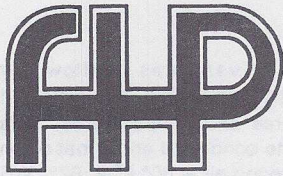


GENERAL: There are many variables (airflow, air temperatures) in an air-conditioning system that will affect operating refrigerant pressures and temperatures. The chart below shows approximate conditions and is based on air flow at the rated SCFM, entering air at 80° FDB, 67° FWB in cooling, 70° FDB in heating.

“HE” models

Operating Pressures & Temperatures

			OPERATING DATA							
			COOLING				HEATING			
MODEL	ENTERING WATER TEMP., °F	WATER FLOW GPM	SUCT. PRES., PSIG	DISCH. PRES., PSIG	WATER TEMP. RISE, °F	AIR TEMP. DROP° FDB	SUCT. PRESS., PSIG	DISCH. PRESS., PSIG	WATER TEMP. DROP° F	AIR TEMP. RISE° FDB
HE034	55°	7.0	62-68	131-145	12-14	19-25	62-69	198-243	9-11	23-34
		8.8	60-67	128-142	10-11	19-26	64-70	203-248	7-9	24-35
	60°	7.0	65-72	146-161	12-14	18-25	68-75	207-253	10-12	25-36
		8.8	64-70	143-158	10-11	19-26	69-77	212-259	8-10	25-37
	65°	7.0	68-75	156-172	12-14	18-25	72-80	212-259	11-13	26-39
		8.8	67-74	152-168	10-11	19-25	74-82	216-264	8-10	27-40
	70°	7.0	71-78	170-188	12-14	18-24	77-85	222-272	11-14	28-41
		8.8	69-77	166-184	10-11	18-25	79-87	227-277	9-11	29-42
	75°	7.0	72-79	180-199	12-13	18-24	81-89	225-275	12-14	29-42
		8.8	70-78	176-194	10-11	18-25	83-91	230-281	9-11	30-44
	80°	7.0	74-81	195-215	12-13	17-24	83-92	231-282	12-15	30-44
		8.8	72-80	190-210	10-11	18-24	86-95	236-288	10-12	31-45
	85°	7.0	76-84	209-231	12-13	17-23				
		8.8	74-82	204-226	10-11	17-23				
	95°	7.0	79-87	238-263	11-13	16-21				
		8.8	77-86	232-256	9-10	16-22				
HE042	55°	8.0	68-76	138-152	12-13	18-25	63-69	194-237	9-11	22-33
		11.0	67-74	133-147	10-11	19-26	65-71	198-242	7-9	23-34
	60°	8.0	71-78	149-165	12-13	18-25	67-75	201-245	10-12	24-35
		11.0	69-76	144-160	10-11	19-25	69-77	205-251	8-9	25-36
	65°	8.0	72-80	162-179	12-13	18-24	72-80	208-254	10-13	26-38
		11.0	70-78	157-173	10-11	18-25	74-82	212-260	8-10	26-39
	70°	8.0	74-82	173-191	12-13	18-24	77-86	215-263	11-13	27-40
		11.0	72-80	168-186	10-11	18-25	79-88	220-268	9-11	28-41
	75°	8.0	76-84	185-205	12-13	18-24	82-90	222-272	11-14	28-41
		11.0	74-82	181-200	10-11	18-24	84-92	227-277	9-11	29-43
	80°	8.0	77-85	196-216	12-13	17-23	86-96	230-282	12-14	29-42
		11.0	75-83	191-211	10-11	18-24	88-98	235-287	9-11	30-44
	85°	8.0	79-87	209-231	12-13	17-23				
		11.0	77-85	204-226	9-10	17-23				
	95°	8.0	84-92	238-263	11-13	15-21				
		11.0	82-90	233-257	9-10	16-21				
HE052	55°	10.4	64-71	133-147	13-14	20-27	66-72	198-242	9-11	24-35
		13.0	62-68	139-153	10-11	20-27	67-75	203-248	7-9	25-36
	60°	10.4	67-74	143-158	13-14	20-26	72-80	206-252	10-12	26-38
		13.0	65-71	148-164	10-11	20-27	74-81	211-257	8-10	27-39
	65°	10.4	69-77	152-168	13-14	19-26	77-85	213-261	11-13	27-40
		13.0	67-75	158-174	10-11	20-27	79-88	217-265	8-10	28-42
	70°	10.4	71-79	163-181	13-14	19-26	82-91	221-270	11-14	29-43
		13.0	69-77	169-187	10-11	20-26	83-92	223-273	9-11	30-44
	75°	10.4	73-81	176-194	13-14	19-26	86-95	226-276	12-14	30-44
		13.0	71-79	182-202	10-11	19-26	87-96	229-279	9-11	31-46
	80°	10.4	74-82	189-209	12-14	18-25	89-98	231-283	12-15	31-45
		13.0	73-80	196-216	10-11	19-26	90-100	234-286	10-12	32-47
	85°	10.4	76-83	203-225	12-13	18-24				
		13.0	74-81	209-231	10-11	18-25				
	95°	10.4	77-86	232-256	12-13	16-22				
		13.0	76-84	238-263	9-10	17-23				

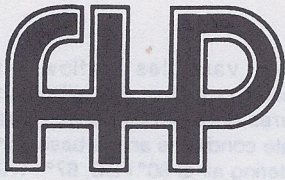


"HE" models

Operating Pressures & Temperatures

GENERAL: There are many variables (airflow, air temperatures) in an air-conditioning system that will affect operating refrigerant pressures and temperatures. The chart below shows approximate conditions and is based on air flow at the rated SCFM, entering air at 80° FDB, 67° FWB in cooling, 70° FDB in heating.

			OPERATING DATA							
			COOLING				HEATING			
MODEL	ENTERING WATER TEMP., °F	WATER FLOW GPM	SUCT. PRES., PSIG	DISCH. PRES., PSIG	WATER TEMP. RISE, °F	AIR TEMP. DROP° FDB	SUCT. PRES., PSIG	DISCH. PRES., PSIG	WATER TEMP. DROP° F	AIR TEMP. RISE° FDB
HE027	55°	5.4	65-71	136-151	12-14	18-25	63-70	190-232	10-12	23-33
		6.8	64-70	133-147	10-11	19-26	65-71	194-237	8-10	23-34
	60°	5.4	67-74	146-161	12-14	18-25	67-74	195-238	10-13	24-36
		6.8	66-72	143-158	10-11	19-25	68-76	199-243	8-10	25-37
	65°	5.4	68-76	156-172	12-14	18-24	70-78	199-244	11-13	26-38
		6.8	67-75	152-168	10-11	18-25	72-80	203-249	9-11	27-39
	70°	5.4	71-78	170-188	12-14	18-24	74-82	207-253	11-14	28-41
		6.8	70-77	166-184	10-11	18-25	76-84	212-259	9-11	28-42
	75°	5.4	73-81	177-196	12-14	18-24	77-85	212-259	12-14	29-42
		6.8	72-80	173-191	10-11	18-24	79-87	216-264	9-11	29-43
	80°	5.4	75-83	195-215	12-14	17-23	80-88	213-260	12-15	29-42
		6.8	74-82	190-210	10-11	18-24	82-90	217-265	10-12	29-43
	85°	5.4	77-85	209-231	12-13	17-23				
		6.8	76-84	204-226	10-11	17-23				
	95°	5.4	80-88	239-264	11-13	15-21				
		6.8	79-87	233-257	9-10	16-21				
HE031	55°	6.6	68-76	139-153	12-14	21-29	66-72	216-264	9-11	25-36
		8.3	67-74	133-147	10-11	22-29	67-74	216-264	7-9	26-38
	60°	6.6	69-76	149-165	12-14	21-28	70-77	225-275	9-12	27-39
		8.3	67-74	143-158	10-11	21-29	71-79	225-275	8-9	27-40
	65°	6.6	71-79	162-179	12-14	21-28	75-82	232-284	10-12	28-42
		8.3	67-75	152-168	10-11	21-29	76-84	236-288	8-10	29-43
	70°	6.6	72-80	172-190	12-14	20-28	79-87	239-292	11-13	30-44
		8.3	69-77	166-184	10-11	21-28	82-90	240-294	9-10	31-46
	75°	6.6	74-82	185-205	12-14	20-27	83-91	248-303	11-13	31-46
		8.3	72-80	179-197	10-11	21-28	84-92	249-305	9-11	32-47
	80°	6.6	76-84	200-221	12-13	20-27	86-96	252-308	11-14	32-47
		8.3	74-82	194-214	10-11	20-27	88-98	257-314	9-11	33-49
	85°	6.6	77-85	213-235	12-13	19-26				
		8.3	76-84	205-227	10-11	20-27				
	95°	6.6	79-87	238-263	11-13	17-24				
		8.3	78-86	233-257	9-10	18-24				
HE041	55°	8.5	64-70	143-159	12-14	22-30	59-65	203-249	9-11	27-39
		10.6	63-69	139-153	10-11	23-31	60-66	207-253	7-9	27-40
	60°	8.5	67-74	157-173	12-14	22-30	64-70	216-264	10-12	29-42
		10.6	65-71	152-168	10-11	22-30	65-71	220-268	8-9	29-43
	65°	8.5	69-77	167-185	12-14	22-29	69-77	225-275	10-12	31-45
		10.6	67-75	162-179	10-11	22-30	70-78	229-279	8-10	31-46
	70°	8.5	72-80	176-194	12-14	21-29	76-84	236-288	11-13	32-48
		10.6	69-77	172-190	10-11	22-30	77-85	239-293	9-11	33-49
	75°	8.5	72-80	191-211	12-14	21-29	81-89	247-301	11-14	33-49
		10.6	71-79	185-205	10-11	22-29	82-90	250-306	9-11	34-51
	80°	8.5	72-80	204-226	12-13	21-28	86-95	256-312	11-14	34-51
		10.6	71-79	200-221	10-11	21-29	88-98	259-317	9-11	35-52
	85°	8.5	72-80	215-237	12-13	20-27				
		10.6	71-79	211-233	10-11	21-28				
	95°	8.5	74-82	242-268	11-13	18-25				
		10.6	75-83	238-263	9-10	19-26				

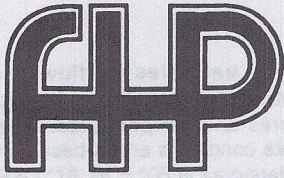


GENERAL: There are many variables (airflow, air temperatures) in an air-conditioning system that will affect operating refrigerant pressures and temperatures. The chart below shows approximate conditions and is based on air flow at the rated SCFM, entering air at 80° FDB, 67° FWB in cooling, 70° FDB in heating.

"HE" models

Operating Pressures & Temperatures

			OPERATING DATA								
			COOLING				HEATING				
MODEL	ENTERING WATER TEMP., °F	WATER FLOW GPM	SUCT. PRES., PSIG	DISCH. PRES., PSIG	WATER TEMP. RISE, °F	AIR TEMP. DROP° FDB	SUCT. PRESS., PSIG	DISCH. PRESS., PSIG	WATER TEMP. DROP° F	AIR TEMP. RISE° FDB	
HE015	55°	3.0	67-74	143-158	13-14	19-26	64-71	194-237	9-11	23-34	
		3.7	65-72	138-152	10-11	20-27	66-73	199-243	7-9	24-35	
	60°	3.0	69-76	153-169	13-14	19-26	69-76	199-244	10-12	25-37	
		3.7	67-74	148-164	10-11	20-27	71-78	204-249	8-10	26-38	
	65°	3.0	72-80	163-180	13-14	19-26	72-80	205-251	11-13	27-39	
		3.7	70-77	158-174	10-11	19-26	74-82	210-256	9-10	28-41	
	70°	3.0	74-82	174-193	13-14	19-25	76-84	212-259	11-14	28-42	
		3.7	72-80	169-187	10-11	19-26	78-86	216-264	9-11	29-43	
	75°	3.0	76-84	186-206	13-14	18-25	79-87	217-265	12-14	29-43	
		3.7	74-82	181-201	10-11	19-26	81-89	222-271	9-11	30-44	
	80°	3.0	78-86	199-220	13-14	18-24	82-90	223-272	12-15	30-44	
		3.7	76-84	194-215	10-11	18-24	84-93	227-278	10-12	31-46	
	85°	3.0	80-88	214-236	13-14	17-23					
		3.7	78-86	209-231	10-11	17-23					
	95°	3.0	83-91	246-272	12-13	16-22					
		3.7	81-89	242-267	9-10	16-22					
	HE019	55°	3.8	65-72	141-156	12-14	19-26	53-59	187-229	9-11	23-33
			4.8	64-70	138-152	10-11	20-27	62-68	191-233	7-9	23-34
60°		3.8	67-74	154-170	13-14	19-26	56-62	189-231	10-12	24-36	
		4.8	66-72	150-166	10-11	19-26	66-72	193-235	8-9	25-37	
65°		3.8	70-78	167-184	13-14	19-25	60-66	192-235	10-13	26-38	
		4.8	69-76	162-180	10-11	19-26	69-77	196-240	8-10	27-39	
70°		3.8	73-80	179-198	13-14	19-25	62-69	196-239	11-13	27-40	
		4.8	71-79	175-193	10-11	19-26	72-80	200-244	9-11	28-42	
75°		3.8	75-82	192-212	13-14	18-25	65-71	201-246	11-14	28-42	
		4.8	73-81	187-207	10-11	19-25	75-83	205-251	9-11	29-43	
80°		3.8	77-85	204-226	13-14	18-24	66-73	207-253	12-14	29-43	
		4.8	75-83	200-221	10-11	18-25	77-85	212-259	9-11	30-44	
85°		3.8	78-86	218-241	12-14	18-24					
		4.8	76-85	213-235	10-11	18-24					
95°		3.8	81-89	243-269	12-13	16-22					
		4.8	79-88	238-263	9-10	16-22					
HE023		55°	4.6	72-80	143-158	13-14	18-24	64-71	185-226	9-11	21-31
			5.8	69-76	137-151	10-11	18-25	67-74	187-229	7-9	22-32
	60°	4.6	75-83	155-171	13-14	18-24	69-76	189-231	10-12	23-33	
		5.8	71-79	149-165	10-11	18-24	72-79	192-234	8-10	23-35	
	65°	4.6	77-85	166-184	12-14	17-24	72-80	194-238	10-13	24-36	
		5.8	73-81	161-177	10-11	18-24	75-83	197-241	8-10	25-37	
	70°	4.6	78-87	177-195	12-14	17-23	75-83	198-242	11-14	26-38	
		5.8	75-82	171-189	10-11	18-24	78-86	201-245	9-11	27-39	
	75°	4.6	80-88	188-208	12-14	17-23	77-85	202-246	11-14	27-39	
		5.8	76-84	182-202	10-11	17-24	80-89	204-250	9-11	27-40	
	80°	4.6	81-90	200-221	12-14	17-23	80-88	204-250	12-14	27-40	
		5.8	77-86	194-214	10-11	17-23	82-91	207-253	9-12	28-42	
	85°	4.6	82-91	212-234	12-13	16-22					
		5.8	78-87	206-228	10-11	17-22					
	95°	4.6	84-93	238-263	12-13	15-20					
		5.8	81-89	232-256	9-10	15-20					



"HE" models

Operating Pressures & Temperatures

GENERAL: There are many variables (airflow, air temperatures) in an air-conditioning system that will affect operating refrigerant pressures and temperatures. The chart below shows approximate conditions and is based on air flow at the rated SCFM, entering air at 80° FDB, 67° FWB in cooling, 70° FDB in heating.

			OPERATING DATA							
			COOLING				HEATING			
MODEL	ENTERING WATER TEMP., °F	WATER FLOW GPM	SUCT. PRES., PSIG	DISCH. PRES., PSIG	WATER TEMP RISE, °F	AIR TEMP DROP° FDB	SUCT. PRESS., PSIG	DISCH. PRESS., PSIG	WATER TEMP. DROP° F	AIR TEMP. RISE° FDB
HE007	55°	1.8	72-79	145-160	13-14	16-22	72-79	189-231	10-12	21-31
		2.3	70-77	140-155	10-11	17-23	73-81	194-237	8-9	22-32
	60°	1.8	74-82	155-172	13-14	16-22	76-84	194-237	10-13	22-33
		2.3	73-80	151-167	10-11	17-23	78-87	199-243	8-10	23-34
	65°	1.8	78-86	165-183	13-14	16-22	80-89	200-244	11-14	24-35
		2.3	76-84	161-178	10-11	16-22	82-91	204-250	9-11	25-36
	70°	1.8	80-88	177-196	13-14	16-22	85-93	206-252	12-14	25-37
		2.3	78-86	173-191	10-11	16-22	86-96	211-257	9-12	26-39
	75°	1.8	82-91	189-209	12-14	16-21	88-97	211-258	12-15	26-39
		2.3	80-89	185-204	10-11	16-22	90-99	216-264	10-12	27-40
	80°	1.8	84-93	202-224	12-14	16-21	91-101	217-265	12-15	27-40
		2.3	82-91	198-219	10-11	16-22	93-103	221-271	10-12	28-41
	85°	1.8	86-95	218-240	12-13	15-21				
		2.3	84-93	213-235	10-11	16-21				
	95°	1.8	89-99	251-277	12-13	15-20				
		2.3	87-96	246-272	9-10	15-20				
HE009	55°	1.5	67-74	143-158	13-14	17-23	72-79	215-262	10-12	22-33
		1.9	65-72	138-152	10-11	17-23	73-81	219-268	8-10	23-34
	60°	1.5	69-76	153-169	13-14	17-23	76-84	221-270	11-13	24-35
		1.9	67-74	148-164	10-11	17-23	78-87	225-275	9-10	25-36
	65°	1.5	72-80	163-180	13-14	16-22	80-89	227-277	11-14	25-37
		1.9	70-77	158-174	10-11	17-23	82-91	231-283	9-11	26-39
	70°	1.5	74-82	174-193	13-14	16-22	85-93	234-286	12-15	27-40
		1.9	72-80	169-187	10-11	17-23	86-96	239-292	10-12	28-41
	75°	1.5	76-84	186-206	13-14	16-22	88-97	240-293	12-15	28-41
		1.9	74-82	181-201	10-11	17-23	90-99	245-299	10-12	29-42
	80°	1.5	78-86	199-220	12-14	16-21	91-101	246-301	13-16	29-42
		1.9	76-84	194-215	10-11	16-22	93-103	251-306	10-13	29-43
	85°	1.5	80-88	214-236	12-14	15-20				
		1.9	78-86	209-231	10-11	15-21				
	95°	1.5	83-91	246-272	12-13	14-19				
		1.9	81-89	242-267	9-10	14-19				
HE012	55°	2.5	66-73	145-160	12-13	19-26	67-74	202-247	9-11	23-33
		3.1	64-71	140-155	9-10	19-26	69-76	207-253	7-8	23-34
	60°	2.5	68-75	155-172	12-13	19-25	71-79	208-254	9-11	24-36
		3.1	66-73	151-167	9-10	19-26	73-81	212-260	7-9	25-37
	65°	2.5	71-79	165-183	12-13	18-25	75-83	214-261	10-12	26-38
		3.1	69-77	161-178	9-10	19-26	77-85	218-267	8-10	27-40
	70°	2.5	73-81	177-196	12-13	18-25	79-87	221-270	11-13	28-41
		3.1	71-79	173-191	9-10	19-25	81-89	225-275	8-10	29-42
	75°	2.5	75-83	189-209	12-13	18-25	82-90	226-277	11-13	29-42
		3.1	74-81	185-204	9-10	19-25	84-93	231-282	9-11	29-43
	80°	2.5	77-85	202-224	12-13	17-23	85-94	232-284	11-14	29-43
		3.1	75-83	198-219	9-10	18-24	87-96	237-289	9-11	30-45
	85°	2.5	79-87	218-240	12-13	17-22				
		3.1	77-85	213-235	9-10	17-23				
	95°	2.5	82-90	251-277	11-12	16-21				
		3.1	80-88	246-272	9-10	16-22				