

R-32 PACKAGED HEAT PUMPS
15.2 SEER2, 6.7 HSPF2
2 TO 5 TONS



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Standard Features

- High-efficiency scroll compressor
- Multi-speed ECM indoor blower motor
- Copper tube/aluminum fin condenser coil
- All-aluminum evaporator coil
- Totally enclosed, permanently lubricated condenser fan motor
- Fully charged system
- Quiet horizontal discharge
- Electric heat kit available as a field-installed option
- AHRI Certified; UL Listed

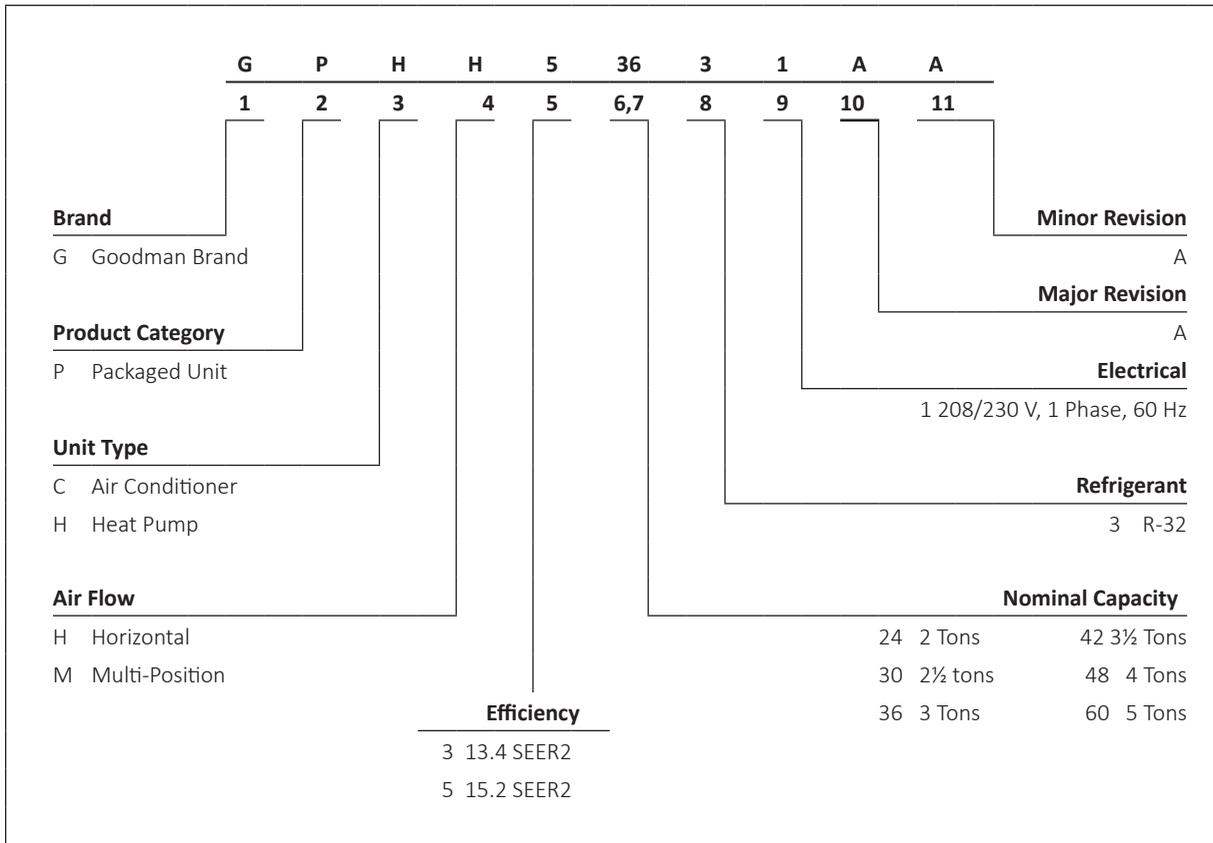
Cabinet Features

- Heavy-gauge galvanized-steel cabinet with attractive Architectural Gray powder-paint finish
- Louvered condenser coil protection
- Aluminum foil-facing internal insulation reinforced with fiberglass scrim
- Fully insulated blower compartment with convenient access panels
- Meets cabinet air leakage requirements when tested in accordance with ASHRAE standard 193
- One footprint for all tonnages
- When properly anchored, meets the 2023 Florida Building Code unit integrity requirements for hurricane-type winds (Anchor bracket kits available.)



* Complete warranty details available from your local dealer or at www.amana-hac.com. To receive the 10-Year Parts Limited Warranty, online registration must be completed within 60 days of installation. Online registration and some of the additional requirements are not required in Florida, California, or Québec. The duration of warranty coverage in Texas and Florida differs in some cases. Other limitations and exclusions apply; refer to complete warranty details for a full list of limitations and exclusions.

NOMENCLATURE



	GPHH5 2431	GPHH5 3031	GPHH5 3631	GPHH5 4231	GPHH5 4831	GPHH5 6031
COOLING CAPACITY						
Total BTU/h	23,600	27,000	32,600	42,000	45,000	55,000
Sensible BTU/h	18,408	21,330	26,080	30,240	35,550	39,600
SEER2	15.0	15.2	15.2	15.2	15.2	15.2
EER2	11.2	11.2	11.2	11.2	11.2	11.2
HEATING CAPACITY						
BTU/h (47°F)	24,000	26,000	30,000	41,500	41,500	52,000
C.O.P. (47°F)	4	3.86	3.64	3.6	3.68	3.6
BTU/h (17°F)	13,200	17,100	19,000	21,000	26,000	33,200
C.O.P. (17°F)	2.50	2.66	2.56	2.12	2.38	2.36
HSPF2	7.00	7.00	7.00	6.70	6.70	6.80
EVAPORATOR FAN / COIL						
Type	ECM	ECM	ECM	ECM	ECM	ECM
Wheel (D x W)	10 x 8	11 x 8				
Indoor Nominal CFM	875	1050	1180	1300	1550	1700
No. of Speeds	5	5	5	5	5	5
Indoor Blower FLA	3.8	3.8	3.8	5.4	5.4	5.4
HORSEPOWER	1/2	1/2	1/2	3/4	3/4	3/4
Face Area (ft ²)	5.26	5.26	6.23	6.23	6.23	7.01
Rows Deep / Fins per Inch	4/14	4/14	4/14	4/14	4/14	4/14
Metering Device Type	TXV	TXV	TXV	TXV	TXV	TXV
Drain Size (NPT)	¾"	¾"	¾"	¾"	¾"	¾"
Refrigerant Charge (oz.)	98	99	144	121	129	140
Condenser Fan / Coil						
OUTDOOR FAN FLA	0.95	0.95	1.4	2	2	1.4
Horsepower	1/6	1/6	1/4	1/3	1/3	1/4
Blade Diameter	22	22	22	22	22	22
Face Area (ft ²)	14.4	13.92	13.92	16.5	16.5	18.85
ROWS DEEP / FINS PER INCH	2/16	2/16	2/16	2/16	2/16	2/20
Metering Device Type	TXV	TXV	TXV	TXV	TXV	TXV
Compressor						
Type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Stage	Single	Single	Two	Two	Two	Two
RLA	10.62	12.8	14.53	23.23	23.23	27.072
LRA	56.5	76	91	128.4	128.4	178
Electrical Data						
Phase	1	1	1	1	1	1
Voltage (Frequency 60 Hz)	208-230	208-230	208-230	208-230	208-230	208-230
Min. Circuit Ampacity	18.03	20.75	23.36	36.44	36.44	40.64
MAX. OVERCURRENT PROTECTION	25	30	35	50	50	60
Decibels	76	76	78	78	80	80
Operating/Shipping Weights (lbs)	350 / 360	350 / 360	390 / 400	400 / 410	410 / 420	430 / 440

Notes:

Always check the S&R plate for electrical data on the unit being installed. Wire size should be determined in accordance with National Electrical Codes. Extensive wire runs will require larger wire sizes. Must use time-delay fuses or HACR-type circuit breakers of the same size as noted.

EXPANDED COOLING DATA — GPHH52431

IDB	AIRFLOW	OUTDOOR AMBIENT TEMPERATURE																							
		65				75				85				95				105				115			
		59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71
70	MBh	23.8	24.2	24.9	-	23.6	24.0	24.7	-	23.0	23.3	24.1	-	21.9	22.3	23.0	-	20.6	20.9	21.7	-	20.6	20.9	21.7	-
	S/T	0.57	0.49	0.35	-	0.58	0.50	0.36	-	0.60	0.52	0.38	-	1.00	0.54	0.40	-	1.00	0.57	0.43	-	1.00	0.57	0.43	-
	ΔT	19.28	17.57	14.37	-	19.24	17.52	14.32	-	19.48	17.76	14.56	-	19.22	17.50	14.30	-	18.99	17.27	14.07	-	18.99	17.27	14.07	-
	kW	1.56	1.56	1.56	-	1.76	1.76	1.76	-	1.99	1.99	1.98	-	2.23	2.23	2.23	-	2.50	2.50	2.50	-	2.50	2.50	2.50	-
	Amps	5.97	5.96	5.94	-	6.84	6.84	6.82	-	7.83	7.82	7.80	-	8.89	8.88	8.86	-	10.07	10.07	10.05	-	10.07	10.07	10.05	-
	Hi PR	245	246	247	-	283	284	286	-	324	325	327	-	368	369	371	-	415	416	418	-	415	416	418	-
	Lo PR	124	125	129	-	131	133	136	-	138	140	143	-	144	145	148	-	149	151	154	-	149	151	154	-
	MBh	24.3	24.7	25.4	-	24.1	24.4	25.2	-	23.5	23.8	24.5	-	22.4	22.7	23.5	-	21.1	21.4	22.1	-	21.1	21.4	22.1	-
	S/T	0.68	0.61	0.47	-	0.69	0.61	0.47	-	0.72	0.64	0.50	-	1.00	0.66	0.52	-	1.00	0.68	0.54	-	1.00	0.73	0.59	-
	ΔT	17.50	15.79	12.59	-	17.46	15.74	12.54	-	17.70	15.98	12.78	-	17.44	15.73	12.52	-	17.21	15.50	12.30	-	17.21	15.50	12.30	-
kW	1.58	1.58	1.57	-	1.78	1.78	1.78	-	2.01	2.00	2.00	-	2.25	2.25	2.24	-	2.52	2.52	2.52	-	2.52	2.52	2.52	-	
Amps	6.04	6.04	6.02	-	6.92	6.92	6.90	-	7.90	7.90	7.88	-	8.96	8.96	8.94	-	10.15	10.14	10.13	-	10.15	10.14	10.13	-	
Hi PR	248	249	251	-	287	288	290	-	327	328	330	-	371	372	374	-	418	419	421	-	418	419	421	-	
Lo PR	127	128	131	-	134	136	139	-	141	143	146	-	147	148	151	-	152	154	157	-	152	154	157	-	
MBh	25.2	25.5	26.2	-	25.0	25.3	26.0	-	24.3	24.7	25.4	-	23.3	23.6	24.3	-	21.9	22.3	23.0	-	21.9	22.3	23.0	-	
S/T	0.73	0.65	0.51	-	0.74	0.66	0.52	-	1.00	0.68	0.55	-	1.00	0.70	0.57	-	1.00	0.73	0.59	-	1.00	0.73	0.59	-	
ΔT	15.82	14.10	10.90	-	15.77	14.06	10.85	-	16.01	14.30	11.10	-	15.75	14.04	10.84	-	15.52	13.81	10.61	-	15.52	13.81	10.61	-	
kW	1.60	1.59	1.59	-	1.80	1.80	1.79	-	2.02	2.02	2.02	-	2.27	2.27	2.26	-	2.54	2.54	2.53	-	2.54	2.54	2.53	-	
Amps	6.12	6.11	6.10	-	7.00	6.99	6.98	-	7.98	7.97	7.96	-	9.04	9.03	9.02	-	10.22	10.22	10.20	-	10.22	10.22	10.20	-	
Hi PR	252	253	255	-	291	292	294	-	332	333	334	-	375	376	378	-	423	424	425	-	423	424	425	-	
Lo PR	131	133	136	-	139	140	144	-	146	147	150	-	151	153	156	-	157	158	161	-	157	158	161	-	
MBh	23.9	24.2	24.9	26.0	23.6	24.0	24.7	25.8	23.0	23.4	24.1	25.2	21.9	22.3	23.0	24.1	20.6	21.0	21.7	22.8	20.6	21.0	21.7	22.8	
S/T	0.70	0.62	0.49	0.3	0.71	0.63	0.49	0.3	1.00	0.66	0.52	0.4	1.00	0.68	0.54	0.4	1.00	0.70	0.56	0.4	1.00	0.70	0.56	0.4	
ΔT	23.05	21.34	18.14	14.8	23.01	21.29	18.09	14.8	23.25	21.53	18.33	15.0	22.99	21.27	18.07	14.8	22.76	21.04	17.84	14.5	22.76	21.04	17.84	14.5	
kW	1.56	1.56	1.55	1.6	1.76	1.76	1.76	1.8	1.99	1.98	1.98	2.0	2.23	2.23	2.23	2.2	2.50	2.50	2.50	2.5	2.50	2.50	2.50	2.5	
Amps	5.96	5.95	5.94	6.0	6.84	6.83	6.82	6.9	7.82	7.81	7.80	7.9	8.88	8.87	8.86	8.9	10.07	10.06	10.04	10.1	10.07	10.06	10.04	10.1	
Hi PR	245	246	248	251.8	284	285	286	290.6	324	325	327	331.3	368	369	371	375.0	415	416	418	422.2	415	416	418	422.2	
Lo PR	124	125	129	133.9	132	133	136	141.5	138	140	143	148.2	144	145	149	153.8	149	151	154	159.4	149	151	154	159.4	
MBh	24.3	24.7	25.4	26.5	24.1	24.5	25.2	26.3	23.5	23.8	24.6	25.6	22.4	22.8	23.5	24.6	21.1	21.4	22.2	23.3	21.1	21.4	22.2	23.3	
S/T	0.82	0.74	0.60	0.5	1.00	0.74	0.61	0.5	1.00	0.77	0.63	0.5	1.00	0.79	0.65	0.5	1.00	0.81	0.67	0.5	1.00	0.81	0.67	0.5	
ΔT	21.27	19.56	16.36	13.0	21.23	19.51	16.31	13.0	21.47	19.75	16.55	13.2	21.21	19.50	16.29	13.0	20.98	19.27	16.07	12.7	20.98	19.27	16.07	12.7	
kW	1.58	1.58	1.57	1.6	1.78	1.78	1.77	1.8	2.00	2.00	2.00	2.0	2.25	2.25	2.24	2.3	2.52	2.52	2.52	2.5	2.52	2.52	2.52	2.5	
Amps	6.04	6.03	6.02	6.1	6.92	6.91	6.90	7.0	7.90	7.89	7.88	7.9	8.96	8.95	8.94	9.0	10.14	10.14	10.12	10.2	10.14	10.14	10.12	10.2	
Hi PR	248	249	251	255.3	287	288	290	294.1	328	329	330	334.7	371	372	374	378.5	419	420	421	425.7	419	420	421	425.7	
Lo PR	127	128	132	136.8	134	136	139	144.4	141	143	146	151.1	147	148	151	156.7	152	154	157	162.2	152	154	157	162.2	
MBh	25.2	25.5	26.3	27.4	25.0	25.3	26.0	27.1	24.4	24.7	25.4	26.5	23.3	23.6	24.3	25.4	22.0	22.3	23.0	24.1	22.0	22.3	23.0	24.1	
S/T	0.86	0.78	0.65	0.5	1.00	0.79	0.65	0.5	1.00	0.82	0.68	0.5	1.00	0.84	0.70	0.6	1.00	1.00	0.72	0.6	1.00	1.00	0.72	0.6	
ΔT	19.59	17.87	14.67	11.4	19.54	17.83	14.62	11.3	19.78	18.07	14.87	11.5	19.52	17.81	14.61	11.3	19.29	17.58	14.38	11.1	19.29	17.58	14.38	11.1	
kW	1.59	1.59	1.59	1.6	1.80	1.79	1.79	1.8	2.02	2.02	2.02	2.0	2.27	2.26	2.26	2.3	2.54	2.54	2.53	2.5	2.54	2.54	2.53	2.5	
Amps	6.11	6.11	6.09	6.2	6.99	6.98	6.97	7.0	7.97	7.96	7.95	8.0	9.03	9.03	9.01	9.1	10.22	10.21	10.20	10.3	10.22	10.21	10.20	10.3	
Hi PR	252	253	255	259.5	291	292	294	298.3	332	333	335	338.9	376	377	378	382.7	423	424	426	429.9	423	424	426	429.9	
Lo PR	131	133	136	141.3	139	140	144	148.9	146	147	150	155.6	151	153	156	161.2	157	158	161	166.7	157	158	161	166.7	

IDB = Entering Indoor Dry Bulb Temperature
 High and low pressures are measured at the liquid and suction access fittings.
 Design Subcooling, 5-7°F @ the liquid access fitting connection AHRI 95 test conditions. Design Superheat 15-18°F @ the compressor suction access fitting connection.
 Shaded area reflects AHRI (TVA) conditions.
 Amps: Unit amps (comp.+ evaporator + condenser fan motors)
 kW = Total system power

IDB	AIRFLOW	OUTDOOR AMBIENT TEMPERATURE												105												115											
		65				75				85				95				105				115															
		59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71												
80	MBh	24.0	24.3	25.0	26.1	23.8	24.1	24.8	25.9	23.1	23.5	24.2	25.3	22.1	22.4	23.1	24.2	20.7	21.1	21.8	22.9	19.5	19.9	20.6	21.7												
	S/T	1.00	0.75	0.61	0.5	1.00	0.76	0.62	0.5	1.00	0.79	0.65	0.5	1.00	1.00	0.67	0.5	1.00	1.00	0.69	0.5	1.00	1.00	0.74	0.6												
	ΔT	26.85	25.13	21.93	18.6	26.80	25.09	21.88	18.6	27.04	25.33	22.13	18.8	26.78	25.07	21.87	18.6	26.55	24.84	21.64	18.3	27.63	25.91	22.71	19.4												
	kW	1.56	1.56	1.56	1.6	1.76	1.76	1.76	1.8	1.99	1.99	1.98	2.0	2.23	2.23	2.23	2.2	2.50	2.50	2.50	2.5	2.82	2.82	2.82	2.8												
	Amps	5.97	5.96	5.94	6.0	6.84	6.84	6.82	6.9	7.82	7.82	7.80	7.9	8.89	8.88	8.86	8.9	10.07	10.06	10.05	10.1	11.46	11.46	11.44	11.5												
	Hi PR	245	246	248	252.3	284	285	287	291.1	325	326	327	331.7	368	369	371	375.5	416	417	418	422.7	466	467	469	473.0												
	Lo PR	124	126	129	134.5	132	134	137	142.1	139	140	143	148.8	144	146	149	154.4	150	151	155	159.9	157	158	162	166.8												
	MBh	24.5	24.8	25.5	26.6	24.2	24.6	25.3	26.4	23.6	24.0	24.7	25.8	22.5	22.9	23.6	24.7	21.2	21.6	22.3	23.4	20.0	20.4	21.1	22.2												
	S/T	1.00	0.87	0.73	0.6	1.00	0.87	0.73	0.6	1.00	0.90	0.76	0.6	1.00	1.00	0.78	0.6	1.00	1.00	0.80	0.7	1.00	1.00	0.86	0.7												
	ΔT	25.07	23.36	20.15	16.8	25.02	23.31	20.11	16.8	25.26	23.55	20.35	17.0	25.01	23.29	20.09	16.8	24.78	23.06	19.86	16.5	25.85	24.14	20.93	17.6												
kW	1.58	1.58	1.57	1.6	1.78	1.78	1.78	1.8	2.01	2.00	2.00	2.0	2.25	2.25	2.24	2.3	2.52	2.52	2.52	2.5	2.84	2.84	2.84	2.9													
Amps	6.04	6.04	6.02	6.1	6.92	6.92	6.90	7.0	7.90	7.90	7.88	7.9	8.96	8.96	8.94	9.0	10.15	10.14	10.13	10.2	11.54	11.53	11.52	11.6													
Hi PR	249	250	251	255.7	287	288	290	294.5	328	329	331	335.2	372	373	375	378.9	419	420	422	426.1	469	470	472	476.5													
Lo PR	127	129	132	137.4	135	136	140	145.0	142	143	146	151.6	147	149	152	157.3	153	154	157	162.8	160	161	164	169.7													
1100	MBh	25.3	25.7	26.4	27.5	25.1	25.5	26.2	27.3	24.5	24.8	25.5	26.6	23.4	23.7	24.5	25.6	22.1	22.4	23.1	24.2	20.9	21.2	21.9	23.0												
	S/T	1.00	0.91	0.77	0.6	1.00	0.92	0.78	0.6	1.00	1.00	0.81	0.7	1.00	1.00	0.83	0.7	1.00	1.00	0.85	0.7	1.00	1.00	1.00	0.8												
	ΔT	23.38	21.67	18.47	15.1	23.34	21.62	18.42	15.1	23.58	21.86	18.66	15.3	23.32	21.60	18.40	15.1	23.09	21.37	18.17	14.9	24.16	22.45	19.25	15.9												
	kW	1.60	1.59	1.59	1.6	1.80	1.80	1.79	1.8	2.02	2.02	2.02	2.0	2.27	2.27	2.26	2.3	2.54	2.54	2.53	2.5	2.86	2.86	2.85	2.9												
	Amps	6.12	6.11	6.10	6.2	7.00	6.99	6.97	7.0	7.98	7.97	7.95	8.0	9.04	9.03	9.02	9.1	10.22	10.22	10.20	10.3	11.61	11.61	11.59	11.7												
	Hi PR	253	254	256	259.9	292	293	294	298.7	332	333	335	339.4	376	377	379	383.1	423	424	426	430.3	474	475	476	480.7												
	Lo PR	132	133	137	141.9	139	141	144	149.5	146	148	151	156.1	152	153	156	161.8	157	159	162	167.3	164	166	169	174.2												
	MBh	24.4	24.7	25.4	26.5	24.2	24.5	25.2	26.3	23.5	23.9	24.6	25.7	22.5	22.8	23.5	24.6	21.1	21.5	22.2	23.3	19.9	20.3	21.0	22.1												
	S/T	1.00	0.86	0.72	0.6	1.00	0.86	0.72	0.6	1.00	1.00	0.75	0.6	1.00	1.00	0.77	0.6	1.00	1.00	0.79	0.6	1.00	1.00	1.00	0.7												
	ΔT	30.21	28.50	25.30	22.0	30.17	28.45	25.25	21.9	30.41	28.69	25.49	22.2	30.15	28.43	25.23	21.9	29.92	28.21	25.00	21.7	30.99	29.28	26.08	22.8												
kW	1.56	1.56	1.56	1.6	1.77	1.76	1.76	1.8	1.99	1.99	1.99	2.0	2.24	2.23	2.23	2.2	2.51	2.51	2.50	2.5	2.83	2.83	2.82	2.8													
Amps	5.98	5.98	5.96	6.0	6.86	6.85	6.84	6.9	7.84	7.83	7.82	7.9	8.90	8.90	8.88	8.9	10.09	10.08	10.07	10.1	11.48	11.47	11.46	11.5													
Hi PR	246	247	249	253.4	285	286	288	292.2	326	327	329	332.9	370	371	372	376.6	417	418	420	423.8	467	468	470	474.2													
Lo PR	126	128	131	136.4	134	135	139	144.0	141	142	145	150.6	146	148	151	156.3	152	153	156	161.8	159	160	163	168.7													
85	MBh	24.9	25.2	25.9	27.0	24.7	25.0	25.7	26.8	24.0	24.4	25.1	26.2	22.9	23.3	24.0	25.1	21.6	22.0	22.7	23.8	20.4	20.8	21.5	22.6												
	S/T	1.00	0.97	0.83	0.7	1.00	1.00	0.84	0.7	1.00	1.00	0.86	0.7	1.00	1.00	0.88	0.7	1.00	1.00	1.00	0.8	1.00	1.00	1.00	0.8												
	ΔT	28.44	26.72	23.52	20.2	28.39	26.68	23.47	20.2	28.63	26.92	23.71	20.4	28.37	26.66	23.46	20.1	28.14	26.43	23.23	19.9	29.22	27.50	24.30	21.0												
	kW	1.58	1.58	1.58	1.6	1.78	1.78	1.78	1.8	2.02	2.01	2.00	2.0	2.25	2.25	2.25	2.3	2.53	2.52	2.52	2.5	2.85	2.84	2.84	2.9												
	Amps	6.06	6.05	6.04	6.1	6.94	6.93	6.92	7.0	7.92	7.91	7.90	8.0	8.98	8.97	8.96	9.0	10.17	10.16	10.14	10.2	11.56	11.55	11.54	11.6												
	Hi PR	250	251	253	256.9	289	290	291	295.7	329	330	332	336.3	373	374	376	380.1	420	421	423	427.3	471	472	473	477.6												
	Lo PR	129	131	134	139.3	137	138	142	146.9	143	145	148	153.5	149	151	154	159.1	155	156	159	164.7	162	163	166	171.6												
	MBh	25.7	26.1	26.8	27.9	25.5	25.9	26.6	27.7	24.9	25.2	25.9	27.0	23.8	24.1	24.9	26.0	22.5	22.8	23.5	24.6	21.3	21.6	22.3	23.4												
	S/T	1.00	1.00	0.88	0.7	1.00	1.00	0.88	0.7	1.00	1.00	0.91	0.8	1.00	1.00	0.93	0.8	1.00	1.00	1.00	0.8	1.00	1.00	1.00	0.9												
	ΔT	26.75	25.03	21.83	18.5	26.70	24.99	21.79	18.5	26.94	25.23	22.03	18.7	26.68	24.97	21.77	18.5	26.46	24.74	21.54	18.2	27.53	25.81	22.61	19.3												
kW	1.60	1.60	1.59	1.6	1.80	1.80	1.80	1.8	2.03	2.02	2.02	2.0	2.27	2.27	2.27	2.3	2.54	2.54	2.54	2.6	2.86	2.86	2.86	2.9													
Amps	6.13	6.13	6.11	6.2	7.01	7.01	6.99	7.1	7.99	7.99	7.97	8.0	9.05	9.05	9.03	9.1	10.24	10.23	10.22	10.3	11.63	11.62	11.61	11.7													
Hi PR	254	255	257	261.1	293	294	296	299.9	333	335	336	340.5	377	378	380	384.3	424	425	427	431.5	475	476	478	481.9													
Lo PR	134	135	138	143.8	141	143	146	151.4	148	150	153	158.0	154	155	158	163.6	159	161	164	169.2	166	168	171	176.1													

IDB = Entering Indoor Dry Bulb Temperature
 High and low pressures are measured at the liquid and suction access fittings.
 Design Subcooling, 5-7°F @ the liquid access fitting connection AHRI 95 test conditions. Design Superheat 15-18°F @ the compressor suction access fitting connection.
 Shaded area reflects AHRI conditions.
 Amps: Unit amps (comp.+ evaporator + condenser fan motors)
 kW = Total system power

IDB	AIRFLOW	OUTDOOR AMBIENT TEMPERATURE												IDB	AIRFLOW	OUTDOOR AMBIENT TEMPERATURE																																		
		65						75								85						95						105						115																
		59	63	67	71	75	79	59	63	67	71	75	79			59	63	67	71	75	79	59	63	67	71	75	79	59	63	67	71	75	79	59	63	67	71	75	79											
ENTERING INDOOR WET BULB TEMPERATURE																																																		
70	800	MBh	27.2	27.6	28.4	-	26.9	27.3	28.2	-	26.2	26.6	27.4	-	25.0	25.4	26.2	-	23.5	23.9	24.7	-	22.1	22.5	23.3	-	27.2	27.6	28.4	-	26.9	27.3	28.1	-	25.6	26.0	26.8	-	24.1	24.5	25.3	-	22.7	23.1	24.0	-				
		S/T	0.54	0.47	0.32	-	0.55	0.47	0.33	-	0.58	0.50	0.36	-	1.00	0.52	0.38	-	1.00	0.54	0.40	-	1.00	0.60	0.45	-	0.69	0.61	0.47	-	0.70	0.62	0.51	-	1.00	0.67	0.53	-	1.00	0.69	0.55	-	1.00	0.74	0.60	-				
		ΔT	18.72	17.09	14.05	-	18.68	17.05	14.01	-	18.90	17.28	14.23	-	18.66	17.03	13.99	-	18.44	16.81	13.77	-	19.46	17.83	14.79	-	16.35	14.72	11.68	-	16.57	14.94	11.90	-	16.35	14.72	11.68	-	17.37	15.74	12.70	-	17.37	15.74	12.70	-				
		kW	1.78	1.78	1.78	-	2.01	2.01	2.01	-	2.27	2.27	2.26	-	2.55	2.55	2.54	-	2.86	2.86	2.85	-	3.22	3.22	3.22	-	2.88	2.88	2.88	-	2.88	2.88	2.88	-	2.88	2.88	2.88	-	3.25	3.25	3.24	-	3.25	3.25	3.24	-				
		Amps	6.68	6.67	6.65	-	7.68	7.67	7.65	-	8.79	8.79	8.77	-	10.00	9.99	9.98	-	11.35	11.35	11.33	-	12.94	12.93	12.91	-	11.46	11.46	11.44	-	11.46	11.46	11.44	-	11.46	11.46	11.44	-	13.05	13.04	13.02	-	13.05	13.04	13.02	-				
		Hi PR	252	253	255	-	292	293	295	-	334	335	337	-	379	380	382	-	428	429	431	-	480	481	483	-	432	433	435	-	432	433	435	-	432	433	435	-	484	485	487	-	484	485	487	-				
Lo PR	124	125	128	-	131	133	136	-	138	139	143	-	143	145	148	-	149	150	154	-	156	157	161	-	147	148	152	-	147	148	152	-	149	150	154	-	156	157	161	-	156	157	161	-						
70	1050	MBh	27.8	28.2	29.0	-	27.6	28.0	28.8	-	26.9	27.3	28.1	-	25.6	26.0	26.8	-	24.1	24.5	25.3	-	22.7	23.1	24.0	-	27.8	28.2	29.0	-	27.8	28.2	29.0	-	26.5	26.9	27.7	-	25.0	25.4	26.2	-	23.6	24.0	24.9	-				
		S/T	0.69	0.61	0.47	-	0.70	0.62	0.48	-	0.73	0.65	0.51	-	1.00	0.67	0.53	-	1.00	0.74	0.60	-	1.00	1.00	0.65	-	0.74	0.66	0.52	-	1.00	0.69	0.55	-	1.00	0.71	0.57	-	1.00	0.74	0.60	-	1.00	1.00	0.65	-				
		ΔT	16.63	15.00	11.96	-	16.59	14.96	11.91	-	16.81	15.18	12.14	-	16.57	14.94	11.90	-	16.35	14.72	11.68	-	17.37	15.74	12.70	-	15.09	13.46	10.42	-	15.32	13.69	10.65	-	15.07	13.44	10.40	-	14.85	13.23	10.18	-	15.87	14.25	11.20	-				
		kW	1.81	1.81	1.80	-	2.04	2.04	2.03	-	2.30	2.29	2.29	-	2.57	2.57	2.57	-	2.88	2.88	2.88	-	3.27	3.27	3.26	-	2.88	2.88	2.88	-	2.88	2.88	2.88	-	2.88	2.88	2.88	-	3.27	3.27	3.26	-	3.27	3.27	3.26	-				
		Amps	6.79	6.78	6.76	-	7.79	7.78	7.76	-	8.90	8.90	8.88	-	10.11	10.11	10.09	-	11.46	11.46	11.44	-	13.05	13.04	13.02	-	11.46	11.46	11.44	-	11.46	11.46	11.44	-	11.46	11.46	11.44	-	13.13	13.12	13.10	-	13.13	13.12	13.10	-				
		Hi PR	256	257	259	-	296	297	299	-	338	339	341	-	383	384	386	-	432	433	435	-	484	485	487	-	338	339	341	-	338	339	341	-	383	384	386	-	432	433	435	-	484	485	487	-				
Lo PR	127	128	132	-	135	136	139	-	141	143	146	-	147	148	152	-	152	154	157	-	163	165	168	-	141	143	146	-	141	143	146	-	147	148	152	-	152	154	157	-	159	161	164	-						
70	1300	MBh	28.7	29.1	29.9	-	28.5	28.9	29.7	-	27.8	28.2	29.0	-	26.5	26.9	27.7	-	25.0	25.4	26.2	-	23.6	24.0	24.9	-	28.7	29.1	29.9	-	28.7	28.2	29.0	-	26.5	26.9	27.7	-	25.0	25.4	26.2	-	23.6	24.0	24.9	-				
		S/T	0.74	0.66	0.52	-	0.75	0.67	0.53	-	0.78	0.69	0.55	-	1.00	0.71	0.57	-	1.00	0.74	0.60	-	1.00	1.00	0.65	-	0.74	0.66	0.52	-	1.00	0.69	0.55	-	1.00	0.71	0.57	-	1.00	0.74	0.60	-	1.00	1.00	0.65	-				
		ΔT	15.13	13.50	10.46	-	15.09	13.46	10.42	-	15.32	13.69	10.65	-	15.07	13.44	10.40	-	14.85	13.23	10.18	-	15.87	14.25	11.20	-	13.46	11.83	8.82	-	13.69	12.06	9.02	-	13.44	11.81	8.77	-	14.85	13.23	10.18	-	15.87	14.25	11.20	-				
		kW	1.83	1.83	1.82	-	2.06	2.06	2.05	-	2.31	2.31	2.31	-	2.59	2.59	2.59	-	2.90	2.90	2.90	-	3.27	3.27	3.26	-	2.31	2.31	2.31	-	2.31	2.31	2.31	-	2.59	2.59	2.59	-	2.90	2.90	2.90	-	3.27	3.27	3.26	-				
		Amps	6.87	6.86	6.84	-	7.87	7.86	7.84	-	8.98	8.97	8.96	-	10.19	10.18	10.17	-	11.54	11.53	11.52	-	13.13	13.12	13.10	-	8.98	8.97	8.96	-	8.98	8.97	8.96	-	10.19	10.18	10.17	-	11.54	11.53	11.52	-	13.13	13.12	13.10	-				
		Hi PR	260	261	263	-	300	301	303	-	342	343	345	-	387	388	390	-	436	437	439	-	488	489	491	-	342	343	345	-	342	343	345	-	387	388	390	-	436	437	439	-	488	489	491	-				
Lo PR	131	133	136	-	139	140	143	-	145	147	150	-	151	153	156	-	156	158	161	-	163	165	168	-	145	147	150	-	145	147	150	-	151	153	156	-	156	158	161	-	163	165	168	-						
75	800	MBh	27.2	27.6	28.4	29.7	27.0	27.3	28.2	29.4	26.2	26.6	27.5	28.7	25.0	25.4	26.2	27.5	23.5	23.9	24.7	26.0	22.1	22.5	23.3	24.6	27.2	27.6	28.4	29.7	27.0	27.3	28.1	29.3	25.6	26.0	26.8	28.1	24.1	24.5	25.3	26.6	22.8	23.2	24.0	25.2				
		S/T	0.68	0.60	0.46	0.3	0.69	0.61	0.47	0.3	0.70	0.63	0.49	0.3	1.00	0.65	0.51	0.4	1.00	0.68	0.53	0.4	1.00	1.00	0.65	0.4	0.68	0.60	0.46	0.3	0.69	0.61	0.47	0.3	1.00	0.65	0.51	0.4	1.00	0.68	0.53	0.4	1.00	1.00	0.65	0.4				
		ΔT	22.30	20.67	17.63	14.5	22.26	20.63	17.59	14.4	22.49	20.86	17.82	14.7	22.24	20.61	17.57	14.4	22.02	20.39	17.35	14.2	23.04	21.41	18.37	15.2	20.63	19.00	15.96	12.8	20.59	18.96	15.92	12.8	20.39	18.76	15.72	12.6	20.15	18.52	15.48	12.3	20.95	19.32	16.28	13.1				
		kW	1.78	1.78	1.78	1.8	2.01	2.01	2.01	2.0	2.27	2.27	2.26	2.3	2.55	2.55	2.54	2.6	2.86	2.86	2.85	2.9	3.22	3.22	3.22	3.2	2.01	2.01	2.01	2.0	2.27	2.27	2.26	2.3	2.55	2.55	2.54	2.6	2.86	2.86	2.85	2.9	3.22	3.22	3.22	3.2				
		Amps	6.67	6.66	6.64	6.7	7.67	7.66	7.65	7.7	8.79	8.78	8.76	8.8	10.00	9.99	9.97	10.0	11.35	11.34	11.32	11.4	12.93	12.92	12.91	13.0	7.67	7.66	7.65	7.7	8.79	8.78	8.76	8.8	10.00	9.99	9.97	10.0	11.35	11.34	11.32	11.4	12.93	12.92	12.91	13.0				
		Hi PR	252	253	255	259.3	292	293	295	299.4	334	335	337	341.4	379	380	382	386.6	428	429	431	435.3	480	481	483	487.3	292	293	295	299.4	334	335	337	341.4	379	380	382	386.6	428	429	431	435.3	480	481	483	487.3				
Lo PR	124	125	128	133.6	131	133	136	141.2	138	139	143	147.9	143	145	148	153.5	149	151	154	159.0	156	157	161	166.0	131	133	136	141.2	138	139	143	147.9	143	145	148	153.5	149	151	154	159.0	156	157	161	166.0						
75	1050	MBh	27.8	28.2	29.1	30.3	27.6	28.0	28.8	30.1	26.9	27.3	28.1	29.3	25.6	26.0	26.9	28.1	24.1	24.5	25.3	26.6	22.8	23.2	24.0	25.2	27.8	28.2	29.1	30.3	27.6	28.0	28.8	30.1	26.9	27.3	28.1	29.3	25.6	26.0	26.9	28.1	24.1	24.5	25.3	26.6	22.8	23.2	24.0	25.2
		S/T	0.83	0.75	0.61	0.5	1.00	0.75	0.61	0.5	1.00	0.78	0.64	0.5	1.00	0.80	0.66	0.5	1.00	0.82	0.68	0.5	1.00	1.00	0.74	0.6	0.75	0.67	0.53	0.4	0.78	0.69	0.55	0.4	0.80	0.66	0.5	1.00	0.82	0.68	0.5	1.00	1.00	0.74	0.6					
		ΔT	20.21	18.58	15.54	12.4	20.17	18.54	15.50	12.3	20.40	18.77	15.73	12.6	20.15	18.52	15.48	12.3	20.35	18.72	15.68	12.1	20.95	19.32	16.28	13.1	18.54	16.91	13.87	10.7	18.77	17.14	1																	

EXPANDED COOLING DATA — GPHH53631 (HIGH STAGE)

IDB	AIRFLOW	OUTDOOR AMBIENT TEMPERATURE												105												115											
		65				75				85				95				105				115															
		59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71												
70	1050	MBh	35.4	35.9	37.0	-	35.1	35.6	36.6	-	34.2	34.7	35.7	-	32.6	33.1	34.1	-	30.6	31.1	32.2	-	28.9	29.4	30.4	-											
		S/T	0.62	0.55	0.41	-	0.63	0.55	0.41	-	0.66	0.58	0.44	-	1.00	0.60	0.46	-	1.00	0.62	0.48	-	1.00	0.67	0.53	-											
		ΔT	19.20	17.43	14.11	-	19.15	17.38	14.06	-	19.40	17.63	14.31	-	19.14	17.36	14.04	-	18.90	17.12	13.81	-	20.01	18.24	14.92	-											
		kW	2.21	2.20	2.20	-	2.48	2.48	2.48	-	2.79	2.79	2.78	-	3.12	3.12	3.12	-	3.50	3.50	3.49	-	3.94	3.93	3.93	-											
		Amps	8.85	8.84	8.82	-	10.12	10.11	10.08	-	11.53	11.52	11.50	-	13.06	13.05	13.03	-	14.77	14.76	14.73	-	16.77	16.76	16.74	-											
	Hi PR	250	251	253	-	289	290	292	-	331	332	334	-	375	376	378	-	423	424	426	-	474	475	477	-												
	Lo PR	126	127	130	-	133	135	138	-	140	141	145	-	146	147	150	-	151	153	156	-	158	160	163	-												
	MBh	35.9	36.4	37.4	-	35.6	36.1	37.1	-	34.6	35.1	36.2	-	33.0	33.5	34.6	-	31.1	31.6	32.7	-	29.3	29.8	30.9	-												
	S/T	0.69	0.61	0.47	-	0.69	0.61	0.47	-	0.72	0.64	0.50	-	1.00	0.66	0.52	-	1.00	0.68	0.54	-	1.00	0.73	0.60	-												
	ΔT	18.13	16.35	13.04	-	18.08	16.31	12.99	-	18.33	16.56	13.24	-	18.06	16.29	12.97	-	17.83	16.05	12.73	-	18.94	17.16	13.85	-												
kW	2.22	2.22	2.21	-	2.50	2.49	2.49	-	2.81	2.80	2.80	-	3.14	3.14	3.13	-	3.51	3.51	3.51	-	3.95	3.95	3.94	-													
Amps	8.92	8.91	8.88	-	10.18	10.17	10.15	-	11.59	11.58	11.56	-	13.12	13.11	13.09	-	14.83	14.82	14.80	-	16.83	16.82	16.80	-													
Hi PR	252	253	255	-	292	293	294	-	333	334	336	-	377	378	380	-	425	426	428	-	477	478	479	-													
Lo PR	127	129	132	-	135	137	140	-	142	143	147	-	147	149	152	-	153	155	158	-	160	161	165	-													
MBh	36.4	36.9	38.0	-	36.1	36.6	37.7	-	35.2	35.7	36.7	-	33.6	34.1	35.2	-	31.7	32.2	33.2	-	29.9	30.4	31.4	-													
S/T	0.72	0.64	0.50	-	0.73	0.65	0.51	-	1.00	0.67	0.53	-	1.00	0.69	0.55	-	1.00	0.72	0.58	-	1.00	1.00	0.63	-													
ΔT	17.23	15.45	12.14	-	17.18	15.40	12.09	-	17.43	15.65	12.34	-	17.16	15.38	12.07	-	16.92	15.15	11.83	-	18.04	16.26	12.94	-													
kW	2.23	2.23	2.23	-	2.51	2.51	2.50	-	2.82	2.82	2.81	-	3.15	3.15	3.14	-	3.52	3.52	3.52	-	3.96	3.96	3.96	-													
Amps	8.97	8.96	8.94	-	10.24	10.23	10.20	-	11.65	11.64	11.62	-	13.18	13.17	13.15	-	14.89	14.88	14.85	-	16.89	16.88	16.86	-													
Hi PR	254	255	257	-	294	295	296	-	335	336	338	-	379	380	382	-	427	428	430	-	479	480	481	-													
Lo PR	129	131	134	-	137	139	142	-	144	145	149	-	149	151	154	-	155	157	160	-	162	164	167	-													
75	900	MBh	32.9	33.3	34.3	35.8	32.6	33.0	34.0	35.5	31.7	32.2	33.1	34.7	30.2	30.7	31.7	33.2	28.4	28.8	29.8	31.4	26.7	27.2	28.2	29.7											
		S/T	0.69	0.61	0.47	0.3	0.70	0.61	0.47	0.3	1.00	0.64	0.50	0.3	1.00	0.66	0.52	0.4	1.00	0.69	0.54	0.4	1.00	1.00	0.60	0.4											
		ΔT	23.47	21.75	18.55	15.2	23.42	21.70	18.50	15.2	23.66	21.95	18.74	15.4	23.40	21.69	18.49	15.2	23.17	21.46	18.26	14.9	24.25	22.53	19.33	16.0											
		kW	2.17	2.16	2.16	2.2	2.44	2.44	2.43	2.5	2.75	2.74	2.74	2.8	3.08	3.07	3.07	3.1	3.44	3.44	3.44	3.5	3.88	3.88	3.87	3.9											
		Amps	8.14	8.13	8.11	8.2	9.33	9.32	9.30	9.4	10.65	10.64	10.62	10.7	12.09	12.08	12.06	12.2	13.69	13.68	13.66	13.8	15.57	15.57	15.55	15.6											
	Hi PR	255	256	258	262.3	295	297	298	302.8	338	339	341	345.3	384	385	387	391.0	433	434	436	440.3	486	487	488	492.9												
	Lo PR	123	125	128	133.2	131	132	136	140.8	137	139	142	147.5	143	145	148	153.1	149	150	153	158.6	155	157	160	165.5												
	MBh	33.6	34.1	35.1	36.6	33.3	33.8	34.8	36.3	32.5	32.9	33.9	35.4	31.0	31.4	32.4	33.9	32.4	29.1	29.6	30.6	32.1	27.5	28.0	28.9	30.5											
	S/T	0.84	0.76	0.61	0.5	1.00	0.76	0.62	0.5	1.00	0.79	0.65	0.5	1.00	0.81	0.67	0.5	1.00	0.83	0.69	0.5	1.00	1.00	0.75	0.6												
	ΔT	21.27	19.56	16.36	13.0	21.23	19.51	16.31	13.0	21.47	19.75	16.55	13.2	21.21	19.50	16.29	13.0	20.98	19.27	16.07	12.7	22.05	20.34	17.14	13.8												
kW	2.20	2.19	2.19	2.2	2.47	2.47	2.46	2.5	2.78	2.77	2.77	2.8	3.11	3.10	3.10	3.1	3.47	3.47	3.47	3.5	3.91	3.91	3.90	3.9													
Amps	8.27	8.26	8.24	8.3	9.46	9.45	9.43	9.5	10.78	10.77	10.75	10.8	12.22	12.21	12.19	12.3	13.82	13.81	13.79	13.9	15.71	15.70	15.68	15.8													
Hi PR	259	260	262	266.6	300	301	303	307.2	342	343	345	349.6	388	389	391	395.4	437	438	440	444.6	490	491	493	497.2													
Lo PR	127	128	131	136.7	134	136	139	144.2	141	142	146	150.9	146	148	151	156.5	152	154	157	162.0	159	160	164	168.9													
MBh	34.4	34.9	35.9	37.4	34.1	34.6	35.6	37.1	33.3	33.7	34.7	36.2	31.8	32.3	33.2	34.8	32.4	30.0	30.4	31.4	32.9	28.3	28.8	29.8	31.3												
S/T	0.88	0.80	0.66	0.5	1.00	0.81	0.67	0.5	1.00	0.83	0.69	0.5	1.00	0.86	0.71	0.6	1.00	0.88	0.74	0.6	1.00	1.00	0.79	0.6													
ΔT	20.01	18.30	15.10	11.8	19.97	18.25	15.05	11.7	20.21	18.49	15.29	12.0	19.95	18.23	15.03	11.7	19.72	18.01	14.80	11.5	20.79	19.08	15.88	12.6													
kW	2.21	2.21	2.21	2.2	2.49	2.49	2.48	2.5	2.79	2.79	2.79	2.8	3.12	3.12	3.12	3.1	3.49	3.49	3.48	3.5	3.92	3.92	3.92	3.9													
Amps	8.34	8.33	8.31	8.4	9.53	9.52	9.50	9.6	10.86	10.85	10.83	10.9	12.29	12.28	12.26	12.4	13.90	13.89	13.87	14.0	15.78	15.77	15.75	15.8													
Hi PR	262	264	265	269.8	303	304	306	310.3	345	347	348	352.8	391	392	394	398.5	440	442	443	447.8	493	494	496	500.4													
Lo PR	130	131	134	139.8	137	139	142	147.4	144	146	149	154.0	150	151	154	159.6	155	157	160	165.2	162	164	167	172.1													

IDB = Entering Indoor Dry Bulb Temperature
 High and low pressures are measured at the liquid and suction access fittings.
 Design Subcooling, 9-12 °F @ the liquid access fitting connection AHR1 95 test conditions. Design Superheat 7-11°F @ the compressor suction access fitting connection.
 Shaded area reflects AHR1 (TVA) conditions.
 Amps: Unit amps (comp.+ evaporator + condenser fan motors)
 KW = Total system power

EXPANDED COOLING DATA — GPHH53631 (HIGH STAGE) (CONT.)

IDB	AIRFLOW	OUTDOOR AMBIENT TEMPERATURE												105												115													
		65						75						85						95						105						115							
		59	63	67	71	75	79	59	63	67	71	75	79	59	63	67	71	75	79	59	63	67	71	75	79	59	63	67	71	75	79	59	63	67	71	75	79		
ENTERING INDOOR WET BULB TEMPERATURE																																							
80	MBh	33.0	33.5	34.5	36.0	32.7	33.2	34.2	35.7	31.9	32.3	33.3	34.8	30.4	30.8	31.8	33.3	28.6	29.0	30.0	31.5	26.9	27.4	28.3	29.9	30.4	30.8	31.8	33.3	28.6	29.0	30.0	31.5	26.9	27.4	28.3	29.9		
	S/T	1.00	0.74	0.60	0.4	1.00	0.75	0.60	0.5	1.00	0.77	0.63	0.5	1.00	0.79	0.65	0.5	1.00	1.00	1.00	0.67	0.5	1.00	1.00	0.73	0.6	1.00	0.79	0.65	0.5	1.00	1.00	1.00	0.67	0.5	1.00	1.00	0.73	0.6
	ΔT	27.26	25.55	22.35	19.0	27.21	25.50	22.30	19.0	27.46	25.74	22.54	19.2	27.20	25.48	22.28	19.0	26.97	25.25	22.05	18.7	28.04	26.33	23.13	19.8	27.20	25.48	22.28	19.0	26.97	25.25	22.05	18.7	28.04	26.33	23.13	19.8		
	kW	2.17	2.17	2.16	2.2	2.44	2.44	2.43	2.5	2.75	2.74	2.74	2.8	3.08	3.07	3.07	3.1	3.45	3.44	3.44	3.5	3.88	3.88	3.87	3.9	3.08	3.07	3.07	3.1	3.45	3.44	3.44	3.5	3.88	3.88	3.87	3.9		
	Amps	8.14	8.14	8.14	8.2	9.33	9.32	9.30	9.4	10.66	10.65	10.63	10.7	12.10	12.09	12.07	12.2	13.70	13.69	13.67	13.8	15.58	15.57	15.55	15.6	12.10	12.09	12.07	12.2	13.70	13.69	13.67	13.8	15.58	15.57	15.55	15.6		
	Hi/PR	255	256	258	262.8	296	297	299	303.3	338	339	341	345.8	384	385	387	391.5	433	434	436	440.8	486	487	489	493.4	384	385	387	391.5	433	434	436	440.8	486	487	489	493.4		
Lo/PR	124	125	128	133.8	131	133	136	141.4	138	140	143	148.0	144	145	148	153.7	149	151	154	159.2	156	158	161	166.1	144	145	148	153.7	149	151	154	159.2	156	158	161	166.1			
1180	MBh	33.8	34.3	35.3	36.8	33.5	34.0	35.0	36.5	32.6	33.1	34.1	35.6	31.1	31.6	32.6	34.1	29.3	29.8	30.8	32.3	27.7	28.1	29.1	30.6	31.1	31.6	32.6	34.1	29.3	29.8	30.8	32.3	27.7	28.1	29.1	30.6		
	S/T	1.00	0.89	0.75	0.6	1.00	0.90	0.75	0.6	1.00	0.92	0.78	0.6	1.00	0.94	0.80	0.6	1.00	1.00	1.00	0.82	0.7	1.00	1.00	0.88	0.7	1.00	0.94	0.80	0.6	1.00	1.00	1.00	0.82	0.7	1.00	1.00	0.88	0.7
	ΔT	25.07	23.36	20.15	16.8	25.02	23.31	20.11	16.8	25.26	23.55	20.35	17.0	25.01	23.29	20.09	16.8	24.78	23.06	19.86	16.5	25.85	24.14	20.93	17.6	25.01	23.29	20.09	16.8	24.78	23.06	19.86	16.5	25.85	24.14	20.93	17.6		
	kW	2.20	2.20	2.19	2.2	2.47	2.47	2.46	2.5	2.78	2.77	2.77	2.8	3.11	3.10	3.10	3.1	3.48	3.47	3.47	3.5	3.91	3.91	3.90	3.9	3.11	3.10	3.10	3.1	3.48	3.47	3.47	3.5	3.91	3.91	3.90	3.9		
	Amps	8.28	8.27	8.25	8.3	9.46	9.45	9.43	9.5	10.79	10.78	10.76	10.9	12.23	12.22	12.20	12.3	13.83	13.82	13.80	13.9	15.71	15.70	15.68	15.8	12.23	12.22	12.20	12.3	13.83	13.82	13.80	13.9	15.71	15.70	15.68	15.8		
	Hi/PR	260	261	263	267.1	300	301	303	307.6	343	344	346	350.1	388	390	391	395.8	438	439	441	445.1	490	491	493	497.7	388	390	391	395.8	438	439	441	445.1	490	491	493	497.7		
Lo/PR	127	129	132	137.2	135	136	139	144.8	141	143	146	151.4	147	149	152	157.1	153	154	157	162.6	159	161	164	169.5	147	149	152	157.1	153	154	157	162.6	159	161	164	169.5			
1400	MBh	34.6	35.1	36.1	37.6	34.3	34.8	35.8	37.3	33.4	33.9	34.9	36.4	32.0	32.4	33.4	34.9	30.1	30.6	31.6	33.1	28.5	28.9	29.9	31.4	32.0	32.4	33.4	34.9	30.1	30.6	31.6	33.1	28.5	28.9	29.9	31.4		
	S/T	1.00	0.93	0.79	0.6	1.00	0.94	0.80	0.6	1.00	0.96	0.82	0.7	1.00	0.98	0.84	0.7	1.00	1.00	1.00	0.87	0.7	1.00	1.00	0.8	1.00	0.98	0.84	0.7	1.00	1.00	1.00	0.87	0.7	1.00	1.00	0.8		
	ΔT	23.81	22.09	18.89	15.6	23.76	22.05	18.85	15.5	24.00	22.29	19.09	15.8	23.74	22.03	18.83	15.5	23.52	21.80	18.60	15.3	24.59	22.87	19.67	16.4	23.74	22.03	18.83	15.5	23.52	21.80	18.60	15.3	24.59	22.87	19.67	16.4		
	kW	2.22	2.21	2.21	2.2	2.49	2.49	2.48	2.5	2.79	2.79	2.79	2.8	3.12	3.12	3.12	3.1	3.49	3.49	3.49	3.5	3.93	3.92	3.92	3.9	3.12	3.12	3.12	3.1	3.49	3.49	3.49	3.5	3.93	3.92	3.92	3.9		
	Amps	8.35	8.34	8.32	8.4	9.54	9.53	9.51	9.6	10.86	10.86	10.84	10.9	12.30	12.29	12.27	12.4	13.90	13.90	13.87	14.0	15.79	15.78	15.76	15.8	12.30	12.29	12.27	12.4	13.90	13.90	13.87	14.0	15.79	15.78	15.76	15.8		
	Hi/PR	263	264	266	270.3	303	305	306	310.8	346	347	349	353.3	392	393	395	399.0	441	442	444	448.3	493	495	496	500.9	392	393	395	399.0	441	442	444	448.3	493	495	496	500.9		
Lo/PR	130	132	135	140.3	138	139	143	147.9	145	146	149	154.6	150	152	155	160.2	156	157	160	165.7	163	164	167	172.6	145	146	149	154.6	150	152	155	160.2	156	157	160	165.7			
85	MBh	33.6	34.1	35.0	36.6	33.3	33.8	34.7	36.3	32.4	32.9	33.9	35.4	30.9	31.4	32.4	33.9	29.1	29.6	30.6	32.1	27.4	27.9	28.9	30.4	30.9	31.4	32.4	33.9	29.1	29.6	30.6	32.1	27.4	27.9	28.9	30.4		
	S/T	1.00	0.85	0.70	0.6	1.00	0.85	0.71	0.6	1.00	0.87	0.74	0.6	1.00	0.89	0.76	0.6	1.00	1.00	1.00	0.78	0.6	1.00	1.00	0.7	1.00	0.89	0.76	0.6	1.00	1.00	1.00	0.78	0.6	1.00	1.00	0.7		
	ΔT	30.63	28.91	25.71	22.4	30.58	28.87	25.67	22.3	30.82	29.11	25.91	22.6	30.56	28.85	25.65	22.3	30.33	28.62	25.42	22.1	31.41	29.69	26.49	23.2	30.56	28.85	25.65	22.3	30.33	28.62	25.42	22.1	31.41	29.69	26.49	23.2		
	kW	2.17	2.17	2.17	2.2	2.45	2.44	2.44	2.5	2.75	2.75	2.75	2.8	3.08	3.08	3.08	3.1	3.45	3.45	3.44	3.5	3.88	3.88	3.88	3.9	3.08	3.08	3.08	3.1	3.45	3.45	3.44	3.5	3.88	3.88	3.88	3.9		
	Amps	8.17	8.16	8.14	8.2	9.36	9.35	9.33	9.4	10.68	10.67	10.65	10.7	12.12	12.11	12.09	12.2	13.72	13.71	13.69	13.8	15.60	15.59	15.57	15.7	12.12	12.11	12.09	12.2	13.72	13.71	13.69	13.8	15.60	15.59	15.57	15.7		
	Hi/PR	257	258	260	264.0	297	298	300	304.5	340	341	342	347.0	385	386	388	392.7	435	436	438	442.0	487	488	490	494.6	385	386	388	392.7	435	436	438	442.0	487	488	490	494.6		
Lo/PR	126	127	130	135.7	133	135	138	143.3	140	141	145	149.9	145	147	150	155.5	151	153	156	161.0	158	159	163	168.0	145	147	150	155.5	151	153	156	161.0	158	159	163	168.0			
1180	MBh	34.4	34.8	35.8	37.3	34.1	34.5	35.5	37.0	33.2	33.7	34.6	36.2	31.7	32.2	33.2	34.7	29.9	30.3	31.3	32.9	28.2	28.7	29.7	31.2	31.7	32.2	33.2	34.7	29.9	30.3	31.3	32.9	28.2	28.7	29.7	31.2		
	S/T	1.00	1.00	0.85	0.7	1.00	1.00	0.86	0.7	1.00	1.00	0.89	0.7	1.00	1.00	0.91	0.8	1.00	1.00	1.00	0.8	1.00	1.00	1.00	0.8	1.00	1.00	0.91	0.8	1.00	1.00	1.00	0.8	1.00	1.00	1.00	0.8		
	ΔT	28.44	26.72	23.52	20.2	28.39	26.68	23.47	20.2	28.63	26.92	23.71	20.4	28.37	26.66	23.46	20.1	28.14	26.43	23.23	19.9	29.22	27.50	24.30	21.0	28.37	26.66	23.46	20.1	28.14	26.43	23.23	19.9	29.22	27.50	24.30	21.0		
	kW	2.20	2.20	2.20	2.2	2.48	2.47	2.47	2.5	2.78	2.78	2.78	2.8	3.11	3.11	3.11	3.1	3.48	3.48	3.47	3.5	3.91	3.91	3.91	3.9	3.11	3.11	3.11	3.1	3.48	3.48	3.47	3.5	3.91	3.91	3.91	3.9		
	Amps	8.30	8.29	8.27	8.4	9.49	9.48	9.46	9.5	10.81	10.80	10.78	10.9	12.25	12.24	12.22	12.3	13.85	13.84	13.82	13.9	15.73	15.73	15.70	15.8	12.25	12.24	12.22	12.3	13.85	13.84	13.82	13.9	15.73	15.73	15.70	15.8		
	Hi/PR	261	262	264	268.3	301	303	304	308.9	344	345	347	351.3	390	391	393	397.0	439	440	442	446.3	492	493	494	498.9	390	391	393	397.0	439	440	442	446.3	492	493	494	498.9		
Lo/PR	129	131	134	139.1	137	138	141	146.7	143	145	148	153.3	149	150	154	158.9	154	156	159																				

EXPANDED COOLING DATA — GPHH53631 (LOW STAGE)

IDB	AIRFLOW	OUTDOOR AMBIENT TEMPERATURE												ENTERING INDOOR WET BULB TEMPERATURE											
		65				75				85				95				105				115			
		59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71
70	MBh	23.6	23.9	24.6	-	23.4	23.7	24.4	-	22.7	23.1	23.8	-	21.7	22.0	22.7	-	20.4	20.7	21.4	-	19.2	19.5	20.2	-
	S/T	0.56	0.47	0.33	-	0.56	0.48	0.33	-	0.59	0.51	0.36	-	1.00	0.53	0.38	-	1.00	0.55	0.41	-	1.00	0.61	0.46	-
	ΔT	19.15	17.50	14.41	-	19.11	17.45	14.36	-	19.34	17.68	14.59	-	19.09	17.43	14.34	-	18.87	17.21	14.12	-	19.90	18.25	15.16	-
	kW	1.36	1.36	1.36	-	1.53	1.53	1.53	-	1.73	1.73	1.72	-	1.93	1.93	1.93	-	2.17	2.17	2.16	-	2.44	2.44	2.43	-
	Amps	5.12	5.11	5.10	-	5.87	5.86	5.85	-	6.70	6.69	6.68	-	7.60	7.60	7.58	-	8.61	8.61	8.59	-	9.80	9.79	9.78	-
	Hi PR	243	244	246	-	282	283	285	-	323	324	325	-	366	367	369	-	413	414	416	-	464	465	466	-
Lo PR	126	128	131	-	134	136	139	-	141	143	146	-	147	148	152	-	153	154	157	-	160	161	164	-	
70	MBh	24.2	24.5	25.2	-	23.9	24.3	25.0	-	23.3	23.7	24.4	-	22.3	22.6	23.3	-	20.9	21.3	22.0	-	19.7	20.1	20.8	-
	S/T	0.72	0.64	0.49	-	0.73	0.65	0.50	-	1.00	0.67	0.53	-	1.00	0.69	0.55	-	1.00	0.72	0.57	-	1.00	1.00	0.63	-
	ΔT	16.89	15.24	12.15	-	16.85	15.19	12.10	-	17.08	15.42	12.34	-	16.83	15.18	12.09	-	16.61	14.95	11.86	-	17.64	15.99	12.90	-
	kW	1.38	1.38	1.38	-	1.55	1.55	1.55	-	1.75	1.75	1.74	-	1.95	1.95	1.95	-	2.19	2.19	2.18	-	2.46	2.46	2.45	-
	Amps	5.21	5.20	5.19	-	5.95	5.95	5.93	-	6.79	6.78	6.77	-	7.69	7.69	7.67	-	8.70	8.69	8.68	-	9.88	9.88	9.86	-
	Hi PR	248	249	250	-	286	287	289	-	327	328	330	-	371	372	373	-	418	419	421	-	468	469	471	-
Lo PR	130	132	135	-	138	140	143	-	145	146	150	-	151	152	155	-	156	158	161	-	163	165	168	-	
1000	MBh	25.0	25.3	26.0	-	24.8	25.1	25.8	-	24.2	24.5	25.2	-	23.1	23.4	24.1	-	21.8	22.1	22.8	-	20.6	20.9	21.6	-
	S/T	0.77	0.69	0.54	-	0.78	0.69	0.55	-	1.00	0.72	0.57	-	1.00	0.74	0.60	-	1.00	0.77	0.62	-	1.00	1.00	0.67	-
	ΔT	15.30	13.65	10.56	-	15.26	13.60	10.52	-	15.49	13.84	10.75	-	15.24	13.59	10.50	-	15.02	13.37	10.28	-	16.06	14.40	11.31	-
	kW	1.40	1.40	1.39	-	1.57	1.57	1.56	-	1.76	1.76	1.76	-	1.97	1.97	1.96	-	2.20	2.20	2.20	-	2.47	2.47	2.47	-
	Amps	5.27	5.26	5.25	-	6.01	6.01	6.00	-	6.85	6.84	6.83	-	7.75	7.75	7.73	-	8.76	8.76	8.74	-	9.94	9.94	9.93	-
	Hi PR	252	253	255	-	290	292	293	-	331	332	334	-	375	376	378	-	422	423	425	-	472	473	475	-
Lo PR	135	136	139	-	142	144	147	-	149	151	154	-	155	157	160	-	161	162	166	-	168	169	173	-	
600	MBh	23.6	23.9	24.6	25.7	23.4	23.7	24.4	25.5	22.8	23.1	23.8	24.9	21.7	22.0	22.7	23.8	20.4	20.7	21.4	22.5	19.2	19.5	20.2	21.3
	S/T	0.70	0.61	0.47	0.3	1.00	0.62	0.47	0.3	1.00	0.65	0.50	0.3	1.00	0.67	0.52	0.4	1.00	0.69	0.54	0.4	1.00	1.00	0.60	0.4
	ΔT	22.79	21.13	18.04	14.8	22.74	21.09	18.00	14.8	22.98	21.32	18.23	15.0	22.73	21.07	17.98	14.8	22.51	20.85	17.76	14.6	23.54	21.89	18.80	15.6
	kW	1.36	1.36	1.36	1.4	1.53	1.53	1.53	1.5	1.73	1.72	1.72	1.7	1.93	1.93	1.93	1.9	2.17	2.16	2.16	2.2	2.44	2.44	2.43	2.4
	Amps	5.11	5.11	5.09	5.2	5.86	5.86	5.84	5.9	6.70	6.69	6.68	6.7	7.60	7.59	7.58	7.6	8.61	8.60	8.59	8.6	9.79	9.79	9.77	9.8
	Hi PR	243	244	246	250.5	282	283	285	289.3	323	324	326	329.8	366	368	369	373.6	414	415	416	420.7	464	465	467	471.0
Lo PR	126	128	131	136.8	134	136	139	144.6	141	143	146	151.4	147	148	152	157.2	153	154	157	162.9	160	161	165	170.0	
75	MBh	24.2	24.5	25.2	26.3	24.0	24.3	25.0	26.1	23.3	23.7	24.4	25.5	22.3	22.6	23.3	24.4	21.0	21.3	22.0	23.1	19.8	20.1	20.8	21.9
	S/T	0.86	0.78	0.63	0.5	1.00	0.78	0.64	0.5	1.00	0.81	0.67	0.5	1.00	0.83	0.69	0.5	1.00	1.00	0.71	0.6	1.00	1.00	0.77	0.6
	ΔT	20.53	18.88	15.79	12.6	20.48	18.83	15.74	12.5	20.72	19.06	15.97	12.8	20.47	18.81	15.72	12.5	20.25	18.59	15.50	12.3	21.28	19.63	16.54	13.3
	kW	1.38	1.38	1.38	1.4	1.55	1.55	1.55	1.6	1.75	1.74	1.74	1.8	1.95	1.95	1.95	2.0	2.19	2.18	2.18	2.2	2.46	2.46	2.45	2.5
	Amps	5.20	5.20	5.18	5.2	5.95	5.94	5.93	6.0	6.78	6.78	6.76	6.8	7.69	7.68	7.67	7.7	8.70	8.69	8.68	8.7	9.88	9.87	9.86	9.9
	Hi PR	248	249	251	254.9	287	288	289	293.7	327	328	330	334.2	371	372	374	378.0	418	419	421	425.1	468	469	471	475.4
Lo PR	130	132	135	140.5	138	140	143	148.3	145	146	150	155.1	151	152	155	160.9	156	158	161	166.6	163	165	168	173.7	
1000	MBh	25.0	25.3	26.1	27.1	24.8	25.1	25.8	26.9	24.2	24.5	25.2	26.3	23.1	23.4	24.1	25.2	21.8	22.1	22.8	23.9	20.6	20.9	21.6	22.7
	S/T	1.00	0.83	0.68	0.5	1.00	0.83	0.69	0.5	1.00	0.86	0.71	0.6	1.00	1.00	0.74	0.6	1.00	1.00	0.76	0.6	1.00	1.00	0.81	0.7
	ΔT	18.94	17.29	14.20	11.0	18.90	17.24	14.15	11.0	19.13	17.48	14.39	11.2	18.88	17.23	14.14	10.9	18.66	17.00	13.92	10.7	19.70	18.04	14.95	11.8
	kW	1.40	1.39	1.39	1.4	1.57	1.57	1.56	1.6	1.76	1.76	1.76	1.8	1.97	1.97	1.96	2.0	2.20	2.20	2.20	2.2	2.47	2.47	2.47	2.5
	Amps	5.26	5.26	5.24	5.3	6.01	6.00	5.99	6.0	6.84	6.84	6.83	6.9	7.75	7.74	7.73	7.8	8.76	8.75	8.74	8.8	9.94	9.93	9.92	10.0
	Hi PR	252	253	255	259.0	291	292	293	297.8	331	332	334	338.3	375	376	378	382.1	422	423	425	429.2	472	473	475	479.5
Lo PR	135	136	139	144.9	142	144	147	152.8	149	151	154	159.6	155	157	160	165.4	161	162	166	171.0	168	169	173	178.1	

IDB = Entering Indoor Dry Bulb Temperature
 High and low pressures are measured at the liquid and suction access fittings.
 Design Subcooling, 8-12 °F @ the liquid access fitting connection AHRI 95 test conditions. Design Superheat 8-12°F @ the compressor suction access fitting connection.
 Shaded area reflects AHRI (TVA) conditions.
 Amps: Unit amps (comp.+ evaporator + condenser fan motors)
 kW = Total system power

EXPANDED COOLING DATA — GPHH53631 (LOW STAGE) (CONT.)

IDB	AIRFLOW	OUTDOOR AMBIENT TEMPERATURE												105												115																															
		65						75						85						95						105						115																									
		59	63	67	71	75	79	59	63	67	71	75	79	59	63	67	71	75	79	59	63	67	71	75	79	59	63	67	71	75	79	59	63	67	71	75	79																				
80	MBh	23.7	24.1	24.8	25.9	23.5	23.8	24.6	25.6	22.9	23.2	23.9	25.0	21.8	22.1	22.9	23.9	20.5	20.8	21.6	22.6	19.3	19.6	20.4	21.4	20.5	20.8	21.6	22.6	19.3	19.6	20.4	21.4	20.5	20.8	21.6	22.6	19.3	19.6	20.4	21.4																
	S/T	1.00	0.75	0.60	0.4	1.00	0.76	0.61	0.5	1.00	0.78	0.64	0.5	1.00	1.00	0.66	0.5	1.00	1.00	0.68	0.5	1.00	1.00	0.74	0.6	1.00	1.00	0.68	0.5	1.00	1.00	0.74	0.6	1.00	1.00	0.68	0.5	1.00	1.00	0.74	0.6																
	ΔT	26.45	24.80	21.71	18.5	26.41	24.75	21.66	18.5	26.41	24.98	21.90	18.7	26.39	24.73	21.65	18.4	26.17	24.51	21.42	18.2	27.20	25.55	22.46	19.3	26.17	24.51	21.42	18.2	27.20	25.55	22.46	19.3	26.17	24.51	21.42	18.2	27.20	25.55	22.46	19.3																
	kW	1.36	1.36	1.36	1.4	1.53	1.53	1.53	1.5	1.73	1.73	1.72	1.7	1.93	1.93	1.93	1.9	2.17	2.17	2.16	2.2	2.44	2.44	2.44	2.4	2.17	2.16	2.16	2.2	2.44	2.44	2.44	2.4	2.17	2.16	2.16	2.2	2.44	2.44	2.44	2.4																
	Amps	5.12	5.11	5.10	5.2	5.86	5.86	5.85	5.9	6.70	6.69	6.68	6.7	7.60	7.60	7.58	7.6	8.61	8.61	8.61	8.59	9.79	9.79	9.78	9.8	8.61	8.61	8.59	8.6	9.79	9.79	9.78	9.8	8.61	8.61	8.59	8.6	9.79	9.79	9.78	9.8																
	Hi PR	244	245	247	251.0	283	284	285	289.7	323	324	326	330.3	367	368	370	374.0	414	415	415	417	464	465	467	471.4	367	368	370	374.0	414	415	417	421.1	464	465	467	471.4	367	368	370	374.0	414	415	417	421.1	464	465	467	471.4								
	Lo PR	127	129	132	137.4	135	136	140	145.2	142	143	147	152.0	147	149	152	157.8	153	155	155	158	160	162	165	170.5	147	149	152	157.8	153	155	158	163.4	160	162	165	170.5	147	149	152	157.8	153	155	158	163.4	160	162	165	170.5								
	MBh	24.3	24.6	25.3	26.4	24.1	24.4	25.1	26.2	23.5	23.8	24.5	25.6	22.4	22.7	23.4	24.5	21.1	21.4	22.1	23.2	19.9	20.2	20.9	22.0	21.1	21.4	22.1	23.2	19.9	20.2	20.9	22.0	21.1	21.4	22.1	23.2	19.9	20.2	20.9	22.0																
	S/T	1.00	0.91	0.77	0.6	1.00	0.92	0.77	0.6	1.00	1.00	0.80	0.6	1.00	1.00	0.82	0.7	1.00	1.00	0.85	0.7	1.00	1.00	1.00	0.7	1.00	1.00	0.85	0.7	1.00	1.00	1.00	0.7	1.00	1.00	0.85	0.7	1.00	1.00	1.00	0.7																
	ΔT	24.19	22.54	19.45	16.2	24.15	22.49	19.40	16.2	24.38	22.73	19.64	16.4	24.13	22.48	19.39	16.2	23.91	22.26	19.17	16.0	24.95	23.29	20.20	17.0	23.91	22.26	19.17	16.0	24.95	23.29	20.20	17.0	23.91	22.26	19.17	16.0	24.95	23.29	20.20	17.0																
kW	1.38	1.38	1.38	1.4	1.55	1.55	1.55	1.6	1.75	1.75	1.74	1.8	1.95	1.95	1.95	2.0	2.19	2.18	2.18	2.2	2.46	2.46	2.45	2.5	2.19	2.18	2.18	2.2	2.46	2.46	2.45	2.5	2.19	2.18	2.18	2.2	2.46	2.46	2.45	2.5																	
Amps	5.21	5.20	5.19	5.2	5.95	5.95	5.93	6.0	6.79	6.78	6.77	6.8	7.69	7.68	7.67	7.7	8.70	8.69	8.68	8.7	9.88	9.88	9.86	9.9	7.69	7.68	7.67	7.7	8.70	8.69	8.68	8.7	9.88	9.88	9.86	9.9	7.69	7.68	7.67	7.7	8.70	8.69	8.68	8.7	9.88	9.88	9.86	9.9									
Hi PR	248	249	251	255.4	287	288	290	294.1	328	329	330	334.7	371	372	374	378.4	418	420	421	425.5	469	470	472	475.8	371	372	374	378.4	418	420	421	425.5	469	470	472	475.8	371	372	374	378.4	418	420	421	425.5	469	470	472	475.8									
Lo PR	131	132	136	141.0	139	140	143	148.9	145	147	150	155.7	151	153	156	161.5	157	158	162	167.1	164	166	169	174.2	145	147	150	155.7	151	153	156	161.5	157	158	162	167.1	164	166	169	174.2	145	147	150	155.7	151	153	156	161.5	157	158	162	167.1	164	166	169	174.2	
MBh	25.1	25.5	26.2	27.3	24.9	25.2	26.0	27.0	24.3	24.6	25.3	26.4	23.2	23.6	24.3	25.4	21.9	22.2	23.0	24.0	20.7	21.1	21.8	22.9	21.9	22.2	23.0	24.0	20.7	21.1	21.8	22.9	21.9	22.2	23.0	24.0	20.7	21.1	21.8	22.9																	
S/T	1.00	0.96	0.82	0.7	1.00	0.97	0.82	0.7	1.00	1.00	0.85	0.7	1.00	1.00	0.87	0.7	1.00	1.00	0.89	0.7	1.00	1.00	1.00	0.8	1.00	1.00	0.87	0.7	1.00	1.00	1.00	0.8	1.00	1.00	0.87	0.7	1.00	1.00	1.00	0.8																	
ΔT	22.61	20.95	17.86	14.7	22.56	20.91	17.82	14.6	22.79	21.14	18.05	14.8	22.54	20.89	17.80	14.6	22.32	20.67	17.58	14.4	23.36	21.70	18.61	15.4	22.32	20.67	17.58	14.4	23.36	21.70	18.61	15.4	22.32	20.67	17.58	14.4	23.36	21.70	18.61	15.4																	
kW	1.40	1.40	1.39	1.4	1.57	1.57	1.56	1.6	1.76	1.76	1.76	1.8	1.97	1.97	1.96	2.0	2.20	2.20	2.20	2.2	2.47	2.47	2.47	2.5	2.19	2.17	1.96	2.0	2.20	2.20	2.20	2.2	2.47	2.47	2.47	2.5	2.19	2.17	1.96	2.0	2.20	2.20	2.20	2.2	2.47	2.47	2.47	2.5									
Amps	5.27	5.26	5.25	5.3	6.01	6.01	6.00	6.1	6.85	6.84	6.83	6.9	7.75	7.75	7.73	7.8	8.76	8.75	8.74	8.8	9.94	9.94	9.93	10.0	7.75	7.75	7.73	7.8	8.76	8.75	8.74	8.8	9.94	9.94	9.93	10.0	7.75	7.75	7.73	7.8	8.76	8.75	8.74	8.8	9.94	9.94	9.93	10.0									
Hi PR	252	253	255	259.5	291	292	294	298.2	332	333	335	338.8	375	377	378	382.5	423	424	425	429.6	473	474	476	479.9	375	377	378	382.5	423	424	425	429.6	473	474	476	479.9	375	377	378	382.5	423	424	425	429.6	473	474	476	479.9									
Lo PR	135	137	140	145.5	143	145	148	153.3	150	151	155	160.2	156	157	160	165.9	161	163	166	171.6	168	170	173	178.7	143	145	148	153.3	150	151	155	160.2	161	163	166	171.6	168	170	173	178.7	143	145	148	153.3	150	151	155	160.2	161	163	166	171.6	168	170	173	178.7	
85	MBh	24.1	24.5	25.2	26.3	23.9	24.2	25.0	26.0	23.3	23.6	24.3	25.4	22.2	22.6	23.3	24.4	20.9	21.2	22.0	23.0	19.7	20.0	20.8	21.8	20.9	21.2	22.0	23.0	19.7	20.0	20.8	21.8	20.9	21.2	22.0	23.0	19.7	20.0	20.8	21.8																
	S/T	1.00	0.86	0.71	0.6	1.00	1.00	0.72	0.6	1.00	1.00	0.75	0.6	1.00	1.00	0.77	0.6	1.00	1.00	0.6	0.6	1.00	1.00	1.00	0.7	1.00	1.00	0.77	0.6	1.00	1.00	1.00	0.7	1.00	1.00	0.77	0.6	1.00	1.00	1.00	0.7																
	ΔT	29.70	28.05	24.96	21.8	29.66	28.00	24.91	21.7	29.89	28.23	25.14	21.9	29.64	27.98	24.89	21.7	29.42	27.76	24.67	21.5	30.45	28.80	25.71	22.5	29.42	27.76	24.67	21.5	30.45	28.80	25.71	22.5	29.42	27.76	24.67	21.5	30.45	28.80	25.71	22.5																
	kW	1.37	1.36	1.36	1.4	1.54	1.54	1.53	1.5	1.73	1.73	1.73	1.7	1.94	1.94	1.93	1.9	2.17	2.17	2.17	2.2	2.44	2.44	2.44	2.5	2.17	2.17	2.17	2.2	2.44	2.44	2.44	2.5	2.17	2.17	2.17	2.2	2.44	2.44	2.44	2.5																
	Amps	5.13	5.13	5.11	5.2	5.88	5.87	5.86	5.9	6.71	6.71	6.69	6.8	7.62	7.61	7.60	7.7	8.63	8.62	8.61	8.7	9.81	9.80	9.79	9.8	7.62	7.61	7.60	7.7	8.63	8.62	8.61	8.7	9.81	9.80	9.79	9.8	7.62	7.61	7.60	7.7	8.63	8.62	8.61	8.7	9.81	9.80	9.79	9.8								
	Hi PR	245	246	248	252.1	284	285	287	290.9	324	325	327	331.4	368	369	371	375.2	415	416	418	422.3	466	467	468	472.6	368	369	371	375.2	415	416	418	422.3	466	467	468	472.6	368	369	371	375.2	415	416	418	422.3	466	467	468	472.6								
	Lo PR	129	131	134	139.3	137	138	142	147.1	144	145	148	153.9	149	151	154	159.7	155	157	160	165.4	162	164	167	172.5	144	145	148	153.9	149	151	154	159.7	155	157	160	165.4	162	164	167	172.5	144	145	148	153.9	149	151	154	159.7	155	157	160	165.4	162	164	167	172.5
	MBh	24.7	25.0	25.7	26.8	24.5	24.8	25.5	26.6	23.9	24.2	24.9	26.0	22.8	23.1	23.8	24.9	21.5	21.8	22.5	23.6	20.3	20.6	21.3	22.4	21.5	21.8	22.5	23.6	20.3	20.6	21.3	22.4	21.5	21.8	22.5	23.6	20.3	20.6	21.3	22.4																
	S/T	1.00	1.0																																																						

EXPANDED COOLING DATA — GPHH54231 (HIGH STAGE)

IDB	AIRFLOW	OUTDOOR AMBIENT TEMPERATURE												105												115																
		65						75						85						95						105						115										
		59	63	67	71	75	79	59	63	67	71	75	79	59	63	67	71	75	79	59	63	67	71	75	79	59	63	67	71	75	79	59	63	67	71	75	79					
70	1000	MBh	42.3	42.9	44.2	-	41.9	42.5	43.8	-	40.8	41.4	42.7	-	38.9	39.5	40.8	-	36.6	37.2	38.4	-	34.4	35.0	36.3	-	36.6	37.2	38.4	-	34.4	35.0	36.3	-	36.6	37.2	38.4	-	34.4	35.0	36.3	-
		S/T	0.50	0.43	0.30	-	0.51	0.44	0.31	-	0.53	0.46	0.33	-	0.55	0.48	0.35	-	1.00	0.50	0.37	-	1.00	0.55	0.42	-	1.00	0.50	0.37	-	1.00	0.55	0.42	-	1.00	0.50	0.37	-	1.00	0.55	0.42	-
		ΔT	22.56	20.59	16.91	-	22.51	20.54	16.86	-	22.79	20.82	17.13	-	22.49	20.52	16.84	-	22.23	20.25	16.57	-	23.46	21.49	17.81	-	22.23	20.25	16.57	-	23.46	21.49	17.81	-	22.23	20.25	16.57	-	23.46	21.49	17.81	-
		kW	2.79	2.79	2.78	-	3.15	3.14	3.14	-	3.54	3.54	3.53	-	3.97	3.96	3.96	-	4.44	4.44	4.43	-	5.00	5.00	4.99	-	4.44	4.44	4.43	-	5.00	5.00	4.99	-	4.44	4.44	4.43	-	5.00	5.00	4.99	-
		Amps	10.65	10.64	10.62	-	12.19	12.18	12.15	-	13.90	13.89	13.86	-	15.76	15.74	15.72	-	17.83	17.82	17.79	-	20.26	20.25	20.22	-	17.83	17.82	17.79	-	20.26	20.25	20.22	-	17.83	17.82	17.79	-	20.26	20.25	20.22	-
		Hi PR	260	261	263	-	301	303	304	-	345	346	348	-	391	393	394	-	442	443	445	-	495	497	498	-	442	443	445	-	495	497	498	-	442	443	445	-	495	497	498	-
	Lo PR	120	121	124	-	127	128	132	-	133	135	138	-	139	140	143	-	144	146	149	-	151	152	155	-	144	146	149	-	151	152	155	-	144	146	149	-	151	152	155	-	
	MBh	43.3	43.9	45.2	-	42.9	43.5	44.8	-	41.8	42.4	43.7	-	39.9	40.5	41.8	-	37.5	38.1	39.4	-	35.4	36.0	37.3	-	37.5	38.1	39.4	-	35.4	36.0	37.3	-	37.5	38.1	39.4	-	35.4	36.0	37.3	-	
	S/T	0.63	0.56	0.43	-	0.64	0.57	0.44	-	0.66	0.59	0.46	-	0.68	0.61	0.48	-	1.00	0.63	0.50	-	1.00	0.68	0.55	-	1.00	0.63	0.50	-	1.00	0.68	0.55	-	1.00	0.63	0.50	-	1.00	0.68	0.55	-	
	ΔT	20.13	18.16	14.48	-	20.08	18.10	14.42	-	20.35	18.38	14.70	-	20.06	18.08	14.40	-	19.79	17.82	14.14	-	21.03	19.06	15.37	-	19.79	17.82	14.14	-	21.03	19.06	15.37	-	19.79	17.82	14.14	-	21.03	19.06	15.37	-	
	kW	2.83	2.83	2.82	-	3.18	3.18	3.17	-	3.58	3.57	3.57	-	4.00	4.00	3.99	-	4.48	4.48	4.47	-	5.04	5.04	5.03	-	4.48	4.48	4.47	-	5.04	5.04	5.03	-	4.48	4.48	4.47	-	5.04	5.04	5.03	-	
	Amps	10.82	10.80	10.78	-	12.35	12.34	12.31	-	14.06	14.05	14.03	-	15.92	15.91	15.88	-	17.99	17.98	17.95	-	20.42	20.41	20.38	-	17.99	17.98	17.95	-	20.42	20.41	20.38	-	17.99	17.98	17.95	-	20.42	20.41	20.38	-	
Hi PR	264	265	267	-	306	307	309	-	349	350	352	-	396	397	399	-	446	447	449	-	500	501	503	-	446	447	449	-	500	501	503	-	446	447	449	-	500	501	503	-		
Lo PR	123	124	127	-	130	132	135	-	137	138	141	-	142	144	147	-	147	149	152	-	154	156	159	-	147	149	152	-	154	156	159	-	147	149	152	-	154	156	159	-		
MBh	44.6	45.2	46.5	-	44.3	44.9	46.1	-	43.1	43.7	45.0	-	41.2	41.8	43.1	-	38.9	39.5	40.8	-	36.7	37.3	38.6	-	38.9	39.5	40.8	-	36.7	37.3	38.6	-	38.9	39.5	40.8	-	36.7	37.3	38.6	-		
S/T	0.67	0.60	0.47	-	0.68	0.61	0.48	-	0.70	0.63	0.50	-	1.00	0.65	0.52	-	1.00	0.67	0.54	-	1.00	0.72	0.59	-	1.00	0.67	0.54	-	1.00	0.72	0.59	-	1.00	0.67	0.54	-	1.00	0.72	0.59	-		
ΔT	18.37	16.40	12.72	-	18.32	16.34	12.66	-	18.59	16.62	12.94	-	18.30	16.32	12.64	-	18.03	16.06	12.38	-	19.27	17.30	13.61	-	18.03	16.06	12.38	-	19.27	17.30	13.61	-	18.03	16.06	12.38	-	19.27	17.30	13.61	-		
kW	2.86	2.85	2.85	-	3.21	3.21	3.20	-	3.60	3.60	3.59	-	4.03	4.03	4.02	-	4.51	4.50	4.50	-	5.07	5.06	5.06	-	4.51	4.50	4.50	-	5.07	5.06	5.06	-	4.51	4.50	4.50	-	5.07	5.06	5.06	-		
Amps	10.93	10.92	10.89	-	12.47	12.46	12.43	-	14.18	14.17	14.14	-	16.04	16.02	16.00	-	18.11	18.10	18.07	-	20.54	20.53	20.50	-	18.11	18.10	18.07	-	20.54	20.53	20.50	-	18.11	18.10	18.07	-	20.54	20.53	20.50	-		
Hi PR	268	270	271	-	310	311	313	-	353	354	356	-	400	401	403	-	450	451	453	-	504	505	507	-	450	451	453	-	504	505	507	-	450	451	453	-	504	505	507	-		
Lo PR	127	128	131	-	134	135	139	-	140	142	145	-	146	147	150	-	151	153	156	-	158	159	163	-	151	153	156	-	158	159	163	-	151	153	156	-	158	159	163	-		
75	1000	MBh	42.3	43.0	44.2	46.2	42.0	42.6	43.8	45.8	40.9	41.5	42.7	44.7	38.9	39.5	40.8	42.8	36.6	37.2	38.5	40.4	34.4	35.0	36.3	38.3	36.6	37.2	38.5	40.4	34.4	35.0	36.3	38.3	36.6	37.2	38.5	40.4	34.4	35.0	36.3	38.3
		S/T	0.63	0.55	0.42	0.3	0.63	0.56	0.43	0.3	1.00	0.58	0.45	0.3	1.00	0.60	0.47	0.3	1.00	0.62	0.49	0.4	1.00	0.67	0.54	0.4	1.00	0.62	0.49	0.4	1.00	0.67	0.54	0.4	1.00	0.62	0.49	0.4	1.00	0.67	0.54	0.4
		ΔT	26.90	24.93	21.25	17.4	26.85	24.87	21.19	17.4	27.12	25.15	21.47	17.7	26.83	24.85	21.17	17.4	26.56	24.59	20.91	17.1	27.80	25.82	22.14	18.3	26.56	24.59	20.91	17.1	27.80	25.82	22.14	18.3	26.56	24.59	20.91	17.1	27.80	25.82	22.14	18.3
		kW	2.79	2.79	2.78	2.8	3.14	3.14	3.13	3.2	3.54	3.53	3.53	3.6	3.96	3.96	3.95	4.0	4.44	4.44	4.43	4.5	5.00	5.00	4.99	5.0	4.44	4.44	4.43	4.5	5.00	5.00	4.99	5.0	4.44	4.44	4.43	4.5	5.00	5.00	4.99	5.0
		Amps	10.64	10.63	10.61	10.7	12.18	12.17	12.14	12.3	13.89	13.88	13.85	14.0	15.75	15.73	15.71	15.8	17.82	17.81	17.78	17.9	20.25	20.24	20.21	20.3	17.82	17.81	17.78	17.9	20.25	20.24	20.21	20.3	17.82	17.81	17.78	17.9	20.25	20.24	20.21	20.3
		Hi PR	260	261	263	267.8	302	303	305	309.2	345	346	348	352.5	392	393	395	399.2	442	443	445	449.5	496	497	499	503.2	442	443	445	449.5	496	497	499	503.2	442	443	445	449.5	496	497	499	503.2
	Lo PR	120	121	124	129.3	127	128	132	136.7	133	135	138	143.1	139	140	143	148.6	144	146	149	153.9	151	152	155	160.6	144	146	149	153.9	151	152	155	160.6	144	146	149	153.9	151	152	155	160.6	
	MBh	43.3	43.9	45.2	47.1	42.9	43.5	44.8	46.8	41.8	42.4	43.7	45.6	39.9	40.5	41.8	43.7	37.6	38.2	39.4	41.4	35.4	36.0	37.3	39.2	37.6	38.2	39.4	41.4	35.4	36.0	37.3	39.2	37.6	38.2	39.4	41.4	35.4	36.0	37.3	39.2	
	S/T	0.75	0.68	0.55	0.4	0.76	0.69	0.56	0.4	1.00	0.71	0.58	0.4	1.00	0.73	0.60	0.5	1.00	0.75	0.62	0.5	1.00	0.80	0.67	0.5	1.00	0.75	0.62	0.5	1.00	0.80	0.67	0.5	1.00	0.75	0.62	0.5	1.00	0.80	0.67	0.5	
	ΔT	24.47	22.49	18.81	15.0	24.41	22.44	18.76	14.9	24.69	22.72	19.04	15.2	24.39	22.42	18.74	14.9	24.13	22.16	18.47	14.7	25.36	23.39	19.71	15.9	24.13	22.16	18.47	14.7	25.36	23.39	19.71	15.9	24.13	22.16	18.47	14.7	25.36	23.39	19.71	15.9	
	kW	2.83	2.82	2.82	2.8	3.18	3.18	3.17	3.2	3.57	3.57	3.57	3.6	4.00	4.00	3.99	4.0	4.48	4.47	4.47	4.5	5.04	5.03	5.03	5.1	4.48	4.47	4.47	4.5	5.04	5.03	5.03	5.1	4.48	4.47	4.47	4.5	5.04	5.03	5.03	5.1	
	Amps	10.81	10.79	10.77	10.9	12.34	12.33	12.30	12.4	14.05	14.04	14.02	14.1	15.91	15.90	15.87	16.0	17.98	17.97	17.94	18.1	20.41	20.40	20.37	20.5	17.98	17.97	17.94	18.1	20.41	20.40	20.37	20.5	17.98	17.97	17.94	18.1	20.41	20.40	20.37	20.5	
Hi PR	265	266	268	272.1	306	307	309	313.5	349	350	352	356.8	396	397	399	403.5	446	447	449	453.8	500	501																				

EXPANDED COOLING DATA — GPHH54241 (HIGH STAGE) (CONT.)

IDB	AIRFLOW	OUTDOOR AMBIENT TEMPERATURE												105												115											
		65				75				85				95				105				115															
		59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71												
80	MBh	42.6	43.2	44.4	46.4	42.2	42.8	44.1	46.0	41.1	41.7	43.0	44.9	39.2	39.8	41.0	43.0	36.8	37.4	38.7	40.6	34.7	35.3	36.5	38.5												
	S/T	0.74	0.67	0.54	0.4	1.00	0.68	0.55	0.4	1.00	0.70	0.57	0.4	1.00	0.72	0.59	0.5	1.00	1.00	1.00	0.61	1.00	1.00	1.00	0.66												
	ΔT	31.26	29.29	25.61	21.8	31.21	29.24	25.56	21.7	31.19	29.22	25.83	22.0	31.19	29.22	25.54	21.7	30.93	28.96	25.27	21.5	32.16	30.19	26.51	22.7												
	kW	2.79	2.79	2.78	2.8	3.14	3.14	3.14	3.2	3.54	3.54	3.53	3.6	3.97	3.96	3.96	4.0	4.44	4.44	4.43	4.5	5.00	5.00	4.99	5.0												
	Amps	10.65	10.64	10.61	10.7	12.19	12.17	12.15	12.3	13.90	13.89	13.86	14.0	15.75	15.74	15.72	15.8	17.83	17.81	17.79	17.9	20.26	20.24	20.22	20.3												
	Hi PR	261	262	264	268.3	302	303	305	309.7	345	347	348	353.0	392	393	395	399.7	442	444	445	450.0	496	497	499	503.7												
	Lo PR	120	122	125	129.9	127	129	132	137.2	134	135	139	143.7	139	141	144	149.1	145	146	149	154.5	151	153	156	161.2												
	MBh	43.5	44.1	45.4	47.4	43.2	43.8	45.0	47.0	42.0	42.6	43.9	45.9	40.1	40.7	42.0	43.9	37.8	38.4	39.7	41.6	35.6	36.2	37.5	39.5												
	S/T	1.00	0.80	0.67	0.5	1.00	0.81	0.68	0.5	1.00	0.83	0.70	0.6	1.00	0.85	0.72	0.6	1.00	1.00	1.00	0.74	1.00	1.00	1.00	0.79												
	ΔT	28.83	26.86	23.18	19.4	28.78	26.81	23.12	19.3	29.05	27.08	23.40	19.6	28.76	26.79	23.10	19.3	28.49	26.52	22.84	19.0	29.73	27.76	24.07	20.3												
	kW	2.83	2.83	2.82	2.8	3.18	3.18	3.17	3.2	3.58	3.57	3.57	3.6	4.00	4.00	3.99	4.0	4.48	4.48	4.47	4.5	5.04	5.04	5.03	5.1												
	Amps	10.81	10.80	10.78	10.9	12.35	12.34	12.31	12.4	14.06	14.05	14.02	14.1	15.92	15.91	15.88	16.0	17.99	17.98	17.95	18.1	20.42	20.41	20.38	20.5												
Hi PR	265	266	268	272.6	306	308	309	314.0	350	351	353	357.3	396	398	399	404.0	447	448	450	454.3	500	502	503	508.0													
Lo PR	123	125	128	133.1	131	132	135	140.4	137	139	142	146.9	143	144	147	152.3	148	149	153	157.7	155	156	159	164.4													
MBh	44.9	45.5	46.8	48.7	44.5	45.1	46.4	48.3	43.4	44.0	45.3	47.2	41.5	42.1	43.3	45.3	39.1	39.7	41.0	43.0	37.0	37.6	38.9	40.8													
S/T	1.00	0.84	0.71	0.6	1.00	0.85	0.72	0.6	1.00	0.87	0.74	0.6	1.00	1.00	0.76	0.6	1.00	1.00	1.00	0.78	1.00	1.00	1.00	0.83													
ΔT	27.07	25.10	21.42	17.6	27.02	25.04	21.36	17.5	27.29	25.32	21.64	17.8	27.00	25.02	21.34	17.5	26.73	24.76	21.08	17.3	27.97	26.00	22.31	18.5													
kW	2.86	2.85	2.85	2.9	3.21	3.21	3.20	3.2	3.60	3.60	3.59	3.6	4.03	4.03	4.02	4.0	4.51	4.50	4.50	4.5	5.07	5.06	5.06	5.1													
Amps	10.93	10.92	10.89	11.0	12.47	12.45	12.43	12.5	14.18	14.17	14.14	14.3	16.03	16.02	16.00	16.1	18.11	18.09	18.07	18.2	20.54	20.52	20.50	20.6													
Hi PR	269	270	272	276.6	310	312	313	318.0	354	355	357	361.3	400	402	403	408.0	451	452	454	458.3	504	506	507	512.0													
Lo PR	127	129	132	136.9	135	136	139	144.3	141	143	146	150.7	146	148	151	156.2	152	153	156	161.5	159	160	163	168.2													
85	MBh	43.3	43.9	45.2	47.1	42.9	43.5	44.8	46.7	41.8	42.4	43.7	45.6	39.9	40.5	41.8	43.7	37.5	38.1	39.4	41.4	35.4	36.0	37.3	39.2												
	S/T	1.00	0.77	0.64	0.5	1.00	0.77	0.65	0.5	1.00	1.00	0.67	0.5	1.00	1.00	0.69	0.6	1.00	1.00	1.00	0.71	1.00	1.00	1.00	0.76												
	ΔT	35.14	33.16	29.48	25.7	35.08	33.11	29.43	25.6	35.36	33.39	29.71	25.9	35.06	33.09	29.41	25.6	34.80	32.83	29.15	25.3	36.03	34.06	30.38	26.6												
	kW	2.80	2.80	2.79	2.8	3.15	3.15	3.14	3.2	3.55	3.54	3.54	3.6	3.97	3.97	3.96	4.0	4.45	4.45	4.44	4.5	5.01	5.00	5.00	5.0												
	Amps	10.68	10.67	10.64	10.8	12.22	12.20	12.18	12.3	13.93	13.92	13.89	14.0	15.78	15.77	15.75	15.9	17.86	17.84	17.82	17.9	20.29	20.27	20.25	20.4												
	Hi PR	262	263	265	269.6	303	305	306	310.9	347	348	350	354.2	393	394	396	400.9	444	445	447	451.2	497	498	500	504.9												
	Lo PR	122	123	127	131.7	129	131	134	139.0	136	137	140	145.5	141	143	146	150.9	147	148	151	156.3	153	155	158	163.0												
	MBh	44.3	44.9	46.1	48.1	43.9	44.5	45.8	47.7	42.8	43.4	44.6	46.6	40.8	41.4	42.7	44.7	38.5	39.1	40.4	42.3	36.4	37.0	38.2	40.2												
	S/T	1.00	0.90	0.77	0.6	1.00	0.90	0.77	0.6	1.00	1.00	0.80	0.7	1.00	1.00	0.82	0.7	1.00	1.00	1.00	0.84	1.00	1.00	1.00	0.8												
	ΔT	32.70	30.73	27.05	23.2	32.65	30.68	26.99	23.2	32.93	30.95	27.27	23.5	32.63	30.66	26.97	23.2	32.36	30.39	26.71	22.9	33.60	31.63	27.95	24.1												
	kW	2.84	2.83	2.83	2.9	3.19	3.19	3.18	3.2	3.58	3.58	3.57	3.6	4.01	4.01	4.00	4.0	4.49	4.48	4.48	4.5	5.05	5.04	5.04	5.1												
	Amps	10.84	10.83	10.81	10.9	12.38	12.37	12.34	12.5	14.09	14.08	14.05	14.2	15.95	15.93	15.91	16.0	18.02	18.01	17.98	18.1	20.45	20.44	20.41	20.5												
Hi PR	266	267	269	273.8	308	309	311	315.2	351	352	354	358.5	398	399	401	405.2	448	449	451	455.5	502	503	505	509.2													
Lo PR	125	127	130	134.9	133	134	137	142.3	139	140	144	148.7	144	146	149	154.2	150	151	154	159.5	156	158	161	166.2													
MBh	45.6	46.2	47.5	49.4	45.2	45.8	47.1	49.1	44.1	44.7	46.0	47.9	42.2	42.8	44.1	46.0	39.8	40.4	41.7	43.7	37.7	38.3	39.6	41.5													
S/T	1.00	0.94	0.81	0.7	1.00	1.00	0.82	0.7	1.00	1.00	0.84	0.7	1.00	1.00	0.86	0.7	1.00	1.00	1.00	0.88	1.00	1.00	1.00	0.8													
ΔT	30.94	28.97	25.29	21.5	30.89	28.92	25.23	21.4	31.17	29.19	25.51	21.7	30.87	28.90	25.21	21.4	30.60	28.63	24.95	21.1	31.84	29.87	26.19	22.4													
kW	2.86	2.86	2.85	2.9	3.22	3.21	3.21	3.2	3.61	3.61	3.60	3.6	4.04	4.03	4.03	4.1	4.51	4.51	4.50	4.5	5.07	5.07	5.06	5.1													
Amps	10.96	10.95	10.92	11.0	12.50	12.48	12.46	12.6	14.21	14.20	14.17	14.3	16.06	16.05	16.03	16.1	18.14	18.12	18.10	18.2	20.57	20.55	20.53	20.6													
Hi PR	270	271	273	277.9	312	313	315	319.2	355	356	358	362.6	402	403	405	409.2	452	453	455	459.5	506	507	509	513.2													
Lo PR	129	131	134	138.7	136	138	141	146.1	143	144	147	152.5	148	150	153	158.0	154	155	158	163.4	160	162	165	170.1													

IDB = Entering Indoor Dry Bulb Temperature
 High and low pressures are measured at the liquid and suction access fittings.
 Design Subcooling, 8-12 °F @ the liquid access fitting connection AHRI 95 test conditions. Design Superheat 8-12°F @ the compressor suction access fitting connection.
 Shaded area reflects AHRI conditions.
 Amps: Unit amps (comp.+ evaporator + condenser fan motors)
 kW = Total system power

EXPANDED COOLING DATA — GPHH54231 (LOW STAGE)

IDB	AIRFLOW	OUTDOOR AMBIENT TEMPERATURE												IDB												
		65				75				85					95				105				115			
		59	63	67	71	59	63	67	71	59	63	67	71		59	63	67	71	59	63	67	71	59	63	67	71
70	MBh	30.5	31.0	31.9	-	30.3	30.7	31.6	-	29.5	29.9	30.8	-	28.1	28.5	29.4	-	26.4	26.8	27.8	-	24.9	25.3	26.2	-	
	S/T	0.55	0.48	0.34	-	0.56	0.48	0.35	-	0.58	0.51	0.37	-	1.00	0.52	0.39	-	1.00	0.55	0.41	-	1.00	0.60	0.46	-	
	ΔT	21.26	19.35	15.80	-	21.20	19.30	15.75	-	21.47	19.57	16.02	-	21.18	19.28	15.73	-	20.93	19.03	15.47	-	22.12	20.22	16.67	-	
	kW	1.76	1.76	1.76	-	1.98	1.98	1.98	-	2.23	2.23	2.23	-	2.50	2.50	2.49	-	2.80	2.80	2.79	-	3.15	3.15	3.15	-	
	Amps	6.72	6.72	6.70	-	7.69	7.68	7.67	-	8.77	8.76	8.74	-	9.93	9.93	9.91	-	11.24	11.23	11.21	-	12.77	12.76	12.74	-	
	Hi PR	249	251	252	-	289	290	292	-	330	332	333	-	375	376	378	-	423	424	426	-	474	476	477	-	
	Lo PR	124	125	128	-	131	133	136	-	138	139	142	-	143	145	148	-	149	150	154	-	156	157	160	-	
	MBh	31.1	31.6	32.5	-	30.9	31.3	32.2	-	30.0	30.5	31.4	-	28.7	29.1	30.0	-	27.0	27.4	28.3	-	25.4	25.9	26.8	-	
	S/T	0.65	0.57	0.44	-	0.65	0.58	0.45	-	0.68	0.60	0.47	-	1.00	0.62	0.49	-	1.00	0.65	0.51	-	1.00	0.70	0.56	-	
	ΔT	19.43	17.52	13.97	-	19.37	17.47	13.92	-	19.64	17.74	14.19	-	19.35	17.45	13.90	-	19.10	17.20	13.64	-	20.29	18.39	14.84	-	
kW	1.78	1.78	1.77	-	2.00	2.00	2.00	-	2.25	2.25	2.24	-	2.52	2.52	2.51	-	2.82	2.82	2.81	-	3.17	3.17	3.16	-		
Amps	6.80	6.80	6.78	-	7.77	7.76	7.74	-	8.85	8.84	8.82	-	10.01	10.01	9.99	-	11.32	11.31	11.29	-	12.85	12.84	12.82	-		
Hi PR	253	254	256	-	292	293	295	-	334	335	337	-	378	379	381	-	426	427	429	-	478	479	481	-		
Lo PR	126	128	131	-	134	135	138	-	140	142	145	-	146	148	151	-	152	153	156	-	158	160	163	-		
MBh	32.0	32.5	33.4	-	31.8	32.2	33.1	-	31.0	31.4	32.3	-	29.6	30.0	30.9	-	27.9	28.3	29.2	-	26.4	26.8	27.7	-		
S/T	0.69	0.62	0.49	-	0.70	0.62	0.49	-	1.00	0.65	0.52	-	1.00	0.67	0.54	-	1.00	0.69	0.56	-	1.00	1.00	0.61	-		
ΔT	17.81	15.91	12.35	-	17.76	15.86	12.30	-	18.03	16.12	12.57	-	17.74	15.84	12.28	-	17.48	15.58	12.03	-	18.68	16.77	13.22	-		
kW	1.80	1.79	1.79	-	2.02	2.02	2.01	-	2.27	2.26	2.26	-	2.53	2.53	2.53	-	2.83	2.83	2.83	-	3.19	3.18	3.18	-		
Amps	6.87	6.87	6.85	-	7.84	7.83	7.81	-	8.92	8.91	8.89	-	10.08	10.08	10.06	-	11.39	11.38	11.36	-	12.91	12.91	12.89	-		
Hi PR	256	257	259	-	296	297	299	-	337	338	340	-	382	383	385	-	430	431	433	-	481	482	484	-		
Lo PR	130	131	135	-	138	139	142	-	144	146	149	-	150	151	154	-	155	157	160	-	162	164	167	-		
75	MBh	30.6	31.0	31.9	33.3	30.3	30.7	31.6	33.0	29.5	29.9	30.8	32.2	28.1	28.5	29.5	30.9	26.4	26.9	27.8	29.2	24.9	25.3	26.2	27.6	
	S/T	0.68	0.60	0.47	0.3	0.68	0.61	0.47	0.3	1.00	0.63	0.50	0.4	1.00	0.65	0.52	0.4	1.00	0.67	0.54	0.4	1.00	1.00	0.59	0.5	
	ΔT	25.44	23.54	19.98	16.3	25.39	23.48	19.93	16.3	25.66	23.75	20.20	16.5	25.37	23.47	19.91	16.2	25.11	23.21	19.66	16.0	26.31	24.40	20.85	17.2	
	kW	1.76	1.76	1.75	1.8	1.98	1.98	1.98	2.0	2.23	2.23	2.22	2.2	2.50	2.50	2.49	2.5	2.80	2.80	2.79	2.8	3.15	3.15	3.14	3.2	
	Amps	6.72	6.71	6.69	6.8	7.68	7.68	7.66	7.7	8.76	8.75	8.74	8.8	9.93	9.92	9.90	10.0	11.23	11.22	11.21	11.3	12.76	12.75	12.73	12.8	
	Hi PR	250	251	253	256.9	289	290	292	296.4	331	332	333	337.9	375	376	378	382.5	423	424	426	430.6	475	476	478	481.9	
	Lo PR	124	125	128	133.5	131	133	136	141.1	138	139	142	147.7	143	145	148	153.3	149	150	154	158.8	156	157	160	165.7	
	MBh	31.1	31.6	32.5	33.9	30.9	31.3	32.2	33.6	30.1	30.5	31.4	32.8	28.7	29.1	30.0	31.4	27.0	27.4	28.4	29.8	25.5	25.9	26.8	28.2	
	S/T	0.77	0.70	0.57	0.4	1.00	0.71	0.57	0.4	1.00	0.73	0.60	0.5	1.00	0.75	0.62	0.5	1.00	0.77	0.64	0.5	1.00	1.00	0.69	0.5	
	ΔT	23.61	21.71	18.15	14.5	23.56	21.65	18.10	14.4	23.83	21.92	18.37	14.7	23.54	21.64	18.08	14.4	23.28	21.38	17.83	14.1	24.48	22.57	19.02	15.3	
kW	1.78	1.78	1.77	1.8	2.00	2.00	1.99	2.0	2.25	2.25	2.24	2.3	2.52	2.51	2.51	2.5	2.82	2.81	2.81	2.8	3.17	3.17	3.16	3.2		
Amps	6.80	6.79	6.77	6.8	7.76	7.76	7.74	7.8	8.84	8.83	8.82	8.9	10.01	10.00	9.98	10.1	11.31	11.30	11.29	11.4	12.84	12.83	12.81	12.9		
Hi PR	253	254	256	260.2	292	294	295	299.7	334	335	337	341.1	379	380	381	385.7	427	428	429	433.8	478	479	481	485.2		
Lo PR	126	128	131	136.3	134	135	139	143.8	140	142	145	150.5	146	148	151	156.1	152	153	156	161.6	158	160	163	168.4		
MBh	32.1	32.5	33.4	34.8	31.8	32.2	33.1	34.5	31.0	31.4	32.3	33.7	29.6	30.0	30.9	32.3	27.9	28.3	29.3	30.7	26.4	26.8	27.7	29.1		
S/T	0.82	0.74	0.61	0.5	1.00	0.75	0.62	0.5	1.00	0.77	0.64	0.5	1.00	0.79	0.66	0.5	1.00	1.00	0.68	0.5	1.00	1.00	0.73	0.6		
ΔT	21.99	20.09	16.54	12.9	21.94	20.04	16.49	12.8	22.21	20.31	16.75	13.1	21.92	20.02	16.47	12.8	21.67	19.77	16.21	12.5	22.86	20.96	17.40	13.7		
kW	1.79	1.79	1.79	1.8	2.02	2.01	2.01	2.0	2.26	2.26	2.26	2.3	2.53	2.53	2.53	2.5	2.83	2.83	2.83	2.8	3.18	3.18	3.18	3.2		
Amps	6.87	6.86	6.84	6.9	7.83	7.83	7.81	7.9	8.91	8.90	8.89	9.0	10.08	10.07	10.05	10.1	11.38	11.37	11.36	11.4	12.91	12.90	12.88	13.0		
Hi PR	257	258	259	263.8	296	297	299	303.3	338	339	340	344.8	382	383	385	389.4	430	431	433	437.5	482	483	484	488.8		
Lo PR	130	132	135	140.0	138	139	142	147.5	144	146	149	154.2	150	151	154	159.8	155	157	160	165.3	162	164	167	172.2		

IDB = Entering Indoor Dry Bulb Temperature
 High and low pressures are measured at the liquid and suction access fittings.
 Design Subcooling, 8-12 °F @ the liquid access fitting connection AHRI 95 test conditions. Design Superheat 8-12°F @ the compressor suction access fitting connection.
 Shaded area reflects AHRI (TVA) conditions.
 Amps: Unit amps (comp.+ evaporator + condenser fan motors)
 KW = Total system power

EXPANDED COOLING DATA — GPHH54241 (LOW STAGE) (CONT.)

IDB	AIRFLOW	OUTDOOR AMBIENT TEMPERATURE												105												115															
		65						75						85						95						105						115									
		59	63	67	71	75	79	59	63	67	71	75	79	59	63	67	71	75	79	59	63	67	71	75	79	59	63	67	71	75	79	59	63	67	71	75	79				
ENTERING INDOOR WET BULB TEMPERATURE																																									
80	MBh	30.7	31.2	32.1	33.5	30.4	30.9	31.8	33.2	29.6	30.1	31.0	32.4	28.3	28.7	29.6	31.0	26.6	27.0	27.9	29.3	25.0	25.5	26.4	27.8	26.6	27.0	27.9	29.3	25.0	25.5	26.4	27.8	26.6	27.0	27.9	29.3	25.0	25.5	26.4	27.8
	S/T	1.00	0.72	0.59	0.5	1.00	0.73	0.60	0.5	1.00	0.75	0.62	0.5	1.00	1.00	0.64	0.5	1.00	1.00	0.66	0.5	1.00	1.00	0.71	0.6	1.00	1.00	0.66	0.5	1.00	1.00	0.71	0.6	1.00	1.00	0.66	0.5	1.00	1.00	0.71	0.6
	ΔT	29.65	27.75	24.20	20.5	29.60	27.70	24.14	20.5	29.87	27.96	24.41	20.7	29.58	27.68	24.12	20.4	29.33	27.42	23.87	20.2	30.52	28.61	25.06	21.4	29.33	27.42	23.87	20.2	30.52	28.61	25.06	21.4	29.33	27.42	23.87	20.2	30.52	28.61	25.06	21.4
	kW	1.76	1.76	1.76	1.8	1.98	1.98	1.98	2.0	2.23	2.23	2.23	2.2	2.50	2.50	2.49	2.5	2.80	2.80	2.79	2.8	12.76	12.76	12.76	12.8	12.76	12.76	12.76	12.8	12.76	12.76	12.76	12.8	12.76	12.76	12.76	12.8	12.76	12.76	12.76	12.8
	Amps	6.72	6.71	6.70	6.8	7.69	7.68	7.66	7.7	8.77	8.76	8.74	8.8	9.93	9.92	9.91	10.0	11.24	11.23	11.21	11.3	47.76	47.76	47.76	48.2	47.76	47.76	47.76	48.2	47.76	47.76	47.76	48.2	47.76	47.76	47.76	48.2	47.76	47.76	47.76	48.2
	Hi-PR	250	251	253	257.3	290	291	293	296.9	331	332	334	338.3	376	377	379	382.9	424	425	427	431.0	156	158	161	166.3	424	425	427	431.0	424	425	427	431.0	424	425	427	431.0	424	425	427	431.0
Lo-PR	124	126	129	134.1	132	133	136	141.7	138	140	143	148.3	144	145	149	153.9	149	151	154	159.4	156	158	161	166.3	149	151	154	159.4	149	151	154	159.4	149	151	154	159.4	149	151	154	159.4	
985	MBh	31.3	31.7	32.7	34.1	31.0	31.5	32.4	33.8	30.2	30.7	31.6	33.0	28.8	29.3	30.2	31.6	27.2	27.6	28.5	29.9	25.6	26.1	27.0	28.4	27.2	27.6	28.5	29.9	25.6	26.1	27.0	28.4	27.2	27.6	28.5	29.9	25.6	26.1	27.0	28.4
	S/T	1.00	0.82	0.69	0.6	1.00	0.83	0.70	0.6	1.00	0.85	0.72	0.6	1.00	1.00	0.74	0.6	1.00	1.00	0.76	0.6	1.00	1.00	0.81	0.7	1.00	1.00	0.76	0.6	1.00	1.00	0.81	0.7	1.00	1.00	0.76	0.6	1.00	1.00	0.81	0.7
	ΔT	27.82	25.92	22.37	18.7	27.77	25.87	22.31	18.6	28.04	26.13	22.58	18.9	27.75	25.85	22.29	18.6	27.50	25.59	22.04	18.4	28.69	26.78	23.23	19.6	27.50	25.59	22.04	18.4	28.69	26.78	23.23	19.6	27.50	25.59	22.04	18.4	28.69	26.78	23.23	19.6
	kW	1.78	1.78	1.77	1.8	2.00	2.00	2.00	2.0	2.25	2.25	2.24	2.3	2.52	2.52	2.51	2.5	2.82	2.82	2.81	2.8	12.84	12.84	12.84	12.9	2.82	2.82	2.81	2.8	12.84	12.84	12.84	12.9	2.82	2.82	2.81	2.8	12.84	12.84	12.84	12.9
	Amps	6.80	6.79	6.78	6.9	7.77	7.76	7.74	7.8	8.85	8.84	8.82	8.9	10.01	10.00	9.99	10.1	11.31	11.31	11.29	11.4	47.8	47.9	48.1	48.5.6	11.31	11.31	11.29	11.4	47.8	47.9	48.1	48.5.6	11.31	11.31	11.29	11.4	47.8	47.9	48.1	48.5.6
	Hi-PR	253	254	256	260.6	293	294	296	300.2	334	335	337	341.6	379	380	382	386.2	427	428	430	434.3	159	161	164	169.0	427	428	430	434.3	427	428	430	434.3	427	428	430	434.3	427	428	430	434.3
Lo-PR	127	128	132	136.8	134	136	139	144.4	141	143	146	151.0	147	148	151	156.6	152	154	157	162.1	156	158	161	166.3	152	154	157	162.1	152	154	157	162.1	152	154	157	162.1	152	154	157	162.1	
1200	MBh	32.2	32.6	33.6	35.0	31.9	32.4	33.3	34.7	31.1	31.6	32.5	33.9	29.8	30.2	31.1	32.5	28.1	28.5	29.4	30.8	26.5	27.0	27.9	29.3	28.1	28.5	29.4	30.8	26.5	27.0	27.9	29.3	28.1	28.5	29.4	30.8	26.5	27.0	27.9	29.3
	S/T	1.00	0.87	0.73	0.6	1.00	0.87	0.74	0.6	1.00	1.00	0.76	0.6	1.00	1.00	0.78	0.6	1.00	1.00	0.80	0.7	1.00	1.00	1.00	0.7	1.00	1.00	0.80	0.7	1.00	1.00	1.00	0.7	1.00	1.00	0.80	0.7	1.00	1.00	1.00	0.7
	ΔT	26.21	24.30	20.75	17.1	26.15	24.25	20.70	17.0	26.42	24.52	20.97	17.3	26.13	24.23	20.68	17.0	25.88	23.98	20.42	16.7	27.07	25.17	21.62	17.9	25.88	23.98	20.42	16.7	27.07	25.17	21.62	17.9	25.88	23.98	20.42	16.7	27.07	25.17	21.62	17.9
	kW	1.80	1.79	1.79	1.8	2.02	2.02	2.01	2.0	2.27	2.26	2.26	2.3	2.53	2.53	2.53	2.5	2.83	2.83	2.83	2.8	12.91	12.91	12.91	13.0	2.83	2.83	2.83	2.8	12.91	12.91	12.91	13.0	2.83	2.83	2.83	2.8	12.91	12.91	12.91	13.0
	Amps	6.87	6.86	6.85	6.9	7.84	7.83	7.81	7.9	8.92	8.91	8.89	9.0	10.08	10.07	10.06	10.1	11.38	11.38	11.36	11.4	48.2	48.3	48.5	48.9.3	11.38	11.38	11.36	11.4	48.2	48.3	48.5	48.9.3	11.38	11.38	11.36	11.4	48.2	48.3	48.5	48.9.3
	Hi-PR	257	258	260	264.3	297	298	299	303.8	338	339	341	345.2	383	384	385	389.8	431	432	434	437.9	163	164	167	172.7	431	432	434	437.9	431	432	434	437.9	431	432	434	437.9	431	432	434	437.9
Lo-PR	131	132	135	140.5	138	140	143	148.1	145	146	149	154.7	150	152	155	160.3	156	157	161	165.8	163	164	167	172.7	156	157	161	165.8	156	157	161	165.8	156	157	161	165.8	156	157	161	165.8	
800	MBh	31.2	31.7	32.6	34.0	31.0	31.4	32.3	33.7	30.2	30.6	31.5	32.9	28.8	29.2	30.1	31.5	27.1	27.5	28.4	29.8	25.6	26.0	26.9	28.3	27.1	27.5	28.4	29.8	25.6	26.0	26.9	28.3	27.1	27.5	28.4	29.8	25.6	26.0	26.9	28.3
	S/T	1.00	0.82	0.69	0.6	1.00	0.83	0.70	0.6	1.00	1.00	0.72	0.6	1.00	1.00	0.74	0.6	1.00	1.00	0.76	0.6	1.00	1.00	1.00	0.7	1.00	1.00	0.76	0.6	1.00	1.00	1.00	0.7	1.00	1.00	0.76	0.6	1.00	1.00	1.00	0.7
	ΔT	33.39	31.48	27.93	24.3	33.34	31.43	27.88	24.2	33.60	31.70	28.15	24.5	33.32	31.41	27.86	24.2	33.06	31.16	27.61	23.9	34.25	32.35	28.80	25.1	33.06	31.16	27.61	23.9	34.25	32.35	28.80	25.1	33.06	31.16	27.61	23.9	34.25	32.35	28.80	25.1
	kW	1.77	1.76	1.76	1.8	1.99	1.99	1.98	2.0	2.24	2.23	2.23	2.2	2.50	2.50	2.50	2.5	2.80	2.80	2.80	2.8	12.78	12.77	12.76	12.8	2.80	2.80	2.80	2.8	12.78	12.77	12.76	12.8	2.80	2.80	2.80	2.8	12.78	12.77	12.76	12.8
	Amps	6.74	6.73	6.72	6.8	7.71	7.70	7.68	7.8	8.78	8.78	8.76	8.8	9.95	9.94	9.93	10.0	11.25	11.25	11.23	11.3	47.6	47.7	47.9	48.3.5	11.25	11.25	11.23	11.3	47.6	47.7	47.9	48.3.5	11.25	11.25	11.23	11.3	47.6	47.7	47.9	48.3.5
	Hi-PR	251	252	254	258.5	291	292	294	298.1	332	333	335	339.5	377	378	380	384.1	425	426	428	432.2	158	160	163	168.1	425	426	428	432.2	425	426	428	432.2	425	426	428	432.2	425	426	428	432.2
Lo-PR	126	127	131	136.0	134	135	138	143.5	140	142	145	150.2	146	147	150	155.8	151	153	156	161.3	158	160	163	168.1	151	153	156	161.3	151	153	156	161.3	151	153	156	161.3	151	153	156	161.3	
985	MBh	31.8	32.3	33.2	34.6	31.5	32.0	32.9	34.3	30.7	31.2	32.1	33.5	29.4	29.8	30.7	32.1	27.7	28.1	29.0	30.4	26.1	26.6	27.5	28.9	27.7	28.1	29.0	30.4	26.1	26.6	27.5	28.9	27.7	28.1	29.0	30.4	26.1	26.6	27.5	28.9
	S/T	1.00	0.92	0.79	0.6	1.00	1.00	0.79	0.7	1.00	1.00	0.82	0.7	1.00	1.00	0.84	0.7	1.00	1.00	0.80	0.7	1.00	1.00	1.00	0.8	1.00	1.00	0.80	0.7	1.00	1.00	1.00	0.8	1.00	1.00	0.80	0.7	1.00	1.00	1.00	0.8
	ΔT	31.56	29.65	26.10	22.4	31.51	29.60	26.05	22.4	31.77	29.87	26.32	22.6	31.49	29.58	26.03	22.3	31.23	29.33	25.78	22.1	32.42	30.52	26.97	23.3	31.23	29.33	25.78	22.1	32.42	30.52	26.97	23.3	31.23	29.33	25.78	22.1	32.42	30.52	26.97	23.3
	kW</																																								

EXPANDED COOLING DATA — GPHH54831 (HIGH STAGE)

IDB	AIRFLOW	OUTDOOR AMBIENT TEMPERATURE												105												115											
		65						75						85						95						105						115					
		59	63	67	71	75	79	59	63	67	71	75	79	59	63	67	71	75	79	59	63	67	71	75	79	59	63	67	71	75	79	59	63	67	71	75	79
70	1400	MBh	45.9	46.6	47.9	-	45.5	46.1	47.5	-	44.3	45.0	46.3	-	42.2	42.9	44.3	-	39.7	40.4	41.7	-	37.4	38.1	39.5	-											
		S/T	0.65	0.57	0.43	-	0.65	0.57	0.43	-	0.68	0.60	0.46	-	0.70	0.62	0.48	-	1.00	0.64	0.50	-	1.00	0.70	0.56	-											
		ΔT	19.20	17.40	14.04	-	19.15	17.35	13.99	-	19.41	17.61	14.24	-	19.13	17.33	13.97	-	18.89	17.09	13.73	-	20.02	18.22	14.86	-											
		kW	3.05	3.04	3.04	-	3.42	3.41	3.41	-	3.83	3.82	3.82	-	4.27	4.27	4.26	-	4.77	4.77	4.76	-	5.36	5.35	5.35	-											
		Amps	11.20	11.19	11.16	-	12.81	12.80	12.77	-	14.60	14.59	14.56	-	16.54	16.53	16.50	-	18.71	18.70	18.67	-	21.25	21.24	21.21	-											
	Hi PR	265	266	268	-	307	308	310	-	351	352	354	-	398	399	401	-	449	450	452	-	503	504	506	-												
	Lo PR	121	123	126	-	129	130	133	-	135	137	140	-	141	142	145	-	146	147	150	-	153	154	157	-												
	1550	MBh	46.4	47.0	48.4	-	46.0	46.6	48.0	-	44.8	45.4	46.8	-	42.7	43.4	44.7	-	40.2	40.9	42.2	-	37.9	38.6	39.9	-											
		S/T	0.69	0.61	0.47	-	0.70	0.62	0.48	-	0.73	0.65	0.51	-	0.75	0.67	0.53	-	1.00	0.69	0.55	-	1.00	0.74	0.60	-											
		ΔT	18.38	16.58	13.22	-	18.33	16.53	13.17	-	18.58	16.78	13.42	-	18.31	16.51	13.15	-	18.07	16.27	12.91	-	19.20	17.40	14.04	-											
kW		3.06	3.06	3.05	-	3.43	3.43	3.42	-	3.84	3.84	3.83	-	4.29	4.29	4.28	-	4.79	4.78	4.78	-	5.37	5.37	5.36	-												
Amps		11.27	11.25	11.23	-	12.87	12.86	12.83	-	14.67	14.65	14.63	-	16.61	16.59	16.57	-	18.77	18.76	18.73	-	21.32	21.30	21.28	-												
Hi PR	267	268	270	-	309	310	312	-	352	354	355	-	399	401	403	-	450	451	453	-	504	506	507	-													
Lo PR	123	124	127	-	130	132	135	-	137	138	141	-	142	143	147	-	147	149	152	-	154	155	159	-													
1700	1400	MBh	46.9	47.6	48.9	-	46.5	47.2	48.5	-	45.3	46.0	47.3	-	43.3	43.9	45.3	-	40.8	41.4	42.8	-	38.5	39.1	40.5	-											
		S/T	0.72	0.64	0.50	-	0.73	0.65	0.51	-	0.75	0.68	0.53	-	1.00	0.70	0.55	-	1.00	0.72	0.58	-	1.00	0.77	0.63	-											
		ΔT	17.66	15.86	12.50	-	17.61	15.81	12.45	-	17.86	16.06	12.70	-	17.59	15.79	12.43	-	17.35	15.55	12.19	-	18.48	16.68	13.32	-											
		kW	3.07	3.07	3.06	-	3.44	3.44	3.43	-	3.85	3.85	3.85	-	4.30	4.30	4.29	-	4.80	4.80	4.79	-	5.38	5.38	5.38	-											
		Amps	11.32	11.31	11.28	-	12.93	12.91	12.89	-	14.72	14.71	14.68	-	16.66	16.65	16.62	-	18.83	18.82	18.79	-	21.37	21.36	21.33	-											
	Hi PR	269	270	272	-	310	311	313	-	354	355	357	-	401	402	404	-	452	453	455	-	506	507	509	-												
	Lo PR	124	126	129	-	132	133	136	-	138	139	143	-	143	145	148	-	149	150	153	-	155	157	160	-												
	1550	MBh	45.9	46.6	47.9	50.0	45.5	46.2	47.5	49.6	44.3	45.0	46.3	48.4	42.3	42.9	44.3	46.4	39.8	40.4	41.8	43.9	37.5	38.1	39.5	41.6											
		S/T	0.78	0.70	0.56	0.4	0.79	0.71	0.57	0.4	1.00	0.73	0.59	0.4	1.00	0.76	0.61	0.5	1.00	0.78	0.64	0.5	1.00	0.83	0.69	0.5											
		ΔT	23.16	21.36	18.00	14.5	23.11	21.31	17.95	14.5	23.36	21.56	18.20	14.7	23.09	21.29	17.93	14.4	22.85	21.05	17.69	14.2	23.98	22.18	18.82	15.3											
kW		3.04	3.04	3.03	3.1	3.41	3.41	3.40	3.4	3.83	3.82	3.82	3.8	4.27	4.27	4.26	4.3	4.77	4.77	4.76	4.8	5.35	5.35	5.35	5.4												
Amps		11.19	11.18	11.15	11.3	12.80	12.79	12.76	12.9	14.59	14.58	14.55	14.7	16.53	16.52	16.49	16.6	18.70	18.69	18.66	18.8	21.24	21.23	21.20	21.3												
Hi PR	265	267	268	273.0	307	308	310	314.8	351	352	354	358.5	398	399	401	405.6	449	450	452	456.4	503	504	506	510.6													
Lo PR	121	123	126	131.1	129	130	133	138.4	135	137	140	144.9	141	142	145	150.3	146	147	151	155.7	153	154	157	162.4													
75	1550	MBh	46.4	47.1	48.4	50.5	46.0	46.6	48.0	50.1	44.8	45.5	46.8	48.9	42.7	43.4	44.8	46.9	40.2	40.9	42.2	44.3	37.9	38.6	40.0	42.0											
		S/T	0.83	0.75	0.61	0.5	0.83	0.75	0.61	0.5	1.00	0.78	0.64	0.5	1.00	0.80	0.66	0.5	1.00	0.82	0.68	0.5	1.00	1.00	0.74	0.6											
		ΔT	22.34	20.54	17.18	13.7	22.29	20.49	17.13	13.6	22.54	20.74	17.38	13.9	22.27	20.47	17.11	13.6	22.03	20.23	16.87	13.4	23.16	21.36	18.00	14.5											
		kW	3.06	3.06	3.05	3.1	3.43	3.42	3.42	3.4	3.84	3.84	3.83	3.9	4.29	4.28	4.28	4.3	4.78	4.78	4.78	4.8	5.37	5.37	5.36	5.4											
		Amps	11.26	11.24	11.22	11.3	12.86	12.85	12.82	12.9	14.66	14.64	14.61	14.7	16.60	16.58	16.56	16.7	18.76	18.75	18.72	18.8	21.31	21.29	21.27	21.4											
Hi PR	267	268	270	274.7	309	310	312	316.5	353	354	356	360.2	400	401	403	407.4	451	452	454	458.1	505	506	508	512.3													
Lo PR	123	124	127	132.5	130	132	135	139.8	137	138	141	146.3	142	143	147	151.7	147	149	152	157.0	154	156	159	163.7													
1700	1550	MBh	47.0	47.6	49.0	51.1	46.5	47.2	48.6	50.7	45.4	46.0	47.4	49.5	43.3	43.9	45.3	47.4	40.8	41.4	42.8	44.9	38.5	39.1	40.5	42.6											
		S/T	0.86	0.78	0.64	0.5	0.86	0.78	0.64	0.5	1.00	0.81	0.67	0.5	1.00	0.83	0.69	0.5	1.00	0.85	0.71	0.6	1.00	1.00	0.77	0.6											
		ΔT	21.62	19.82	16.46	13.0	21.57	19.77	16.41	12.9	21.82	20.02	16.66	13.2	21.55	19.75	16.39	12.9	21.31	19.51	16.15	12.7	22.44	20.64	17.28	13.8											
		kW	3.07	3.07	3.06	3.1	3.44	3.44	3.43	3.5	3.85	3.85	3.84	3.9	4.30	4.30	4.29	4.3	4.80	4.79	4.79	4.8	5.38	5.38	5.37	5.4											
		Amps	11.31	11.30	11.27	11.4	12.92	12.90	12.88	13.0	14.71	14.70	14.67	14.8	16.65	16.64	16.61	16.7	18.82	18.81	18.78	18.9	21.36	21.35	21.32	21.4											
Hi PR	269	270	272	276.4	311	312	314	318.2	354	355	357	361.9	401	403	404	409.0	452	453	455	459.8	506	508	509	514.0													
Lo PR	124	126	129	134.0	132	133	136	141.3	138	140	143	147.8	143	145	148	153.2	149	150	153	158.5	156	157	160	165.2													

IDB = Entering Indoor Dry Bulb Temperature
 High and low pressures are measured at the liquid and suction access fittings.
 Design Subcooling, 8-12 °F @ the liquid access fitting connection AHRI 95 test conditions. Design Superheat 8-12°F @ the compressor suction access fitting connection.
 Shaded area reflects AHRI (TVA) conditions.
 Amps: Unit amps (comp.+ evaporator + condenser fan motors)
 kW = Total system power

EXPANDED COOLING DATA — GPHH54831 (LOW STAGE)

IDB	AIREFLOW	OUTDOOR AMBIENT TEMPERATURE																							
		65				75				85				95				105				115			
		59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71
70	MBh	32.6	33.1	34.1	-	32.4	32.8	33.8	-	31.5	32.0	32.9	-	30.0	30.5	31.5	-	28.2	28.7	29.7	-	26.6	27.0	28.0	-
	S/T	0.58	0.50	0.35	-	0.59	0.51	0.36	-	0.61	0.53	0.39	-	0.63	0.55	0.41	-	1.00	0.58	0.43	-	1.00	0.63	0.49	-
	ΔT	19.71	17.97	14.73	-	19.66	17.92	14.68	-	19.91	18.17	14.93	-	19.64	17.91	14.66	-	19.41	17.67	14.43	-	20.50	18.76	15.52	-
	kW	1.90	1.90	1.90	-	2.13	2.13	2.13	-	2.39	2.39	2.39	-	2.67	2.67	2.67	-	2.99	2.99	2.98	-	3.36	3.35	3.35	-
	Amps	6.99	6.98	6.96	-	8.00	7.99	7.97	-	9.13	9.12	9.10	-	10.35	10.34	10.32	-	11.71	11.70	11.68	-	13.31	13.30	13.28	-
	Hi PR	251	252	254	-	291	292	294	-	333	334	336	-	378	379	381	-	427	428	430	-	478	480	481	-
	Lo PR	123	125	128	-	131	132	135	-	137	139	142	-	143	144	148	-	148	150	153	-	155	157	160	-
	MBh	33.3	33.8	34.8	-	33.1	33.5	34.5	-	32.2	32.7	33.6	-	30.7	31.2	32.2	-	28.9	29.4	30.4	-	27.3	27.7	28.7	-
	S/T	0.71	0.63	0.49	-	0.72	0.64	0.49	-	0.75	0.66	0.52	-	1.00	0.68	0.54	-	1.00	0.71	0.56	-	1.00	0.76	0.62	-
	ΔT	17.74	16.00	12.76	-	17.69	15.95	12.71	-	17.93	16.20	12.95	-	17.67	15.93	12.69	-	17.44	15.70	12.46	-	18.53	16.79	13.55	-
kW	1.92	1.92	1.92	-	2.16	2.16	2.15	-	2.42	2.41	2.41	-	2.70	2.70	2.69	-	3.01	3.01	3.01	-	3.38	3.38	3.37	-	
Amps	7.09	7.08	7.06	-	8.10	8.09	8.07	-	9.22	9.22	9.20	-	10.44	10.44	10.42	-	11.81	11.80	11.78	-	13.41	13.40	13.38	-	
Hi PR	255	256	258	-	295	296	298	-	337	338	340	-	382	383	385	-	430	432	433	-	482	483	485	-	
Lo PR	126	128	131	-	134	135	138	-	140	142	145	-	146	147	151	-	151	153	156	-	158	160	163	-	
MBh	34.1	34.6	35.6	-	33.8	34.3	35.3	-	33.0	33.4	34.4	-	31.5	31.9	32.9	-	29.7	30.1	31.1	-	28.0	28.5	29.5	-	
S/T	0.76	0.67	0.53	-	0.76	0.68	0.54	-	1.00	0.71	0.56	-	1.00	0.73	0.58	-	1.00	0.75	0.61	-	1.00	0.81	0.66	-	
ΔT	16.52	14.78	11.54	-	16.47	14.74	11.49	-	16.72	14.98	11.74	-	16.46	14.72	11.47	-	16.22	14.49	11.24	-	17.31	15.57	12.33	-	
kW	1.94	1.94	1.93	-	2.17	2.17	2.17	-	2.43	2.43	2.42	-	2.71	2.71	2.71	-	3.02	3.02	3.02	-	3.39	3.39	3.39	-	
Amps	7.15	7.14	7.12	-	8.16	8.15	8.13	-	9.28	9.28	9.26	-	10.51	10.50	10.48	-	11.87	11.86	11.84	-	13.47	13.46	13.44	-	
Hi PR	258	259	261	-	298	299	301	-	340	341	343	-	385	386	388	-	433	435	436	-	485	486	488	-	
Lo PR	129	131	134	-	137	138	141	-	143	145	148	-	149	150	154	-	154	156	159	-	161	163	166	-	
MBh	32.7	33.1	34.1	35.6	32.4	32.8	33.8	35.3	31.5	32.0	33.0	34.5	30.0	30.5	31.5	33.0	28.2	28.7	29.7	31.2	26.6	27.0	28.0	29.5	
S/T	0.72	0.64	0.49	0.3	0.72	0.64	0.50	0.3	1.00	0.67	0.52	0.4	1.00	0.69	0.55	0.4	1.00	0.71	0.57	0.4	1.00	1.00	0.62	0.5	
ΔT	23.53	21.79	18.55	15.2	23.48	21.74	18.50	15.1	23.73	21.99	18.75	15.4	23.46	21.73	18.48	15.1	23.23	21.49	18.25	14.9	24.32	22.58	19.34	16.0	
kW	1.90	1.90	1.89	1.9	2.13	2.13	2.13	2.1	2.39	2.39	2.39	2.4	2.67	2.67	2.67	2.7	2.99	2.98	2.98	3.0	3.35	3.35	3.35	3.4	
Amps	6.98	6.97	6.96	7.0	7.99	7.98	7.97	8.0	9.12	9.11	9.09	9.2	10.34	10.33	10.31	10.4	11.70	11.70	11.68	11.8	13.30	13.29	13.28	13.4	
Hi PR	252	253	254	258.8	291	293	294	298.7	333	334	336	340.5	378	379	381	385.6	427	428	430	434.1	479	480	482	486.0	
Lo PR	123	125	128	133.1	131	132	135	140.6	137	139	142	147.3	143	144	148	152.9	148	150	153	158.3	155	157	160	165.2	
MBh	33.4	33.8	34.8	36.3	33.1	33.5	34.5	36.0	32.2	32.7	33.7	35.2	30.7	31.2	32.2	33.7	28.9	29.4	30.4	31.9	27.3	27.7	28.7	30.2	
S/T	0.85	0.77	0.62	0.5	1.00	0.77	0.63	0.5	1.00	0.80	0.66	0.5	1.00	0.68	0.54	0.4	1.00	0.85	0.70	0.5	1.00	1.00	0.76	0.6	
ΔT	21.56	19.82	16.58	13.2	21.51	19.77	16.53	13.2	21.75	20.02	16.77	13.4	21.49	19.75	16.51	13.1	21.26	19.52	16.28	12.9	22.35	20.61	17.37	14.0	
kW	1.92	1.92	1.92	1.9	2.16	2.15	2.15	2.2	2.42	2.41	2.41	2.4	2.70	2.69	2.69	2.7	3.01	3.01	3.00	3.0	3.38	3.38	3.37	3.4	
Amps	7.08	7.07	7.05	7.1	8.09	8.08	8.07	8.1	9.22	9.21	9.19	9.3	10.44	10.43	10.41	10.5	11.80	11.79	11.78	11.9	13.40	13.39	13.38	13.5	
Hi PR	255	256	258	262.6	295	296	298	302.6	337	338	340	344.4	382	383	385	389.4	431	432	434	438.0	483	484	485	489.8	
Lo PR	126	128	131	136.2	134	135	138	143.7	140	142	145	150.3	146	147	151	155.9	151	153	156	161.4	158	160	163	168.3	
MBh	34.1	34.6	35.6	37.1	33.8	34.3	35.3	36.8	33.0	33.4	34.4	35.9	31.5	32.0	32.9	34.4	29.7	30.2	31.1	32.6	28.0	28.5	29.5	31.0	
S/T	0.89	0.81	0.67	0.5	1.00	0.82	0.67	0.5	1.00	0.85	0.70	0.5	1.00	0.87	0.72	0.6	1.00	1.00	0.75	0.6	1.00	1.00	0.80	0.6	
ΔT	20.34	18.60	15.36	12.0	20.29	18.56	15.31	12.0	20.54	18.80	15.56	12.2	20.28	18.54	15.29	11.9	20.04	18.31	15.06	11.7	21.13	19.39	16.15	12.8	
kW	1.94	1.94	1.93	1.9	2.17	2.17	2.16	2.2	2.43	2.43	2.42	2.4	2.71	2.71	2.70	2.7	3.02	3.02	3.02	3.0	3.39	3.39	3.39	3.4	
Amps	7.14	7.13	7.12	7.2	8.15	8.14	8.13	8.2	9.28	9.27	9.25	9.3	10.50	10.49	10.47	10.6	11.86	11.85	11.84	11.9	13.46	13.45	13.44	13.5	
Hi PR	258	259	261	265.6	298	299	301	305.5	340	341	343	347.3	385	386	388	392.4	434	435	437	440.9	485	487	488	492.8	
Lo PR	129	131	134	139.1	137	138	141	146.7	143	145	148	153.3	149	150	154	158.9	154	156	159	164.4	161	163	166	171.3	

IDB = Entering Indoor Dry Bulb Temperature
 High and low pressures are measured at the liquid and suction access fittings.
 Design Subcooling, 5-7 °F @ the liquid access fitting connection ARI 95 test conditions. Design Superheat 15-18°F @ the compressor suction access fitting connection.
 Shaded area reflects AHRI (TVA) conditions.
 Amps: Unit amps (comp.+ evaporator + condenser fan motors)
 KW = Total system power

EXPANDED COOLING DATA — GPHH54831 (LOW STAGE) (CONT.)

IDB	AIRFLOW	OUTDOOR AMBIENT TEMPERATURE												ENTERING INDOOR WET BULB TEMPERATURE											
		65				75				85				95				105				115			
		59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71
80	MBh	32.8	33.3	34.3	35.8	32.5	33.0	34.0	35.5	31.7	32.1	33.1	34.6	30.2	30.7	31.7	33.2	28.4	28.9	29.8	31.3	26.7	27.2	28.2	29.7
	S/T	1.00	0.77	0.63	0.5	1.00	0.78	0.63	0.5	1.00	0.80	0.66	0.5	1.00	0.82	0.68	0.5	1.00	1.00	0.70	0.6	1.00	1.00	0.76	0.6
	ΔT	27.38	25.64	22.39	19.0	27.33	25.59	22.35	19.0	27.57	25.83	22.59	19.2	27.31	25.57	22.33	19.0	27.08	25.34	22.10	18.7	28.17	26.43	23.18	19.8
	kW	1.90	1.90	1.90	1.9	2.13	2.13	2.13	2.1	2.39	2.39	2.39	2.4	2.67	2.67	2.67	2.7	2.99	2.99	2.98	3.0	3.36	3.35	3.35	3.4
	Amps	6.99	6.98	6.96	7.0	8.00	7.99	7.97	8.0	9.12	9.12	9.10	9.2	10.35	10.34	10.32	10.4	11.71	11.70	11.68	11.8	13.31	13.30	13.28	13.4
	Hi PR	252	253	255	259.3	292	293	295	299.2	334	335	337	341.0	379	380	382	386.1	427	428	430	434.6	479	480	482	486.4
	Lo PR	124	125	128	133.6	131	133	136	141.2	138	139	143	147.8	143	145	148	153.4	149	150	154	158.9	156	157	160	165.8
	MBh	33.5	34.0	35.0	36.5	33.2	33.7	34.7	36.2	32.4	32.9	33.8	35.3	30.9	31.4	32.4	33.9	29.1	29.6	30.5	32.0	27.4	27.9	28.9	30.4
	S/T	1.00	0.90	0.76	0.6	1.00	0.91	0.76	0.6	1.00	0.94	0.79	0.6	1.00	1.00	0.81	0.7	1.00	1.00	0.84	0.7	1.00	1.00	0.89	0.7
	ΔT	25.40	23.67	20.42	17.1	25.36	23.62	20.37	17.0	25.60	23.86	20.62	17.3	25.34	23.60	20.36	17.0	25.11	23.37	20.12	16.8	26.19	24.46	21.21	17.9
1020	kW	1.92	1.92	1.92	1.9	2.16	2.16	2.15	2.2	2.42	2.41	2.41	2.4	2.70	2.70	2.69	2.7	3.01	3.01	3.00	3.0	3.38	3.38	3.37	3.4
	Amps	7.09	7.08	7.06	7.1	8.10	8.09	8.07	8.1	9.22	9.22	9.20	9.3	10.44	10.44	10.42	10.5	11.81	11.80	11.78	11.9	13.41	13.40	13.38	13.5
	Hi PR	256	257	259	263.1	296	297	299	303.0	338	339	340	344.9	383	384	385	389.9	431	432	434	438.5	483	484	486	490.3
	Lo PR	127	128	131	136.7	134	136	139	144.3	141	142	146	150.9	147	148	151	156.5	152	154	157	162.0	159	160	164	168.9
	MBh	34.3	34.8	35.8	37.3	34.0	34.5	35.5	37.0	33.1	33.6	34.6	36.1	31.7	32.1	33.1	34.6	29.9	30.3	31.3	32.8	28.2	28.7	29.7	31.2
	S/T	1.00	0.95	0.80	0.6	1.00	0.95	0.81	0.7	1.00	1.00	0.83	0.7	1.00	1.00	0.86	0.7	1.00	1.00	0.88	0.7	1.00	1.00	0.93	0.8
	ΔT	24.19	22.45	19.21	15.8	24.14	22.40	19.16	15.8	24.38	22.65	19.40	16.0	24.12	22.38	19.14	15.8	23.89	22.15	18.91	15.5	24.98	23.24	20.00	16.6
	kW	1.94	1.94	1.93	2.0	2.17	2.17	2.17	2.2	2.43	2.43	2.42	2.4	2.71	2.71	2.71	2.7	3.02	3.02	3.02	3.0	3.39	3.39	3.39	3.4
	Amps	7.15	7.14	7.12	7.2	8.16	8.15	8.13	8.2	9.28	9.28	9.26	9.3	10.50	10.50	10.48	10.6	11.87	11.86	11.84	11.9	13.47	13.46	13.44	13.5
	Hi PR	259	260	262	266.1	299	300	302	306.0	341	342	343	347.8	386	387	388	392.9	434	435	437	441.4	486	487	489	493.2
Lo PR	130	131	134	139.6	137	139	142	147.2	144	145	149	153.8	149	151	154	159.4	155	156	160	164.9	162	163	167	171.8	
85	MBh	33.4	33.9	34.8	36.3	33.1	33.6	34.5	36.0	32.2	32.7	33.7	35.2	30.8	31.2	32.2	33.7	29.0	29.4	30.4	31.9	27.3	27.8	28.7	30.3
	S/T	1.00	0.88	0.73	0.6	1.00	0.89	0.74	0.6	1.00	1.00	0.77	0.6	1.00	1.00	0.79	0.6	1.00	1.00	0.81	0.7	1.00	1.00	1.00	0.7
	ΔT	30.79	29.05	25.81	22.4	30.74	29.00	25.76	22.4	30.98	29.25	26.00	22.6	30.72	28.98	25.74	22.4	30.49	28.75	25.51	22.1	31.58	29.84	26.60	23.2
	kW	1.91	1.90	1.90	1.9	2.14	2.14	2.13	2.2	2.40	2.40	2.39	2.4	2.68	2.68	2.67	2.7	2.99	2.99	2.99	3.0	3.36	3.36	3.35	3.4
	Amps	7.01	7.00	6.98	7.1	8.02	8.01	7.99	8.1	9.14	9.14	9.12	9.2	10.36	10.36	10.34	10.4	11.73	11.72	11.70	11.8	13.33	13.32	13.30	13.4
	Hi PR	253	254	256	260.5	293	294	296	300.4	335	336	338	342.2	380	381	383	387.2	429	430	431	435.8	480	481	483	487.6
	Lo PR	125	127	130	135.5	133	135	138	143.0	140	141	144	149.7	145	147	150	155.3	151	152	155	160.8	158	159	162	167.6
	MBh	34.1	34.6	35.5	37.0	33.8	34.3	35.2	36.7	32.9	33.4	34.4	35.9	31.5	31.9	32.9	34.4	29.7	30.1	31.1	32.6	28.0	28.5	29.5	31.0
	S/T	1.00	1.00	0.87	0.7	1.00	1.00	0.87	0.7	1.00	1.00	0.90	0.7	1.00	1.00	0.92	0.8	1.00	1.00	1.00	0.8	1.00	1.00	1.00	0.8
	ΔT	28.81	27.08	23.83	20.5	28.77	27.03	23.78	20.4	29.01	27.27	24.03	20.7	28.75	27.01	23.77	20.4	28.52	26.78	23.53	20.2	29.60	27.87	24.62	21.3
kW	1.93	1.93	1.92	1.9	2.16	2.16	2.16	2.2	2.42	2.42	2.42	2.4	2.70	2.70	2.70	2.7	3.02	3.01	3.01	3.0	3.38	3.38	3.38	3.4	
Amps	7.10	7.10	7.08	7.2	8.11	8.11	8.09	8.2	9.24	9.23	9.22	9.3	10.46	10.46	10.44	10.5	11.83	11.82	11.80	11.9	13.43	13.42	13.40	13.5	
Hi PR	257	258	260	264.3	297	298	300	304.2	339	340	342	346.1	384	385	387	391.1	432	433	435	439.6	484	485	487	491.5	
Lo PR	129	130	133	138.6	136	138	141	146.1	143	144	147	152.8	148	150	153	158.4	154	155	159	163.9	161	162	165	170.7	
1200	MBh	34.9	35.3	36.3	37.8	34.6	35.0	36.0	37.5	33.7	34.2	35.2	36.7	32.2	32.7	33.7	35.2	30.4	30.9	31.9	33.4	28.8	29.2	30.2	31.7
	S/T	1.00	1.00	0.91	0.8	1.00	1.00	0.92	0.8	1.00	1.00	0.94	0.8	1.00	1.00	0.96	0.8	1.00	1.00	1.00	0.8	1.00	1.00	1.00	0.9
	ΔT	27.60	25.86	22.62	19.3	27.55	25.81	22.57	19.2	27.79	26.06	22.81	19.5	27.53	25.80	22.55	19.2	27.30	25.56	22.32	19.0	28.39	26.65	23.41	20.0
	kW	1.94	1.94	1.94	2.0	2.18	2.17	2.17	2.2	2.43	2.43	2.43	2.4	2.72	2.71	2.71	2.7	3.03	3.03	3.02	3.0	3.40	3.40	3.39	3.4
	Amps	7.17	7.16	7.14	7.2	8.18	8.17	8.15	8.2	9.30	9.30	9.28	9.4	10.52	10.52	10.50	10.6	11.89	11.88	11.86	11.9	13.49	13.48	13.46	13.5
	Hi PR	260	261	263	267.3	300	301	303	307.2	342	343	345	349.0	387	388	390	394.0	435	436	438	442.6	487	488	490	494.4
	Lo PR	132	133	136	141.5	139	141	144	149.1	146	147	150	155.7	151	153	156	161.3	157	158	161	166.8	164	165	168	173.7

IDB = Entering Indoor Dry Bulb Temperature
 High and low pressures are measured at the liquid and suction access fittings.
 Design Subcooling, 5-7 °F @ the liquid access fitting connection ARI 95 test conditions. Design Superheat 15-18°F @ the compressor suction access fitting connection.
 Shaded area reflects AHRI conditions.
 Amps: Unit amps (comp.+ evaporator + condenser fan motors)
 kW = Total system power

EXPANDED COOLING DATA — GPHH56031 (HIGH STAGE)

IDB	AIRFLOW	OUTDOOR AMBIENT TEMPERATURE												105												115											
		65				75				85				95				105				115															
		59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71												
70	1500	MBh	56.0	56.8	58.5	-	55.5	56.3	58.0	-	54.0	54.8	56.5	-	51.5	52.3	54.0	-	48.4	49.2	50.9	-	45.6	46.4	48.1	-											
		S/T	0.58	0.51	0.38	-	0.58	0.51	0.38	-	0.61	0.54	0.41	-	0.63	0.55	0.43	-	1.00	0.58	0.45	-	1.00	0.62	0.50	-											
		ΔT	21.24	19.27	15.59	-	21.19	19.22	15.54	-	21.47	19.50	15.81	-	21.17	19.20	15.52	-	20.91	18.94	15.25	-	22.14	20.17	16.49	-											
		kW	3.68	3.67	3.66	-	4.14	4.14	4.13	-	4.66	4.66	4.65	-	5.22	5.22	5.21	-	5.85	5.84	5.84	-	6.58	6.58	6.57	-											
		Amps	13.61	13.60	13.56	-	15.63	15.62	15.58	-	17.89	17.87	17.84	-	20.33	20.31	20.28	-	23.05	23.04	23.00	-	26.25	26.24	26.20	-											
	Hi PR	282	283	285	-	326	327	329	-	373	374	376	-	423	424	426	-	477	478	480	-	534	536	538	-												
	Lo PR	120	122	125	-	128	129	132	-	134	135	139	-	139	141	144	-	145	146	149	-	151	153	156	-												
	1700	MBh	56.7	57.5	59.2	-	56.2	57.0	58.7	-	54.7	55.5	57.2	-	52.2	53.0	54.7	-	49.1	49.9	51.6	-	46.3	47.1	48.8	-											
		S/T	0.63	0.56	0.43	-	0.64	0.57	0.44	-	0.66	0.59	0.46	-	0.68	0.61	0.48	-	1.00	0.63	0.50	-	1.00	0.68	0.55	-											
		ΔT	20.13	18.16	14.48	-	20.08	18.10	14.42	-	20.35	18.38	14.70	-	20.06	18.08	14.40	-	19.79	17.82	14.14	-	21.03	19.06	15.37	-											
kW		3.70	3.69	3.69	-	4.16	4.16	4.15	-	4.68	4.68	4.67	-	5.24	5.24	5.23	-	5.87	5.87	5.86	-	6.61	6.60	6.59	-												
Amps		13.71	13.69	13.66	-	15.73	15.71	15.68	-	17.98	17.97	17.93	-	20.43	20.41	20.37	-	23.15	23.14	23.10	-	26.35	26.34	26.30	-												
Hi PR	284	285	287	-	328	330	332	-	375	376	378	-	425	426	428	-	479	480	482	-	537	538	540	-													
Lo PR	122	123	126	-	129	131	134	-	136	137	140	-	141	143	146	-	146	148	151	-	153	155	158	-													
1900	MBh	57.5	58.3	60.0	-	57.0	57.8	59.5	-	55.6	56.3	58.0	-	53.0	53.8	55.5	-	50.0	50.8	52.4	-	47.2	48.0	49.6	-												
	S/T	0.66	0.59	0.46	-	0.67	0.60	0.47	-	0.69	0.62	0.49	-	0.71	0.64	0.51	-	1.00	0.66	0.53	-	1.00	0.71	0.58	-												
	ΔT	19.18	17.21	13.53	-	19.13	17.16	13.48	-	19.41	17.43	13.75	-	19.11	17.14	13.46	-	18.85	16.87	13.19	-	20.08	18.11	14.43	-												
	kW	3.72	3.71	3.71	-	4.18	4.18	4.17	-	4.70	4.70	4.69	-	5.26	5.26	5.25	-	5.89	5.89	5.88	-	6.62	6.62	6.61	-												
	Amps	13.79	13.78	13.74	-	15.81	15.80	15.76	-	18.07	18.05	18.02	-	20.51	20.49	20.46	-	23.23	23.22	23.18	-	26.43	26.42	26.38	-												
Hi PR	286	287	289	-	331	332	334	-	377	378	380	-	427	428	430	-	481	482	484	-	539	540	542	-													
Lo PR	124	125	128	-	131	133	136	-	137	139	142	-	143	144	147	-	148	150	153	-	155	156	159	-													
75	1500	MBh	56.0	56.8	58.5	61.0	55.5	56.3	58.0	60.5	54.1	54.9	56.5	59.1	51.6	52.3	54.0	56.6	48.5	49.3	50.9	53.5	45.7	46.5	48.1	50.7											
		S/T	0.70	0.63	0.50	0.4	0.71	0.63	0.51	0.4	1.00	0.66	0.53	0.4	1.00	0.68	0.55	0.4	1.00	0.70	0.57	0.4	1.00	0.75	0.62	0.5											
		ΔT	25.58	23.61	19.93	16.1	25.53	23.55	19.87	16.1	25.80	23.83	20.15	16.3	25.51	23.53	19.85	16.0	25.24	23.27	19.59	15.8	26.48	24.51	20.82	17.0											
		kW	3.67	3.67	3.66	3.7	4.14	4.13	4.13	4.2	4.66	4.65	4.64	4.7	5.22	5.21	5.21	5.2	5.84	5.84	5.83	5.9	6.58	6.58	6.57	6.6											
		Amps	13.60	13.58	13.55	13.7	15.62	15.60	15.57	15.7	17.87	17.86	17.82	18.0	20.31	20.30	20.26	20.4	23.04	23.02	22.99	23.1	26.24	26.22	26.19	26.3											
	Hi PR	282	283	285	290.1	326	328	330	334.5	373	374	376	381.0	423	424	426	431.1	477	478	480	485.2	535	536	538	542.8												
	Lo PR	120	122	125	130.0	128	129	132	137.3	134	135	139	143.7	139	141	144	149.1	145	146	149	154.4	151	153	156	161.1												
	1700	MBh	56.7	57.5	59.2	61.7	56.2	57.0	58.7	61.2	54.8	55.6	57.2	59.8	52.2	53.0	54.7	57.3	49.2	50.0	51.6	54.2	46.4	47.2	48.8	51.4											
		S/T	0.75	0.68	0.55	0.4	0.76	0.69	0.56	0.4	1.00	0.71	0.58	0.4	1.00	0.73	0.60	0.5	1.00	0.75	0.62	0.5	1.00	0.80	0.67	0.5											
		ΔT	24.47	22.49	18.81	15.0	24.41	22.44	18.76	14.9	24.69	22.72	19.04	15.2	24.39	22.42	18.74	14.9	24.13	22.16	18.47	14.7	25.36	23.39	19.71	15.9											
kW		3.70	3.69	3.68	3.7	4.16	4.16	4.15	4.2	4.68	4.67	4.67	4.7	5.24	5.24	5.23	5.3	5.87	5.86	5.86	5.9	6.60	6.60	6.59	6.6												
Amps		13.70	13.68	13.65	13.8	15.72	15.70	15.67	15.8	17.97	17.96	17.92	18.1	20.41	20.40	20.36	20.5	23.14	23.12	23.09	23.2	26.34	26.32	26.29	26.4												
Hi PR	284	285	287	292.3	329	330	332	336.7	375	376	378	383.3	425	427	428	433.4	479	481	483	487.4	537	538	540	545.1													
Lo PR	122	123	127	131.6	129	131	134	138.9	136	137	140	145.3	141	143	146	150.8	146	148	151	156.1	153	155	158	162.7													
1900	MBh	57.6	58.3	60.0	62.6	57.0	57.8	59.5	62.1	55.6	56.4	58.0	60.6	53.1	53.9	55.5	58.1	50.0	50.8	52.5	55.0	47.2	48.0	49.7	52.2												
	S/T	0.78	0.71	0.58	0.4	0.79	0.72	0.59	0.5	1.00	0.74	0.61	0.5	1.00	0.76	0.63	0.5	1.00	0.78	0.65	0.5	1.00	1.00	0.70	0.6												
	ΔT	23.52	21.55	17.86	14.1	23.46	21.49	17.81	14.0	23.74	21.77	18.09	14.3	23.44	21.47	17.79	14.0	23.18	21.21	17.53	13.7	24.42	22.44	18.76	14.9												
	kW	3.71	3.71	3.70	3.7	4.18	4.18	4.17	4.2	4.70	4.69	4.69	4.7	5.26	5.26	5.25	5.3	5.89	5.88	5.87	5.9	6.62	6.62	6.61	6.6												
	Amps	13.78	13.76	13.73	13.9	15.80	15.78	15.75	15.9	18.05	18.04	18.00	18.2	20.50	20.48	20.44	20.6	23.22	23.21	23.17	23.3	26.42	26.41	26.37	26.5												
Hi PR	286	288	290	294.5	331	332	334	338.9	377	379	381	385.5	427	429	431	435.6	482	483	485	489.6	539	540	542	547.3													
Lo PR	124	125	128	133.5	131	133	136	140.8	138	139	142	147.2	143	144	147	152.6	148	150	153	157.9	155	156	159	164.6													

IDB = Entering Indoor Dry Bulb Temperature
 High and low pressures are measured at the liquid and suction access fittings.
 Design Subcooling, 5-7 °F @ the liquid access fitting connection ARI 95 test conditions. Design Superheat 15-18°F @ the compressor suction access fitting connection.
 Shaded area reflects AHRI (TVA) conditions.
 Amps: Unit amps (comp.+ evaporator + condenser fan motors)
 KW = Total system power

EXPANDED COOLING DATA — GPHH56031 (HIGH STAGE) (CONT.)

IDB	AIRFLOW	OUTDOOR AMBIENT TEMPERATURE												105												115											
		65				75				85				95				105				115															
		59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71												
80	MBh	56.3	57.1	58.8	61.3	55.8	56.6	58.3	60.8	54.4	55.1	56.8	59.4	51.8	52.6	54.3	56.9	48.8	49.6	51.2	53.8	46.0	46.8	48.4	51.0												
	S/T	0.82	0.75	0.62	0.5	1.00	0.75	0.63	0.5	1.00	0.78	0.65	0.5	1.00	0.80	0.67	0.5	1.00	1.00	0.69	0.6	1.00	1.00	0.74	0.6												
	ΔT	29.95	27.97	24.29	20.5	29.89	27.92	24.24	20.4	30.17	28.20	24.51	20.7	29.87	27.90	24.22	20.4	29.61	27.64	23.95	20.1	30.84	28.87	25.19	21.4												
	kW	3.67	3.67	3.66	3.7	4.14	4.14	4.13	4.2	4.66	4.65	4.65	4.7	5.22	5.22	5.21	5.2	5.85	5.84	5.84	5.9	6.58	6.58	6.57	6.6												
	Amps	13.61	13.59	13.56	13.7	15.63	15.61	15.58	15.7	17.88	17.87	17.83	18.0	20.32	20.31	20.27	20.4	23.05	23.04	23.00	23.2	26.25	26.23	26.20	26.4												
	Hi PR	282	284	286	290.6	327	328	330	335.0	373	375	377	381.5	424	425	427	431.7	478	479	481	485.7	535	536	538	543.4												
	Lo PR	121	122	125	130.5	128	130	133	137.8	135	136	139	144.2	140	141	145	149.6	145	147	150	154.9	152	153	156	161.6												
	MBh	57.0	57.8	59.5	62.0	56.5	57.3	59.0	61.5	55.1	55.8	57.5	60.1	52.5	53.3	55.0	57.6	49.5	50.3	51.9	54.5	46.7	47.5	49.1	51.7												
	S/T	1.00	0.80	0.67	0.5	1.00	0.81	0.68	0.5	1.00	0.83	0.70	0.6	1.00	0.85	0.72	0.6	1.00	1.00	0.74	0.6	1.00	1.00	0.79	0.7												
	ΔT	28.83	26.86	23.18	19.4	28.78	26.81	23.12	19.3	29.05	27.08	23.40	19.6	28.76	26.79	23.10	19.3	28.49	26.52	22.84	19.0	29.73	27.76	24.07	20.3												
kW	3.70	3.69	3.69	3.7	4.16	4.16	4.15	4.2	4.68	4.68	4.67	4.7	5.24	5.24	5.23	5.3	5.87	5.87	5.86	5.9	6.61	6.60	6.59	6.6													
Amps	13.71	13.69	13.66	13.8	15.73	15.71	15.68	15.8	17.98	17.97	17.93	18.1	20.42	20.41	20.37	20.5	23.15	23.13	23.10	23.3	26.35	26.33	26.30	26.5													
Hi PR	285	286	288	292.8	329	330	332	337.2	376	377	379	383.8	426	427	429	433.9	480	481	483	487.9	538	539	541	545.6													
Lo PR	122	124	127	132.2	130	131	134	139.5	136	138	141	145.9	142	143	146	151.3	147	148	151	156.6	154	155	158	163.3													
MBh	57.8	58.6	60.3	62.9	57.3	58.1	59.8	62.4	55.9	56.7	58.3	60.9	53.4	54.2	55.8	58.4	50.3	51.1	52.8	55.3	47.5	48.3	49.9	52.5													
S/T	1.00	0.83	0.70	0.6	1.00	0.84	0.71	0.6	1.00	0.86	0.73	0.6	1.00	0.88	0.75	0.6	1.00	1.00	0.77	0.6	1.00	1.00	0.82	0.7													
ΔT	27.88	25.91	22.23	18.4	27.83	25.86	22.18	18.4	28.11	26.13	22.45	18.6	27.81	25.84	22.16	18.3	27.55	25.57	21.89	18.1	28.78	26.81	23.13	19.3													
kW	3.72	3.71	3.71	3.7	4.18	4.18	4.17	4.2	4.70	4.70	4.69	4.7	5.26	5.26	5.25	5.3	5.89	5.88	5.88	5.9	6.62	6.62	6.61	6.6													
Amps	13.79	13.77	13.74	13.9	15.81	15.79	15.76	15.9	18.07	18.05	18.01	18.2	20.51	20.49	20.46	20.6	23.23	23.22	23.18	23.3	26.43	26.42	26.38	26.5													
Hi PR	287	288	290	295.0	331	333	335	339.4	378	379	381	386.0	428	429	431	436.1	482	483	485	490.1	540	541	543	547.8													
Lo PR	124	126	129	134.0	132	133	136	141.3	138	140	143	147.7	143	145	148	153.1	149	150	153	158.4	155	157	160	165.1													
85	MBh	57.3	58.1	59.7	62.3	56.8	57.6	59.2	61.8	55.3	56.1	57.8	60.3	52.8	53.6	55.2	57.8	49.7	50.5	52.2	54.7	46.9	47.7	49.4	51.9												
	S/T	1.00	0.84	0.72	0.6	1.00	0.85	0.72	0.6	1.00	1.00	0.75	0.6	1.00	1.00	0.76	0.6	1.00	1.00	0.78	0.6	1.00	1.00	0.83	0.7												
	ΔT	33.82	31.84	28.16	24.3	33.76	31.79	28.11	24.3	34.04	32.07	28.39	24.6	33.74	31.77	28.09	24.3	33.48	31.51	27.83	24.0	34.71	32.74	29.06	25.2												
	kW	3.68	3.68	3.67	3.7	4.15	4.14	4.14	4.2	4.67	4.66	4.66	4.7	5.23	5.22	5.22	5.3	5.86	5.85	5.84	5.9	6.59	6.59	6.58	6.6												
	Amps	13.65	13.63	13.60	13.8	15.67	15.65	15.62	15.8	17.92	17.91	17.87	18.0	20.36	20.35	20.31	20.5	23.09	23.07	23.04	23.2	26.29	26.27	26.24	26.4												
	Hi PR	284	285	287	291.9	328	329	331	336.3	375	376	378	382.9	425	426	428	433.0	479	480	482	487.0	537	538	540	544.7												
	Lo PR	123	124	127	132.3	130	131	134	139.6	136	138	141	146.0	142	143	146	151.4	147	149	152	156.7	154	155	158	163.4												
	MBh	58.0	58.7	60.4	63.0	57.5	58.2	59.9	62.5	56.0	56.8	58.5	61.0	53.5	54.3	55.9	58.5	50.4	51.2	52.9	55.4	47.6	48.4	50.1	52.6												
	S/T	1.00	0.90	0.77	0.6	1.00	0.90	0.77	0.6	1.00	1.00	0.80	0.7	1.00	1.00	0.82	0.7	1.00	1.00	0.84	0.7	1.00	1.00	1.00	0.8												
	ΔT	32.70	30.73	27.05	23.2	32.65	30.68	26.99	23.2	32.93	30.95	27.27	23.5	32.63	30.66	26.97	23.2	32.36	30.39	26.71	22.9	33.60	31.63	27.95	24.1												
kW	3.71	3.70	3.69	3.7	4.17	4.17	4.16	4.2	4.69	4.69	4.68	4.7	5.25	5.25	5.24	5.3	5.88	5.87	5.87	5.9	6.61	6.61	6.60	6.6													
Amps	13.75	13.73	13.69	13.8	15.77	15.75	15.72	15.9	18.02	18.00	17.97	18.1	20.46	20.45	20.41	20.6	23.19	23.17	23.14	23.3	26.39	26.37	26.34	26.5													
Hi PR	286	287	289	294.1	330	332	334	338.6	377	378	380	385.1	427	428	430	435.2	481	482	484	489.3	539	540	542	546.9													
Lo PR	124	126	129	134.0	132	133	136	141.3	138	139	143	147.7	143	145	148	153.1	149	150	153	158.4	155	157	160	165.1													
MBh	58.8	59.6	61.2	63.8	58.3	59.1	60.7	63.3	56.8	57.6	59.3	61.8	54.3	55.1	56.8	59.3	51.2	52.0	53.7	56.2	48.4	49.2	50.9	53.4													
S/T	1.00	0.93	0.80	0.7	1.00	0.93	0.80	0.7	1.00	1.00	0.83	0.7	1.00	1.00	0.85	0.7	1.00	1.00	0.87	0.7	1.00	1.00	1.00	0.8													
ΔT	31.75	29.78	26.10	22.3	31.70	29.73	26.05	22.2	31.98	30.01	26.32	22.5	31.68	29.71	26.03	22.2	31.42	29.45	25.76	21.9	32.65	30.68	27.00	23.2													
kW	3.73	3.72	3.71	3.7	4.19	4.19	4.18	4.2	4.71	4.71	4.70	4.7	5.27	5.27	5.26	5.3	5.90	5.89	5.89	5.9	6.63	6.63	6.62	6.7													
Amps	13.83	13.81	13.78	13.9	15.85	15.83	15.80	16.0	18.10	18.09	18.05	18.2	20.54	20.53	20.49	20.6	23.27	23.26	23.22	23.4	26.47	26.45	26.42	26.6													
Hi PR	288	289	291	296.3	333	334	336	340.8	379	380	382	387.3	429	431	433	437.4	483	485	487	491.5	541	542	544	549.1													
Lo PR	126	128	131	135.8	133	135	138	143.1	140	141	144	149.5	145	147	150	154.9	151	152	155	160.2	157	159	162	166.9													

IDB = Entering Indoor Dry Bulb Temperature
 High and low pressures are measured at the liquid and suction access fittings.
 Design Subcooling, 5-7 °F @ the liquid access fitting connection ARI 95 test conditions. Design Superheat 15-18°F @ the compressor suction access fitting connection.
 Shaded area reflects AHRI conditions.
 Amps: Unit amps (comp.+ evaporator + condenser fan motors)
 kW = Total system power

EXPANDED COOLING DATA — GPHH56031 LOW STAGE

IDB	AIRFLOW	OUTDOOR AMBIENT TEMPERATURE												105												115											
		65				75				85				95				105				115															
		59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71												
70	MBh	40.0	40.5	41.7	-	39.6	40.2	41.4	-	38.5	39.1	40.3	-	36.7	37.3	38.5	-	34.5	35.1	36.3	-	32.5	33.1	34.3	-												
	S/T	0.54	0.47	0.33	-	0.55	0.47	0.34	-	0.57	0.50	0.36	-	0.59	0.52	0.38	-	1.00	0.54	0.41	-	1.00	0.59	0.46	-												
	ΔT	21.40	19.50	15.94	-	21.35	19.44	15.89	-	21.61	19.71	16.16	-	21.33	19.42	15.87	-	21.07	19.17	15.62	-	22.26	20.36	16.81	-												
	kW	2.30	2.30	2.29	-	2.59	2.59	2.59	-	2.92	2.92	2.91	-	3.27	3.27	3.26	-	3.67	3.66	3.66	-	4.13	4.13	4.12	-												
	Amps	8.51	8.50	8.48	-	9.78	9.77	9.75	-	11.20	11.19	11.17	-	12.73	12.72	12.70	-	14.45	14.44	14.42	-	16.46	16.45	16.43	-												
	Hi PR	268	269	271	-	310	311	313	-	355	356	358	-	403	404	406	-	454	455	457	-	509	511	512	-												
	Lo PR	122	124	127	-	130	132	135	-	137	138	141	-	142	144	147	-	148	149	152	-	154	156	159	-												
	MBh	40.8	41.3	42.5	-	40.4	41.0	42.2	-	39.4	39.9	41.1	-	37.5	38.1	39.3	-	35.3	35.9	37.1	-	33.3	33.9	35.1	-												
	S/T	0.65	0.57	0.44	-	0.65	0.58	0.45	-	0.68	0.60	0.47	-	1.00	0.62	0.49	-	1.00	0.65	0.51	-	1.00	0.70	0.56	-												
	ΔT	19.43	17.52	13.97	-	19.37	17.47	13.92	-	19.64	17.74	14.19	-	19.35	17.45	13.90	-	19.10	17.20	13.64	-	20.29	18.39	14.84	-												
kW	2.33	2.32	2.32	-	2.62	2.62	2.61	-	2.94	2.94	2.94	-	3.30	3.30	3.29	-	3.69	3.69	3.68	-	4.16	4.15	4.15	-													
Amps	8.62	8.61	8.59	-	9.89	9.88	9.86	-	11.31	11.30	11.28	-	12.85	12.84	12.82	-	14.56	14.55	14.53	-	16.57	16.56	16.54	-													
Hi PR	271	273	275	-	314	315	317	-	358	360	361	-	406	407	409	-	458	459	461	-	513	514	516	-													
Lo PR	125	127	130	-	133	134	138	-	139	141	144	-	145	147	150	-	150	152	155	-	157	159	162	-													
MBh	41.8	42.4	43.6	-	41.5	42.0	43.2	-	40.4	41.0	42.2	-	38.6	39.2	40.4	-	36.4	37.0	38.2	-	34.4	35.0	36.2	-													
S/T	0.69	0.62	0.48	-	0.70	0.62	0.49	-	0.72	0.65	0.51	-	1.00	0.67	0.53	-	1.00	0.69	0.56	-	1.00	0.74	0.61	-													
ΔT	17.93	16.03	12.48	-	17.88	15.98	12.43	-	18.15	16.25	12.69	-	17.86	15.96	12.41	-	17.61	15.70	12.15	-	18.80	16.90	13.34	-													
kW	2.35	2.34	2.34	-	2.64	2.64	2.63	-	2.96	2.96	2.96	-	3.32	3.31	3.31	-	3.71	3.71	3.70	-	4.17	4.17	4.17	-													
Amps	8.71	8.70	8.68	-	9.98	9.97	9.95	-	11.40	11.39	11.37	-	12.93	12.92	12.90	-	14.65	14.64	14.62	-	16.66	16.65	16.63	-													
Hi PR	275	276	278	-	317	319	321	-	362	363	365	-	410	411	413	-	462	463	465	-	517	518	520	-													
Lo PR	129	130	133	-	136	138	141	-	143	144	147	-	148	150	153	-	154	155	158	-	161	162	165	-													
75	MBh	40.0	40.5	41.7	43.6	39.6	40.2	41.4	43.2	38.6	39.1	40.3	42.2	36.8	37.3	38.5	40.4	34.6	35.1	36.3	38.2	32.5	33.1	34.3	36.1												
	S/T	0.67	0.59	0.46	0.3	0.67	0.60	0.47	0.3	1.00	0.62	0.49	0.4	1.00	0.64	0.51	0.4	1.00	0.66	0.53	0.4	1.00	1.00	0.58	0.4												
	ΔT	25.58	23.68	20.13	16.4	25.53	23.63	20.07	16.4	25.80	23.89	20.34	16.7	25.51	23.61	20.05	16.4	25.26	23.35	19.80	16.1	26.45	24.54	20.99	17.3												
	kW	2.30	2.30	2.29	2.3	2.59	2.59	2.58	2.6	2.92	2.91	2.91	2.9	3.27	3.27	3.26	3.3	3.66	3.66	3.66	3.7	4.13	4.12	4.12	4.1												
	Amps	8.50	8.49	8.47	8.6	9.77	9.76	9.74	9.8	11.19	11.18	11.16	11.3	12.73	12.72	12.69	12.8	14.44	14.43	14.41	14.5	16.45	16.44	16.42	16.5												
	Hi PR	268	269	271	275.7	310	312	313	318.1	355	356	358	362.6	403	404	406	410.6	454	456	458	462.2	510	511	513	517.3												
	Lo PR	123	124	127	132.5	130	132	135	140.0	137	138	141	146.6	142	144	147	152.1	148	149	152	157.6	154	156	159	164.4												
	MBh	40.8	41.4	42.6	44.4	40.4	41.0	42.2	44.0	39.4	39.9	41.1	43.0	37.6	38.1	39.3	41.2	35.4	35.9	37.1	39.0	33.3	33.9	35.1	36.9												
	S/T	0.77	0.70	0.57	0.4	0.78	0.71	0.57	0.4	1.00	0.73	0.60	0.5	1.00	0.75	0.62	0.5	1.00	0.77	0.64	0.5	1.00	1.00	0.69	0.5												
	ΔT	23.61	21.71	18.15	14.5	23.56	21.65	18.10	14.4	23.83	21.92	18.37	14.7	23.54	21.64	18.08	14.4	23.28	21.38	17.83	14.1	24.48	22.57	19.02	15.3												
kW	2.32	2.32	2.32	2.3	2.62	2.61	2.61	2.6	2.94	2.94	2.94	3.0	3.30	3.29	3.29	3.3	3.69	3.69	3.68	3.7	4.15	4.15	4.15	4.2													
Amps	8.61	8.60	8.58	8.7	9.89	9.88	9.85	10.0	11.30	11.29	11.27	11.4	12.84	12.81	12.81	12.9	14.55	14.54	14.52	14.6	16.57	16.56	16.53	16.6													
Hi PR	272	273	275	279.4	314	315	317	321.9	359	360	362	366.4	407	408	410	414.3	458	459	461	466.0	513	515	516	521.1													
Lo PR	125	127	130	135.3	133	134	138	142.8	139	141	144	149.4	145	147	150	155.0	151	152	155	160.4	157	159	162	167.3													
MBh	41.9	42.4	43.6	45.5	41.5	42.1	43.3	45.1	40.4	41.0	42.2	44.1	38.6	39.2	40.4	42.2	36.4	37.0	38.2	40.0	34.4	35.0	36.2	38.0													
S/T	0.82	0.74	0.61	0.5	1.00	0.75	0.62	0.5	1.00	0.77	0.64	0.5	1.00	0.79	0.66	0.5	1.00	1.00	0.68	0.5	1.00	1.00	0.73	0.6													
ΔT	22.12	20.21	16.66	13.0	22.07	20.16	16.61	12.9	22.33	20.43	16.88	13.2	22.05	20.14	16.59	12.9	21.79	19.89	16.34	12.7	22.98	21.08	17.53	13.8													
kW	2.34	2.34	2.34	2.4	2.64	2.63	2.63	2.7	2.96	2.96	2.96	3.0	3.32	3.31	3.31	3.3	3.71	3.71	3.70	3.7	4.17	4.17	4.17	4.2													
Amps	8.70	8.69	8.67	8.8	9.97	9.96	9.94	10.0	11.39	11.38	11.36	11.6	12.92	12.91	12.89	13.0	14.64	14.63	14.61	14.7	16.65	16.64	16.62	16.7													
Hi PR	275	276	278	283.0	318	319	321	325.5	362	363	365	370.0	410	411	413	417.9	462	463	465	469.6	517	518	520	524.7													
Lo PR	129	130	133	138.7	136	138	141	146.2	143	144	147	152.8	148	150	153	158.3	154	155	159	163.8	161	162	165	170.6													

IDB = Entering Indoor Dry Bulb Temperature
 High and low pressures are measured at the liquid and suction access fittings.
 Design Subcooling, 5-7 °F @ the liquid access fitting connection ARI 95 test conditions. Design Superheat 15-18°F @ the compressor suction access fitting connection.
 Shaded area reflects AHRI (TVA) conditions.
 Amps: Unit amps (comp.+ evaporator + condenser fan motors)
 KW = Total system power

EXPANDED COOLING DATA — GPHH56031 LOW STAGE (CONT.)

IDB	AIRFLOW	OUTDOOR AMBIENT TEMPERATURE												105												115																										
		65						75						85						95						105						115																				
		59	63	67	71	75	79	59	63	67	71	75	79	59	63	67	71	75	79	59	63	67	71	75	79	59	63	67	71	75	79	59	63	67	71	75	79															
ENTERING INDOOR WET BULB TEMPERATURE												ENTERING INDOOR WET BULB TEMPERATURE												ENTERING INDOOR WET BULB TEMPERATURE																												
80	MBh	40.2	40.8	42.0	43.8	39.8	40.4	41.6	43.4	38.8	39.3	40.5	42.4	37.0	37.5	38.7	40.6	34.8	35.3	36.5	38.4	32.7	33.3	34.5	36.4	37.0	37.5	38.7	40.6	34.8	35.3	36.5	38.4	32.7	33.3	34.5	36.4	37.0	37.5	38.7	40.6	34.8	35.3	36.5	38.4	32.7	33.3	34.5	36.4			
	S/T	1.00	0.71	0.58	0.4	1.00	0.72	0.59	0.4	1.00	0.74	0.61	0.5	1.00	0.76	0.63	0.5	1.00	1.00	1.00	0.65	0.5	1.00	1.00	0.70	0.6	1.00	0.76	0.63	0.5	1.00	1.00	1.00	0.76	0.6	1.00	1.00	0.70	0.6	1.00	0.76	0.63	0.5	1.00	1.00	1.00	0.76	0.6	1.00	1.00	0.70	0.6
	ΔT	29.79	27.89	24.34	20.7	29.74	27.84	24.29	20.6	30.01	28.11	24.55	20.9	29.72	27.82	24.27	20.6	29.47	27.50	25.59	22.04	20.3	30.66	28.76	25.20	21.5	29.72	27.82	24.27	20.6	29.47	27.50	25.59	22.04	20.3	30.66	28.76	25.20	21.5	29.72	27.82	24.27	20.6	29.47	27.50	25.59	22.04	20.3	30.66	28.76	25.20	21.5
	kW	2.30	2.30	2.29	2.3	2.59	2.59	2.58	2.6	2.92	2.92	2.91	2.9	3.27	3.27	3.26	3.3	3.67	3.67	3.66	3.66	3.7	4.13	4.13	4.12	4.1	3.27	3.27	3.26	3.3	3.67	3.66	3.66	3.66	3.7	4.13	4.13	4.12	4.1	3.27	3.27	3.26	3.3	3.67	3.66	3.66	3.66	3.7	4.13	4.13	4.12	4.1
	Amps	8.51	8.50	8.48	8.6	9.78	9.77	9.75	9.8	11.20	11.19	11.17	11.3	12.73	12.72	12.70	12.8	14.45	14.44	14.44	14.42	14.5	16.46	16.45	16.43	16.5	12.73	12.72	12.70	12.8	14.45	14.44	14.44	14.42	14.5	16.46	16.45	16.43	16.5	12.73	12.72	12.70	12.8	14.45	14.44	14.44	14.42	14.5	16.46	16.45	16.43	16.5
	Hi-PR	268	270	271	276.2	311	312	314	318.6	355	357	358	363.1	403	404	406	411.1	455	456	458	462.7	510	511	513	517.8	403	404	406	411.1	455	456	458	462.7	510	511	513	517.8	403	404	406	411.1	455	456	458	462.7	510	511	513	517.8			
	Lo-PR	123	125	128	133.0	131	132	135	140.5	137	139	142	147.1	143	144	147	152.7	148	150	153	158.1	155	157	160	165.0	143	144	147	152.7	148	150	153	158.1	155	157	160	165.0	143	144	147	152.7	148	150	153	158.1	155	157	160	165.0			
	MBh	41.0	41.6	42.8	44.6	40.6	41.2	42.4	44.2	39.6	40.2	41.4	43.2	37.8	38.3	39.5	41.4	35.6	36.1	37.3	39.2	33.5	34.1	35.3	37.2	37.8	38.3	39.5	41.4	35.6	36.1	37.3	39.2	33.5	34.1	35.3	37.2	37.8	38.3	39.5	41.4	35.6	36.1	37.3	39.2	33.5	34.1	35.3	37.2			
	S/T	1.00	0.82	0.69	0.6	1.00	0.83	0.70	0.6	1.00	0.85	0.72	0.6	1.00	1.00	0.74	0.6	1.00	1.00	1.00	0.76	0.6	1.00	1.00	0.81	0.7	1.00	1.00	0.74	0.6	1.00	1.00	1.00	0.76	0.6	1.00	1.00	0.81	0.7	1.00	1.00	0.74	0.6	1.00	1.00	1.00	0.76	0.6	1.00	1.00	0.81	0.7
	ΔT	27.82	25.92	22.37	18.7	27.77	25.87	22.31	18.6	28.04	26.13	22.58	18.9	27.75	25.85	22.29	18.6	27.50	25.59	22.04	18.4	28.69	26.78	23.23	19.6	27.75	25.85	22.29	18.6	27.50	25.59	22.04	18.4	28.69	26.78	23.23	19.6	27.75	25.85	22.29	18.6	27.50	25.59	22.04	18.4	28.69	26.78	23.23	19.6			
kW	2.33	2.32	2.32	2.3	2.62	2.62	2.61	2.6	2.94	2.94	2.94	3.0	3.30	3.30	3.29	3.3	3.69	3.69	3.68	3.7	4.15	4.15	4.15	4.2	3.30	3.30	3.29	3.3	3.69	3.69	3.68	3.7	4.15	4.15	4.15	4.2	3.30	3.30	3.29	3.3	3.69	3.69	3.68	3.7	4.15	4.15	4.15	4.2				
Amps	8.62	8.61	8.59	8.7	9.89	9.88	9.86	10.0	11.31	11.30	11.28	11.4	12.85	12.84	12.81	12.9	14.56	14.55	14.53	14.6	16.57	16.56	16.54	16.6	12.85	12.84	12.81	12.9	14.56	14.55	14.53	14.6	16.57	16.56	16.54	16.6	12.85	12.84	12.81	12.9	14.56	14.55	14.53	14.6	16.57	16.56	16.54	16.6				
Hi-PR	272	273	275	279.9	315	316	318	322.4	359	360	362	366.9	407	408	410	414.8	459	460	462	466.5	514	515	517	521.6	407	408	410	414.8	459	460	462	466.5	514	515	517	521.6	407	408	410	414.8	459	460	462	466.5	514	515	517	521.6				
Lo-PR	126	127	131	135.9	133	135	138	143.4	140	142	145	150.0	146	147	150	155.5	151	153	156	161.0	158	159	163	167.8	146	147	150	155.5	151	153	156	161.0	158	159	163	167.8	146	147	150	155.5	151	153	156	161.0	158	159	163	167.8				
MBh	42.1	42.6	43.8	45.7	41.7	42.3	43.5	45.3	40.7	41.2	42.4	44.3	38.9	39.4	40.6	42.5	36.6	37.2	38.4	40.2	34.6	35.2	36.4	38.2	38.9	39.4	40.6	42.5	36.6	37.2	38.4	40.2	34.6	35.2	36.4	38.2	38.9	39.4	40.6	42.5	36.6	37.2	38.4	40.2	34.6	35.2	36.4	38.2				
S/T	1.00	0.86	0.73	0.6	1.00	0.87	0.74	0.6	1.00	0.89	0.76	0.6	1.00	1.00	0.78	0.6	1.00	1.00	1.00	0.80	0.7	1.00	1.00	0.85	0.7	1.00	1.00	0.78	0.6	1.00	1.00	1.00	0.80	0.7	1.00	1.00	0.85	0.7	1.00	1.00	0.78	0.6	1.00	1.00	1.00	0.80	0.7	1.00	1.00	0.85	0.7	
ΔT	26.33	24.43	20.87	17.2	26.28	24.37	20.82	17.1	26.55	24.64	21.09	17.4	26.26	24.36	20.80	17.1	26.00	24.10	20.55	16.9	27.20	25.29	21.74	18.1	26.26	24.36	20.80	17.1	26.00	24.10	20.55	16.9	27.20	25.29	21.74	18.1	26.26	24.36	20.80	17.1	26.00	24.10	20.55	16.9	27.20	25.29	21.74	18.1				
kW	2.35	2.34	2.34	2.4	2.64	2.64	2.63	2.7	2.96	2.96	2.96	3.0	3.32	3.31	3.31	3.3	3.71	3.71	3.70	3.7	4.17	4.17	4.17	4.2	3.32	3.31	3.31	3.3	3.71	3.71	3.70	3.7	4.17	4.17	4.17	4.2	3.32	3.31	3.31	3.3	3.71	3.71	3.70	3.7	4.17	4.17	4.17	4.2				
Amps	8.71	8.70	8.67	8.8	9.98	9.97	9.95	10.0	11.40	11.39	11.36	11.5	12.93	12.92	12.90	13.0	14.65	14.64	14.61	14.7	16.66	16.65	16.63	16.7	12.93	12.92	12.90	13.0	14.65	14.64	14.61	14.7	16.66	16.65	16.63	16.7	12.93	12.92	12.90	13.0	14.65	14.64	14.61	14.7	16.66	16.65	16.63	16.7				
Hi-PR	276	277	279	283.5	318	319	321	326.0	363	364	366	370.5	411	412	414	418.4	462	463	465	470.0	517	519	520	525.2	411	412	414	418.4	462	463	465	470.0	517	519	520	525.2	411	412	414	418.4	462	463	465	470.0	517	519	520	525.2				
Lo-PR	129	131	134	139.2	137	138	141	146.7	143	145	148	153.3	149	150	154	158.9	154	156	159	164.3	161	163	166	171.2	149	150	154	158.9	154	156	159	164.3	161	163	166	171.2	149	150	154	158.9	154	156	159	164.3	161	163	166	171.2				
85	MBh	40.9	41.4	42.6	44.5	40.5	41.1	42.3	44.1	39.5	40.0	41.2	43.1	37.6	38.2	39.4	41.3	35.4	36.0	37.2	39.0	33.4	34.0	35.2	37.0	37.6	38.2	39.4	41.3	35.4	36.0	37.2	39.0	33.4	34.0	35.2	37.0	37.6	38.2	39.4	41.3	35.4	36.0	37.2	39.0	33.4	34.0	35.2	37.0			
	S/T	1.00	0.81	0.68	0.5	1.00	0.82	0.69	0.5	1.00	1.00	0.71	0.6	1.00	1.00	0.73	0.6	1.00	1.00	1.00	0.75	0.6	1.00	1.00	0.7	1.00	1.00	0.73	0.6	1.00	1.00	1.00	0.75	0.6	1.00	1.00	0.75	0.6	1.00	1.00	0.73	0.6	1.00	1.00	1.00	0.75	0.6	1.00	1.00	0.75	0.6	
	ΔT	33.53	31.63	28.07	24.4	33.48	31.58	28.02	24.3	33.75	31.84	28.29	24.6	33.46	31.56	28.00	24.3	33.20	31.30	27.75	24.1	34.40	32.49	28.94	25.3	33.46	31.56	28.00	24.3	33.20	31.30	27.75	24.1	34.40	32.49	28.94	25.3	33.46	31.56	28.00	24.3	33.20	31.30	27.75	24.1	34.40	32.49	28.94	25.3			
	kW	2.31	2.30	2.30	2.3	2.60	2.60	2.59	2.6	2.92	2.92	2.92	2.9	3.28	3.27	3.27	3.3	3.67	3.67	3.66	3.7	4.13	4.13	4.13	4.1	3.28	3.27	3.27	3.3	3.67	3.67	3.66	3.7	4.13	4.13	4.13	4.1	3.28	3.27	3.27	3.3	3.67	3.67	3.66	3.7	4.13	4.13	4.13	4.1			
	Amps	8.53	8.52	8.50	8.6	9.80	9.79	9.77	9.9	11.22	11.21	11.19	11.3	12.76	12.75	12.73	12.8	14.47	14.46	14.44	14.5	16.48	16.47	16.45	16.5	12.76	12.75	12.73	12.8	14.47	14.46	14.44	14.5	16.48	16.47	16.45	16															

EXPANDED HEATING DATA

GPHH52431

100% CAPACITY

	OUTDOOR AMBIENT TEMPERATURE																
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	-5	
MBh	31.70	29.54	27.42	25.33	24.00	22.98	20.44	18.13	16.24	14.83	13.77	13.20	12.48	10.68	8.88	7.08	5.28
T/R	32.26	30.35	28.45	26.54	25.40	24.32	21.63	19.18	17.19	15.69	14.57	13.97	13.21	11.30	9.40	7.49	5.59
KW	1.89	1.85	1.81	1.78	1.76	1.74	1.71	1.67	1.64	1.60	1.57	1.55	1.53	1.50	1.46	1.43	1.39
AMPS	6.8	6.7	6.5	6.3	6.3	6.2	6.0	5.9	5.7	5.6	5.4	5.3	5.3	5.1	5.0	4.8	4.7
COP	4.93	4.68	4.43	4.17	4.00	3.86	3.50	3.17	2.90	2.71	2.57	2.50	2.39	2.09	1.78	1.45	1.11
Hi PR	394	382	369	356	348	343	330	317	305	292	279	271	266	253	240	228	215
LO PR	142	133	125	116	110	107	98	89	80	71	63	57	54	45	36	27	18

GPHH53031

100% CAPACITY

	OUTDOOR AMBIENT TEMPERATURE																
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	-5	
MBh	32.59	30.75	28.94	27.16	26.00	25.15	23.16	21.09	19.55	18.38	17.55	17.10	16.51	15.02	13.54	12.06	10.57
T/R	27.64	26.33	25.02	23.71	22.93	22.25	20.43	18.68	17.24	16.21	15.47	15.08	14.56	13.25	11.94	10.63	9.32
KW	2.03	2.01	2.00	1.98	1.97	1.97	1.95	1.94	1.92	1.91	1.89	1.88	1.88	1.86	1.85	1.83	1.82
AMPS	7.2	7.1	7.0	7.0	6.9	6.9	6.8	6.8	6.7	6.6	6.6	6.5	6.5	6.4	6.4	6.3	6.2
COP	4.71	4.48	4.24	4.01	3.86	3.75	3.48	3.19	2.98	2.82	2.72	2.66	2.58	2.36	2.15	1.93	1.70
Hi PR	402	388	375	362	355	349	336	323	310	297	284	276	271	258	245	232	219
LO PR	137	128	120	111	106	103	94	86	77	69	60	55	52	43	35	26	18

GPHH53631

100% CAPACITY

	OUTDOOR AMBIENT TEMPERATURE																
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	-5	
MBh	38.06	35.81	33.59	31.41	30.00	28.97	26.46	24.04	22.05	20.60	19.56	19.00	18.27	16.43	14.60	12.77	10.93
T/R	28.72	27.28	25.84	24.41	23.54	22.77	20.76	18.86	17.30	16.17	15.35	14.91	14.33	12.89	11.46	10.02	8.58
KW	2.56	2.52	2.48	2.44	2.42	2.40	2.36	2.32	2.28	2.24	2.20	2.18	2.16	2.12	2.08	2.04	2.00
AMPS	9.3	9.1	8.9	8.7	8.6	8.6	8.4	8.2	8.0	7.9	7.7	7.6	7.5	7.3	7.2	7.0	6.8
COP	4.36	4.17	3.97	3.77	3.64	3.54	3.29	3.04	2.84	2.70	2.61	2.56	2.48	2.27	2.06	1.84	1.60
Hi PR	375	363	351	339	331	327	314	302	290	278	265	258	253	241	229	217	204
LO PR	133	124	116	108	103	100	91	83	75	67	58	53	50	42	34	25	17

GPHH53631

70 % CAPACITY

	OUTDOOR AMBIENT TEMPERATURE																
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	-5	
MBh	28.44	26.54	24.66	22.82	21.64	20.75	18.52	16.47	14.80	13.56	12.63	12.13	11.50	9.91	8.33	6.74	5.16
T/R	31.66	29.82	27.99	26.15	25.05	24.02	21.43	19.06	17.13	15.70	14.62	14.04	13.31	11.47	9.64	7.80	5.97
KW	1.57	1.52	1.47	1.42	1.40	1.38	1.33	1.28	1.23	1.19	1.14	1.11	1.09	1.04	1.00	0.95	0.90
AMPS	5.5	5.3	5.1	4.9	4.8	4.7	4.5	4.3	4.1	3.9	3.7	3.6	3.5	3.3	3.1	2.9	2.7
COP	5.32	5.12	4.91	4.70	4.55	4.42	4.08	3.77	3.52	3.35	3.25	3.20	3.09	2.78	2.45	2.08	1.67
Hi PR	364	352	340	328	321	316	305	293	281	269	257	250	245	234	222	210	198
LO PR	130	122	114	106	101	98	90	82	74	65	57	53	49	41	33	25	17

GPHH54231

100 % CAPACITY

	OUTDOOR AMBIENT TEMPERATURE																
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	-5	
MBh	55.12	51.35	47.91	43.99	41.50	39.53	34.68	30.34	26.81	24.14	22.09	21.00	19.63	16.22	12.80	9.38	5.97
T/R	38.32	35.89	33.45	31.02	29.56	28.15	24.70	21.61	19.09	17.19	15.74	14.96	13.98	11.55	9.12	6.68	4.25
KW	3.66	3.58	3.51	3.43	3.38	3.35	3.27	3.19	3.11	3.03	2.95	2.90	2.87	2.79	2.71	2.63	2.55
AMPS	13.9	13.5	13.2	12.8	12.6	12.5	12.1	11.8	11.5	11.1	10.8	10.6	10.4	10.1	9.7	9.4	9.0
COP	4.41	4.20	4.01	3.76	3.60	3.46	3.11	2.79	2.53	2.33	2.19	2.12	2.00	1.70	1.38	1.04	0.68
Hi PR	393	380	368	355	347	342	329	317	304	291	278	270	265	253	240	227	214
LO PR	128	120	112	104	100	97	89	81	73	65	57	52	49	41	33	25	17

Calculations are based on nominal CFM and 70 °F indoor dry bulb.

Amps = Outdoor unit amps (comp.+fan) motor)

Note: Shaded area is AHRI Rating Conditions at 47°F outdoor ambient temperature

kW = Total system power

GPHH54231

70 % CAPACITY

	OUTDOOR AMBIENT TEMPERATURE																
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5		-5
MBh	39.77	37.04	34.60	31.80	29.94	28.31	24.39	20.92	18.12	15.97	14.30	13.41	12.31	9.55	6.79	4.04	1.28
T/R	36.10	33.63	31.18	28.68	27.18	25.70	22.14	18.99	16.45	14.50	12.98	12.17	11.17	8.67	6.17	3.67	1.16
KW	2.23	2.16	2.08	2.00	1.95	1.92	1.84	1.76	1.69	1.61	1.53	1.48	1.45	1.37	1.30	1.22	1.14
AMPS	8.1	7.8	7.4	7.1	6.9	6.7	6.4	6.1	5.7	5.4	5.0	4.8	4.7	4.4	4.0	3.7	3.3
COP	5.22	5.04	4.88	4.66	4.50	4.32	3.88	3.48	3.15	2.91	2.74	2.65	2.48	2.04	1.54	0.97	0.33
Hi PR	381	369	356	344	336	332	319	307	294	282	270	262	257	245	232	220	208
LO PR	126	118	111	103	98	95	87	79	71	63	56	51	48	40	32	24	16

GPHH54831

100 % CAPACITY

	OUTDOOR AMBIENT TEMPERATURE																
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5		-5
MBh	52.83	49.66	46.55	43.48	41.50	40.06	36.50	33.10	30.31	28.27	26.79	26.00	24.97	22.38	19.80	17.22	14.63
T/R	30.35	28.81	27.26	25.72	24.79	23.96	21.80	19.77	18.10	16.89	16.00	15.53	14.91	13.37	11.83	10.28	8.74
KW	3.37	3.35	3.33	3.32	3.31	3.30	3.28	3.26	3.25	3.23	3.21	3.20	3.19	3.18	3.16	3.14	3.13
AMPS	12.2	12.1	12.0	12.0	11.9	11.9	11.8	11.7	11.7	11.6	11.5	11.5	11.4	11.4	11.3	11.2	11.1
COP	4.60	4.34	4.09	3.84	3.68	3.56	3.26	2.97	2.74	2.57	2.44	2.38	2.29	2.06	1.84	1.61	1.37
Hi PR	370	358	346	334	326	321	309	297	285	273	261	254	249	237	225	213	201
LO PR	128	120	112	104	100	97	89	81	73	65	57	52	49	41	33	25	17

GPHH54831

70 % CAPACITY

	OUTDOOR AMBIENT TEMPERATURE																
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5		-5
MBh	39.46	36.79	34.17	31.58	29.94	28.69	25.55	22.68	20.35	18.61	17.30	16.60	15.71	13.49	11.26	9.04	6.82
T/R	34.44	32.43	30.41	28.39	27.18	26.04	23.19	20.59	18.48	16.89	15.71	15.07	14.26	12.24	10.22	8.21	6.19
KW	2.07	2.03	1.98	1.94	1.91	1.89	1.85	1.80	1.75	1.71	1.66	1.64	1.62	1.57	1.53	1.48	1.43
AMPS	7.4	7.2	7.0	6.8	6.7	6.6	6.4	6.2	6.0	5.8	5.6	5.5	5.4	5.2	5.0	4.8	4.6
COP	5.58	5.32	5.05	4.78	4.60	4.45	4.06	3.69	3.40	3.19	3.05	2.98	2.85	2.52	2.16	1.79	1.39
Hi PR	358	347	335	323	316	312	300	288	277	265	253	246	242	230	218	207	195
LO PR	126	118	111	103	98	95	87	79	71	63	56	51	48	40	32	24	16

GPHH56031

100 % CAPACITY

	OUTDOOR AMBIENT TEMPERATURE																
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5		-5
MBh	65.81	61.95	58.15	54.42	52.00	50.24	45.96	41.81	38.41	35.93	34.16	33.20	31.95	28.81	25.68	22.55	19.41
T/R	34.47	32.76	31.06	29.35	28.32	27.42	25.03	22.77	20.92	19.57	18.60	18.08	17.40	15.69	13.99	12.28	10.57
KW	4.30	4.28	4.26	4.24	4.23	4.23	4.21	4.19	4.17	4.15	4.13	4.12	4.12	4.10	4.08	4.06	4.04
AMPS	16.0	15.9	15.8	15.8	15.7	15.7	15.6	15.5	15.4	15.4	15.3	15.2	15.2	15.1	15.0	15.0	14.9
COP	4.49	4.24	4.00	3.76	3.60	3.48	3.20	2.93	2.70	2.54	2.42	2.36	2.27	2.06	1.85	1.63	1.41
Hi PR	407	394	381	367	359	354	341	328	314	301	288	280	275	261	248	235	222
LO PR	124	116	109	101	96	93	85	78	70	62	55	50	47	39	31	24	16

GPHH56031

70 % CAPACITY

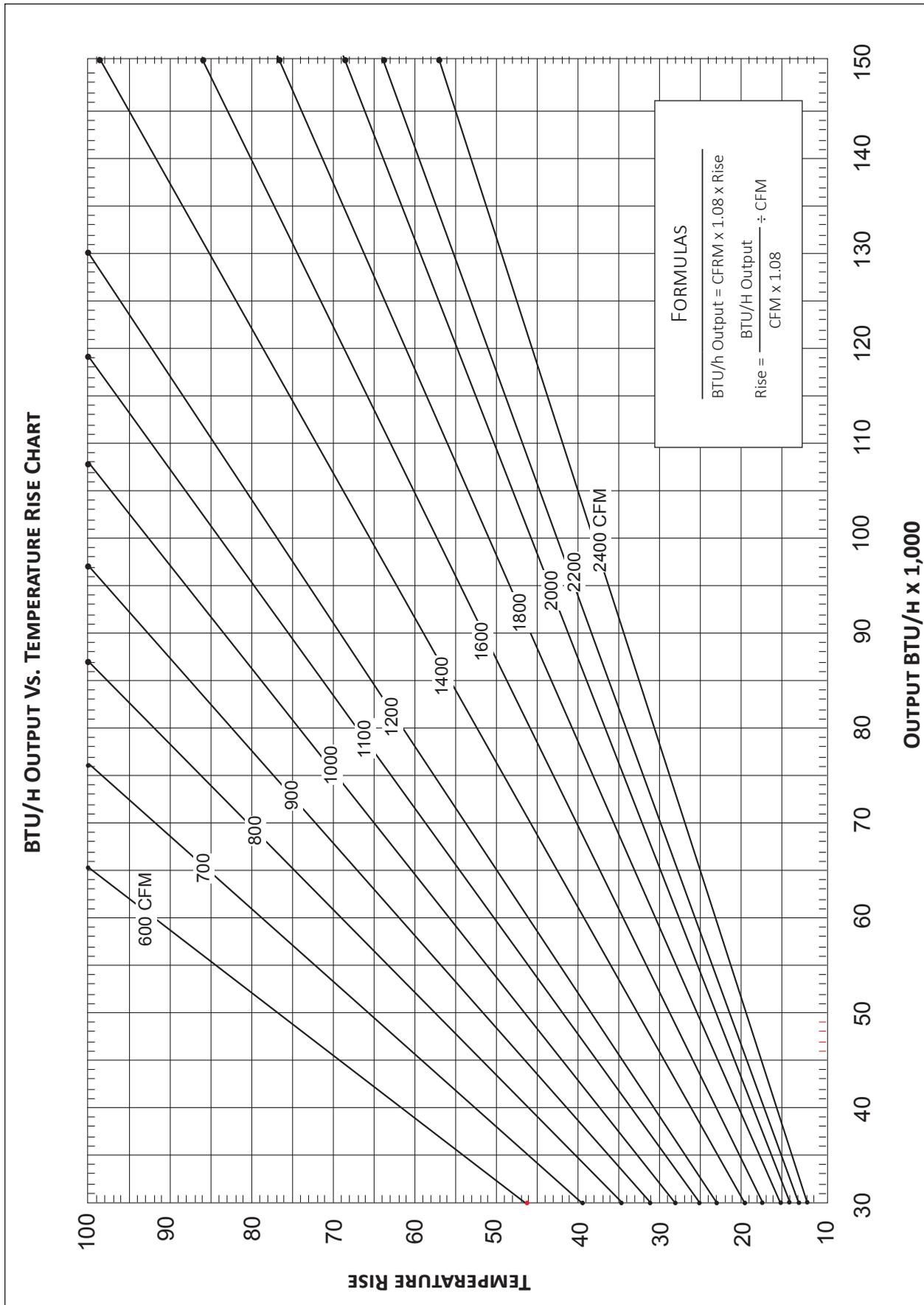
	OUTDOOR AMBIENT TEMPERATURE																
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5		-5
MBh	49.20	45.92	42.70	39.54	37.51	35.99	32.15	28.64	25.78	23.65	22.05	21.20	20.11	17.39	14.67	11.95	9.23
T/R	35.04	33.03	31.01	29.00	27.79	26.66	23.82	21.22	19.10	17.52	16.33	15.70	14.90	12.88	10.87	8.85	6.84
KW	2.65	2.59	2.54	2.48	2.45	2.42	2.37	2.31	2.25	2.20	2.14	2.11	2.08	2.03	1.97	1.91	1.86
AMPS	9.5	9.3	9.0	8.8	8.6	8.6	8.3	8.1	7.8	7.6	7.3	7.2	7.1	6.8	6.6	6.3	6.1
COP	5.44	5.19	4.93	4.67	4.50	4.35	3.98	3.63	3.35	3.16	3.02	2.95	2.83	2.51	2.18	1.83	1.46
Hi PR	395	382	369	356	348	343	330	318	305	292	279	271	266	253	241	228	215
LO PR	122	114	107	99	95	91	84	76	69	61	54	49	46	38	31	23	16

Calculations are based on nominal CFM and 70 °F indoor dry bulb.

Amps = Outdoor unit amps (comp.+fan) motor)

Note: Shaded area is AHRI Rating Conditions at 47°F outdoor ambient temperature

kW = Total system power



MODEL	SPEED*	VOLTS		E.S.P. (IN. OF H ₂ O)							
				0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80
GPHH52431	T1	230	CFM	914	866	818	770	722	674	626	578
			Watts	69	80	91	102	114	125	136	147
	T2 / T3	230	CFM	1092	1038	989	936	888	832	782	721
			Watts	130	141	151	160	172	181	189	201
	T4 / T5	230	CFM	1231	1179	1127	1074	1022	969	917	865
			Watts	168	180	193	205	218	230	243	255
GPHH53031	T1	230	CFM	1005	961	918	874	831	787	744	700
			Watts	91	102	114	125	137	149	160	172
	T2 / T3	230	CFM	1286	1242	1196	1151	1105	1059	1009	948
			Watts	191	196	207	219	233	241	252	264
	T4 / T5	230	CFM	1462	1409	1357	1305	1252	1200	1147	1095
			Watts	241	253	266	278	291	303	315	328
GPHH53631	T1	230	CFM	855	802	750	697	644	591	-	-
			Watts	76	88	100	112	123	133	-	-
	T2 / T3	230	CFM	1405	1365	1325	1284	1242	1199	1156	1112
			Watts	224	243	262	280	291	302	312	321
	T4 / T5	230	CFM	1577	1525	1472	1420	1367	1315	1263	1210
			Watts	277	290	302	314	327	339	352	364
GPHH54231	T1	230	CFM	1101	1052	1015	970	928	886	848	809
			Watts	132	144	158	168	179	190	201	211
	T2 / T3	230	CFM	1536	1484	1440	1403	1363	1336	1294	1230
			Watts	274	285	280	311	327	337	346	359
	T4 / T5	230	CFM	1645	1602	1560	1517	1475	1433	1390	1347
			Watts	285	297	309	321	333	346	358	370
GPHH54831	T1	230	CFM	1143	1088	1050	1011	962	928	905	855
			Watts	139	149	164	178	186	196	208	218
	T2 / T3	230	CFM	1828	1775	1722	1677	1635	1593	1548	1498
			Watts	403	416	428	439	452	465	477	484
	T4 / T5	230	CFM	2002	1935	1885	1827	1767	1732	1669	1618
			Watts	498	521	516	534	551	567	571	574
GPHH56031	T1	230	CFM	1412	1353	1300	1256	1214	1170	1123	1077
			Watts	211	220	228	236	248	258	269	281
	T2 / T3	230	CFM	1965	1908	1857	1812	1770	1731	1695	1658
			Watts	476	489	500	509	520	530	541	551
	T4 / T5	230	CFM	2049	1948	1914	1851	1811	1770	1738	1685
			Watts	506	522	528	548	544	548	556	568

* Speed set at T2 at the factory. DP3CH6041

HEAT KIT ELECTRICAL DATA (BLOWER ONLY, HEAT MODE)

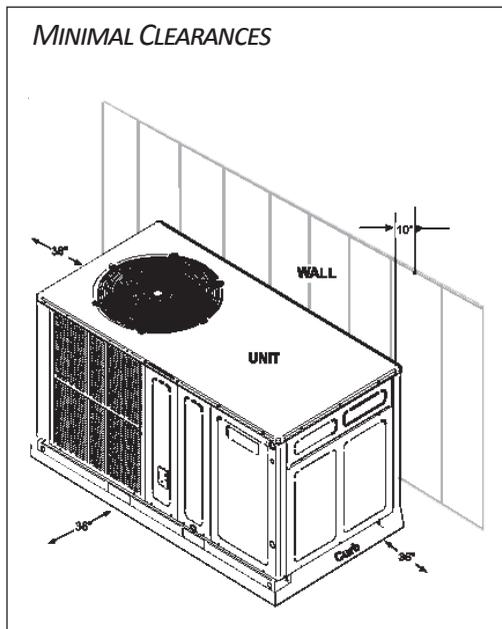
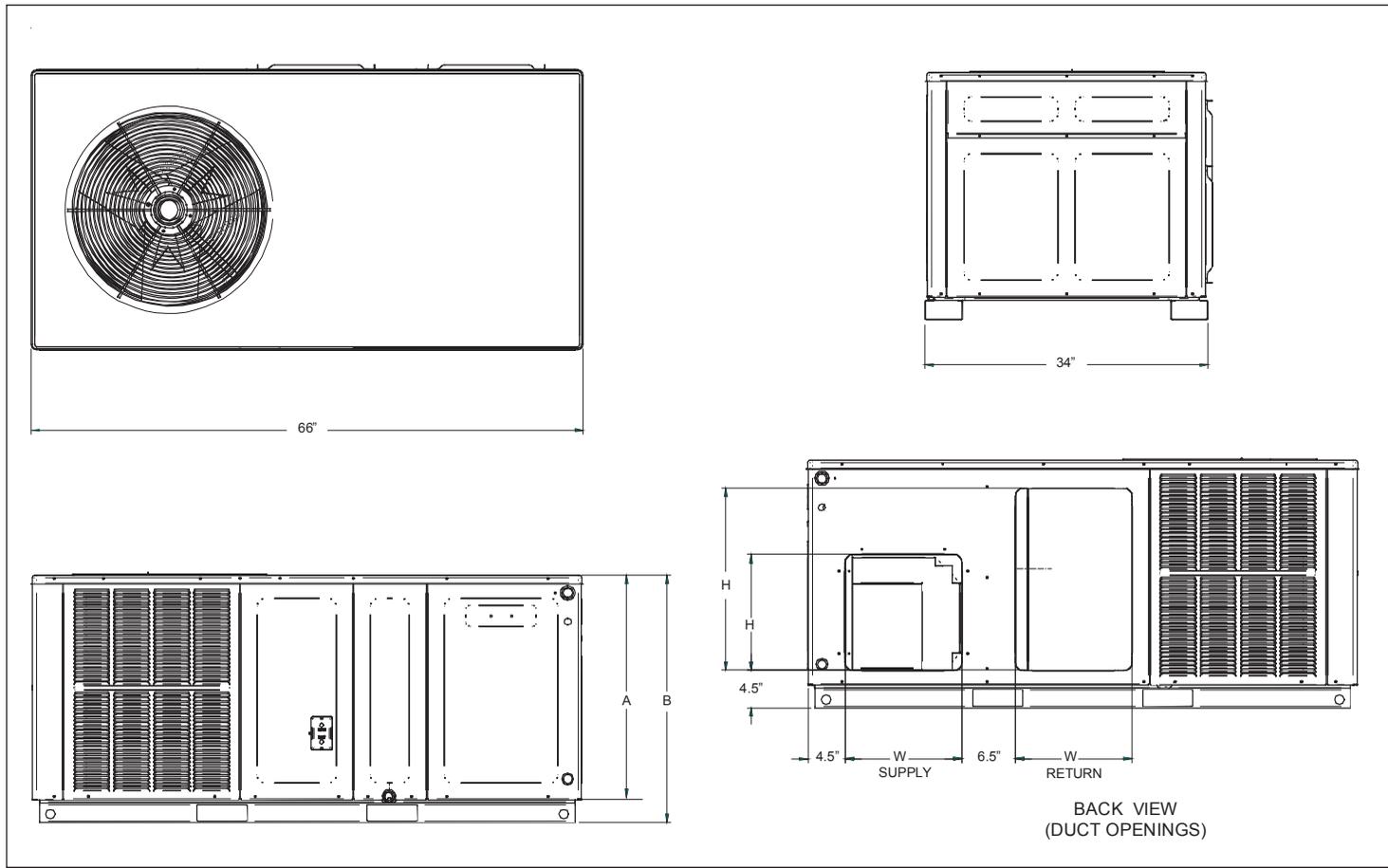
MODEL AND HEAT KIT USAGE	CIRCUIT #1		CIRCUIT #2		SINGLE-POINT KIT		ACTUAL kW
	MCA ¹	MOP ²	MCA ¹	MOP ²	MCA ¹	MOP ²	
GP HH52431							
HKTPD051	24.7	25	-	-	42.73	45	4.75
HKTPD081	36.5	40	-	-	54.53	60	7
HKTPD101	49.5	50	-	-	67.53	70	9.5
GP HH53031							
HKTPD051	24.7	25	-	-	45.45	50	4.75
HKTPD081	36.5	40	-	-	57.25	60	7
HKTPD101	49.5	50	-	-	70.25	80	9.5
HKTPD151	49.5	50	24.7	25	94.95	100	14.25
GP HH53631							
HKTPD051	24.7	25	-	-	48.06	50	4.75
HKTPD081	36.5	40	-	-	59.86	60	7
HKTPD101	49.5	50	-	-	72.86	80	9.5
HKTPD151	49.5	50	24.7	25	97.56	100	14.25
GP HH54231							
HKTPD051	24.7	25	-	-	61.14	70	4.75
HKTPD081	36.5	40	-	-	72.94	80	7
HKTPD101	49.5	50	-	-	85.94	90	9.5
HKTPD151	49.5	50	24.7	25	110.64	125	14.25
HKTPD201	49.5	50	49.5	50	135.44	150	19
GP HH54831							
HKTPD051	24.7	25	-	-	61.14	70	4.75
HKTPD081	36.5	40	-	-	72.94	80	7
HKTPD101	49.5	50	-	-	85.94	90	9.5
HKTPD151	49.5	50	24.7	25	110.64	125	14.25
HKTPD201	49.5	50	49.5	50	135.44	150	19
GP HH56031							
HKTPD051	24.7	25	-	-	65.34	80	4.75
HKTPD081	36.5	40	-	-	77.14	90	7
HKTPD101	49.5	50	-	-	85.94	100	9.5
HKTPD151	49.5	50	24.7	25	110.64	125	14.25
HKTPD201	49.5	50	49.5	50	135.44	150	19

¹ Minimum Circuit Ampacity

² Maximum Overcurrent Protection Device

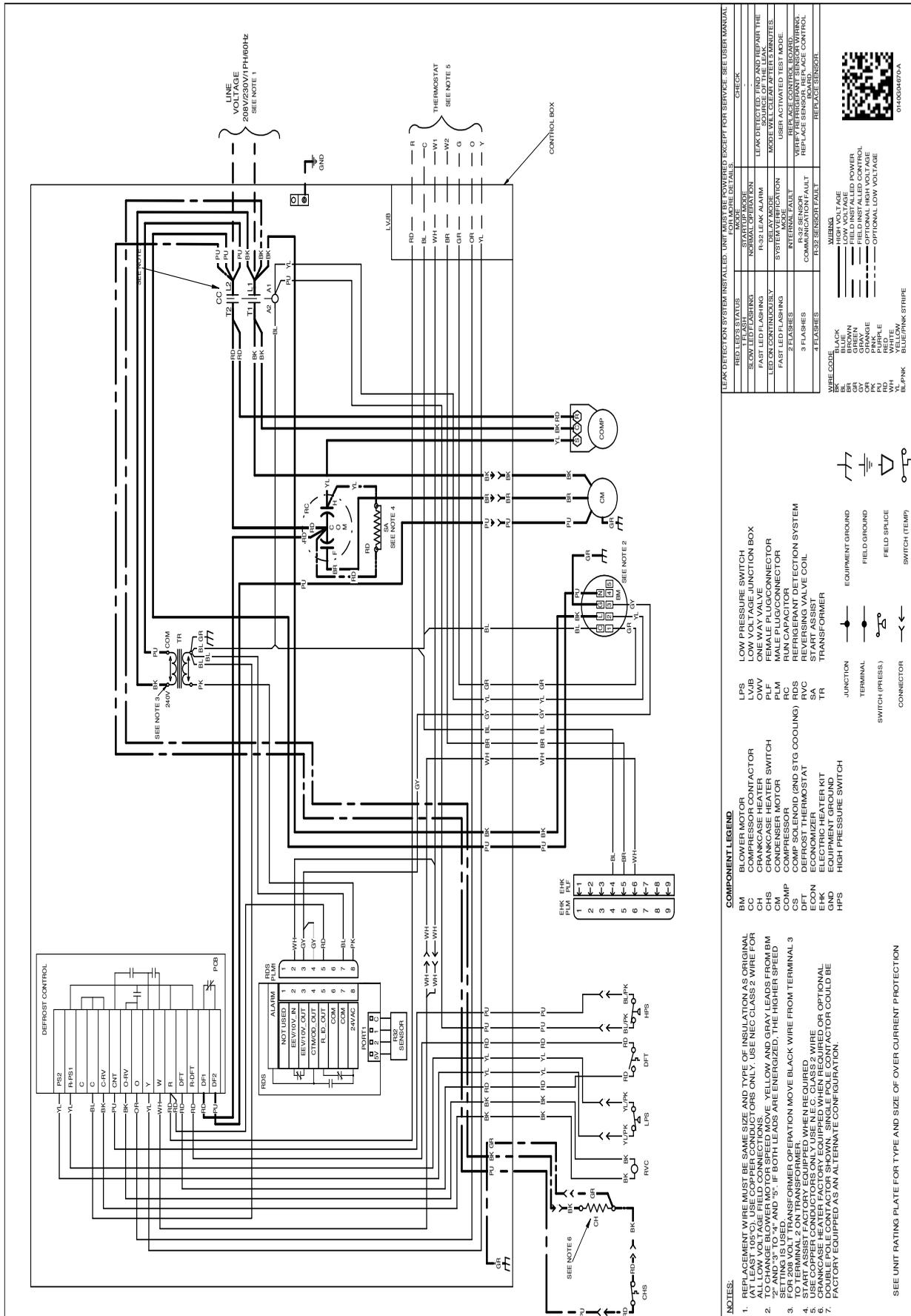
Heating kW Correction Factor					
Supply Voltage	240	230	220	210	208
Correction Factor	1.0	0.93	0.85	0.78	0.76

Multiply rated kW by correction factor to get actual kW



MODEL	UNIT DIMENSIONS				CHASSIS SIZE
	W	D	HEIGHT		
			A	B	
GPHH52431	66	34	27½	30	Small
GPHH53031	66	34	27½	30	Small
GPHH53631	66	34	32½	35	Medium
GPHH54231	66	34	32½	35	Medium
GPHH54831	66	34	32½	35	Medium
GPHH56031	66	34	36	38½	Large

MODEL	DUCT OPENINGS			
	SUPPLY		RETURN	
	W	H	W	H
GPHH52431	14	14	14	22
GPHH53031	14	14	14	22
GPHH53631	14	14	14	24
GPHH54231	14	14	14	24
GPHH54831	14	14	14	24
GPHH56031	14	14	14	24



LEAK DETECTION SYSTEM INSTALLED. UNIT MUST BE POWERED EXCEPT FOR SERVICE. SEE USER MANUAL.

LED STATUS				
NO LED FLASHING				
FAST LED FLASHING				
LED ON CONTINUOUSLY				
3 FLASHES				
4 FLASHES				

COMPONENT LEGEND

LPS	LOW PRESSURE SWITCH	TR	TRANSFORMER
LVB	LOW VOLTAGE JUNCTION BOX	TR	TRANSFORMER
OWV	ONE WAY VALVE	TR	TRANSFORMER
PLF	FEMALE PLUG CONNECTOR	TR	TRANSFORMER
PLM	MALE PLUG CONNECTOR	TR	TRANSFORMER
RC	RUN CAPACITOR	TR	TRANSFORMER
RDS	REFRIGERANT DETECTION SYSTEM	TR	TRANSFORMER
RVC	REFERRING VALVE COIL	TR	TRANSFORMER
TR	TRANSFORMER	TR	TRANSFORMER

NOTES:

- REPLACEMENT WIRE MUST BE SAME SIZE AND TYPE OF INSULATION AS ORIGINAL.
- ALL LOW VOLTAGE FIELD CONNECTIONS. TIGHTEN ONLY. USE NEO CLASS 2 WIRE FOR ALL LOW VOLTAGE FIELD CONNECTIONS.
- SETTING IS USED. BEFORE OPERATION MOVE BLACK WIRE FROM TERMINAL 3 TO TERMINAL 2 ON TRANSFORMER.
- START ASSIST FACTORY EQUIPPED WHEN REQUIRED.
- CRANKCASE HEATER FACTORY EQUIPPED WHEN REQUIRED OR OPTIONAL.
- DOUBLE POLE CONTACTOR SHOWN. SINGLE POLE CONTACTOR COULD BE FACTORY EQUIPPED AS AN ALTERNATE CONFIGURATION.

WIRE CODE

BL	BLACK	GR	GREEN
BR	BROWN	OR	ORANGE
PU	PURPLE	PK	PINK
WH	WHITE	YL	YELLOW
BL/PNK	BLACK/PINK STRIPE		

WIRING

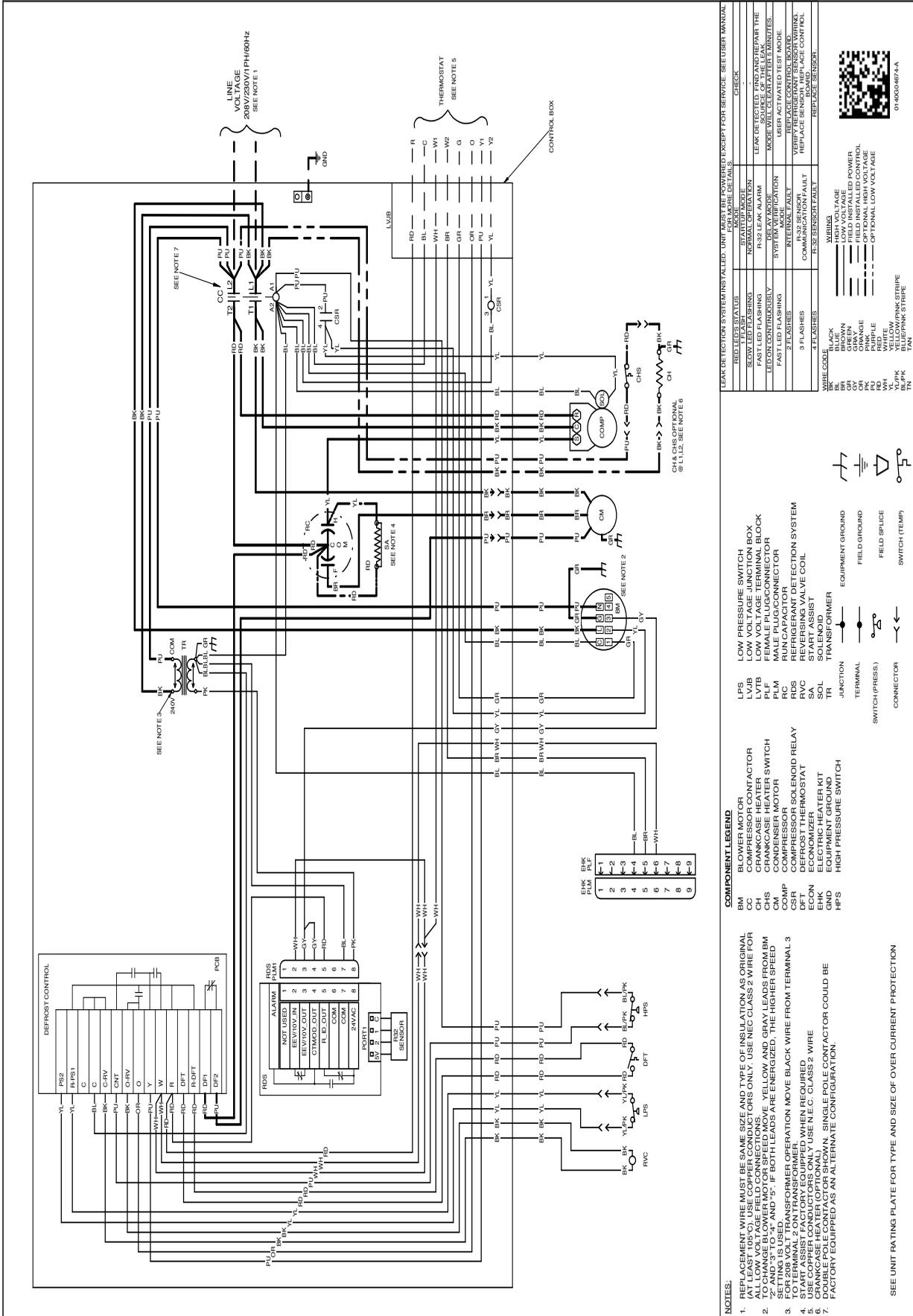
---	LOW VOLTAGE
---	FIELD INSTALLED POWER
---	OPTIONAL HIGH VOLTAGE
---	OPTIONAL LOW VOLTAGE

SEE UNIT RATING PLATE FOR TYPE AND SIZE OF OVER CURRENT PROTECTION

WARNING

High Voltage: Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury, or death.

Wiring is subject to change. Always refer to the wiring diagram or the unit for the most up-to-date wiring.



LEAK DETECTION SYSTEM (INSTALLED, UNIT MUST BE POWERED UP EXCEPT FOR SERVICE. SEE USER MANUAL FOR MORE DETAILS)

STATUS	CHECK
RED LED STATUS	LEAK DETECTED. FIND AND REPAIR THE SOURCE OF THE LEAK IMMEDIATELY.
YELLOW LED STATUS	LEAK DETECTED. USER ACTIVATED TEST MODE.
FAST LED FLASHING	REPLACE CONTROL BOARD.
2 FLASHES	INTERNAL FAULT.
3 FLASHES	REPLACE SENSOR.
4 FLASHES	REPLACE SENSOR FAULT.

WIRING

BLK	HIGH VOLTAGE
GRN	FIELD INSTALLED POWER
GR	FIELD INSTALLED CONTROL
CHG	CHARGE
PU	PURPLE
WH	WHITE
YL	YELLOW/PINK STRIPE
YL/PK	YELLOW/PINK STRIPE
YL/PK	YELLOW/PINK STRIPE
TAN	TAN

COMPONENT LEGEND

BM	BLOWER MOTOR
CC	COMPRESSOR CONTACTOR
CHS	CRANKCASE HEATER SWITCH
CM	COMPRESSOR MOTOR
COMP	COMPRESSOR
DFT	DEFROST THERMOSTAT
ECON	ECONOMIZER
GMK	GEAR MOTOR
HPS	HIGH PRESSURE SWITCH
LPS	LOW PRESSURE SWITCH
LVB	LOW VOLTAGE JUNCTION BOX
PLF	FEMALE PLUG/CONNECTOR
PLM	MALE PLUG/CONNECTOR
RVC	REVERSING VALVE COIL
RVC	REVERSING VALVE COIL
SA	START ASSIST
SOLENOID	SOLENOID
TR	TRANSFORMER
JUNCTION	EQUIPMENT GROUND
TERMINAL	FIELD GROUND
SWITCH (PRESS)	FIELD SPLICE
CONNECTOR	SWITCH (TEMP)

NOTES:

- REPLACEMENT WIRE MUST BE SAME SIZE AND TYPE OF INSULATION AS ORIGINAL (AT LEAST 105°C). USE COPPER CONDUCTORS ONLY. USE NEC CLASS 2 WIRE FOR TO CHANGE BLOWER MOTOR SPEED. MOVE YELLOW AND GRAY LEADS FROM BM SETTING IS USED AND "5", IF BOTH LEADS ARE ENERGIZED, THE HIGHER SPEED SETTING IS USED.
- FOR 208 VOLT TRANSFORMER OPERATION MOVE BLACK WIRE FROM TERMINAL 3 START ASSIST FACTORY EQUIPPED WHEN REQUIRED.
- USE COPPER CONDUCTORS ONLY USE N.E.C. CLASS 2 WIRE.
- DOUBLE POLE CONTACTOR SHOWN. SINGLE POLE CONTACTOR COULD BE FACTORY EQUIPPED AS AN ALTERNATE CONFIGURATION.

SEE UNIT RATING PLATE FOR TYPE AND SIZE OF OVER CURRENT PROTECTION

WARNING

High Voltage: Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury or death.

Wiring is subject to change. Always refer to the wiring diagram or the unit for the most up-to-date wiring.

ACCESSORIES

ACCESSORY DESCRIPTION	ITEM NUMBER	
	SMALL CHASSIS	MEDIUM/LARGE CHASSIS
Downflow Economizer (use w/PCCP roof curb)	DDNECNJPCHHA	DDNECNJPCHHA
Downflow Plenum Kit (use w/PCCP roof curb)	PCP101-103	PCP101-103
Downflow Plenum Kit (R-8) (use w/PCCP roof curb)	PCP101-103 R8	PCP101-103 R8
Elbow Flashing w/R-8 Liner	PCEF101-103	PCEF101-103
Economizer Wiring Harness	O259G00213	O259G00213
External Horizontal Filter Rack	DPHFRA	DPHFRA
Horizontal Economizer	DHZECNJPGCHM	DHZECNJPGCHM
Inline Fuse Kit	INFKPKG01	INFKPKG01
Isolation Relay Kit (req'd with Economizer)	IRKT-01	IRKT-01
Manual Damper	PCMD101-103	PCMD101-103
Manual Damper - Horizontal	GPHMD101-103	GPHMD101-103
Motorized Damper	PCMDM101-103	PCMDM101-103
Outdoor Thermostat Kit w/ Lockout Stat	OT18-60A	OT18-60A
Roof Curb	PCCP101-103	PCCP101-103
Square to Round Downflow (use w/PCCP roof curb)	SQRPC101	SQRPC102-103
Square to Round Horizontal	SQRPCH101	SQRPCH102-103