL MODE (cont)

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm				
		20,000				
		Evaporator Air — Ewb (F)				
		75	72	67	62	57
75	TC	684	650	599	562	531
	SHC	241	296	383	503	531
	kW	34.8	34.2	33.4	32.7	32.3
	BF	0.22	0.14	0.33	0.22	0.37
85	TC	650	621	573	536	508
	SHC	217	274	363	483	508
	kW	38.3	37.7	36.9	36.3	36.0
	BF	0.18	0.13	0.32	0.22	0.39
95	TC	618	591	543	497	484
	SHC	194	251	342	427	484
	kW	42.4	41.9	41.3	40.7	40.4
	BF	0.17	0.13	0.32	0.30	0.40
105	TC	583	557	511	492	458
	SHC	169	228	320	447	458
	kW	47.2	46.8	46.2	46.2	45.6
	BF	0.16	0.12	0.32	0.25	0.41
115	TC	544	519	492	448	430
	SHC	142	203	326	406	430
	kW	52.6	52.3	52.1	51.9	52.1
	BF	0.14	0.12	0.22	0.26	0.43

#### LEGEND

48/50 VAV units only.

BF — Bypass Factor      kW — Compressor Motor Power Input  
Edb — Entering Dry Bulb      SHC — Sensible Heat Cap. (1000 Btuh)  
Ewb — Entering Wet Bulb      TC — Total Cap. (1000 Btuh) Gross

#### NOTES:

- The SHC is based on 80°F edb temperature of air entering evaporator coil. For edb temperatures other than 80°F, adjust SHC by multiplying the correction factor and the cfm and then adding or subtracting the value from the SHC.

- Interpolation is permissible.
- Correction Factor =  $1.10 \times (1 - BF) \times (edb - 80)$ .
- Cooling capacities are gross and do not include deduction for indoor fan motor heat.
- SHC values provided are in subcooling mode with the gas bypass valve closed and reflect the maximum SHC in subcooling mode. The P Series innovative modulating valve system can reduce SHC as needed to meet the supply air set point requirement with minimal change in latent capacity. This will provide variable SHC to meet the space load.

## Cooling Capacities (cont)

### 48/50 050 (50 TON) HIGH-CAPACITY COIL — SUBCOOL MODE

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm																			
		10,000					12,500					15,000					17,500				
		Evaporator Air — Ewb (F)																			
		75	72	67	62	57	75	72	67	62	57	75	72	67	62	57	75	72	67	62	57
75	TC	589	555	500	454	407	633	597	538	489	452	673	619	563	515	482	697	653	583	534	509
	SHC	191	216	261	316	365	209	238	301	366	427	241	260	335	411	468	251	297	367	452	509
	kW	33.4	32.8	32.0	31.2	30.5	34.2	33.6	32.5	31.7	31.1	35.1	33.9	33.0	32.1	31.5	35.4	34.6	33.3	32.4	32.0
	BF	0.00	0.00	0.07	0.16	0.13	0.00	0.11	0.24	0.16	0.18	0.00	0.10	0.21	0.18	0.24	0.14	0.30	0.21	0.19	0.28
85	TC	552	523	468	445	408	592	557	506	470	436	618	581	531	488	460	640	601	550	502	483
	SHC	160	190	233	300	371	175	205	275	345	424	192	228	309	390	460	201	252	340	432	483
	kW	36.7	36.1	35.2	34.7	34.3	37.4	36.8	35.8	35.1	34.6	37.9	37.2	36.3	35.5	35.0	38.3	37.6	36.6	35.8	35.4
	BF	0.00	0.00	0.07	0.07	0.08	0.00	0.10	0.23	0.09	0.13	0.00	0.09	0.21	0.10	0.20	0.13	0.29	0.21	0.12	0.29
95	TC	514	485	436	418	382	551	510	475	441	417	575	543	499	457	435	597	564	518	470	453
	SHC	128	159	206	279	350	142	162	249	323	406	158	198	282	365	435	166	221	314	405	453
	kW	40.5	39.9	39.1	38.9	38.5	41.2	40.5	39.8	39.3	38.9	41.7	41.1	40.3	39.7	39.2	42.2	41.5	40.7	39.9	39.5
	BF	0.00	0.00	0.07	0.07	0.08	0.00	0.09	0.22	0.08	0.14	0.15	0.09	0.20	0.10	0.22	0.12	0.28	0.21	0.13	0.30
105	TC	477	450	402	387	365	511	473	440	408	363	537	504	464	423	405	555	525	482	436	425
	SHC	97	130	179	255	334	110	131	222	298	354	121	166	255	339	405	133	191	286	378	425
	kW	44.9	44.5	43.9	43.9	43.6	45.7	45.1	44.6	44.3	43.8	46.3	45.7	45.1	44.7	44.2	46.7	46.2	45.5	44.8	44.5
	BF	0.00	0.00	0.06	0.07	0.11	0.00	0.09	0.21	0.08	0.16	0.13	0.08	0.20	0.10	0.24	0.11	0.27	0.20	0.13	0.31
115	TC	438	412	365	353	340	469	430	402	372	333	493	461	424	387	381	511	482	441	400	398
	SHC	64	100	151	230	314	77	99	194	271	326	87	134	226	312	381	99	159	256	345	398
	kW	50.1	49.9	49.6	50.5	51.4	50.9	50.4	50.3	50.9	50.6	51.5	51.1	50.8	51.0	50.7	52.0	51.5	51.1	50.2	50.7
	BF	0.00	0.10	0.06	0.07	0.11	0.00	0.08	0.21	0.08	0.18	0.11	0.08	0.20	0.11	0.26	0.10	0.26	0.20	0.15	0.33

### 48/50 050 (50 TON) HIGH-CAPACITY COIL — SUBCOOL MODE (cont)

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm				
		20,000				
		Evaporator Air — Ewb (F)				
		75	72	67	62	57
75	TC	707	650	597	548	527
	SHC	262	298	395	487	527
	kW	35.6	34.3	33.5	32.7	32.3
	BF	0.12	0.26	0.22	0.22	0.35
85	TC	650	616	564	517	506
	SHC	211	271	369	473	506
	kW	38.5	37.9	36.9	36.1	35.8
	BF	0.12	0.26	0.21	0.15	0.35
95	TC	611	579	532	500	471
	SHC	181	242	342	458	471
	kW	42.5	41.8	40.9	40.2	39.8
	BF	0.11	0.25	0.21	0.16	0.36
105	TC	570	539	496	446	442
	SHC	148	211	315	411	442
	kW	47.1	46.5	45.8	44.9	44.8
	BF	0.11	0.25	0.21	0.16	0.38
115	TC	524	495	454	411	403
	SHC	115	178	285	378	403
	kW	52.4	51.8	51.4	50.6	50.6
	BF	0.10	0.25	0.21	0.18	0.39

#### LEGEND

48/50 VAV units only.

BF — Bypass Factor      kW — Compressor Motor Power Input  
Edb — Entering Dry Bulb      SHC — Sensible Heat Cap. (1000 Btuh)  
Ewb — Entering Wet Bulb      TC — Total Cap. (1000 Btuh) Gross

#### NOTES:

- The SHC is based on 80°F edb temperature of air entering evaporator coil. For edb temperatures other than 80°F, adjust SHC by multiplying the correction factor and the cfm and then adding or subtracting the value from the SHC.

- Interpolation is permissible.
- Correction Factor =  $1.10 \times (1 - BF) \times (edb - 80)$ .
- Cooling capacities are gross and do not include deduction for indoor fan motor heat.
- SHC values provided are in subcooling mode with the gas bypass valve closed and reflect the maximum SHC in subcooling mode. The P Series innovative modulating valve system can reduce SHC as needed to meet the supply air set point requirement with minimal change in latent capacity. This will provide variable SHC to meet the space load.

## Cooling Capacities (cont)

### 48/50 055 (55 TON) STANDARD CAPACITY COIL — SUBCOOL MODE

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm																			
		11,000					13,750					16,500					19,250				
		Evaporator Air — Ewb (F)																			
		75	72	67	62	57	75	72	67	62	57	75	72	67	62	57	75	72	67	62	57
75	TC	648	613	562	501	464	681	647	598	541	494	704	668	615	561	523	719	684	630	578	549
	SHC	206	244	311	364	434	221	269	354	424	487	236	290	383	471	523	248	310	415	515	549
	kW	41.9	41.3	40.5	39.7	39.2	42.5	41.9	41.2	40.2	39.6	43.0	42.3	41.4	40.5	40.0	43.3	42.6	41.6	40.8	40.3
	BF	0.03	0.08	0.08	0.07	0.08	0.12	0.10	0.09	0.09	0.14	0.14	0.12	0.12	0.11	0.23	0.16	0.15	0.14	0.14	0.31
85	TC	573	588	536	488	443	652	619	567	516	472	672	639	586	537	500	687	654	602	551	525
	SHC	139	226	292	357	416	200	249	329	407	466	213	269	361	453	500	225	289	394	495	525
	kW	44.8	45.1	44.3	43.7	43.0	46.2	45.6	44.8	44.1	43.4	46.6	46.0	45.1	44.3	43.8	46.9	46.3	45.3	44.5	44.2
	BF	0.04	0.08	0.08	0.07	0.09	0.12	0.10	0.09	0.09	0.15	0.14	0.13	0.12	0.12	0.24	0.16	0.15	0.14	0.14	0.32
95	TC	591	560	510	463	422	621	515	538	490	455	640	533	558	509	476	652	623	572	522	500
	SHC	165	206	273	338	403	178	154	309	388	455	191	172	342	433	476	200	267	373	473	500
	kW	50.0	49.5	48.8	48.1	47.7	50.5	48.6	49.2	48.5	48.4	50.9	48.9	49.4	48.7	48.2	51.1	50.6	49.7	48.9	48.6
	BF	0.05	0.08	0.08	0.07	0.10	0.12	0.10	0.09	0.09	0.16	0.14	0.13	0.12	0.12	0.26	0.16	0.15	0.14	0.14	0.33
105	TC	560	529	481	436	395	588	557	508	462	424	606	576	526	479	451	623	589	539	491	474
	SHC	143	185	253	319	374	156	205	288	368	424	167	225	320	411	451	183	243	351	450	474
	kW	55.0	54.5	53.8	53.6	53.3	55.5	54.9	54.1	53.6	53.3	55.8	55.2	54.4	53.7	53.5	56.2	55.5	54.6	53.8	53.6
	BF	0.05	0.08	0.08	0.08	0.12	0.12	0.10	0.10	0.09	0.18	0.14	0.13	0.12	0.12	0.27	0.16	0.15	0.14	0.15	0.35
115	TC	526	497	451	408	371	552	523	476	432	398	569	540	493	448	424	584	552	505	460	457
	SHC	121	163	232	299	352	132	183	266	347	398	143	201	298	389	424	157	219	328	422	457
	kW	60.7	60.3	60.0	60.1	60.0	61.0	60.5	60.0	59.8	59.8	61.4	60.8	60.1	59.8	59.7	61.7	61.0	60.2	59.7	60.4
	BF	0.05	0.08	0.08	0.08	0.14	0.12	0.10	0.10	0.10	0.20	0.14	0.13	0.12	0.12	0.29	0.16	0.15	0.14	0.17	0.37

### 48/50 055 (55 TON) STANDARD CAPACITY COIL — SUBCOOL MODE (cont)

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm									
		22,000					24,750				
		Evaporator Air — Ewb (F)									
		75	72	67	62	57	75	72	67	62	57
75	TC	732	699	641	589	571	742	709	651	598	597
	SHC	260	332	445	553	571	272	350	474	584	597
	kW	43.5	43.0	41.9	41.0	40.7	43.8	43.2	42.1	41.1	41.3
	BF	0.18	0.16	0.15	0.17	0.37	0.20	0.18	0.17	0.20	0.43
85	TC	698	666	554	561	555	707	677	621	571	564
	SHC	237	307	366	531	555	248	327	453	560	564
	kW	47.2	46.5	44.5	44.7	44.9	47.4	46.8	45.7	44.8	44.8
	BF	0.18	0.17	0.15	0.17	0.39	0.20	0.18	0.17	0.21	0.44
95	TC	665	634	582	532	530	674	642	591	543	545
	SHC	214	285	403	508	530	224	302	431	531	545
	kW	51.4	50.8	49.8	49.0	49.4	51.6	51.0	50.0	49.2	49.5
	BF	0.18	0.17	0.15	0.18	0.40	0.20	0.18	0.17	0.23	0.45
105	TC	633	599	549	503	502	638	607	557	514	518
	SHC	193	261	380	476	502	200	278	408	504	518
	kW	56.4	55.7	54.8	54.0	54.4	56.4	55.8	54.9	54.1	54.6
	BF	0.18	0.17	0.16	0.20	0.41	0.20	0.18	0.17	0.24	0.46
115	TC	591	562	514	473	463	599	569	522	482	488
	SHC	164	237	357	449	463	174	253	384	475	488
	kW	61.8	61.2	60.3	59.7	59.7	62.0	61.3	60.4	59.8	60.3
	BF	0.18	0.17	0.16	0.22	0.43	0.20	0.18	0.17	0.26	0.48

#### LEGEND

48/50 VAV units only.

**BF** — Bypass Factor      **kW** — Compressor Motor Power Input  
**Edb** — Entering Dry Bulb      **SHC** — Sensible Heat Cap. (1000 Btuh)  
**Ewb** — Entering Wet Bulb      **TC** — Total Cap. (1000 Btuh) Gross

#### NOTES:

- The SHC is based on 80°F edb temperature of air entering evaporator coil. For edb temperatures other than 80°F, adjust SHC by multiplying the correction factor and the cfm and then adding or subtracting the value from the SHC.

- Interpolation is permissible.
- Correction Factor =  $1.10 \times (1 - BF) \times (edb - 80)$ .
- Cooling capacities are gross and do not include deduction for indoor fan motor heat.
- SHC values provided are in subcooling mode with the gas bypass valve closed and reflect the maximum SHC in subcooling mode. The P Series innovative modulating valve system can reduce SHC as needed to meet the supply air set point requirement with minimal change in latent capacity. This will provide variable SHC to meet the space load.



## Cooling Capacities (cont)

### 48/50 055 (55 TON) HIGH-CAPACITY COIL — SUBCOOL MODE

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm																			
		11,000					13,750					16,500					19,250				
		Evaporator Air — Ewb (F)																			
		75	72	67	62	57	75	72	67	62	57	75	72	67	62	57	75	72	67	62	57
75	TC	639	598	533	481	441	678	632	569	510	476	704	658	588	535	500	721	671	618	550	524
	SHC	174	211	270	338	411	194	237	316	392	467	213	263	350	448	500	227	282	403	496	524
	kW	42.0	41.3	40.2	39.3	38.7	42.8	42.0	40.9	39.9	39.2	43.3	42.5	41.2	40.3	39.7	43.6	42.7	41.7	40.6	40.2
	BF	0.03	0.02	0.02	0.02	0.03	0.05	0.03	0.02	0.03	0.09	0.06	0.04	0.04	0.04	0.17	0.08	0.06	0.05	0.06	0.26
85	TC	591	553	497	449	415	618	577	534	473	446	663	616	552	491	467	676	629	566	502	490
	SHC	133	172	241	311	387	143	189	286	360	438	182	231	322	410	467	192	251	358	453	490
	kW	45.4	44.7	43.7	43.0	42.5	46.0	45.2	44.3	43.3	42.8	46.7	45.9	44.7	43.7	43.2	47.0	46.2	45.0	43.9	43.6
	BF	0.02	0.02	0.02	0.02	0.03	0.05	0.03	0.02	0.03	0.10	0.06	0.04	0.04	0.04	0.18	0.07	0.06	0.05	0.06	0.27
95	TC	563	525	469	415	395	595	552	493	436	416	618	573	510	452	433	621	568	523	467	455
	SHC	113	151	219	283	371	128	172	253	330	410	144	195	288	378	433	144	197	323	424	455
	kW	49.6	48.9	47.9	47.3	46.9	50.2	49.4	48.3	47.5	47.2	50.7	49.8	48.6	47.7	47.4	50.9	49.9	48.9	47.9	47.7
	BF	0.02	0.02	0.02	0.02	0.06	0.05	0.03	0.02	0.03	0.11	0.06	0.04	0.04	0.04	0.20	0.07	0.05	0.05	0.06	0.28
105	TC	511	476	423	380	364	554	512	454	407	389	577	514	457	413	399	572	529	468	433	417
	SHC	70	111	181	256	339	97	141	222	310	384	114	145	243	346	399	106	167	276	388	417
	kW	54.3	53.6	52.7	52.5	52.6	55.0	54.1	53.1	52.4	52.3	55.5	54.3	53.2	52.5	52.3	55.6	54.6	53.4	52.7	52.5
	BF	0.02	0.02	0.02	0.02	0.06	0.05	0.03	0.03	0.03	0.12	0.06	0.04	0.04	0.04	0.21	0.07	0.05	0.05	0.09	0.29
115	TC	469	434	383	343	334	490	453	399	358	350	507	467	411	374	363	520	477	420	393	378
	SHC	39	80	151	228	311	44	93	178	270	347	56	110	208	316	363	68	128	240	351	378
	kW	60.0	59.3	58.9	59.4	59.9	60.4	59.5	58.7	58.7	59.0	60.8	59.7	58.7	58.4	58.5	61.2	59.9	58.7	58.3	58.3
	BF	0.02	0.02	0.02	0.02	0.08	0.05	0.03	0.03	0.03	0.14	0.06	0.04	0.04	0.05	0.23	0.07	0.05	0.05	0.11	0.31

### 48/50 055 (55 TON) HIGH-CAPACITY COIL — SUBCOOL MODE (cont)

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm									
		22,000					24,750				
		Evaporator Air — Ewb (F)									
		75	72	67	62	57	75	72	67	62	57
75	TC	739	686	746	568	555	752	697	750	582	576
	SHC	246	307	653	537	555	263	329	668	569	576
	kW	43.9	43.0	44.1	40.9	40.7	44.1	43.2	44.2	41.2	41.1
	BF	0.09	0.07	0.36	0.10	0.33	0.10	0.08	0.37	0.14	0.39
85	TC	692	643	573	521	518	704	653	584	531	537
	SHC	210	274	389	491	518	226	297	426	520	537
	kW	47.3	46.5	45.2	44.2	44.1	47.6	46.7	45.4	44.5	44.5
	BF	0.09	0.07	0.06	0.11	0.34	0.10	0.08	0.07	0.15	0.40
95	TC	636	579	535	484	473	666	612	543	495	489
	SHC	161	218	359	456	473	197	264	393	486	489
	kW	51.3	50.1	49.1	48.2	48.1	51.7	50.6	49.3	48.4	48.4
	BF	0.08	0.07	0.06	0.12	0.35	0.10	0.08	0.07	0.16	0.40
105	TC	586	539	475	445	434	593	545	484	454	448
	SHC	122	188	308	419	434	134	207	343	446	448
	kW	56.0	54.8	53.5	52.9	52.8	56.2	55.0	53.7	53.1	53.0
	BF	0.09	0.07	0.06	0.13	0.36	0.10	0.08	0.07	0.17	0.42
115	TC	532	486	427	404	393	543	494	434	410	405
	SHC	82	148	272	380	393	98	169	304	405	405
	kW	61.6	60.1	58.8	58.4	58.3	62.0	60.3	58.9	58.4	58.4
	BF	0.09	0.07	0.06	0.15	0.38	0.10	0.08	0.08	0.19	0.43

#### LEGEND

48/50 VAV units only.

**BF** — Bypass Factor      **kW** — Compressor Motor Power Input  
**Edb** — Entering Dry Bulb      **SHC** — Sensible Heat Cap. (1000 Btu/h)  
**Ewb** — Entering Wet Bulb      **TC** — Total Cap. (1000 Btu/h) Gross

#### NOTES:

- The SHC is based on 80°F edb temperature of air entering evaporator coil. For edb temperatures other than 80°F, adjust SHC by multiplying the correction factor and the cfm and then adding or subtracting the value from the SHC.

- Interpolation is permissible.
- Correction Factor =  $1.10 \times (1 - BF) \times (edb - 80)$ .
- Cooling capacities are gross and do not include deduction for indoor fan motor heat.
- SHC values provided are in subcooling mode with the gas bypass valve closed and reflect the maximum SHC in subcooling mode. The P Series innovative modulating valve system can reduce SHC as needed to meet the supply air set point requirement with minimal change in latent capacity. This will provide variable SHC to meet the space load.

## Cooling Capacities (cont)

### 48/50 060 (60 TON) STANDARD CAPACITY COIL — SUBCOOL MODE

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm																			
		12,000					15,000					18,000					21,000				
		Evaporator Air — Ewb (F)																			
		75	72	67	62	57	75	72	67	62	57	75	72	67	62	57	75	72	67	62	57
75	TC	711	674	615	560	508	754	710	650	600	539	771	734	674	626	570	789	758	692	634	599
	SHC	224	268	339	408	473	247	293	379	469	530	255	315	415	522	570	269	344	450	559	599
	kW	48.5	47.7	46.6	45.7	44.8	49.5	48.5	47.2	46.5	45.2	49.9	49.0	47.7	47.1	45.8	50.3	49.7	48.1	47.0	46.3
	BF	0.02	0.08	0.08	0.08	0.09	0.13	0.11	0.10	0.10	0.14	0.15	0.13	0.13	0.12	0.23	0.17	0.16	0.15	0.15	0.31
85	TC	681	646	589	536	482	723	688	622	567	518	746	702	645	589	546	755	717	661	605	586
	SHC	202	246	318	389	446	226	279	357	442	508	239	292	393	492	546	244	311	427	537	586
	kW	52.8	52.0	51.0	50.0	49.2	53.8	53.1	51.6	50.6	49.6	54.3	53.2	52.0	51.0	50.2	54.4	53.5	52.4	51.3	51.6
	BF	0.04	0.08	0.08	0.08	0.08	0.13	0.11	0.10	0.10	0.16	0.15	0.13	0.13	0.12	0.24	0.17	0.16	0.15	0.15	0.32
95	TC	649	615	561	510	462	681	647	592	539	494	703	668	613	560	521	727	684	629	575	548
	SHC	179	224	298	370	435	193	247	335	422	485	206	268	370	470	521	227	288	404	513	548
	kW	57.7	57.0	55.9	55.2	54.8	58.4	57.6	56.5	55.5	54.8	58.9	58.1	56.9	55.9	55.2	59.6	58.4	57.3	56.2	55.7
	BF	0.05	0.08	0.08	0.08	0.10	0.13	0.11	0.10	0.10	0.17	0.15	0.14	0.13	0.13	0.25	0.17	0.16	0.15	0.15	0.33
105	TC	614	582	531	482	433	644	611	559	509	468	664	631	579	528	495	679	646	593	542	519
	SHC	155	201	276	349	408	168	222	312	400	461	180	243	346	447	495	192	262	379	489	519
	kW	63.3	62.6	61.8	61.4	61.3	63.9	63.2	62.1	61.5	61.0	64.4	63.6	62.5	61.7	61.3	64.7	64.0	62.8	61.8	61.5
	BF	0.05	0.08	0.08	0.08	0.09	0.13	0.11	0.10	0.10	0.18	0.15	0.14	0.13	0.13	0.27	0.17	0.16	0.15	0.16	0.34
115	TC	577	547	498	451	408	604	573	524	477	439	631	592	542	494	465	644	605	555	506	489
	SHC	130	177	253	327	381	142	197	288	376	433	162	216	321	422	465	173	235	353	462	489
	kW	69.8	69.3	68.8	68.7	69.0	70.2	69.6	68.9	68.6	68.2	71.0	69.9	69.0	68.5	68.4	71.2	70.1	69.2	68.5	68.4
	BF	0.05	0.08	0.08	0.08	0.12	0.13	0.11	0.10	0.10	0.20	0.15	0.14	0.13	0.13	0.29	0.17	0.16	0.15	0.16	0.36

### 48/50 060 (60 TON) STANDARD CAPACITY COIL — SUBCOOL MODE (cont)

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm									
		24,000					27,000				
		Evaporator Air — Ewb (F)									
		75	72	67	62	57	75	72	67	62	57
75	TC	793	765	795	775	771	804	774	715	780	778
	SHC	276	357	681	740	771	288	375	514	758	778
	kW	50.4	49.8	50.9	50.6	50.6	50.6	50.0	48.7	50.7	50.7
	BF	0.20	0.18	0.39	0.48	0.63	0.22	0.20	0.18	0.49	0.65
85	TC	776	732	674	617	597	767	742	694	637	617
	SHC	264	333	459	577	597	262	352	495	624	617
	kW	55.1	53.9	52.6	51.5	51.1	54.7	54.2	53.3	52.3	51.5
	BF	0.19	0.18	0.16	0.18	0.38	0.22	0.19	0.18	0.21	0.43
95	TC	730	696	640	586	582	754	704	658	596	601
	SHC	230	307	436	551	582	262	326	475	578	601
	kW	59.5	58.7	57.5	56.4	57.0	61.1	58.8	58.1	56.6	57.3
	BF	0.19	0.18	0.17	0.18	0.39	0.22	0.20	0.18	0.23	0.45
105	TC	698	657	604	553	540	699	666	621	577	570
	SHC	212	281	410	518	540	214	299	449	562	570
	kW	65.4	64.2	63.0	61.9	61.7	65.2	64.4	63.6	63.0	62.9
	BF	0.19	0.18	0.17	0.20	0.41	0.21	0.19	0.18	0.24	0.46
115	TC	654	615	574	519	522	654	623	573	530	524
	SHC	184	254	394	487	522	186	271	414	516	524
	kW	71.5	70.3	69.7	68.5	69.5	71.3	70.5	69.4	68.6	68.6
	BF	0.19	0.18	0.17	0.22	0.42	0.21	0.20	0.18	0.26	0.47

#### LEGEND

48/50 VAV units only.

**BF** — Bypass Factor      **kW** — Compressor Motor Power Input  
**Edb** — Entering Dry Bulb      **SHC** — Sensible Heat Cap. (1000 Btu/h)  
**Ewb** — Entering Wet Bulb      **TC** — Total Cap. (1000 Btu/h) Gross

#### NOTES:

- The SHC is based on 80°F edb temperature of air entering evaporator coil. For edb temperatures other than 80°F, adjust SHC by multiplying the correction factor and the cfm and then adding or subtracting the value from the SHC.

- Interpolation is permissible.
- Correction Factor =  $1.10 \times (1 - BF) \times (edb - 80)$ .
- Cooling capacities are gross and do not include deduction for indoor fan motor heat.
- SHC values provided are in subcooling mode with the gas bypass valve closed and reflect the maximum SHC in subcooling mode. The P Series innovative modulating valve system can reduce SHC as needed to meet the supply air set point requirement with minimal change in latent capacity. This will provide variable SHC to meet the space load.

## Cooling Capacities (cont)

### 48/50 060 (60 TON) HIGH-CAPACITY COIL — SUBCOOL MODE

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm																			
		12,000					15,000					18,000					21,000				
		Evaporator Air — Ewb (F)																			
		75	72	67	62	57	75	72	67	62	57	75	72	67	62	57	75	72	67	62	57
75	TC SHC kW BF	703	654	591	539	494	787	718	647	570	533	812	750	672	588	558	829	752	683	620	588
		188	224	299	378	457	254	280	364	435	520	270	312	406	486	558	285	318	439	554	588
		48.9	47.7	46.4	45.3	44.4	50.2	48.9	47.3	45.9	45.1	50.8	49.8	48.0	46.4	45.7	51.3	49.9	48.5	47.0	46.4
		0.00	0.02	0.02	0.02	0.03	0.05	0.04	0.03	0.03	0.08	0.07	0.05	0.04	0.04	0.16	0.09	0.06	0.05	0.06	0.25
85	TC SHC kW BF	661	621	559	506	462	691	658	592	534	504	739	692	606	555	526	759	710	639	568	553
		152	198	273	351	424	163	226	314	405	492	203	261	346	458	526	221	286	402	507	553
		52.7	51.8	50.5	49.5	48.7	53.5	52.7	51.2	50.0	49.3	54.4	53.4	51.6	50.4	49.8	54.9	53.8	52.2	50.8	50.4
		0.03	0.02	0.02	0.02	0.03	0.06	0.03	0.03	0.03	0.09	0.07	0.05	0.04	0.04	0.17	0.08	0.06	0.05	0.06	0.26
95	TC SHC kW BF	621	581	522	472	443	672	611	548	497	473	670	625	583	516	492	689	668	581	546	516
		120	165	242	323	413	154	187	278	375	462	142	203	331	426	492	159	254	352	490	516
		57.4	56.5	55.3	54.4	54.1	58.4	57.2	55.8	54.8	54.2	58.7	57.6	56.4	55.2	54.7	59.2	58.4	56.6	55.6	55.1
		0.02	0.02	0.02	0.02	0.05	0.05	0.03	0.03	0.03	0.11	0.07	0.05	0.04	0.04	0.19	0.08	0.06	0.05	0.07	0.27
105	TC SHC kW BF	576	538	483	436	410	628	564	505	458	441	625	586	521	474	457	644	597	534	493	478
		87	132	212	294	378	122	151	244	344	432	110	174	280	393	457	127	193	315	440	478
		62.9	62.0	61.0	60.8	61.0	64.0	62.6	61.2	60.6	60.4	64.2	63.1	61.6	60.6	60.5	64.7	63.4	61.8	60.9	60.6
		0.02	0.02	0.02	0.02	0.05	0.05	0.03	0.03	0.03	0.12	0.07	0.05	0.04	0.05	0.20	0.08	0.06	0.05	0.09	0.28
115	TC SHC kW BF	529	493	440	396	379	553	514	459	415	400	573	530	473	432	420	587	544	482	451	438
		52	99	180	265	349	60	113	210	312	387	74	133	243	361	420	86	155	276	400	438
		69.6	68.7	68.2	68.7	69.0	70.1	69.0	68.0	68.0	68.4	70.7	69.3	68.0	67.7	67.8	71.2	69.6	68.1	67.5	67.6
		0.02	0.02	0.02	0.02	0.07	0.05	0.03	0.03	0.03	0.13	0.07	0.05	0.04	0.05	0.22	0.08	0.06	0.05	0.11	0.30

### 48/50 060 (60 TON) HIGH-CAPACITY COIL — SUBCOOL MODE (cont)

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm									
		24,000					27,000				
		Evaporator Air — Ewb (F)									
		75	72	67	62	57	75	72	67	62	57
75	TC	847	805	691	637	607	859	791	720	662	654
	SHC	301	384	471	599	607	321	379	526	638	654
	kW	51.7	50.8	48.6	47.4	46.9	52.1	50.7	49.1	47.8	47.6
	BF	0.10	0.08	0.07	0.10	0.32	0.11	0.09	0.08	0.14	0.38
85	TC	776	725	651	591	574	795	737	662	601	599
	SHC	239	312	440	552	574	261	337	478	584	599
	kW	55.3	54.2	52.5	51.2	50.9	55.9	54.5	52.8	51.5	51.5
	BF	0.10	0.08	0.07	0.11	0.33	0.11	0.09	0.08	0.15	0.39
95	TC	701	683	609	550	535	747	694	619	561	554
	SHC	173	279	407	513	535	225	304	443	546	554
	kW	59.6	58.8	57.1	55.8	55.5	60.3	59.1	57.3	56.1	56.0
	BF	0.09	0.08	0.07	0.12	0.34	0.11	0.09	0.08	0.16	0.40
105	TC	656	610	544	509	495	667	618	550	519	512
	SHC	141	218	351	474	495	156	238	385	505	512
	kW	65.1	63.7	62.1	61.2	61.0	65.4	64.0	62.3	61.4	61.3
	BF	0.09	0.07	0.07	0.13	0.35	0.11	0.09	0.08	0.17	0.41
115	TC	599	553	491	465	453	609	561	498	471	466
	SHC	100	175	311	432	453	115	197	346	460	466
	kW	71.7	69.9	68.2	67.6	67.5	72.1	70.1	68.3	67.7	67.6
	BF	0.09	0.07	0.07	0.15	0.37	0.11	0.09	0.08	0.19	0.42

#### LEGEND

48/50 VAV units only.

**BF** — Bypass Factor      **kW** — Compressor Motor Power Input  
**Edb** — Entering Dry Bulb      **SHC** — Sensible Heat Cap. (1000 Btu/h)  
**Ewb** — Entering Wet Bulb      **TC** — Total Cap. (1000 Btu/h) Gross

#### NOTES:

- The SHC is based on 80°F edb temperature of air entering evaporator coil. For edb temperatures other than 80°F, adjust SHC by multiplying the correction factor and the cfm and then adding or subtracting the value from the SHC.

- Interpolation is permissible.
- Correction Factor =  $1.10 \times (1 - BF) \times (edb - 80)$ .
- Cooling capacities are gross and do not include deduction for indoor fan motor heat.
- SHC values provided are in subcooling mode with the gas bypass valve closed and reflect the maximum SHC in subcooling mode. The P Series innovative modulating valve system can reduce SHC as needed to meet the supply air set point requirement with minimal change in latent capacity. This will provide variable SHC to meet the space load.

## Cooling Capacities (cont)

### 48/50 070 (70 TON) STANDARD CAPACITY COIL — SUBCOOL MODE

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm																			
		14,000					17,500					21,000					24,500				
		Evaporator Air — Ewb (F)																			
		75	72	67	62	57	75	72	67	62	57	75	72	67	62	57	75	72	67	62	57
75	TC	791	754	683	644	576	812	787	726	676	627	855	813	749	671	663	875	813	767	703	681
	SHC	255	309	393	488	552	257	336	440	549	627	292	363	483	580	663	308	369	525	648	681
	kW	52.2	51.2	49.8	48.8	47.5	53.0	52.1	50.6	49.5	48.6	54.3	53.1	51.2	49.6	49.3	54.8	53.1	51.7	50.4	49.6
	BF	0.00	0.07	0.07	0.06	0.08	0.13	0.10	0.09	0.09	0.16	0.14	0.12	0.11	0.11	0.26	0.16	0.14	0.13	0.14	0.34
85	TC	738	724	665	618	551	774	738	695	637	588	815	776	716	668	623	833	793	731	672	675
	SHC	209	286	374	467	529	229	295	416	517	588	264	337	458	584	623	279	361	497	624	675
	kW	56.1	55.5	54.1	53.2	51.8	57.2	56.2	54.9	53.6	52.5	58.4	57.3	55.4	54.3	53.3	59.0	57.8	56.1	54.7	55.7
	BF	0.00	0.07	0.07	0.07	0.09	0.13	0.10	0.09	0.09	0.17	0.14	0.12	0.11	0.11	0.27	0.15	0.14	0.13	0.14	0.35
95	TC	723	687	627	595	543	754	718	660	579	577	775	739	681	646	616	791	753	696	639	621
	SHC	205	258	344	453	522	221	285	390	467	577	236	310	431	571	616	250	333	472	597	621
	kW	61.7	60.7	59.2	59.7	59.3	62.6	61.6	60.1	58.3	59.8	63.3	62.2	60.6	60.7	60.4	63.8	62.7	61.1	59.6	59.2
	BF	0.05	0.07	0.07	0.07	0.11	0.13	0.10	0.09	0.09	0.17	0.14	0.12	0.11	0.11	0.28	0.15	0.14	0.13	0.15	0.36
105	TC	685	650	605	565	517	714	679	624	593	552	733	699	643	613	586	747	713	657	604	589
	SHC	178	232	333	431	498	193	257	364	491	552	207	282	405	547	586	221	305	444	560	589
	kW	67.3	66.4	65.9	65.7	65.5	68.2	67.2	65.8	66.2	65.9	68.8	67.8	66.3	66.7	66.6	69.3	68.2	66.7	65.3	64.9
	BF	0.05	0.07	0.07	0.07	0.12	0.13	0.10	0.09	0.09	0.20	0.14	0.12	0.11	0.12	0.30	0.15	0.14	0.13	0.17	0.37
115	TC	643	610	583	532	483	670	637	584	558	522	705	655	602	576	555	718	668	615	567	554
	SHC	150	205	321	408	471	163	229	337	467	522	195	253	377	522	555	209	275	416	526	554
	kW	73.7	72.8	73.4	72.9	72.7	74.5	73.6	72.2	73.1	73.1	75.9	74.1	72.7	73.5	73.5	76.3	74.5	73.0	71.7	71.4
	BF	0.04	0.07	0.07	0.07	0.15	0.12	0.10	0.09	0.09	0.22	0.14	0.12	0.11	0.12	0.32	0.15	0.14	0.13	0.19	0.39

### 48/50 070 (70 TON) STANDARD CAPACITY COIL — SUBCOOL MODE (cont)

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm									
		28,000					30,000				
		Evaporator Air — Ewb (F)									
		75	72	67	62	57	75	72	67	62	57
75	TC	703	888	847	777	717	897	854	783	696	728
	SHC	648	332	414	561	717	333	428	582	681	728
	kW	50.4	55.2	54.1	52.3	50.5	55.5	54.3	52.5	50.4	50.8
	BF	0.17	0.15	0.14	0.17	0.40	0.18	0.16	0.15	0.20	0.43
85	TC	847	806	744	683	675	853	812	750	715	709
	SHC	294	385	536	657	675	303	399	558	700	709
	kW	59.4	58.2	56.5	54.9	54.7	59.6	58.4	56.7	56.9	56.3
	BF	0.17	0.15	0.14	0.19	0.41	0.18	0.16	0.15	0.22	0.44
95	TC	802	766	707	677	669	808	771	713	685	608
	SHC	265	357	510	654	669	273	370	531	674	608
	kW	64.2	63.1	61.4	61.5	61.3	64.4	63.3	61.6	61.8	59.2
	BF	0.17	0.15	0.14	0.20	0.42	0.18	0.16	0.15	0.23	0.45
105	TC	758	724	668	643	635	763	729	672	652	646
	SHC	235	328	482	623	635	242	341	503	643	646
	kW	69.7	68.6	67.0	67.5	67.4	69.8	68.8	67.2	67.8	67.6
	BF	0.17	0.15	0.14	0.22	0.43	0.18	0.16	0.15	0.24	0.46
115	TC	711	697	624	581	573	738	701	629	587	610
	SHC	204	318	453	561	573	235	331	474	580	610
	kW	75.9	75.7	73.3	72.1	71.9	77.0	75.9	73.5	72.3	74.3
	BF	0.17	0.15	0.14	0.23	0.45	0.18	0.16	0.15	0.26	0.48

#### LEGEND

48/50 VAV units only.

**BF** — Bypass Factor      **kW** — Compressor Motor Power Input  
**Edb** — Entering Dry Bulb      **SHC** — Sensible Heat Cap. (1000 Btu/h)  
**Ewb** — Entering Wet Bulb      **TC** — Total Cap. (1000 Btu/h) Gross

#### NOTES:

- The SHC is based on 80°F edb temperature of air entering evaporator coil. For edb temperatures other than 80°F, adjust SHC by multiplying the correction factor and the cfm and then adding or subtracting the value from the SHC.

- Interpolation is permissible.
- Correction Factor =  $1.10 \times (1 - BF) \times (edb - 80)$ .
- Cooling capacities are gross and do not include deduction for indoor fan motor heat.
- SHC values provided are in subcooling mode with the gas bypass valve closed and reflect the maximum SHC in subcooling mode. The P Series innovative modulating valve system can reduce SHC as needed to meet the supply air set point requirement with minimal change in latent capacity. This will provide variable SHC to meet the space load.

## Cooling Capacities (cont)

### 48/50 070 (70 TON) HIGH-CAPACITY COIL — SUBCOOL MODE

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm																			
		14,000					17,500					21,000					24,500				
		Evaporator Air — Ewb (F)																			
		75	72	67	62	57	75	72	67	62	57	75	72	67	62	57	75	72	67	62	57
75	TC SHC kW BF	798	759	699	643	604	835	793	732	675	635	861	817	754	698	669	879	836	769	716	700
		236	292	386	478	578	253	320	433	544	631	271	348	478	607	669	288	375	522	664	700
		52.9	51.8	50.3	49.0	48.1	53.9	52.8	51.1	49.7	48.8	54.7	53.5	51.8	50.3	49.6	55.3	54.1	52.2	50.8	50.3
		0.03	0.02	0.02	0.02	0.03	0.06	0.04	0.03	0.04	0.11	0.07	0.05	0.05	0.05	0.21	0.08	0.06	0.06	0.08	0.29
85	TC SHC kW BF	762	725	668	610	586	795	757	697	644	600	817	778	718	664	638	833	793	733	683	667
		207	264	361	451	558	222	290	405	519	598	237	316	449	579	638	253	342	493	636	667
		57.0	56.0	54.6	53.3	52.7	58.0	57.0	55.3	54.0	53.1	58.7	57.6	55.9	54.5	53.9	59.3	58.1	56.4	55.0	54.6
		0.03	0.02	0.02	0.02	0.06	0.06	0.04	0.03	0.04	0.12	0.07	0.05	0.05	0.05	0.22	0.08	0.06	0.06	0.08	0.30
95	TC SHC kW BF	723	687	632	578	560	752	716	661	610	568	773	735	679	631	607	787	749	693	649	634
		176	235	333	427	534	189	259	377	492	562	203	284	419	553	607	218	308	462	600	634
		62.0	61.0	59.6	58.4	58.2	62.8	61.8	60.3	59.1	58.1	63.5	62.4	60.9	59.6	59.0	64.0	62.9	61.3	60.0	59.7
		0.03	0.02	0.02	0.02	0.07	0.06	0.04	0.03	0.04	0.12	0.07	0.05	0.05	0.06	0.23	0.08	0.06	0.06	0.10	0.31
105	TC SHC kW BF	680	646	594	548	533	706	671	618	570	528	724	688	636	592	569	737	701	648	610	598
		145	205	305	405	508	155	226	346	463	528	167	249	387	523	569	181	273	429	563	598
		67.7	66.7	65.6	65.2	65.1	68.5	67.5	66.1	65.3	64.7	69.1	68.0	66.5	65.6	65.2	69.5	68.4	66.9	65.8	65.7
		0.02	0.02	0.02	0.02	0.09	0.06	0.04	0.03	0.04	0.15	0.07	0.05	0.05	0.06	0.25	0.08	0.06	0.06	0.12	0.33
115	TC SHC kW BF	633	601	553	504	502	656	624	575	532	507	671	638	590	559	536	683	649	601	572	556
		111	173	276	373	479	120	193	316	442	507	130	214	355	494	536	143	236	396	527	556
		74.5	73.8	73.2	73.1	73.5	75.1	74.2	73.4	73.0	72.9	75.5	74.6	73.6	73.1	72.9	75.9	74.9	73.7	73.1	73.0
		0.02	0.02	0.02	0.02	0.10	0.06	0.04	0.03	0.04	0.17	0.07	0.05	0.05	0.08	0.27	0.08	0.06	0.06	0.13	0.34

### 48/50 070 (70 TON) HIGH-CAPACITY COIL — SUBCOOL MODE (cont)

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm									
		28,000					30,000				
		Evaporator Air — Ewb (F)									
		75	72	67	62	57	75	72	67	62	57
75	TC	894	849	783	733	723	901	851	788	741	736
	SHC	305	403	567	705	723	314	414	590	728	736
	kW	55.7	54.5	52.7	51.2	51.0	56.0	54.4	52.8	51.5	51.3
	BF	0.09	0.08	0.07	0.12	0.36	0.10	0.08	0.08	0.15	0.40
85	TC	845	805	745	701	692	852	810	750	709	703
	SHC	269	368	536	675	692	278	383	560	696	703
	kW	59.7	58.5	56.8	55.5	55.3	59.9	58.7	56.9	55.7	55.6
	BF	0.09	0.08	0.07	0.13	0.37	0.10	0.08	0.08	0.16	0.40
95	TC	798	760	703	666	659	804	765	708	673	664
	SHC	233	334	503	641	659	241	348	527	662	664
	kW	64.4	63.3	61.6	60.5	60.3	64.6	63.4	61.8	60.7	60.5
	BF	0.09	0.08	0.07	0.15	0.38	0.10	0.08	0.08	0.17	0.41
105	TC	747	710	657	626	619	752	715	661	633	628
	SHC	195	297	470	603	619	203	311	492	624	628
	kW	69.9	68.8	67.2	66.3	66.1	70.0	68.9	67.4	66.5	66.4
	BF	0.09	0.08	0.07	0.16	0.39	0.10	0.08	0.08	0.18	0.42
115	TC	691	657	609	583	573	696	660	613	589	582
	SHC	156	260	436	563	573	164	273	458	583	582
	kW	76.2	75.2	73.9	73.3	73.2	76.4	75.3	74.0	73.4	73.3
	BF	0.09	0.08	0.07	0.18	0.41	0.10	0.08	0.08	0.20	0.44

#### LEGEND

48/50 VAV units only.

**BF** — Bypass Factor      **kW** — Compressor Motor Power Input  
**Edb** — Entering Dry Bulb      **SHC** — Sensible Heat Cap. (1000 Btu/h)  
**Ewb** — Entering Wet Bulb      **TC** — Total Cap. (1000 Btu/h) Gross

#### NOTES:

- The SHC is based on 80°F edb temperature of air entering evaporator coil. For edb temperatures other than 80°F, adjust SHC by multiplying the correction factor and the cfm and then adding or subtracting the value from the SHC.

- Interpolation is permissible.
- Correction Factor =  $1.10 \times (1 - BF) \times (edb - 80)$ .
- Cooling capacities are gross and do not include deduction for indoor fan motor heat.
- SHC values provided are in subcooling mode with the gas bypass valve closed and reflect the maximum SHC in subcooling mode. The P Series innovative modulating valve system can reduce SHC as needed to meet the supply air set point requirement with minimal change in latent capacity. This will provide variable SHC to meet the space load.



## Cooling Capacities (cont)

### 48/50 075 (75 TON) STANDARD CAPACITY COIL — SUBCOOL MODE

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm																			
		14,000					17,500					21,000					24,500				
		Evaporator Air — Ewb (F)																			
		75	72	67	62	57	75	72	67	62	57	75	72	67	62	57	75	72	67	62	57
75	TC	847	771	745	681	619	871	829	760	720	659	900	856	789	725	674	914	868	809	743	709
	SHC	281	299	432	507	582	284	347	447	572	649	301	373	494	610	674	310	391	530	665	709
	kW	56.6	54.6	54.8	53.8	53.0	57.3	56.2	54.5	54.5	53.9	58.2	57.0	55.2	53.7	52.5	58.7	57.4	55.8	54.1	53.3
	BF	0.00	0.07	0.07	0.06	0.07	0.06	0.10	0.09	0.09	0.14	0.14	0.12	0.11	0.11	0.22	0.16	0.14	0.12	0.13	0.31
85	TC	803	756	715	653	593	832	817	713	668	632	860	819	755	681	670	878	838	773	710	680
	SHC	246	293	403	486	562	254	344	410	527	623	272	346	468	576	670	287	371	508	639	680
	kW	61.1	59.9	59.9	59.1	58.1	61.9	62.1	58.9	57.8	58.4	62.8	61.7	59.9	58.3	59.6	63.4	62.2	60.4	58.8	58.1
	BF	0.00	0.07	0.07	0.06	0.08	0.16	0.10	0.09	0.09	0.15	0.14	0.12	0.11	0.11	0.24	0.16	0.14	0.13	0.13	0.32
95	TC	759	720	681	623	566	794	755	694	603	606	818	779	717	682	641	859	797	734	674	648
	SHC	212	266	378	464	540	227	292	399	471	599	242	317	441	585	641	282	341	480	611	648
	kW	66.4	65.4	65.6	64.8	64.5	67.4	66.4	64.7	62.6	64.9	68.2	67.1	65.4	66.0	65.6	69.9	67.6	65.9	64.3	63.7
	BF	0.00	0.07	0.07	0.06	0.09	0.14	0.10	0.09	0.09	0.16	0.14	0.12	0.11	0.11	0.25	0.16	0.14	0.13	0.14	0.33
105	TC	718	681	647	590	533	751	714	654	621	576	773	736	677	645	610	789	752	692	634	613
	SHC	183	238	354	440	508	198	263	371	501	576	212	287	412	559	610	226	311	451	582	613
	kW	72.6	71.6	72.3	71.5	71.1	73.6	72.6	71.0	71.9	72.1	74.3	73.2	71.6	72.6	72.3	74.9	73.7	72.1	70.5	70.0
	BF	0.06	0.07	0.07	0.06	0.11	0.14	0.10	0.09	0.09	0.17	0.14	0.12	0.11	0.11	0.27	0.15	0.13	0.13	0.14	0.34
115	TC	674	639	611	555	510	704	669	613	581	509	724	689	633	607	576	764	704	647	622	577
	SHC	154	209	330	415	486	167	233	342	472	485	180	256	382	533	576	219	279	421	570	577
	kW	79.6	78.7	80.2	79.6	80.4	80.5	79.5	78.1	79.8	80.0	81.2	80.1	78.6	80.3	80.2	83.1	80.6	79.0	80.7	77.3
	BF	0.05	0.07	0.07	0.07	0.13	0.13	0.10	0.09	0.09	0.13	0.14	0.12	0.11	0.12	0.29	0.15	0.13	0.13	0.17	0.36

### 48/50 075 (75 TON) STANDARD CAPACITY COIL — SUBCOOL MODE (cont)

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm									
		28,000					30,000				
		Evaporator Air — Ewb (F)									
		75	72	67	62	57	75	72	67	62	57
75	TC	939	893	823	780	736	947	900	830	764	773
	SHC	329	424	575	736	736	338	437	596	741	773
	kW	59.3	58.1	56.2	55.8	54.0	59.6	58.3	56.4	54.7	55.8
	BF	0.17	0.15	0.14	0.16	0.37	0.18	0.16	0.15	0.17	0.40
85	TC	893	852	787	724	706	900	884	817	731	719
	SHC	302	394	547	685	706	310	433	593	703	719
	kW	63.9	62.7	60.9	59.2	58.8	64.1	64.0	62.2	59.4	59.1
	BF	0.17	0.15	0.14	0.16	0.38	0.18	0.16	0.15	0.19	0.41
95	TC	849	810	747	687	673	854	817	753	696	685
	SHC	271	365	519	649	673	283	373	540	670	685
	kW	69.2	68.0	66.3	64.6	64.3	69.4	68.3	66.5	64.9	64.6
	BF	0.17	0.15	0.14	0.18	0.39	0.18	0.16	0.15	0.21	0.42
105	TC	802	764	705	650	637	830	770	710	658	649
	SHC	235	334	489	614	637	280	346	510	634	649
	kW	75.3	74.1	72.4	70.9	70.6	76.7	74.3	72.6	71.1	70.9
	BF	0.17	0.15	0.14	0.20	0.41	0.18	0.16	0.15	0.22	0.44
115	TC	750	715	658	635	599	787	720	663	617	609
	SHC	206	301	458	605	599	236	314	479	596	609
	kW	82.1	81.0	79.3	80.9	77.8	83.9	81.2	79.5	78.2	78.0
	BF	0.17	0.15	0.14	0.21	0.42	0.18	0.16	0.15	0.24	0.45

#### LEGEND

48/50 VAV units only.

**BF** — Bypass Factor      **kW** — Compressor Motor Power Input  
**Edb** — Entering Dry Bulb      **SHC** — Sensible Heat Cap. (1000 Btu/h)  
**Ewb** — Entering Wet Bulb      **TC** — Total Cap. (1000 Btu/h) Gross

#### NOTES:

1. The SHC is based on 80°F edb temperature of air entering evaporator coil. For edb temperatures other than 80°F, adjust SHC by multiplying the correction factor and the cfm and then adding or subtracting the value from the SHC.

2. Interpolation is permissible.
3. Correction Factor =  $1.10 \times (1 - BF) \times (edb - 80)$ .
4. Cooling capacities are gross and do not include deduction for indoor fan motor heat.
5. SHC values provided are in subcooling mode with the gas bypass valve closed and reflect the maximum SHC in subcooling mode. The P Series innovative modulating valve system can reduce SHC as needed to meet the supply air set point requirement with minimal change in latent capacity. This will provide variable SHC to meet the space load.

## Cooling Capacities (cont)

### 48/50 075 (75 TON) HIGH-CAPACITY COIL — SUBCOOL MODE

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm																			
		14,000					17,500					21,000					24,500				
		Evaporator Air — Ewb (F)																			
		75	72	67	62	57	75	72	67	62	57	75	72	67	62	57	75	72	67	62	57
75	TC	871	825	758	693	647	913	869	799	726	674	946	896	837	761	717	966	919	847	773	753
	SHC	277	330	421	508	606	296	363	472	572	660	317	391	530	644	717	333	421	561	697	753
	kW	57.3	56.1	54.4	53.0	52.4	58.6	57.3	55.5	53.5	52.5	59.5	58.1	56.5	54.5	53.5	60.2	58.8	56.8	54.8	54.4
	BF	0.00	0.02	0.02	0.02	0.03	0.07	0.04	0.03	0.03	0.09	0.07	0.05	0.04	0.05	0.17	0.08	0.06	0.06	0.07	0.26
85	TC	836	794	741	680	616	876	834	766	717	650	907	866	792	743	689	923	880	812	747	741
	SHC	250	306	411	502	580	268	336	447	569	636	289	369	493	633	689	302	392	539	677	741
	kW	62.1	61.0	59.7	58.6	57.2	63.3	62.1	60.3	59.3	57.5	64.2	63.0	61.0	59.9	58.4	64.8	63.5	61.6	59.9	60.0
	BF	0.00	0.02	0.02	0.02	0.04	0.07	0.04	0.03	0.03	0.10	0.07	0.05	0.04	0.05	0.18	0.08	0.06	0.06	0.07	0.27
95	TC	798	769	708	649	592	836	804	729	684	619	861	820	765	706	657	880	842	782	711	708
	SHC	222	291	387	480	559	238	317	420	546	607	255	334	477	606	657	271	365	520	647	708
	kW	67.7	67.0	65.6	64.6	64.0	68.9	68.0	65.9	65.1	63.3	69.7	68.4	67.0	65.5	64.1	70.3	69.1	67.4	65.5	65.7
	BF	0.03	0.02	0.02	0.02	0.05	0.07	0.04	0.03	0.03	0.12	0.07	0.05	0.04	0.05	0.20	0.08	0.06	0.06	0.08	0.28
105	TC	756	729	671	615	565	798	752	702	647	586	818	776	724	670	623	833	796	739	671	674
	SHC	192	263	362	456	533	214	277	405	519	576	226	304	448	580	623	239	333	490	610	674
	kW	74.2	73.5	72.6	72.1	72.0	75.4	74.1	73.0	72.3	70.7	76.1	74.8	73.4	72.5	71.3	76.6	75.4	73.8	72.0	72.7
	BF	0.03	0.02	0.02	0.02	0.07	0.06	0.04	0.03	0.04	0.13	0.07	0.05	0.05	0.05	0.22	0.08	0.06	0.06	0.10	0.30
115	TC	711	688	631	578	533	750	706	646	607	574	770	728	680	629	586	781	744	694	631	635
	SHC	162	235	334	429	504	183	247	362	492	568	194	272	418	551	586	205	297	460	573	635
	kW	82.0	81.7	81.0	81.0	81.3	83.0	81.8	80.6	80.9	80.9	83.6	82.4	81.4	81.0	79.8	84.0	82.8	81.7	80.1	81.0
	BF	0.02	0.02	0.02	0.02	0.09	0.06	0.04	0.03	0.04	0.15	0.07	0.05	0.05	0.06	0.23	0.08	0.06	0.06	0.12	0.31

### 48/50 075 (75 TON) HIGH-CAPACITY COIL — SUBCOOL MODE (cont)

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm									
		28,000					30,000				
		Evaporator Air — Ewb (F)									
		75	72	67	62	57	75	72	67	62	57
75	TC	983	936	862	796	783	990	944	869	806	797
	SHC	351	449	611	755	783	360	465	636	777	797
	kW	60.7	59.4	57.3	55.5	55.2	60.9	59.6	57.5	55.8	55.6
	BF	0.09	0.08	0.07	0.10	0.33	0.10	0.08	0.08	0.13	0.36
85	TC	939	898	826	764	768	974	902	840	790	761
	SHC	320	422	583	721	768	369	434	615	762	761
	kW	65.4	64.1	62.0	60.3	60.6	69.7	64.2	62.4	61.2	60.1
	BF	0.09	0.08	0.07	0.11	0.34	0.12	0.08	0.08	0.14	0.37
95	TC	895	852	786	747	733	932	856	800	755	747
	SHC	289	388	554	706	733	346	395	586	729	747
	kW	70.8	69.5	67.6	66.7	66.3	75.8	69.6	68.0	66.9	66.7
	BF	0.09	0.08	0.07	0.13	0.35	0.12	0.08	0.08	0.15	0.38
105	TC	846	806	750	709	697	850	812	755	717	709
	SHC	251	356	532	671	697	273	371	555	693	709
	kW	77.0	75.8	74.2	73.2	73.0	77.2	76.0	74.4	73.4	73.2
	BF	0.10	0.08	0.07	0.14	0.36	0.10	0.08	0.08	0.16	0.40
115	TC	794	755	704	668	658	802	761	708	676	669
	SHC	220	323	500	634	658	222	338	523	656	669
	kW	84.4	83.2	81.9	81.3	81.2	84.6	83.4	82.0	81.4	81.4
	BF	0.09	0.08	0.07	0.16	0.38	0.10	0.08	0.08	0.18	0.41

#### LEGEND

48/50 VAV units only.

**BF** — Bypass Factor      **kW** — Compressor Motor Power Input  
**Edb** — Entering Dry Bulb      **SHC** — Sensible Heat Cap. (1000 Btu/h)  
**Ewb** — Entering Wet Bulb      **TC** — Total Cap. (1000 Btu/h) Gross

#### NOTES:

- The SHC is based on 80°F edb temperature of air entering evaporator coil. For edb temperatures other than 80°F, adjust SHC by multiplying the correction factor and the cfm and then adding or subtracting the value from the SHC.

- Interpolation is permissible.
- Correction Factor =  $1.10 \times (1 - BF) \times (edb - 80)$ .
- Cooling capacities are gross and do not include deduction for indoor fan motor heat.
- SHC values provided are in subcooling mode with the gas bypass valve closed and reflect the maximum SHC in subcooling mode. The P Series innovative modulating valve system can reduce SHC as needed to meet the supply air set point requirement with minimal change in latent capacity. This will provide variable SHC to meet the space load.

## Cooling Capacities (cont)

### 48/50 090 (90 TON) STANDARD CAPACITY COIL — SUBCOOL MODE

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm																			
		18,000					22,500					27,000					31,500				
		Evaporator Air — Ewb (F)																			
		75	72	67	62	57	75	72	67	62	57	75	72	67	62	57	75	72	67	62	57
75	TC	1075	1017	922	863	788	1154	1072	1003	915	836	1171	1135	1017	925	883	1201	1142	1045	952	923
	SHC	396	454	541	656	744	450	493	629	736	819	452	553	658	782	883	475	563	707	846	923
	kW	61.1	60.1	58.5	58.1	57.2	62.8	61.1	60.3	58.8	57.7	63.0	62.5	60.2	58.6	58.4	63.6	62.4	60.7	59.1	59.0
	BF	0.00	0.05	0.09	0.10	0.11	0.03	0.10	0.12	0.12	0.18	0.09	0.12	0.14	0.15	0.26	0.12	0.15	0.16	0.17	0.33
85	TC	1052	964	884	828	752	1080	1013	933	876	807	1117	1083	995	910	844	1144	1088	996	935	887
	SHC	387	413	513	629	712	391	449	570	707	791	414	516	649	778	844	436	525	673	841	887
	kW	68.2	66.3	64.9	64.9	64.0	68.5	67.3	65.8	65.5	64.6	69.2	68.8	67.3	65.9	65.1	69.8	68.7	67.0	66.4	65.7
	BF	0.00	0.06	0.09	0.10	0.11	0.04	0.10	0.12	0.12	0.19	0.09	0.13	0.14	0.15	0.26	0.12	0.15	0.16	0.18	0.34
95	TC	977	950	868	790	718	1026	972	914	835	771	1080	1006	946	866	808	1086	1053	944	890	849
	SHC	327	413	508	600	686	354	423	564	677	756	396	456	615	746	808	396	508	637	807	849
	kW	74.7	74.6	73.6	72.8	71.9	75.7	74.6	74.1	73.3	72.4	77.0	75.3	74.6	73.6	73.0	77.0	76.5	74.2	73.9	73.5
	BF	0.00	0.06	0.09	0.10	0.11	0.04	0.10	0.12	0.12	0.20	0.09	0.13	0.14	0.15	0.28	0.12	0.15	0.16	0.18	0.35
105	TC	924	839	823	750	689	991	943	865	790	734	1000	972	894	819	770	1041	993	916	843	807
	SHC	291	315	476	570	656	337	410	529	645	721	336	440	579	712	770	372	468	625	773	807
	kW	83.0	81.6	82.5	81.9	81.1	84.5	83.8	82.9	82.2	81.5	84.5	84.2	83.3	82.5	82.0	85.6	84.6	83.5	82.8	82.4
	BF	0.00	0.06	0.09	0.10	0.15	0.05	0.10	0.12	0.12	0.22	0.09	0.13	0.14	0.15	0.30	0.12	0.15	0.16	0.19	0.37
115	TC	868	848	774	708	648	931	886	812	742	694	956	912	838	769	728	974	930	858	790	762
	SHC	253	342	442	544	617	297	371	493	611	682	313	399	540	675	728	329	426	586	728	762
	kW	92.8	93.3	92.8	92.4	91.8	94.2	93.7	93.0	92.6	92.0	94.5	94.0	93.3	92.7	92.5	94.8	94.2	93.4	92.9	92.7
	BF	0.00	0.06	0.09	0.10	0.16	0.05	0.10	0.12	0.13	0.24	0.10	0.13	0.14	0.16	0.31	0.13	0.15	0.16	0.20	0.39

### 48/50 090 (90 TON) STANDARD CAPACITY COIL — SUBCOOL MODE (cont)

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm				
		36,000				
		Evaporator Air — Ewb (F)				
		75	72	67	62	57
75	TC	1209	1164	1068	972	932
	SHC	481	594	757	903	932
	kW	63.8	62.9	61.2	59.5	58.7
	BF	0.15	0.17	0.18	0.20	0.39
85	TC	1165	1109	1041	929	923
	SHC	456	555	745	869	923
	kW	70.2	69.1	68.1	65.8	66.2
	BF	0.15	0.17	0.18	0.21	0.40
95	TC	1105	1051	963	908	882
	SHC	415	516	683	863	882
	kW	77.4	76.3	74.6	74.2	73.9
	BF	0.15	0.17	0.18	0.21	0.41
105	TC	1041	990	932	860	838
	SHC	373	475	669	815	838
	kW	85.5	84.4	83.8	82.9	82.7
	BF	0.15	0.17	0.18	0.23	0.43
115	TC	973	926	872	810	791
	SHC	329	433	629	767	791
	kW	94.6	93.8	93.6	93.0	92.9
	BF	0.15	0.17	0.18	0.25	0.44

#### LEGEND

48/50 VAV units only.

BF — Bypass Factor      kW — Compressor Motor Power Input  
Edb — Entering Dry Bulb      SHC — Sensible Heat Cap. (1000 Btuh)  
Ewb — Entering Wet Bulb      TC — Total Cap. (1000 Btuh) Gross

#### NOTES:

- The SHC is based on 80°F edb temperature of air entering evaporator coil. For edb temperatures other than 80°F, adjust SHC by multiplying the correction factor and the cfm and then adding or subtracting the value from the SHC.

- Interpolation is permissible.
- Correction Factor =  $1.10 \times (1 - BF) \times (edb - 80)$ .
- Cooling capacities are gross and do not include deduction for indoor fan motor heat.
- SHC values provided are in subcooling mode with the gas bypass valve closed and reflect the maximum SHC in subcooling mode. The P Series innovative modulating valve system can reduce SHC as needed to meet the supply air set point requirement with minimal change in latent capacity. This will provide variable SHC to meet the space load.

## Cooling Capacities (cont)

### 48/50 090 (90 TON) HIGH-CAPACITY COIL — SUBCOOL MODE

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm																			
		18,000					22,500					27,000					31,500				
		Evaporator Air — Ewb (F)																			
		75	72	67	62	57	75	72	67	62	57	75	72	67	62	57	75	72	67	62	57
75	TC SHC kW BF	1134	1074	981	894	822	1191	1131	1036	948	878	1230	1170	1075	985	932	1259	1198	1103	1014	974
		398	462	566	668	773	425	503	630	755	859	450	540	690	837	932	474	577	748	911	974
		62.5	61.4	59.7	58.3	57.4	63.6	62.5	60.7	59.2	57.9	64.5	63.3	61.5	59.9	58.9	65.1	63.9	62.0	60.4	59.7
		0.00	0.01	0.02	0.03	0.04	0.00	0.03	0.04	0.04	0.10	0.03	0.05	0.05	0.06	0.18	0.05	0.06	0.06	0.08	0.26
85	TC SHC kW BF	1080	1023	935	853	781	1133	1076	985	902	843	1169	1111	1021	937	886	1196	1138	1046	964	930
		358	424	531	636	736	383	462	592	721	826	406	498	650	800	886	429	533	706	872	930
		68.8	67.7	66.2	65.3	64.5	69.9	68.8	67.1	65.8	64.9	70.7	69.5	67.8	66.2	65.6	71.3	70.1	68.3	66.7	66.1
		0.00	0.01	0.02	0.03	0.04	0.01	0.03	0.04	0.04	0.11	0.03	0.05	0.05	0.06	0.19	0.05	0.06	0.06	0.08	0.27
95	TC SHC kW BF	1025	970	887	810	743	1072	1018	933	855	801	1105	1050	965	887	843	1129	1074	988	912	885
		318	386	495	603	702	340	420	554	685	785	361	454	610	762	843	382	487	664	831	885
		76.1	75.2	74.2	73.6	73.0	77.1	76.0	74.7	73.9	73.2	77.9	76.7	75.2	74.2	73.8	78.4	77.3	75.5	74.5	74.1
		0.00	0.01	0.02	0.03	0.06	0.01	0.03	0.04	0.04	0.12	0.04	0.05	0.05	0.06	0.20	0.06	0.06	0.06	0.09	0.29
105	TC SHC kW BF	965	914	835	762	710	1008	957	877	804	758	1036	986	905	834	798	1058	1006	926	858	836
		277	345	458	568	672	295	377	513	648	744	313	409	567	722	798	332	440	620	793	836
		84.9	84.4	83.8	83.7	83.4	85.5	84.8	84.1	83.7	83.2	86.0	85.2	84.3	83.7	83.5	86.5	85.5	84.5	83.8	83.6
		0.00	0.01	0.02	0.03	0.08	0.01	0.03	0.04	0.04	0.14	0.04	0.05	0.05	0.06	0.22	0.06	0.06	0.06	0.10	0.30
115	TC SHC kW BF	903	855	780	714	664	940	892	817	748	712	965	917	842	777	748	984	935	860	803	783
		233	304	418	536	626	248	332	471	608	700	264	361	523	680	748	282	391	575	735	783
		95.3	95.0	95.0	95.6	95.6	95.7	95.2	94.9	95.1	94.9	96.0	95.4	94.9	94.8	94.9	96.3	95.6	95.0	94.6	94.7
		0.00	0.01	0.02	0.03	0.10	0.01	0.03	0.04	0.05	0.16	0.04	0.05	0.05	0.07	0.24	0.06	0.06	0.07	0.12	0.32

### 48/50 090 (90 TON) HIGH-CAPACITY COIL — SUBCOOL MODE (cont)

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm				
		36,000				
		Evaporator Air — Ewb (F)				
		75	72	67	62	57
75	TC	1281	1220	1124	1038	1014
	SHC	497	611	803	978	1014
	kW	65.6	64.4	62.5	60.9	60.4
	BF	0.07	0.07	0.08	0.11	0.33
85	TC	1216	1157	1066	986	967
	SHC	450	566	760	935	967
	kW	71.8	70.5	68.7	67.2	66.8
	BF	0.07	0.08	0.08	0.11	0.34
95	TC	1148	1092	1005	934	919
	SHC	402	520	717	888	919
	kW	78.8	77.7	75.9	74.7	74.5
	BF	0.07	0.08	0.08	0.13	0.35
105	TC	1074	1022	942	881	867
	SHC	352	471	672	837	867
	kW	86.9	85.8	84.7	83.9	83.8
	BF	0.07	0.08	0.08	0.14	0.37
115	TC	998	949	874	824	812
	SHC	300	421	624	783	812
	kW	96.5	95.8	95.0	94.6	94.6
	BF	0.07	0.08	0.08	0.16	0.38

#### LEGEND

48/50 VAV units only.

BF — Bypass Factor      kW — Compressor Motor Power Input  
Edb — Entering Dry Bulb      SHC — Sensible Heat Cap. (1000 Btuh)  
Ewb — Entering Wet Bulb      TC — Total Cap. (1000 Btuh) Gross

#### NOTES:

- The SHC is based on 80°F edb temperature of air entering evaporator coil. For edb temperatures other than 80°F, adjust SHC by multiplying the correction factor and the cfm and then adding or subtracting the value from the SHC.

- Interpolation is permissible.
- Correction Factor =  $1.10 \times (1 - BF) \times (edb - 80)$ .
- Cooling capacities are gross and do not include deduction for indoor fan motor heat.
- SHC values provided are in subcooling mode with the gas bypass valve closed and reflect the maximum SHC in subcooling mode. The P Series innovative modulating valve system can reduce SHC as needed to meet the supply air set point requirement with minimal change in latent capacity. This will provide variable SHC to meet the space load.

## Cooling Capacities (cont)

### 48/50P2,P3,P4,P5100 (100 TON) STANDARD CAPACITY COIL — SUBCOOL MODE

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm														
		20,000					25,000					30,000				
		Evaporator Air — Ewb (F)														
		75	72	67	62	57	75	72	67	62	57	75	72	67	62	57
75	TC	1146	1084	987	897	815	1203	1165	1042	949	873	1261	1167	1071	986	932
	SHC	418	481	581	680	773	450	548	645	764	850	494	547	693	841	932
	kW	67.9	66.6	64.7	63.1	61.7	69.1	68.7	65.9	64.1	62.5	70.6	68.5	66.5	64.8	63.9
	BF	0.00	0.07	0.10	0.11	0.12	0.05	0.11	0.13	0.13	0.21	0.10	0.14	0.15	0.16	0.27
85	TC	1064	1005	946	856	779	1111	1053	991	913	836	1141	1089	1003	939	892
	SHC	351	414	551	648	735	373	450	607	739	814	390	484	638	805	892
	kW	74.1	72.8	71.6	70.1	68.7	75.2	73.9	72.5	71.1	69.5	76.0	74.8	73.0	71.5	70.8
	BF	0.00	0.07	0.10	0.11	0.15	0.05	0.11	0.13	0.13	0.22	0.10	0.14	0.15	0.16	0.29
95	TC	1004	941	894	813	762	1042	995	906	857	814	1073	1024	945	889	850
	SHC	306	365	511	614	719	321	408	535	695	793	340	437	596	767	850
	kW	81.6	80.2	79.5	78.3	77.8	82.6	81.5	79.6	78.9	78.4	83.4	82.3	80.5	79.5	79.0
	BF	0.00	0.07	0.10	0.11	0.16	0.06	0.11	0.13	0.14	0.23	0.10	0.14	0.15	0.17	0.30
105	TC	931	898	843	766	724	976	926	846	807	771	1003	955	866	836	805
	SHC	251	337	474	579	683	274	356	490	658	753	291	387	533	727	805
	kW	90.0	89.4	88.9	87.8	87.5	91.1	90.0	88.7	88.3	88.0	91.8	90.7	89.0	88.8	88.5
	BF	0.01	0.07	0.10	0.11	0.18	0.06	0.11	0.13	0.14	0.25	0.11	0.14	0.15	0.17	0.32
115	TC	867	835	792	715	683	905	859	797	762	726	927	882	823	779	756
	SHC	206	292	439	543	644	225	309	460	628	710	238	335	508	686	756
	kW	100.2	99.7	99.9	98.8	98.7	100.9	100.1	99.5	99.5	99.0	101.4	100.6	99.7	99.5	99.4
	BF	0.01	0.07	0.10	0.11	0.19	0.06	0.11	0.13	0.14	0.26	0.11	0.14	0.15	0.18	0.34

### 48/50P2,P3,P4,P5100 (100 TON) STANDARD CAPACITY COIL — SUBCOOL MODE (cont)

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm									
		35,000					40,000				
		Evaporator Air — Ewb (F)									
		75	72	67	62	57	75	72	67	62	57
75	TC	1273	1210	1133	1020	973	1296	1233	1157	1036	998
	SHC	499	597	781	915	973	522	630	834	968	998
	kW	70.8	69.4	68.1	65.5	64.6	71.4	70.0	68.7	65.9	65.0
	BF	0.13	0.16	0.17	0.19	0.35	0.16	0.18	0.19	0.22	0.41
85	TC	1164	1107	1024	969	917	1186	1130	1043	967	964
	SHC	408	510	685	875	917	429	543	734	906	964
	kW	76.6	75.3	73.4	72.2	71.0	77.2	75.8	74.0	72.3	72.1
	BF	0.14	0.16	0.17	0.19	0.36	0.16	0.18	0.19	0.23	0.42
95	TC	1096	1044	961	914	886	1114	1059	979	935	876
	SHC	359	465	638	829	886	377	490	687	875	876
	kW	84.0	82.8	80.9	79.9	79.5	84.5	83.2	81.4	80.3	79.0
	BF	0.14	0.16	0.17	0.20	0.38	0.16	0.18	0.19	0.25	0.43
105	TC	1021	974	900	860	838	1037	990	918	886	825
	SHC	306	415	595	782	838	322	442	644	828	825
	kW	92.4	91.2	89.7	89.1	88.9	92.8	91.7	90.1	89.6	88.2
	BF	0.14	0.16	0.17	0.22	0.39	0.16	0.18	0.19	0.27	0.45
115	TC	944	901	833	806	787	824	955	913	841	813
	SHC	252	363	547	729	787	765	265	388	586	813
	kW	101.8	100.9	99.9	99.8	99.7	100.0	102.1	101.2	100.0	99.9
	BF	0.14	0.16	0.17	0.24	0.41	0.27	0.16	0.18	0.20	0.46

#### LEGEND

48/50 VAV units only.

**BF** — Bypass Factor      **kW** — Compressor Motor Power Input  
**Edb** — Entering Dry Bulb      **SHC** — Sensible Heat Cap. (1000 Btuh)  
**Ewb** — Entering Wet Bulb      **TC** — Total Cap. (1000 Btuh) Gross

#### NOTES:

1. The SHC is based on 80°F edb temperature of air entering evaporator coil. For edb temperatures other than 80°F, adjust SHC by multiplying the correction factor and the cfm and then adding or subtracting the value from the SHC.

2. Interpolation is permissible.
3. Correction Factor =  $1.10 \times (1 - BF) \times (edb - 80)$ .
4. Cooling capacities are gross and do not include deduction for indoor fan motor heat.
5. SHC values provided are in subcooling mode with the gas bypass valve closed and reflect the maximum SHC in subcooling mode. The P Series innovative modulating valve system can reduce SHC as needed to meet the supply air set point requirement with minimal change in latent capacity. This will provide variable SHC to meet the space load.



## Cooling Capacities (cont)

### 48/50P2,P3,P4,P5100 (100 TON) HIGH-CAPACITY COIL — SUBCOOL MODE

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm														
		20,000					25,000					30,000				
		Evaporator Air — Ewb (F)														
		75	72	67	62	57	75	72	67	62	57	75	72	67	62	57
75	TC	1210	1148	1077	994	900	1255	1205	1119	1042	951	1306	1243	1145	1080	1025
	SHC	417	489	633	756	848	433	531	687	843	924	470	571	738	929	1025
	kW	69.7	68.3	66.8	65.4	64.1	70.8	69.6	67.7	66.2	64.1	72.1	70.6	68.4	67.0	66.0
	BF	0.00	0.01	0.03	0.03	0.06	0.01	0.04	0.04	0.05	0.13	0.04	0.05	0.06	0.07	0.19
85	TC	1152	1116	1016	942	863	1204	1140	1077	993	933	1274	1213	1136	1029	981
	SHC	374	471	584	714	811	398	482	658	806	907	461	560	745	889	981
	kW	76.4	75.5	73.3	72.6	71.7	77.7	76.2	74.8	73.2	72.4	79.0	77.6	76.2	73.8	73.1
	BF	0.00	0.01	0.03	0.03	0.08	0.01	0.04	0.04	0.05	0.14	0.04	0.06	0.06	0.07	0.21
95	TC	1091	1035	965	876	825	1139	1083	1017	926	890	1171	1110	1026	975	935
	SHC	329	405	546	659	774	350	441	614	752	866	370	471	650	848	935
	kW	84.2	82.9	81.9	80.7	80.9	85.4	84.1	82.8	81.3	81.3	86.3	84.8	82.9	82.3	81.8
	BF	0.00	0.01	0.03	0.03	0.09	0.01	0.04	0.04	0.05	0.15	0.04	0.05	0.06	0.07	0.22
105	TC	1027	1000	909	824	758	1068	1013	957	888	844	1097	1041	924	919	885
	SHC	283	387	505	621	709	300	390	571	728	823	318	422	567	805	885
	kW	93.4	93.2	92.0	91.3	90.3	94.3	93.2	92.7	92.2	91.8	95.0	93.8	91.7	92.4	92.2
	BF	0.00	0.01	0.03	0.03	0.11	0.02	0.04	0.04	0.05	0.17	0.05	0.05	0.06	0.08	0.24
115	TC	960	935	849	789	715	987	929	892	811	794	1010	971	893	844	810
	SHC	237	342	476	602	669	242	327	541	668	775	255	374	556	736	810
	kW	104.3	104.5	103.8	104.7	102.8	104.7	103.8	104.2	103.5	104.2	105.2	104.6	103.7	103.3	103.1
	BF	0.01	0.02	0.03	0.03	0.13	0.02	0.04	0.05	0.06	0.19	0.05	0.05	0.06	0.10	0.26

### 48/50P2,P3,P4,P5100 (100 TON) HIGH-CAPACITY COIL — SUBCOOL MODE (cont)

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — Cfm									
		35,000					40,000				
		Evaporator Air — Ewb (F)									
		75	72	67	62	57	75	72	67	62	57
75	TC SHC kW BF	1334	1272	1173	1099	1046	1356	1293	1220	1135	1114
		494	609	800	996	1046	517	646	885	1072	1114
		72.9	71.4	69.1	67.3	66.2	73.6	72.0	69.8	68.2	67.7
		0.06	0.07	0.07	0.09	0.28	0.08	0.08	0.09	0.13	0.35
85	TC SHC kW BF	1302	1263	1111	1056	1018	1323	1262	1129	1078	1051
		487	621	753	962	1018	510	636	809	1010	1051
		79.7	79.1	75.7	74.4	73.5	80.3	78.9	76.2	74.9	74.2
		0.06	0.07	0.07	0.10	0.29	0.08	0.09	0.09	0.14	0.36
95	TC SHC kW BF	1194	1138	1049	991	978	1208	1147	1067	1014	1012
		391	510	708	904	978	407	535	765	949	1012
		87.0	85.6	83.5	82.3	82.3	87.5	85.9	83.9	82.6	82.8
		0.06	0.07	0.07	0.11	0.30	0.08	0.09	0.09	0.15	0.37
105	TC SHC kW BF	1117	1058	976	935	925	1133	1080	995	972	957
		337	451	654	850	925	355	490	711	915	957
		95.6	94.2	92.7	92.2	92.4	96.1	94.7	93.0	92.9	92.7
		0.07	0.07	0.07	0.13	0.32	0.08	0.09	0.09	0.18	0.38
115	TC SHC kW BF	1037	980	902	889	869	1050	994	911	896	898
		281	396	602	808	869	298	428	649	837	898
		105.8	104.7	103.6	104.2	104.1	106.2	105.0	103.7	103.8	104.1
		0.07	0.07	0.08	0.15	0.34	0.08	0.09	0.09	0.19	0.40

#### LEGEND

48/50 VAV units only.

**BF** — Bypass Factor      **kW** — Compressor Motor Power Input  
**Edb** — Entering Dry Bulb      **SHC** — Sensible Heat Cap. (1000 Btuh)  
**Ewb** — Entering Wet Bulb      **TC** — Total Cap. (1000 Btuh) Gross

#### NOTES:

- The SHC is based on 80°F edb temperature of air entering evaporator coil. For edb temperatures other than 80°F, adjust SHC by multiplying the correction factor and the cfm and then adding or subtracting the value from the SHC.

- Interpolation is permissible.
- Correction Factor =  $1.10 \times (1 - BF) \times (edb - 80)$ .
- Cooling capacities are gross and do not include deduction for indoor fan motor heat.
- SHC values provided are in subcooling mode with the gas bypass valve closed and reflect the maximum SHC in subcooling mode. The P Series innovative modulating valve system can reduce SHC as needed to meet the supply air set point requirement with minimal change in latent capacity. This will provide variable SHC to meet the space load.