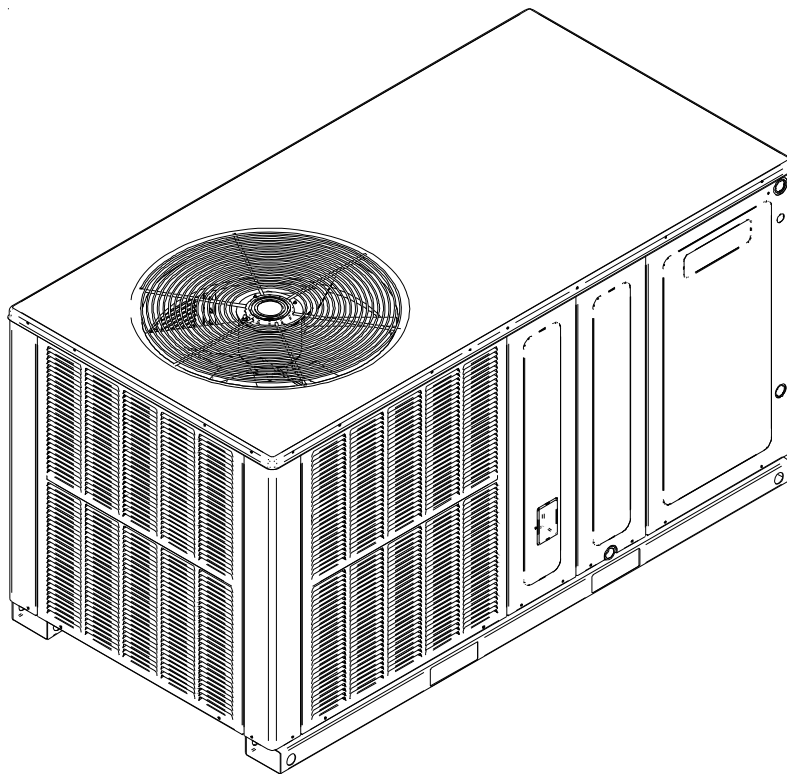




TECHNICAL MANUAL

GPH 14 SEER R-410A Package Heat Pump Units

- Refer to Service Manual RS6300011 (Horizontal) for installation, operation, and troubleshooting information.
- All safety information must be followed as provided in the Service Manual.
- Refer to the appropriate Parts Catalog for part number information.
- Models listed on page 3.
- Models qualify for the 2009 and 2010 Federal Tax Credits for Energy Efficiency**



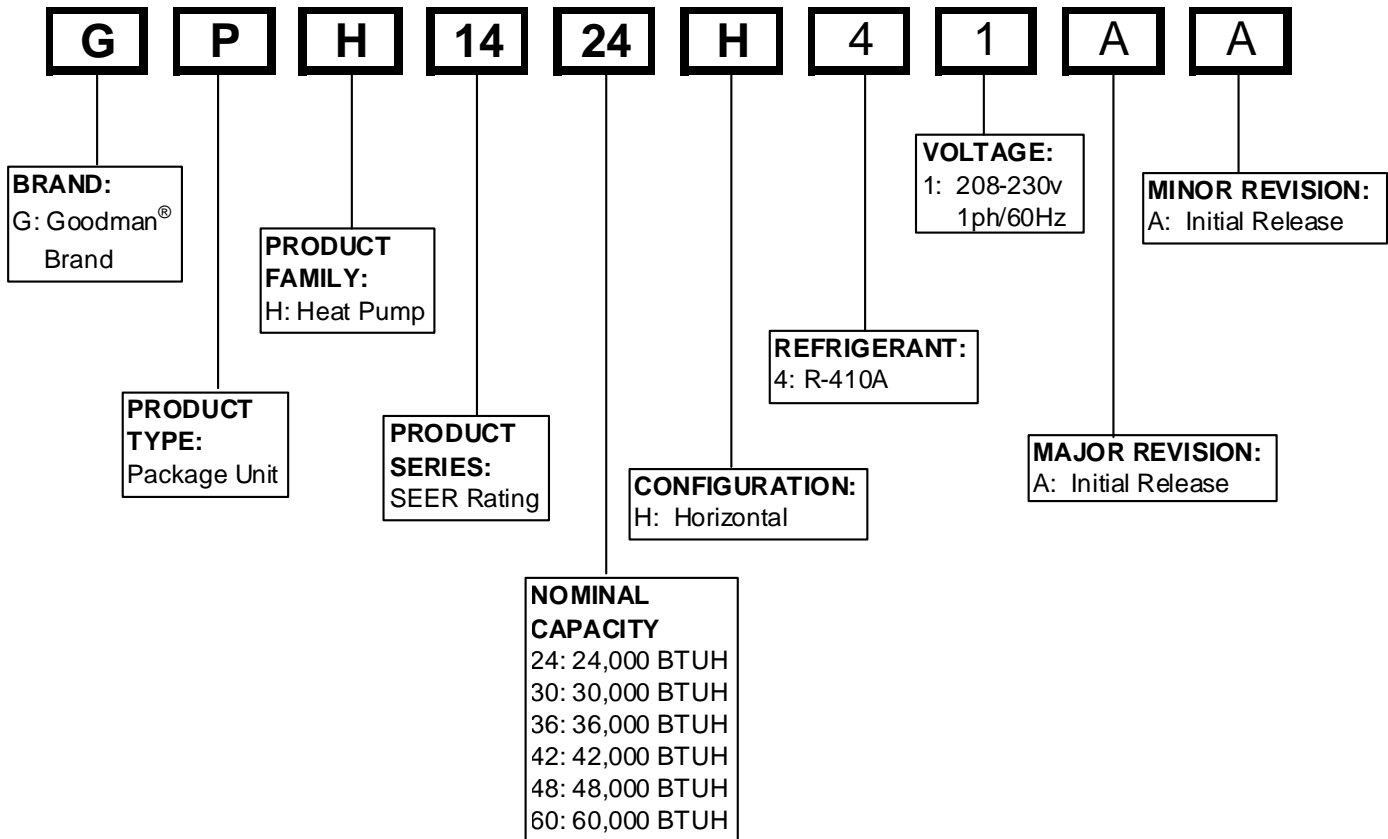
***Note that these tax credits are subject to specific requirements set forth in the American Recovery and Reinvestment Act of 2009 and in the Internal Revenue Code. Goodman recommends that consumers consult a tax professional if they have questions about the applicability of these credits.*



This manual is to be used by qualified, professionally trained HVAC technicians only. Goodman does not assume any responsibility for property damage or personal injury due to improper service procedures or services performed by an unqualified person.


RT6332008r3
November 2010


PRODUCT IDENTIFICATION

The model and manufacturing number are used for positive identification of component parts used in manufacturing. Please use these numbers when requesting service or parts information.



 **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. 

 **WARNING** Goodman will not be responsible for any injury or property damage arising from improper service or service procedures. If you install or perform service on this unit, you assume responsibility for any personal injury or property damage which may result. Many jurisdictions require a license to install or service heating and air conditioning equipment.

 **WARNING** Installation and repair of this unit should be performed ONLY by individuals meeting (at a minimum) the requirements of an "entry level technician" as specified by the Air-Conditioning, Heating, and Refrigeration Institute (AHRI). Attempting to install or repair this unit without such background may result in product damage, personal injury or death.

PRODUCT IDENTIFICATION

The model and manufacturing number are used for positive identification of component parts used in manufacturing. Please use these numbers when requesting service or parts information.

GPH1424H41A*

GPH1430H41A*

GPH1436H41A*

GPH1442H41A*

GPH1448H41A*

GPH1460H41A*

Models qualify for the 2009 and 2010 Federal Tax Credits
for Energy Efficiency**

***Note that these tax credits are subject to specific requirements set forth in the American Recovery and Reinvestment Act of 2009 and in the Internal Revenue Code. Goodman recommends that consumers consult a tax professional if they have questions about the applicability of these credits.*



The United States Environmental Protection Agency ("EPA") has issued various regulations regarding the introduction and disposal of refrigerants introduced into this unit. Failure to follow these regulations may harm the environment and can lead to the imposition of substantial fines. These regulations may vary by jurisdiction. Should questions arise, contact your local EPA office.



Do not connect or use any device that is not design certified by Goodman for use with this unit. Serious property damage, personal injury, reduced unit performance and/or hazardous conditions may result from the use of such non-approved devices.



To prevent the risk of property damage, personal injury, or death, do not store combustible materials or use gasoline or other flammable liquids or vapors in the vicinity of this appliance.

PRODUCT DESIGN

GPH Package Units are designed for outdoor installations only in either residential or light commercial applications.

The connecting ductwork (Supply and Return) can only be connected for horizontal airflow.

A return air filter must be installed behind the return air grille(s) or provision must be made for a filter in an accessible location within the return air duct. The minimum filter area should not be less than those sizes listed in the Specification Section. Under no circumstances should the unit be operated without return air filters.

A 3/4" pipe is provided for removal of condensate water from the indoor coil. In order to provide proper condensate flow, a drain trap is supplied and shipped loose inside the unit for field installation. (Do not reduce the drain line size).

Refrigerant flow control is achieved by use of restrictor orifices.

Package Heat Pump models use a combination of restrictor orifices and thermostatic expansion valves for refrigerant flow control.

Some heat pump models also have a suction line accumulator installed between the reversing valve and the compressor. The object of the accumulator is to:

1. Provide a liquid refrigerant storage vessel during prolonged system off cycles.
2. Store excess liquid refrigerant not needed by the system while running.
3. Return oil and saturated vapor to the compressor at a controlled rate.
4. Retain stored excess refrigerant during a sudden system pressure fluctuation such as seen in defrost cycles.

Refrigerant flow control is achieved by use of restrictor orifices. GPH units use the FastTest Access Fitting System, with a saddle that is either soldered to the suction and liquid lines or is fastened with a locking nut to the access fitting box (core) and then screwed into the saddle. **NOTE: The core must not be removed from the saddle until the refrigerant charge has been removed. Failure to do so could result in property damage or personal injury.**

The single phase units use permanent split capacitor (PSC) design compressors. Starting components are not required for these units. A low microfarad run capacitor assists the compressor to start and remains in the circuit during operation.

GPH14[24-60]H41* units have EEM indoor blower motors that are energized by a 24V signal from the IBR and are constant torque motors with very low power consumption. The EEM motors feature an integral control module.

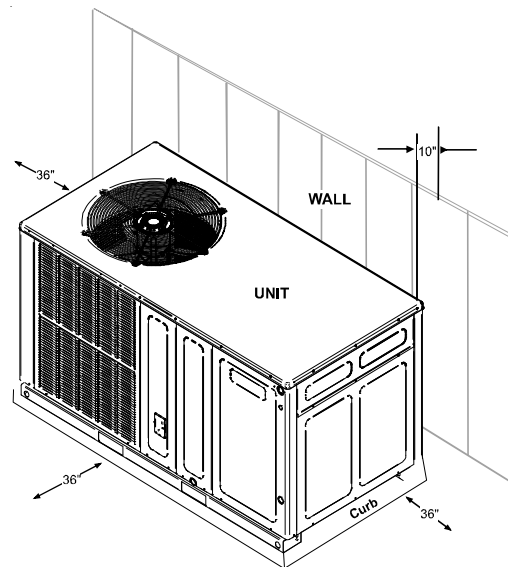
Air for condensing (cooling cycle) or evaporation (heating cycle) is drawn through the outdoor coil by a propeller fan, and is discharged vertically out the top of the unit. The outdoor coil is designed for .0 static. No additional restriction (ductwork) shall be applied.

Conditioned air is drawn through the filter(s), field installed, across the coil and back into the conditioned space by the indoor blower.

Package Heat Pump indoor sections are designed to accept optional components such as auxiliary electric heaters and circuit breakers. Provisions for these components have been made at time of manufacture.

Location and Clearances

NOTE: To ensure proper condensate drainage, unit must be installed in a level position.

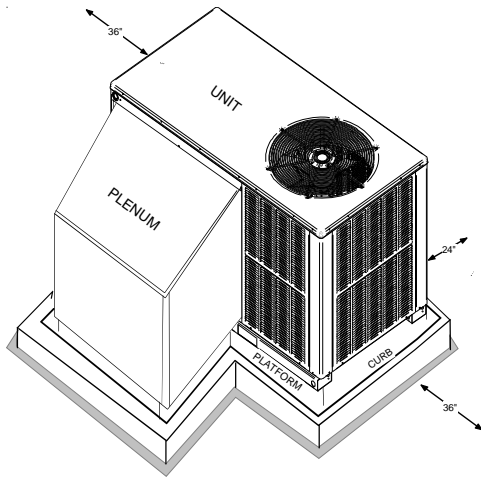


Outside Slab Installation - Horizontal (H)

NOTE: Roof overhang should be no more than 36" and provisions made to deflect the warm discharge air out from the overhang.

Minimum clearances are required to avoid air recirculation and keep the unit operating at peak efficiency.


PRODUCT DESIGN



Rooftop Installation - Horizontal (H)

NOTE: To ensure proper condensate drainage, unit must be installed in a level position.

In installations where the unit is installed above ground level and not serviceable from the ground (Example: roof top installations) the installer must provide service platform for service person with rails or guards in accordance with local codes or ordinances, or, in their absence, with the latest edition of the Uniform Mechanical Code Section 305.

 WARNING
TO PREVENT POSSIBLE PROPERTY DAMAGE, THE UNIT SHOULD REMAIN IN AN UPRIGHT POSITION DURING ALL RIGGING AND MOVING OPERATIONS. TO FACILITATE LIFTING AND MOVING IF A CRANE IS USED, PLACE THE UNIT IN AN ADEQUATE CABLE SLING.

Refer to Roof curb Installation Instructions for proper curb installation. Curbing must be installed in compliance with the National Roofing Contractors Association Manual.

HKR ELECTRICAL DATA

Model and Heat Kit Usage	Circuit #1		Circuit #2		Actual kW & BTU at 240V
	Minimum Circuit Ampacity at 208 / 240V	Maximum Overcurrent Protection (amps) at 208 / 240V	Minimum Circuit Ampacity at 208 / 240V	Maximum Overcurrent Protection (amps) at 208 / 240V	
GPH1424H41A*					
HKR05*,C*	24 / 27	30 / 30	----	----	4.75 / 16,200
HKR08*,C*	33 / 28	40 / 40	----	----	7.00 / 23,800
HKR10*,C*	45 / 51	60 / 60	----	----	9.50 / 32,400
GPH1430H41A*					
HKR05*,C*	24 / 27	30 / 30	----	----	4.75 / 16,200
HKR08*,C*	34 / 39	40 / 40	----	----	7.00 / 23,800
HKR10*,C*	45 / 52	60 / 60	----	----	9.50 / 32,400
HKR15*,C*	45 / 52	60 / 60	22 / 25	30 / 30	14.25 / 48,600
GPH1436H41A*					
HKR05*,C*	24 / 27	30 / 30	----	----	4.75 / 16,200
HKR08*,C*	34 / 39	40 / 40	----	----	7.00 / 23,800
HKR10*,C*	45 / 52	60 / 60	----	----	9.50 / 32,400
HKR15*,C*	45 / 52	60 / 60	22 / 25	30 / 30	14.25 / 48,600
GPH1442H41A*					
HKR05*,C*	25 / 27	30 / 30	----	----	4.75 / 16,200
HKR08*,C*	34 / 39	40 / 40	----	----	7.00 / 23,800
HKR10*,C*	46 / 52	60 / 60	----	----	9.50 / 32,400
HKR15*,C*	46 / 52	60 / 60	22 / 25	30 / 30	14.25 / 48,600
HKR20*,C*	46 / 52	60 / 60	43 / 49	60 / 60	19.50 / 66,500
GPH1448H41A*					
HKR05*,C*	25 / 28	30 / 30	----	----	4.75 / 16,200
HKR08*,C*	34 / 40	40 / 40	----	----	7.00 / 23,800
HKR10*,C*	46 / 53	60 / 60	----	----	9.50 / 32,400
HKR15*,C*	46 / 52	60 / 60	22 / 25	30 / 30	14.25 / 48,600
HKR20*,C*	46 / 52	60 / 60	43 / 49	60 / 60	19.50 / 66,500
GPH1460H41A*					
HKR05*,C*	26 / 30	30 / 30	----	----	4.75 / 16,200
HKR08*,C*	36 / 40	40 / 40	----	----	7.00 / 23,800
HKR10*,C*	48 / 54	60 / 60	----	----	9.50 / 32,400
HKR15*,C*	48 / 54	60 / 60	22 / 25	30 / 30	14.25 / 48,600
HKR20*,C*	48 / 54	60 / 60	43 / 49	60 / 60	19.50 / 66,500

IMPORTANT NOTE: A separate power supply is required for the HKR heater kit.

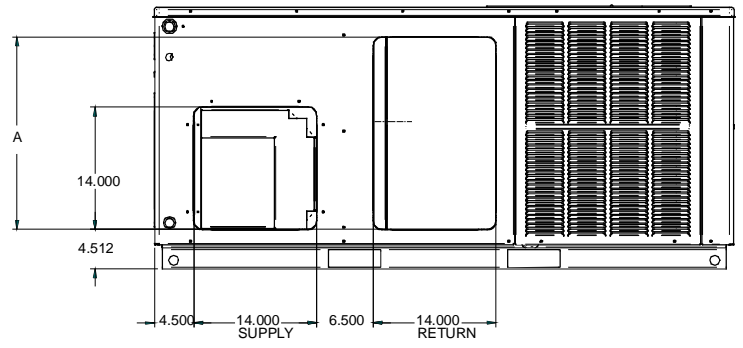
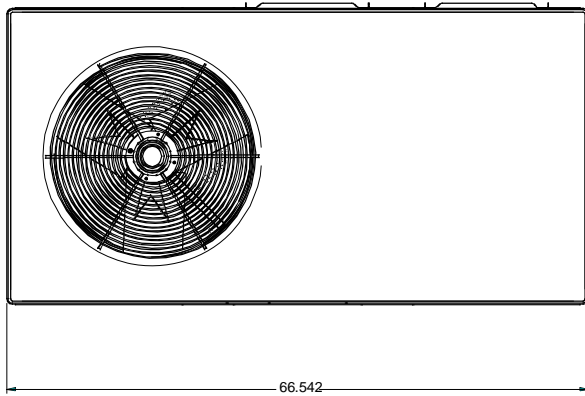


WARNING

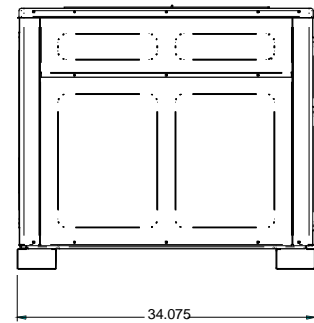
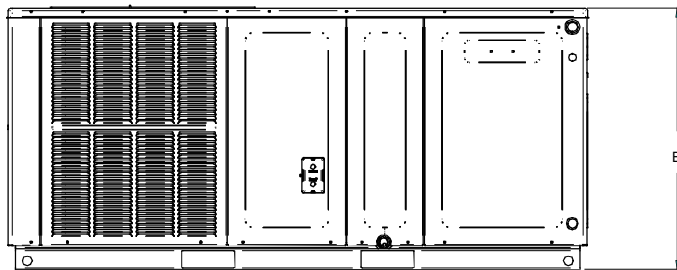
All wires and overcurrent protection devices are sized for use with electric heaters only and without refrigeration. If heaters are not installed with above wire size, overheating and fire could occur. See PACKAGE COOLING SPECIFICATIONS section for minimum circuit ampacity and maximum overcurrent protection during refrigeration cycle.

PRODUCT DIMENSIONS

GPH14[24-60]H41*



BACK VIEW
(DUCT OPENINGS)



Chassis	Model	A	B
Small	GPH1424H41**	22.000	29.932
	GPH1430H41**	22.000	29.932
Medium	GPH1436H41**	24.000	34.932
	GPH1442H41**	24.000	34.932
Large	GPH1448H41**	24.000	38.682
	GPH1460H41**	24.000	38.682

PACKAGE HEAT PUMP SPECIFICATIONS GPH14[24-36]H41A*

		GPH1424H41**	GPH1430H41**	GPH1436H41**
COOLING CAPACITY	COOLING CAPACITY, BTUH	24,400	29,600	36,000
	SEER / EER	15.0 / 12.2	14.5 / 12.2	14.3 / 12.0
HEATING RATING	47°/43°F	22,800	27,600	33,000
	35°/33°F	15,500	18,600	26,000
	17°/15°F	13,000	15,400	21,400
	HSPF	8.0	8.3	8.5
UNIT ELECTRICAL SPECIFICATION	VOLTAGE (NAMEPLATE)	208/230-60-1	208/230-60-1	208/230-60-1
	AMPS	15.4	17.1	20.1
	MIN CIRCUIT AMPACITY	12.5	15.6	24.2
	MAX OVERCURRENT PROTECTION ⁽²⁾	20	25	40
COMPRESSOR	TYPE	SCROLL	SCROLL	SCROLL
	RATED LOAD AMPS	12.8	14.1	16.7
	LOCKED ROTOR AMPS	58.3	73	79
CONDENSER FAN MOTOR	HORSEPOWER	1/6	1/6	1/4
	RPM	815	815	1075
	FULL LOAD AMPS	1.1	1.1	1.5
	LOCKED ROTOR AMPS	1.7	1.7	3.0
CONDENSER FAN	BLADE DIAMETER (INCHES) / # OF BLADES	22 / 3	22 / 3	22 / 4
CONDENSER COIL	FACE AREA (SQ. FT.)	13.4	13.4	17
	NUMBER OF ROWS	1	1	1
	FINS PER INCH	24	24	24
EVAPORATOR BLOWER MOTOR	HORSEPOWER - NO. OF SPEEDS	1/2 - 5	1/2 - 5	1/2 - 5
	FULL LOAD AMPS	1.50	1.86	1.86
	LOCKED ROTOR AMPS	NA	NA	NA
	MOTOR SPEED TAP - COOLING	T2	T2	T2
	RPM	1,050	1,050	1,050
EVAPORATOR BLOWER	DIAMETER X WIDTH (INCHES)	10 X 8	10 X 8	10 X 8
	RATED SCFM COOLING	850	1,050	1,200
	HI EFFICIENCY COOLING CFM	850	1,050	1,200
	FAN ONLY COOLING CFM	800	950	1,100
	MAX EXTERNAL STATIC PRESS ("w.c.)	0.5	0.5	0.5
EVAPORATOR COIL	FACE AREA (SQ. FT.)	5.25	4.67	5.20
	NUMBER OF ROWS	3	4	3
	FINS PER INCH	16	16	14
GENERAL INFORMATION	FILTER SIZE (SQ. FT.)	20 x 20 x 1	20 x 25 x 1	25 x 25 x 1
	DRAIN SIZE (INCHES)	3/4"	3/4"	3/4"
	EXPANSION DEVICE (INDOOR / OUTDOOR)	ORIFICE (0.057 / 0.049)	ORIFICE (0.065 / 0.047)	ORIFICE (0.068 / 0.067)
	REFRIGERANT CHARGE R-410A (OZS.)	85	105	125
	POWER SUPPLY CONDUIT KNOCKOUT SIZE (*)	3/4, 1, 1-1/4	3/4, 1, 1-1/4	3/4, 1, 1-1/4
	LOW VOLTAGE CONDUIT KNOCKOUT SIZE (*)	1/2	1/2	1/2
	PRESSURE SWITCH - OPENS / CLOSES PSIG	7 / 25	7 / 25	7 / 25
	SHIPPING WEIGHT (LBS.)	325	325	385
	OPERATING WEIGHT (LBS.)	315	315	375

⁽²⁾ Maximum Overcurrent Protection Device: **MUST** use Time Delay Fuse or HACR type Circuit Breaker of the same size as noted.

* Calculated external filter size based on air velocity of 300 ft/min.

Wire size should be determined in accordance with National Electrical Codes. Extensive wire runs will require larger wire sizes.

Unit specifications are subject to change without notice. **ALWAYS** refer to the units serial plate for the most up-to-date general and electrical information.

IMPORTANT: While this data is presented as a guide, it is important to electrically connect the unit and properly size wires and fuses/circuit breakers in accordance with the National Electrical Code and/or all local codes. Data shown is w/o electric heaters.

PACKAGE HEAT PUMP SPECIFICATIONS GPH14[42-60]H41A*

		GPH1442H41**	GPH1448H41**	GPH1460H41**
COOLING CAPACITY	COOLING CAPACITY, BTUH	40,000	46,000	57,000
	SEER / EER	14.2 / 12.0	14.5 / 12.1	14.2 / 12.0
HEATING RATING	47°/43°F	37,600	45,000	54,500
	35°/33°F	27,500	32,000	43,000
	17°/15°F	21,600	26,000	33,800
	HSPF	8.3	8.3	8.4
UNIT ELECTRICAL SPECIFICATION	VOLTAGE (NAMEPLATE)	208/230-60-1	208/230-60-1	208/230-60-1
	AMPS	22.2	24.2	30.7
	MIN CIRCUIT AMPACITY	26.6	29.2	40.2
	MAX OVERCURRENT PROTECTION ⁽²⁾	40	45	60
COMPRESSOR	TYPE	SCROLL	SCROLL	SCROLL
	RATED LOAD AMPS	17.9	19.9	26.4
	LOCKED ROTOR AMPS	112	109	134
CONDENSER FAN MOTOR	HORSEPOWER	1/4	1/4	1/4
	RPM	1075	1075	1075
	FULL LOAD AMPS	1.4	1.4	1.4
	LOCKED ROTOR AMPS	2.9	2.9	2.9
CONDENSER FAN	BLADE DIAMETER (INCHES) / # OF BLADES	22 / 4	22 / 4	22 / 4
CONDENSER COIL	FACE AREA (SQ. FT.)	17	19.1	19.1
	NUMBER OF ROWS	1	2	2
	FINS PER INCH	24	16	16
EVAPORATOR BLOWER MOTOR	HORSEPOWER - NO. OF SPEEDS	1/2 - 5	3/4 - 5	3/4 - 5
	FULL LOAD AMPS	2.9	2.9	2.9
	LOCKED ROTOR AMPS	NA	NA	NA
	MOTOR SPEED TAP - COOLING	T2	T2	T2
	RPM	1,050	1,050	1,050
EVAPORATOR BLOWER	DIAMETER X WIDTH (INCHES)	10 X 8	10 X 8	11 X 8
	RATED SCFM COOLING	1,300	1,600	1,600
	HI EFFICIENCY COOLING CFM	1,300	1,600	1,600
	5 TON NOMINAL COOLING CFM	NA	NA	1,800
	FAN ONLY COOLING CFM	1,200	1,400	1,600
	MAX EXTERNAL STATIC PRESS ("w.c.)	0.5	0.5	0.5
EVAPORATOR COIL	FACE AREA (SQ. FT.)	6.2	6.2	7.0
	NUMBER OF ROWS	4	4	4
	FINS PER INCH	14	14	14
GENERAL INFORMATION	FILTER SIZE (SQ. FT.)	(2) 20 x 20 x 1	(2) 20 x 20 x 1	(2) 20 x 25 x 1
	DRAIN SIZE (INCHES)	3/4"	3/4"	3/4"
	EXPANSION DEVICE (INDOOR / OUTDOOR)	ORIFICE (0.072 / 0.065)	ORIFICE (0.076 / 0.065)	ORIFICE (0.088 / 0.071)
	REFRIGERANT CHARGE R-410A (OZS.)	150	190	200
	POWER SUPPLY CONDUIT KNOCKOUT SIZE (INCHES)	3/4, 1, 1-1/4	3/4, 1, 1-1/4	3/4, 1, 1-1/4
	LOW VOLTAGE CONDUIT KNOCKOUT SIZE (INCHES)	1/2	1/2	1/2
	PRESSURE SWITCH - OPENS / CLOSES PSIG	7 / 25	7 / 25	7 / 25
	SHIPPING WEIGHT (LBS.)	385	415	415
	OPERATING WEIGHT (LBS.)	375	405	405

⁽²⁾ Maximum Overcurrent Protection Device: **MUST** use Time Delay Fuse or HACR type Circuit Breaker of the same size as noted.

* Calculated external filter size based on air velocity of 300 ft/min.

Wire size should be determined in accordance with National Electrical Codes. Extensive wire runs will require larger wire sizes.

Unit specifications are subject to change without notice. **ALWAYS** refer to the units serial plate for the most up-to-date general and electrical information.

IMPORTANT: While this data is presented as a guide, it is important to electrically connect the unit and properly size wires and fuses/circuit breakers in accordance with the National Electrical Code and/or all local codes. Data shown is w/o electric heaters.

ACCESSORIES

GPH13[24-60]H41A*

ACCESSORIES - GPC/GPH***H MODELS	
Part Number	Description
OT18-60A	Outdoor Thermostat Kit w/Lockout Stat
OT/EHR18-60	Emergency Heat Relay Kit
HKR	Electric Heat Kit
PCCP101-103	Roof Curb
PCP101-103	Downflow Plenum Kit
PCP101-103R8	Downflow Plenum Kit w/ R-8 Insulation
PCEC101-103	Downflow Economizer for GPC-(H) A/C - To Be Used With PCP101-103
PCEH101-103	Downflow Economizer for GPH-(H) Heat Pump - To Be Used With PCP101-103
PCMD101-103	Manual Damper - To Be Used With PCP101-103
PCMDM101-103	Motorized Damper - To Be Used With PCP101-103
GPHMD101-103	Manual Damper for Horizontal Applications
SQRPCH101	Square to Round Adapters 16" & 14"
SQRPCH102-103	Square to Round Adapters 18" & 14"
SQRPC101	Square to Round Adapter - For Use With PCCP101-103 Curb 16" Rounds
SQRPC102-103	Square to Round Adapter For Use With PCCP101-103 Curb 18" Rounds
PCFR101-103	External Horizontal Filter Rack
PCEF101-103	Elbow & Flashing w/ R-8 Liner
CDK36	Flush Mount Concentric Duct Kit
CDK36515	Flush Mount Concentric Duct Kit w/ Filter
CDK36530	Step Down Concentric Duct Kit
CDK36535	Step Down Concentric Duct Kit w/ Filter
CDK4872	Flush Mount Concentric Duct Kit
CDK4872515	Flush Mount Concentric Duct Kit w/ Filter
CDK4872530	Step Down Concentric Duct Kit
CDK4872535	Step Down Concentric Duct Kit w/ Filter

BLOWER PERFORMANCE DATA

GPH14[24-60]H41A*

Dry Coil Data

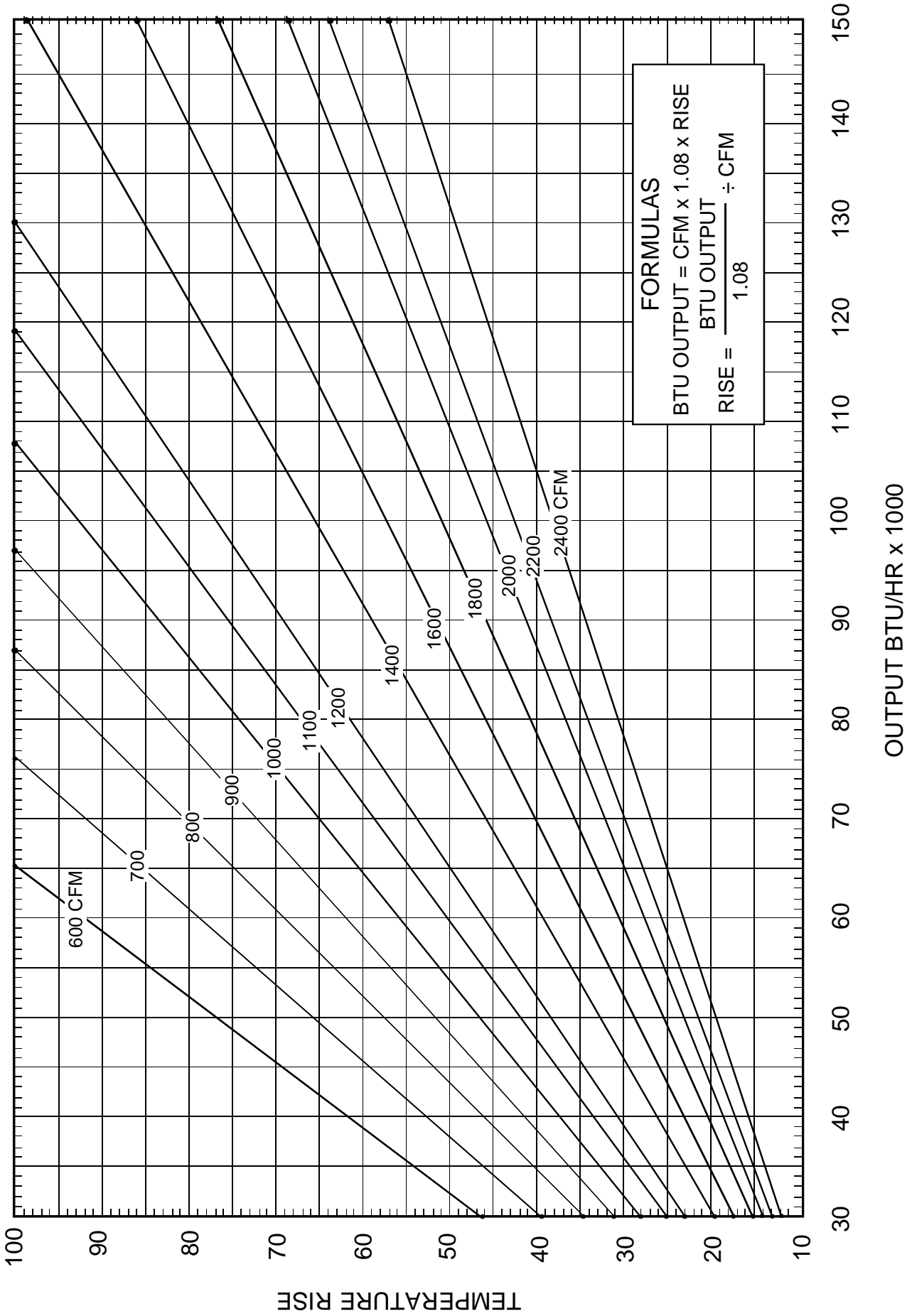
Model	Speed	Volts		E.S.P (In. of H ₂ O)							
				0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
GPH1424H41**	T1	230	CFM	934	759	755	638	581	489	-	-
			WATTS	95	77	76	73	83	90	-	-
	T2,T3	230	CFM	990	837	801	744	696	652	601	-
			WATTS	107	94	105	110	119	133	142	-
	T4, T5	230	CFM	1061	989	947	925	876	-	-	-
			WATTS	126	134	146	158	169	-	-	-
GPH1430H41**	T1	230	CFM	1022	929	894	829	797	748	695	643
			WATTS	116	114	126	134	144	156	168	173
	T2,T3	230	CFM	1103	1063	1012	962	937	-	-	-
			WATTS	142	154	165	173	185	-	-	-
	T4, T5	230	CFM	1285	1240	1202	1163	1124	1076	1046	1003
			WATTS	205	218	231	244	257	268	280	288
GPH1436H41**	T1	230	CFM	1234	1111	1071	1024	933	922	-	-
			WATTS	144	140	152	164	179	183	-	-
	T2,T3	230	CFM	1287	1232	1186	1133	1099	1053	-	-
			WATTS	162	175	187	201	213	221	-	-
	T4, T5	230	CFM	1381	1325	1277	1233	1181	1144	-	-
			WATTS	195	203	217	233	247	258	-	-
GPH1442H41**	T1	230	CFM	1272	1197	1145	1106	1055	998	947	906
			WATTS	160	168	183	191	211	220	230	243
	T2,T3	230	CFM	1357	1297	1244	1194	1147	1099	1049	1008
			WATTS	188	202	213	228	245	255	267	284
	T4, T5	230	CFM	1537	1478	1431	1386	1336	1293	1253	1208
			WATTS	244	258	274	288	303	317	329	341
GPH1448H41**	T1	230	CFM	1418	1383	1349	1312	1275	1228	1178	1141
			WATTS	242	258	273	282	299	308	320	338
	T2,T3	230	CFM	1175	1635	1645	1515	1510	1450	1430	1400
			WATTS	395	420	435	445	455	465	470	475
	T4, T5	230	CFM	1845	1790	1715	1685	1590	1580	1530	1500
			WATTS	490	505	520	535	550	560	570	575
GPH1460H41**	T1, T2, T3	230	CFM	1775	1635	1645	1515	1510	1450	1430	1400
			WATTS	395	420	435	445	455	465	470	475
	T4, T5	230	CFM	2025	1900	1840	1780	1725	1650	1620	1580
			WATTS	575	595	620	630	645	655	660	670

NOTES:

1. Data shown is dry coil. Wet coil pressure drop is approx.
2. 0.1" H₂O, for 2 row indoor coil; 0.2" H₂O, for 3 row indoor coil; and 0.3" H₂O, for 4 row indoor coil.
3. Data shown does not include filter pressure drop, approx. 0.08" H₂O.
4. Reduce airflow by 2% for 208V operation.

BLOWER PERFORMANCE DATA

BTU OUTPUT vs TEMPERATURE RISE CHART



COOLING PERFORMANCE DATA

GPH1424H41A*

EXPANDED PERFORMANCE DATA

COOLING OPERATION

MODEL: GPH1424H41A*

Design Subcooling, 10 ± 2 °F @ the liquid access fitting connection AHRI 95 test conditions. Design Superheat 9 ± 2 °F @ the compressor suction access fitting connection.

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	955	MBh	23.9	24.8	27.2	-	23.4	24.2	26.5	-	22.8	23.6	25.9	-	22.2	23.1	25.3	-	21.1	21.9	24.0	-	19.6	20.3	22.2	-
		S/T	0.75	0.62	0.43	-	0.77	0.65	0.45	-	0.79	0.66	0.46	-	0.82	0.68	0.47	-	0.85	0.71	0.49	-	0.86	0.72	0.50	-
		Delta T	17	15	11	-	17	15	11	-	17	15	11	-	18	15	12	-	17	15	11	-	16	14	11	-
		KW	1.54	1.57	1.62	-	1.66	1.70	1.75	-	1.77	1.81	1.87	-	1.86	1.91	1.97	-	1.95	1.99	2.06	-	2.02	2.06	2.13	-
		AMPS	6.4	6.5	6.7	-	6.8	7.0	7.2	-	7.4	7.6	7.8	-	7.9	8.0	8.3	-	8.3	8.5	8.8	-	8.8	9.0	9.3	-
	850	HI PR	236	253	268	-	264	284	300	-	301	323	342	-	342	368	389	-	385	414	438	-	425	458	484	-
		LO PR	111	118	129	-	117	125	136	-	122	129	141	-	128	136	148	-	134	143	156	-	139	147	161	-
		MBh	23.2	24.1	26.4	-	22.7	23.5	25.7	-	22.1	22.9	25.1	-	21.6	22.4	24.5	-	20.5	21.3	23.3	-	19.0	19.7	21.6	-
		S/T	0.71	0.59	0.41	-	0.74	0.62	0.43	-	0.76	0.63	0.44	-	0.78	0.65	0.45	-	0.81	0.68	0.47	-	0.82	0.68	0.47	-
		Delta T	18	15	12	-	18	16	12	-	18	16	12	-	18	16	12	-	18	16	12	-	17	15	11	-
745	KW	1.52	1.56	1.61	-	1.65	1.68	1.74	-	1.75	1.79	1.85	-	1.85	1.89	1.96	-	1.93	1.97	2.04	-	2.00	2.05	2.12	-	
	AMPS	6.3	6.5	6.6	-	6.8	6.9	7.1	-	7.3	7.5	7.7	-	7.8	8.0	8.2	-	8.3	8.5	8.7	-	8.7	8.9	9.2	-	
	HI PR	233	251	265	-	262	282	297	-	298	320	338	-	339	365	385	-	381	410	433	-	421	453	479	-	
	LO PR	110	117	127	-	116	123	135	-	120	128	140	-	127	135	147	-	133	141	154	-	137	146	159	-	
	MBh	21.4	22.2	24.3	-	20.9	21.7	23.8	-	20.4	21.2	23.2	-	19.9	20.7	22.6	-	18.9	19.6	21.5	-	17.5	18.2	19.9	-	
75	955	S/T	0.69	0.57	0.40	-	0.71	0.59	0.41	-	0.73	0.61	0.42	-	0.75	0.63	0.44	-	0.78	0.65	0.45	-	0.79	0.66	0.46	-
		Delta T	18	16	12	-	18	16	12	-	18	16	12	-	19	16	12	-	18	16	12	-	17	15	11	-
		KW	1.55	1.58	1.64	1.69	1.67	1.71	1.77	1.83	1.78	1.82	1.89	1.95	1.88	1.92	1.99	2.06	1.96	2.01	2.08	2.15	2.03	2.08	2.15	2.23
		AMPS	6.4	6.6	6.8	7.0	6.9	7.1	7.3	7.5	7.5	7.6	7.9	8.1	7.9	8.1	8.4	8.7	8.4	8.6	8.9	9.2	8.9	9.1	9.4	9.7
		HI PR	238	256	270	282	267	287	303	316	304	327	345	360	346	372	393	410	389	419	442	461	430	463	488	509
	850	LO PR	112	119	130	138	118	126	137	146	123	131	143	152	129	137	150	160	135	144	157	167	140	149	163	173
		MBh	23.6	24.3	26.3	28.2	23.1	23.7	25.7	27.6	22.5	23.2	25.1	26.9	22.0	22.6	24.5	26.3	20.9	21.5	23.2	25.0	19.3	19.9	21.5	23.1
		S/T	0.81	0.72	0.55	0.35	0.84	0.75	0.57	0.37	0.86	0.77	0.58	0.37	0.89	0.79	0.60	0.39	0.92	0.82	0.62	0.40	0.93	0.83	0.63	0.40
		Delta T	21	19	16	11	21	19	16	11	21	19	16	11	21	19	16	11	21	19	16	11	19	18	15	10
		KW	1.54	1.57	1.62	1.68	1.66	1.70	1.75	1.81	1.77	1.81	1.87	1.93	1.86	1.91	1.97	2.04	1.95	1.99	2.06	2.13	2.02	2.06	2.13	2.21
745	AMPS	6.4	6.5	6.7	6.9	6.8	7.0	7.2	7.5	7.4	7.6	7.8	8.1	7.9	8.0	8.3	8.6	8.3	8.5	8.8	9.1	8.8	9.0	9.3	9.6	
	HI PR	236	253	268	279	264	284	300	313	301	323	342	356	342	368	389	406	385	415	438	457	426	458	484	504	
	LO PR	111	118	129	137	117	125	136	145	122	129	141	151	128	136	149	158	134	143	156	166	139	147	161	171	
	MBh	21.8	22.4	24.3	26.1	21.3	21.9	23.7	25.5	20.8	21.4	23.2	24.8	20.3	20.9	22.6	24.2	19.3	19.8	21.5	23.0	17.8	18.4	19.9	21.3	
	S/T	0.78	0.70	0.53	0.34	0.81	0.72	0.55	0.36	0.83	0.74	0.56	0.36	0.86	0.77	0.58	0.37	0.89	0.80	0.60	0.39	0.90	0.80	0.61	0.39	
745	Delta T	21	19	16	11	21	20	16	11	21	20	16	11	21	20	16	11	21	19	16	11	20	18	15	10	
	KW	1.50	1.53	1.58	1.63	1.62	1.65	1.71	1.77	1.72	1.76	1.82	1.88	1.82	1.86	1.92	1.99	1.90	1.94	2.01	2.08	1.96	2.01	2.08	2.15	
	AMPS	6.2	6.3	6.5	6.8	6.7	6.8	7.0	7.3	7.2	7.4	7.6	7.9	7.7	7.8	8.1	8.4	8.1	8.3	8.6	8.9	8.6	8.8	9.1	9.4	
	HI PR	228	246	260	271	256	276	291	304	292	314	331	346	332	357	377	394	374	402	425	443	413	444	469	489	
	LO PR	108	114	125	133	114	121	132	141	118	126	137	146	124	132	144	153	130	138	151	161	134	143	156	166	

* Entering Indoor Dry Bulb Temperature

NOTE: Shaded area is ACCA (TVA) conditions. High and low pressures are measured at the liquid and suction access fittings.

COOLING PERFORMANCE DATA

GPH1424H41A*

EXPANDED PERFORMANCE DATA

EXPANDED PERFORMANCE DATA

MODEL: GPH1424H41A*

Design Subcooling, 10 ± 2 °F @ the liquid access fitting connection AHRI 95 test conditions. Design Superheat 9 ± 2°F @ the compressor suction access fitting connection.

IDB*	Airflow	Outdoor Ambient Temperature												Cooling Operation													
		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	955	MBh	24.7	25.3	27.0	28.9	24.2	24.7	26.4	28.2	23.6	24.1	25.8	27.5	23.0	23.5	25.1	26.9	21.9	22.3	23.9	25.5	20.3	20.7	22.1	23.6	
		S/T	0.93	0.87	0.71	0.53	0.96	0.90	0.74	0.55	1.00	0.93	0.76	0.56	1.00	0.96	0.78	0.58	1.00	1.00	1.00	0.81	0.60	1.00	1.00	0.82	0.61
		Delta T	22	21	18	15	22	22	19	15	23	22	19	15	22	22	19	15	21	21	22	19	15	19	20	17	14
		KW	1.56	1.60	1.65	1.71	1.69	1.73	1.78	1.84	1.80	1.84	1.90	1.97	1.90	1.94	2.01	2.08	1.98	1.98	2.03	2.10	2.17	2.05	2.10	2.17	2.25
		AMPS	6.5	6.6	6.8	7.1	7.0	7.1	7.3	7.6	7.5	7.7	7.9	8.2	8.0	8.2	8.4	8.7	8.5	8.5	8.7	9.0	9.3	9.0	9.2	9.5	9.8
		HI PR	240	259	273	285	270	290	306	320	307	330	349	363	349	376	397	414	393	423	447	466	466	434	467	493	515
		LO PR	113	120	131	140	119	127	139	148	124	132	144	154	130	139	152	161	137	145	159	169	169	141	150	164	175
		MBh	24.0	24.6	26.2	28.0	23.5	24.0	25.6	27.4	22.9	23.4	25.0	26.7	22.4	22.8	24.4	26.1	21.2	21.7	23.2	24.8	19.7	20.1	21.5	23.0	
		S/T	0.89	0.83	0.68	0.51	0.92	0.86	0.70	0.53	0.94	0.89	0.72	0.54	0.97	0.91	0.74	0.56	1.00	0.95	0.77	0.58	1.00	0.96	0.78	0.58	
		Delta T	23	22	19	15	23	22	19	16	23	22	19	16	24	24	21	16	24	23	22	19	15	21	21	18	14
85	850	KW	1.55	1.58	1.64	1.69	1.67	1.71	1.77	1.83	1.78	1.82	1.89	1.95	1.88	1.92	1.99	2.06	1.96	2.01	2.08	2.15	2.03	2.08	2.15	2.23	
		AMPS	6.4	6.6	6.8	7.0	6.9	7.1	7.3	7.5	7.5	7.6	7.9	8.1	7.9	8.1	8.4	8.7	8.4	8.6	8.9	9.2	8.9	9.1	9.4	9.7	
		HI PR	238	256	270	282	267	287	303	316	304	327	345	360	346	372	393	410	389	419	442	461	430	463	488	510	
		LO PR	112	119	130	139	118	126	137	146	123	131	143	152	129	137	150	160	135	144	157	167	140	149	163	173	
		MBh	22.2	22.7	24.2	25.9	21.7	22.1	23.6	25.3	21.1	21.6	23.1	24.7	20.6	21.1	22.5	24.1	19.6	20.0	21.4	22.9	18.2	18.6	19.8	21.2	
		S/T	0.86	0.80	0.65	0.49	0.89	0.83	0.68	0.51	0.91	0.85	0.69	0.52	0.94	0.88	0.72	0.54	0.97	0.91	0.74	0.56	0.98	0.92	0.75	0.56	
		Delta T	23	22	20	16	24	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16	22	21	18	15	
		KW	1.51	1.54	1.60	1.65	1.63	1.67	1.72	1.78	1.74	1.78	1.84	1.90	1.83	1.87	1.94	2.00	1.91	1.96	2.02	2.09	1.98	2.03	2.10	2.17	
		AMPS	6.3	6.4	6.6	6.8	6.7	6.9	7.1	7.3	7.3	7.4	7.7	7.9	7.7	7.9	8.2	8.4	8.2	8.4	8.6	8.9	9.0	8.7	8.9	9.1	9.5
		HI PR	231	248	262	274	259	279	294	307	295	317	335	349	335	361	381	398	377	406	429	447	417	449	474	494	
LO PR	109	116	126	134	115	122	133	142	119	127	139	148	125	133	146	155	131	140	152	162	136	144	158	168			

NOTE: Shaded area reflects ARI rating conditions

IDB*	Airflow	Outdoor Ambient Temperature												Cooling Operation													
		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		
85	955	MBh	25.2	25.7	26.9	28.7	24.6	25.1	26.3	28.0	24.0	24.5	25.6	27.3	23.4	23.9	25.0	26.7	22.3	22.7	23.8	25.3	20.6	21.0	22.0	23.5	
		S/T	0.98	0.94	0.85	0.69	1.00	0.98	0.88	0.71	1.00	1.00	0.90	0.73	1.00	1.00	0.93	0.76	1.00	1.00	0.97	0.79	1.00	1.00	0.98	0.79	
		Delta T	24	23	22	19	24	24	22	19	23	24	22	19	23	23	22	19	23	21	22	19	20	20	20	21	18
		KW	1.58	1.61	1.66	1.72	1.70	1.74	1.80	1.86	1.81	1.86	1.92	1.98	1.91	1.96	2.02	2.09	2.00	2.04	2.11	2.19	2.07	2.12	2.19	2.27	
		AMPS	6.5	6.7	6.9	7.1	7.0	7.2	7.4	7.7	7.6	7.8	8.0	8.3	8.1	8.3	8.5	8.8	8.6	8.8	9.0	9.4	9.0	9.3	9.5	9.9	
		HI PR	243	261	276	288	272	293	309	323	310	333	352	367	353	380	401	418	397	427	451	470	439	472	498	520	
		LO PR	114	122	133	141	121	128	140	149	125	133	146	155	132	140	153	163	138	147	160	171	143	152	166	177	
		MBh	24.4	24.9	26.1	27.8	23.9	24.3	25.5	27.2	23.3	23.8	24.9	26.5	22.7	23.2	24.3	25.9	21.6	22.0	23.1	24.6	20.0	20.4	21.4	22.8	
		S/T	0.93	0.90	0.81	0.66	0.96	0.93	0.84	0.68	0.99	0.95	0.86	0.70	1.00	0.99	0.89	0.72	1.00	1.00	0.92	0.75	1.00	1.00	0.93	0.76	
		Delta T	25	24	23	20	25	25	23	20	25	25	23	20	25	25	23	20	25	23	24	23	20	22	22	22	19
85	850	KW	1.56	1.60	1.65	1.71	1.69	1.73	1.78	1.84	1.80	1.84	1.90	1.97	1.90	1.94	2.01	2.08	1.98	2.03	2.10	2.17	2.05	2.10	2.17	2.25	
		AMPS	6.5	6.6	6.8	7.1	7.0	7.1	7.3	7.6	7.5	7.7	7.9	8.2	8.0	8.2	8.4	8.7	8.5	8.7	9.0	9.3	9.0	9.2	9.5	9.8	
		HI PR	240	259	273	285	270	290	306	320	307	330	349	363	349	376	397	414	393	423	447	466	434	467	493	515	
		LO PR	113	120	131	140	119	127	139	148	124	132	144	154	130	139	152	161	137	145	159	169	141	150	164	175	
		MBh	22.6	23.0	24.1	25.7	22.0	22.5	23.5	25.1	21.5	21.9	23.0	24.5	21.0	21.4	22.4	23.9	19.9	20.3	21.3	22.7	18.5	18.8	19.7	21.0	
		S/T	0.90	0.87	0.78	0.63	0.93	0.90	0.81	0.66	0.95	0.92	0.83	0.67	0.98	0.95	0.86	0.70	1.00	0.99	0.89	0.72	1.00	0.99	0.90	0.73	
		Delta T	25	25	23	20	25	25	24	20	25	25	24	20	26	25	24	21	25	25	23	20	23	23	23	22	19
		KW	1.52	1.56	1.61	1.66	1.65	1.68	1.74	1.80	1.75	1.79	1.85	1.92	1.85	1.89	1.95	2.02	1.93	1.97	2.04	2.11	2.00	2.04	2.11	2.19	
		AMPS	6.3	6.5	6.6	6.9	6.8	6.9	7.1	7.4	7.3	7.5	7.7	8.0	7.8	8.0	8.2	8.5	8.3	8.5	8.7	9.0	8.7	8.9	9.2	9.5	
		HI PR	233	251	265	276	262	281	297	310	297	320	338	353	339	365	385	402	381	410	433	452	421	453	479	499	
LO PR	110	117	127	136	116	123	135	143	120	128	140	149	127	135	147	157	133	141	154	164	137	146	159	170			

* Entering Indoor Dry Bulb Temperature

NOTE: Shaded area is AHRI Rating Conditions

KW = Total system power

AMPS: Unit amps (comp. + evaporator + condenser fan motors)

High and low pressures are measured at the liquid and suction access fittings.

COOLING PERFORMANCE DATA

GPH1430H41A*

EXPANDED PERFORMANCE DATA

MODEL: GPH1430H41A*

COOLING OPERATION

Design Subcooling, 8 ± 2 °F @ the liquid access fitting connection AHRI 95 test conditions. Design Superheat 5 ± 2 °F @ the compressor suction access fitting connection.

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	1180	MBh	29.0	30.1	32.9	-	28.3	29.4	32.2	-	27.7	28.7	31.4	-	27.0	28.0	30.6	-	25.6	26.6	29.1	-	23.7	24.6	27.0	-	
		S/T	0.80	0.67	0.46	-	0.83	0.69	0.48	-	0.85	0.71	0.49	-	0.87	0.73	0.51	-	0.91	0.76	0.53	-	0.92	0.76	0.53	-	
		Delta T	18	16	12	-	18	16	12	-	18	16	12	-	18	16	12	-	18	16	12	-	17	15	11	-	
		KW	1.88	1.92	1.98	-	2.03	2.07	2.14	-	2.16	2.21	2.28	-	2.27	2.32	2.40	-	2.37	2.42	2.51	-	2.46	2.51	2.60	-	
		AMPS	7.8	8.0	8.2	-	8.4	8.6	8.8	-	9.1	9.3	9.6	-	9.6	9.9	10.2	-	10.2	10.5	10.8	-	10.8	11.0	11.4	-	
		HI PR	242	261	275	-	272	292	309	-	309	332	351	-	352	379	400	-	396	426	450	-	437	471	497	-	
		LO PR	116	123	135	-	123	130	142	-	127	136	148	-	134	142	155	-	140	149	163	-	145	154	168	-	
		MBh	28.2	29.2	32.0	-	27.5	28.5	31.2	-	26.9	27.8	30.5	-	26.2	27.2	29.7	-	24.9	25.8	28.3	-	23.1	23.9	26.2	-	
		S/T	0.76	0.63	0.44	-	0.79	0.66	0.46	-	0.81	0.67	0.47	-	0.83	0.70	0.48	-	0.87	0.72	0.50	-	0.87	0.73	0.50	-	
		Delta T	19	16	12	-	19	16	12	-	19	16	12	-	19	17	13	-	19	16	12	-	18	15	12	-	
920	1050	KW	1.87	1.91	1.97	-	2.01	2.06	2.12	-	2.14	2.19	2.26	-	2.25	2.30	2.38	-	2.35	2.40	2.48	-	2.43	2.49	2.57	-	
		AMPS	7.8	7.9	8.2	-	8.3	8.5	8.8	-	9.0	9.2	9.5	-	9.6	9.8	10.1	-	10.1	10.4	10.7	-	10.7	10.9	11.3	-	
		HI PR	240	258	272	-	269	289	306	-	306	329	348	-	348	375	396	-	392	422	445	-	433	466	492	-	
		LO PR	115	122	133	-	121	129	141	-	126	134	146	-	132	141	154	-	139	148	161	-	144	153	167	-	
		MBh	26.0	26.9	29.5	-	25.4	26.3	28.8	-	24.8	25.7	28.1	-	24.2	25.1	27.5	-	23.0	23.8	26.1	-	21.3	22.1	24.2	-	
		S/T	0.73	0.61	0.42	-	0.76	0.63	0.44	-	0.78	0.65	0.45	-	0.80	0.67	0.47	-	0.83	0.70	0.48	-	0.84	0.70	0.49	-	
		Delta T	19	16	13	-	19	17	13	-	19	17	13	-	19	17	13	-	19	17	13	-	18	15	12	-	
		KW	1.82	1.86	1.92	-	1.96	2.00	2.07	-	2.09	2.13	2.20	-	2.20	2.25	2.32	-	2.29	2.34	2.42	-	2.37	2.43	2.51	-	
		AMPS	7.6	7.7	8.0	-	8.1	8.3	8.6	-	8.8	9.0	9.2	-	9.3	9.5	9.8	-	9.9	10.1	10.4	-	10.4	10.7	11.0	-	
		HI PR	233	250	264	-	261	281	296	-	297	319	337	-	338	364	384	-	380	409	432	-	420	452	477	-	
LO PR	111	119	129	-	118	125	137	-	122	130	142	-	128	137	149	-	135	143	156	-	139	148	162	-			
75	1180	MBh	29.5	30.4	32.9	35.3	28.8	29.7	32.1	34.5	28.1	29.0	31.3	33.6	27.4	28.3	30.6	32.8	26.1	26.8	29.1	31.2	24.1	24.9	26.9	28.9	
		S/T	0.91	0.81	0.61	0.39	0.94	0.84	0.64	0.41	0.96	0.86	0.65	0.42	0.99	0.89	0.67	0.43	1.00	0.92	0.70	0.45	1.00	0.93	0.70	0.45	
		Delta T	21	19	16	11	21	19	16	11	21	19	16	11	21	20	16	11	21	20	19	16	11	19	18	15	10
		KW	1.90	1.94	2.00	2.07	2.05	2.09	2.16	2.23	2.18	2.23	2.30	2.38	2.29	2.34	2.42	2.51	2.39	2.45	2.53	2.61	2.48	2.53	2.62	2.71	
		AMPS	7.9	8.1	8.3	8.6	8.5	8.7	8.9	9.2	9.1	9.4	9.6	10.0	9.7	9.9	10.3	10.6	10.3	10.5	10.9	11.3	10.9	11.1	11.5	11.9	
		HI PR	245	263	278	290	274	295	312	325	312	336	355	370	355	383	404	421	400	430	454	474	442	476	502	524	
		LO PR	117	125	136	145	124	132	144	153	129	137	149	159	135	144	157	167	142	151	165	175	147	156	170	181	
		MBh	28.6	29.5	31.9	34.3	28.0	28.8	31.2	33.5	27.3	28.1	30.4	32.7	26.6	27.4	29.7	31.9	25.3	26.1	28.2	30.3	23.4	24.1	26.1	28.0	
		S/T	0.86	0.77	0.58	0.38	0.90	0.80	0.61	0.39	0.92	0.82	0.62	0.40	0.95	0.85	0.64	0.41	0.98	0.88	0.67	0.43	0.99	0.89	0.67	0.43	
		Delta T	22	20	16	11	22	20	17	11	22	20	17	11	22	20	17	11	22	20	16	11	20	19	15	11	
920	1050	KW	1.88	1.92	1.98	2.05	2.03	2.07	2.14	2.21	2.16	2.21	2.28	2.36	2.27	2.32	2.40	2.48	2.37	2.42	2.51	2.59	2.46	2.51	2.60	2.69	
		AMPS	7.8	8.0	8.2	8.5	8.4	8.6	8.9	9.2	9.1	9.3	9.6	9.9	9.6	9.9	10.2	10.5	10.2	10.5	10.8	11.2	10.8	11.0	11.4	11.8	
		HI PR	242	261	275	287	272	292	309	322	309	333	351	366	352	379	400	417	396	426	450	469	437	471	497	519	
		LO PR	116	123	135	144	123	130	142	152	127	136	148	158	134	142	155	166	140	149	163	173	145	154	168	179	
		MBh	26.4	27.2	29.5	31.6	25.8	26.6	28.8	30.9	25.2	25.9	28.1	30.1	24.6	25.3	27.4	29.4	23.4	24.1	26.0	27.9	21.6	22.3	24.1	25.9	
		S/T	0.83	0.75	0.56	0.36	0.86	0.77	0.58	0.38	0.89	0.79	0.60	0.39	0.91	0.82	0.62	0.40	0.95	0.85	0.64	0.41	0.96	0.86	0.65	0.42	
		Delta T	22	20	17	11	22	21	17	12	22	21	17	12	22	21	17	12	22	20	17	12	21	19	16	11	
		KW	1.84	1.87	1.93	2.00	1.98	2.02	2.09	2.16	2.10	2.15	2.22	2.30	2.22	2.27	2.34	2.42	2.31	2.36	2.44	2.53	2.39	2.45	2.53	2.62	
		AMPS	7.6	7.8	8.0	8.3	8.2	8.4	8.6	8.9	8.8	9.0	9.3	9.6	9.4	9.6	9.9	10.3	10.0	10.2	10.5	10.9	10.5	10.8	11.1	11.5	
		HI PR	235	253	267	278	264	284	300	312	300	323	341	355	341	367	388	405	384	413	436	455	424	457	482	503	
LO PR	113	120	131	139	119	127	138	147	124	131	144	153	130	138	151	161	136	145	158	168	141	150	163	174			

* Entering Indoor Dry Bulb Temperature

NOTE: Shaded area is ACOA (TVA) conditions. High and low pressures are measured at the liquid and suction access fittings.

COOLING PERFORMANCE DATA

GPH1430H41A*

EXPANDED PERFORMANCE DATA

EXPANDED PERFORMANCE DATA

MODEL: GPH1430H41A*

Design Subcooling, 8 ± 2 °F @ the liquid access fitting connection AHRI 95 test conditions. Design Superheat 5 ± 2 °F @ the compressor suction access fitting connection.

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		
80	1180	MBh	30.0	30.7	32.8	35.0	29.3	30.0	32.0	34.2	28.6	29.3	31.3	33.4	27.9	28.5	30.5	32.6	26.5	27.1	29.0	31.0	24.6	25.1	26.8	28.7	
		S/T	1.00	0.93	0.76	0.57	1.00	0.97	0.79	0.59	1.00	1.00	0.81	0.60	1.00	1.00	0.83	0.62	1.00	1.00	0.86	0.65	1.00	1.00	0.87	0.65	
		Delta T	23	22	19	15	23	23	20	16	22	22	20	16	22	22	22	20	16	21	21	19	16	19	20	18	15
		KW	1.91	1.95	2.02	2.08	2.06	2.11	2.18	2.25	2.19	2.24	2.32	2.40	2.31	2.36	2.44	2.53	2.41	2.47	2.55	2.64	2.50	2.56	2.64	2.73	
		AMPS	8.0	8.1	8.4	8.7	8.5	8.7	9.0	9.3	9.2	9.4	9.7	10.1	9.8	10.0	10.3	10.7	10.4	10.6	11.0	11.4	11.0	11.2	11.6	12.0	
	HIPR	247	266	281	293	277	298	315	329	315	339	358	374	359	386	408	426	404	435	459	479	446	480	507	529		
	LO PR	118	126	137	146	125	133	145	155	130	138	151	161	137	145	159	169	143	152	166	177	148	157	172	183		
	MBh	29.1	29.8	31.8	34.0	28.5	29.1	31.1	33.2	27.8	28.4	30.3	32.4	27.1	27.7	29.6	31.6	25.8	26.3	28.1	30.1	23.9	24.4	26.0	27.8		
	S/T	0.95	0.89	0.72	0.54	0.98	0.92	0.75	0.56	1.00	0.94	0.77	0.57	1.00	0.98	0.79	0.59	1.00	1.00	0.82	0.62	1.00	1.00	0.83	0.62		
	Delta T	24	23	20	16	24	23	20	16	24	23	20	16	24	24	21	17	25	24	21	17	25	24	21	19	15	
1050	KW	1.90	1.94	2.00	2.07	2.05	2.09	2.16	2.23	2.18	2.23	2.30	2.38	2.29	2.34	2.42	2.51	2.39	2.45	2.53	2.62	2.48	2.53	2.62	2.71		
	AMPS	7.9	8.1	8.3	8.6	8.5	8.7	8.9	9.2	9.1	9.4	9.6	10.0	9.7	10.0	10.3	10.6	10.3	10.5	10.9	11.3	10.9	11.1	11.5	11.9		
	HIPR	245	263	278	290	274	295	312	325	312	336	355	370	356	383	404	421	400	430	455	474	442	476	502	524		
	LO PR	117	125	136	145	124	132	144	153	129	137	149	159	135	144	157	167	142	151	165	175	147	156	170	181		
	MBh	26.9	27.5	29.4	31.4	26.3	26.9	28.7	30.7	25.7	26.2	28.0	29.9	25.0	25.6	27.3	29.2	23.8	24.3	26.0	27.7	22.0	22.5	24.0	25.7		
S/T	0.91	0.86	0.70	0.52	0.95	0.89	0.72	0.54	0.97	0.91	0.74	0.55	1.00	0.94	0.77	0.57	1.04	0.98	0.79	0.59	1.05	0.98	0.80	0.60			
Delta T	25	24	20	16	25	24	21	17	25	24	21	17	25	24	21	17	25	24	21	17	25	24	21	19	15		
920	KW	1.85	1.89	1.95	2.01	1.99	2.04	2.10	2.17	2.12	2.17	2.24	2.32	2.23	2.28	2.36	2.44	2.33	2.38	2.46	2.55	2.41	2.47	2.55	2.64		
	AMPS	7.7	7.9	8.1	8.4	8.3	8.4	8.7	9.0	8.9	9.1	9.4	9.7	9.5	9.7	10.0	10.3	10.0	10.3	10.6	11.0	10.6	10.8	11.2	11.6		
	HIPR	237	255	270	281	266	286	303	316	303	326	344	359	345	371	392	409	388	417	441	460	429	461	487	508		
	LO PR	114	121	132	141	120	128	139	149	125	133	145	154	131	139	152	162	137	146	160	170	142	151	165	176		
	MBh	26.9	27.5	29.4	31.4	26.3	26.9	28.7	30.7	25.7	26.2	28.0	29.9	25.0	25.6	27.3	29.2	23.8	24.3	26.0	27.7	22.0	22.5	24.0	25.7		

NOTE: Shaded area reflects AHRI rating conditions

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		
85	1180	MBh	30.5	31.1	32.6	34.8	29.8	30.4	31.9	34.0	29.1	29.7	31.1	33.2	28.4	29.0	30.3	32.4	27.0	27.5	28.8	30.7	25.0	25.5	26.7	28.5	
		S/T	1.00	1.00	0.91	0.74	1.00	1.00	0.94	0.76	1.00	1.00	0.96	0.78	1.00	1.00	1.00	0.81	1.00	1.00	0.84	0.84	1.00	1.00	0.87	0.85	
		Delta T	24	24	23	20	23	24	23	20	23	23	23	20	22	23	24	20	21	21	21	22	20	19	20	21	19
		KW	1.93	1.97	2.03	2.10	2.08	2.13	2.19	2.27	2.21	2.26	2.34	2.42	2.33	2.38	2.46	2.55	2.43	2.49	2.57	2.66	2.52	2.58	2.66	2.76	
		AMPS	8.0	8.2	8.4	8.7	8.6	8.8	9.1	9.4	9.3	9.5	9.8	10.2	9.9	10.1	10.4	10.8	10.5	10.7	11.1	11.5	11.1	11.3	11.7	12.1	
	HIPR	250	269	284	296	280	301	318	332	318	343	362	377	363	390	412	430	408	439	464	484	451	485	512	534		
	LO PR	120	127	139	148	126	134	147	156	131	140	152	162	138	147	160	171	145	154	168	179	149	159	174	185		
	MBh	29.7	30.2	31.7	33.8	29.0	29.5	30.9	33.0	28.3	28.8	30.2	32.2	27.6	28.1	29.5	31.4	26.2	26.7	28.0	29.8	24.3	24.7	25.9	27.7		
	S/T	0.99	0.96	0.87	0.70	1.00	0.99	0.90	0.73	1.00	1.00	0.92	0.75	1.00	1.00	0.95	0.77	1.00	1.00	0.99	0.80	1.00	1.00	0.99	0.81		
	Delta T	26	25	24	21	25	26	24	21	25	25	24	21	24	24	21	17	23	23	24	21	21	22	23	20		
1050	KW	1.91	1.95	2.02	2.08	2.06	2.11	2.18	2.25	2.19	2.24	2.32	2.40	2.31	2.36	2.44	2.53	2.41	2.47	2.55	2.64	2.50	2.56	2.64	2.73		
	AMPS	8.0	8.1	8.4	8.7	8.5	8.7	9.0	9.3	9.2	9.4	9.7	10.1	9.8	10.0	10.3	10.7	10.4	10.6	11.0	11.4	11.0	11.2	11.6	12.0		
	HIPR	247	266	281	293	277	298	315	329	315	339	358	374	359	386	408	426	404	435	459	479	446	480	507	529		
	LO PR	118	126	137	146	125	133	145	155	130	138	151	161	137	145	159	169	143	152	166	177	148	157	172	183		
	MBh	27.4	27.9	29.2	31.2	26.7	27.3	28.5	30.5	26.1	26.6	27.9	29.7	25.5	26.0	27.2	29.0	24.2	24.7	25.8	27.6	22.4	22.8	23.9	25.5		
S/T	0.96	0.92	0.83	0.68	0.99	0.96	0.86	0.70	1.00	0.98	0.89	0.72	1.00	1.00	0.92	0.74	1.00	1.00	0.95	0.77	1.00	1.00	0.96	0.78			
Delta T	26	26	24	21	27	26	25	21	26	26	25	21	25	25	22	18	24	24	25	21	22	23	23	20			
920	KW	1.87	1.91	1.97	2.03	2.01	2.06	2.12	2.19	2.14	2.19	2.26	2.34	2.25	2.30	2.38	2.46	2.35	2.40	2.48	2.57	2.43	2.49	2.57	2.66		
	AMPS	7.8	7.9	8.2	8.4	8.3	8.5	8.8	9.1	9.0	9.2	9.5	9.8	9.6	9.8	10.1	10.4	10.1	10.4	10.7	11.1	10.7	10.9	11.3	11.7		
	HIPR	240	258	272	284	269	289	306	319	306	329	348	362	348	375	396	413	392	422	445	464	433	466	492	513		
	LO PR	115	122	133	142	121	129	141	150	126	134	146	156	132	141	154	164	139	148	161	172	144	153	167	178		
	MBh	26.9	27.5	29.4	31.4	26.3	26.9	28.7	30.7	25.7	26.2	28.0	29.9	25.0	25.6	27.3	29.2	23.8	24.3	26.0	27.7	22.0	22.5	24.0	25.7		

* Entering Indoor Dry Bulb Temperature

High and low pressures are measured at the liquid and suction access fittings.

KW = Total system power

AMPS: Unit amps (comp. + evaporator + condenser fan motors)

COOLING PERFORMANCE DATA

GPH1436H41A*

MODEL: GPH1436H41A*

EXPANDED PERFORMANCE DATA

COOLING OPERATION

Design Subcooling, 11 ± 2 °F @ the liquid access fitting connection. AHRI 95 test conditions. Design Superheat 5 ± 2 °F @ the compressor suction access fitting connection.

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	1350	MBh	35.3	36.6	40.1	-	34.5	35.7	39.1	-	33.6	34.9	38.2	-	32.8	34.0	37.3	-	31.2	32.3	35.4	-	28.9	29.9	32.8	-
		S/T	0.76	0.64	0.44	-	0.79	0.66	0.46	-	0.81	0.68	0.47	-	0.84	0.70	0.48	-	0.87	0.73	0.50	-	0.88	0.73	0.51	-
		Delta T	18	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	18	16	12	-	17	15	11	-
		KW	2.37	2.42	2.50	-	2.56	2.61	2.70	-	2.72	2.78	2.87	-	2.86	2.93	3.02	-	2.99	3.05	3.16	-	3.09	3.16	3.27	-
		AMPS	9.9	10.1	10.4	-	10.7	10.9	11.2	-	11.5	11.7	12.1	-	12.2	12.5	12.9	-	12.9	13.2	13.6	-	13.6	14.0	14.4	-
	1200	HI PR	246	265	280	-	277	298	314	-	315	338	357	-	358	386	407	-	403	434	458	-	445	479	506	-
		LO PR	112	120	131	-	119	126	138	-	123	131	143	-	130	138	151	-	136	145	158	-	141	149	163	-
		MBh	34.2	35.5	38.9	-	33.5	34.7	38.0	-	32.7	33.8	37.1	-	31.9	33.0	36.2	-	30.3	31.4	34.4	-	28.0	29.1	31.8	-
		S/T	0.73	0.61	0.42	-	0.76	0.63	0.44	-	0.77	0.65	0.45	-	0.80	0.67	0.46	-	0.83	0.69	0.48	-	0.84	0.70	0.48	-
		Delta T	19	17	13	-	19	17	13	-	19	17	13	-	20	17	13	-	19	17	13	-	18	16	12	-
1050	KW	2.35	2.40	2.48	-	2.53	2.59	2.67	-	2.70	2.76	2.85	-	2.84	2.90	3.00	-	2.96	3.03	3.13	-	3.07	3.13	3.24	-	
	AMPS	9.9	10.1	10.4	-	10.6	10.8	11.1	-	11.4	11.6	12.0	-	12.1	12.4	12.8	-	12.8	13.1	13.5	-	13.5	13.8	14.3	-	
	HI PR	244	263	277	-	274	295	311	-	311	335	354	-	355	382	403	-	399	429	453	-	441	474	501	-	
	LO PR	111	118	129	-	118	125	137	-	122	130	142	-	128	137	149	-	134	143	156	-	139	148	162	-	
	MBh	31.6	32.8	35.9	-	30.9	32.0	35.1	-	30.1	31.2	34.2	-	29.4	30.5	33.4	-	27.9	29.0	31.7	-	25.9	26.8	29.4	-	
75	1350	S/T	0.70	0.59	0.41	-	0.73	0.61	0.42	-	0.75	0.62	0.43	-	0.77	0.64	0.45	-	0.80	0.67	0.46	-	0.81	0.67	0.47	-
		Delta T	19	17	13	-	20	17	13	-	20	17	13	-	20	17	13	-	20	17	13	-	18	16	12	-
		KW	2.29	2.34	2.42	-	2.47	2.53	2.61	-	2.63	2.69	2.78	-	2.77	2.83	2.92	-	2.89	2.95	3.05	-	2.99	3.05	3.16	-
		AMPS	9.6	9.8	10.1	-	10.3	10.5	10.8	-	11.1	11.4	11.7	-	11.8	12.1	12.4	-	12.5	12.8	13.2	-	13.2	13.5	13.9	-
		HI PR	237	255	269	-	266	286	302	-	302	325	343	-	344	370	391	-	387	417	440	-	428	460	486	-
	1200	LO PR	108	115	125	-	114	121	132	-	119	126	138	-	124	132	145	-	130	139	152	-	135	144	157	-
		MBh	35.9	36.9	40.0	42.9	35.0	36.1	39.1	41.9	34.2	35.2	38.1	40.9	33.4	34.4	37.2	39.9	31.7	32.6	35.3	37.9	29.4	30.2	32.7	35.1
		S/T	0.87	0.78	0.59	0.38	0.90	0.81	0.61	0.39	0.92	0.83	0.62	0.40	0.95	0.85	0.65	0.41	0.99	0.88	0.67	0.43	1.00	0.89	0.68	0.43
		Delta T	21	20	16	11	21	20	16	11	22	20	16	11	22	20	16	11	22	20	16	11	20	18	15	10
		KW	2.39	2.44	2.52	2.60	2.58	2.63	2.72	2.81	2.74	2.80	2.90	2.99	2.89	2.95	3.05	3.15	3.01	3.08	3.18	3.29	3.12	3.19	3.30	3.41
1050	AMPS	10.0	10.2	10.5	10.9	10.7	11.0	11.3	11.7	11.6	11.8	12.2	12.6	12.3	12.6	13.0	13.4	13.0	13.3	13.8	14.2	13.8	14.1	14.5	15.0	
	HI PR	249	268	283	295	279	301	317	331	318	342	361	377	362	389	411	429	407	438	463	483	450	484	511	533	
	LO PR	114	121	132	140	120	128	139	148	125	133	145	154	131	139	152	162	137	146	159	170	142	151	165	176	
	MBh	34.8	35.9	38.8	41.7	34.0	35.0	37.9	40.7	33.2	34.2	37.0	39.7	32.4	33.4	36.1	38.8	30.8	31.7	34.3	36.8	28.5	29.4	31.8	34.1	
	S/T	0.83	0.74	0.56	0.36	0.86	0.77	0.58	0.37	0.88	0.79	0.60	0.38	0.91	0.81	0.62	0.40	0.94	0.84	0.64	0.41	0.95	0.85	0.64	0.41	
70	1350	Delta T	22	20	17	12	22	21	17	12	22	21	17	12	23	21	17	12	22	20	17	12	21	19	16	11
		KW	2.37	2.42	2.50	2.58	2.56	2.61	2.70	2.79	2.72	2.78	2.87	2.97	2.86	2.93	3.03	3.13	2.99	3.05	3.16	3.26	3.09	3.16	3.27	3.38
		AMPS	9.9	10.1	10.4	10.8	10.7	10.9	11.2	11.6	11.5	11.7	12.1	12.5	12.2	12.5	12.9	13.3	12.9	13.2	13.6	14.1	13.6	14.0	14.4	14.9
		HI PR	247	265	280	292	277	298	314	328	315	339	358	373	358	386	407	425	403	434	458	478	445	479	506	528
		LO PR	112	120	131	139	119	126	138	147	123	131	143	153	130	138	151	160	136	145	158	168	141	150	163	174
	1200	MBh	32.1	33.1	35.8	38.5	31.4	32.3	35.0	37.6	30.7	31.6	34.2	36.7	29.9	30.8	33.3	35.8	28.4	29.3	31.7	34.0	26.3	27.1	29.3	31.5
		S/T	0.80	0.71	0.54	0.35	0.83	0.74	0.56	0.36	0.85	0.76	0.57	0.37	0.88	0.78	0.59	0.38	0.91	0.81	0.62	0.40	0.92	0.82	0.62	0.40
		Delta T	22	21	17	12	23	21	17	12	23	21	17	12	23	21	17	12	23	21	17	12	21	19	16	11
		KW	2.31	2.36	2.44	2.52	2.49	2.55	2.63	2.72	2.65	2.71	2.80	2.89	2.79	2.85	2.95	3.05	2.91	2.98	3.08	3.18	3.01	3.08	3.18	3.29
		AMPS	9.7	9.9	10.2	10.5	10.4	10.6	10.9	11.3	11.2	11.5	11.8	12.2	11.9	12.2	12.5	13.0	12.6	12.9	13.3	13.8	13.3	13.6	14.0	14.5
1050	HI PR	239	257	272	283	268	289	305	318	305	328	347	362	348	374	395	412	391	421	444	463	432	465	491	512	
	LO PR	109	116	127	135	115	123	134	142	120	127	139	148	126	134	146	156	132	140	153	163	136	145	158	169	

* Entering Indoor Dry Bulb Temperature

NOTE: Shaded area is ACCA (TVA) conditions. High and low pressures are measured at the liquid and suction access fittings.

COOLING PERFORMANCE DATA

GPH1436H41A*

EXPANDED PERFORMANCE DATA

EXPANDED PERFORMANCE DATA

MODEL: GPH1436H41A*

Design Subcooling, 11 ± 2 °F @ the liquid access fitting connection AHR1 95 test conditions. Design Superheat 5 ± 2 °F @ the compressor suction access fitting connection.

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		
80	1350	MBh	36.5	37.3	39.9	42.6	35.7	36.4	38.9	41.6	34.8	35.6	38.0	40.6	34.0	34.7	37.1	39.6	32.3	33.0	35.2	37.7	29.9	30.5	32.6	34.9	
		S/T	0.95	0.89	0.73	0.54	1.00	0.93	0.75	0.56	1.00	0.95	0.77	0.58	1.00	1.00	0.80	0.60	1.00	1.00	0.83	0.62	1.00	1.00	0.83	0.62	
		Delta T	24	23	20	16	24	23	20	16	24	23	20	16	23	24	20	16	22	22	22	20	16	20	21	19	15
		KW	2.41	2.46	2.54	2.62	2.60	2.66	2.74	2.83	2.76	2.83	2.92	3.02	2.91	2.98	3.08	3.18	3.04	3.12	3.11	3.21	3.32	3.14	3.22	3.33	3.44
		AMPS	10.1	10.3	10.6	11.0	10.8	11.1	11.4	11.8	11.7	11.9	12.3	12.7	12.4	12.7	13.1	13.6	13.2	13.5	13.9	14.4	13.9	14.2	14.7	15.2	15.2
	1200	HI PR	252	271	286	298	282	304	321	334	321	345	365	380	366	393	415	433	411	443	467	487	454	489	516	539	
		LO PR	115	122	133	142	121	129	141	150	126	134	146	156	132	141	154	164	139	147	161	171	143	153	167	177	
		MBh	35.4	36.2	38.7	41.4	34.6	35.4	37.8	40.4	33.8	34.5	36.9	39.4	33.0	33.7	36.0	38.5	31.3	32.0	34.2	36.6	29.0	29.7	31.7	33.9	
		S/T	0.91	0.85	0.69	0.52	0.94	0.88	0.72	0.54	0.97	0.91	0.74	0.55	1.00	0.93	0.76	0.57	1.00	0.97	0.79	0.59	1.00	0.98	0.80	0.60	
		Delta T	25	24	21	16	25	24	21	17	25	24	21	17	25	24	21	17	25	24	21	17	22	22	19	15	
1050	KW	2.39	2.44	2.52	2.60	2.58	2.63	2.72	2.81	2.74	2.80	2.90	2.99	2.89	2.95	3.05	3.15	3.01	3.08	3.18	3.29	3.12	3.19	3.30	3.41		
	AMPS	10.0	10.2	10.5	10.9	10.7	11.0	11.3	11.7	11.6	11.8	12.2	12.6	12.3	12.6	13.0	13.4	13.0	13.3	13.8	14.2	13.8	14.1	14.5	15.0		
	HI PR	249	268	283	295	279	301	318	331	318	342	361	377	362	390	411	429	407	438	463	483	450	484	511	533		
	LO PR	114	121	132	140	120	128	139	148	125	133	145	154	131	139	152	162	137	146	159	170	142	151	165	176		
	MBh	32.7	33.4	35.7	38.2	32.0	32.7	34.9	37.3	31.2	31.9	34.1	36.4	30.4	31.1	33.2	35.5	28.9	29.5	31.6	33.7	26.8	27.4	29.2	31.3		
85	1350	S/T	0.88	0.82	0.67	0.50	0.91	0.85	0.69	0.52	0.93	0.87	0.71	0.53	0.96	0.90	0.73	0.55	1.00	0.94	0.76	0.57	1.01	0.94	0.77	0.57	
		Delta T	25	24	21	17	25	24	21	17	25	24	21	17	26	25	21	17	26	25	21	17	24	23	20	16	
		KW	2.33	2.38	2.46	2.54	2.51	2.57	2.65	2.74	2.67	2.73	2.82	2.92	2.81	2.88	2.97	3.07	2.94	3.00	3.10	3.21	3.04	3.11	3.21	3.32	
		AMPS	9.8	10.0	10.3	10.6	10.5	10.7	11.0	11.4	11.3	11.5	11.9	12.3	12.0	12.3	12.7	13.1	12.7	13.0	13.4	13.9	13.4	13.7	14.1	14.6	
		HI PR	242	260	274	286	271	292	308	321	308	332	350	365	351	378	399	416	395	425	449	468	436	470	496	517	
	1200	LO PR	110	117	128	136	116	124	135	144	121	129	140	150	127	135	148	157	133	142	155	165	138	146	160	170	
		MBh	37.2	37.9	39.7	42.3	36.3	37.0	38.7	41.3	35.4	36.1	37.8	40.3	34.6	35.2	36.9	39.4	32.8	33.5	35.0	37.4	30.4	31.0	32.5	34.6	
		S/T	1.00	0.96	0.87	0.71	1.00	1.00	0.90	0.73	1.00	1.00	0.92	0.75	1.00	1.00	0.95	0.77	1.00	1.00	0.99	0.80	1.00	1.00	1.00	0.81	
		Delta T	25	25	23	20	25	25	24	21	24	25	24	21	24	24	24	21	24	23	24	20	21	21	22	19	
		KW	2.43	2.48	2.56	2.65	2.62	2.68	2.76	2.86	2.79	2.85	2.94	3.04	2.94	3.00	3.10	3.21	3.06	3.13	3.24	3.35	3.17	3.24	3.35	3.47	
85	1350	AMPS	10.2	10.4	10.7	11.1	10.9	11.2	11.5	11.9	11.8	12.0	12.4	12.8	12.5	12.8	13.2	13.7	13.3	13.6	14.0	14.5	14.0	14.3	14.8	15.3	
		HI PR	254	273	289	301	285	307	324	338	324	349	368	384	369	397	420	438	415	447	472	492	459	494	522	544	
		LO PR	116	123	135	143	122	130	142	151	127	135	148	157	134	142	155	165	140	149	163	173	145	154	168	179	
		MBh	36.1	36.8	38.5	41.1	35.2	35.9	37.6	40.1	34.4	35.1	36.7	39.2	33.6	34.2	35.8	38.2	31.9	32.5	34.0	36.3	29.5	30.1	31.5	33.6	
		S/T	0.95	0.92	0.83	0.67	0.99	0.95	0.86	0.70	1.00	0.98	0.88	0.72	1.00	1.00	0.91	0.74	1.00	1.00	0.94	0.77	1.00	1.00	0.95	0.77	
	1200	Delta T	26	26	24	21	27	26	25	21	26	26	25	21	26	26	25	22	24	25	25	21	23	23	23	20	
		KW	2.41	2.46	2.54	2.62	2.60	2.66	2.74	2.83	2.76	2.83	2.92	3.02	2.91	2.98	3.08	3.18	3.04	3.11	3.21	3.32	3.14	3.22	3.33	3.44	
		AMPS	10.1	10.3	10.6	11.0	10.8	11.1	11.4	11.8	11.7	11.9	12.3	12.7	12.4	12.7	13.1	13.6	13.2	13.5	13.9	14.4	13.9	14.2	14.7	15.2	
		HI PR	252	271	286	298	282	304	321	334	321	345	365	380	366	393	415	433	411	443	467	487	454	489	516	539	
		LO PR	115	122	133	142	121	129	141	150	126	134	146	156	132	141	154	164	139	147	161	171	143	153	167	177	
1050	MBh	33.3	33.9	35.5	37.9	32.5	33.1	34.7	37.0	31.7	32.4	33.9	36.2	31.0	31.6	33.1	35.3	29.4	30.0	31.4	33.5	27.3	27.8	29.1	31.0		
	S/T	0.92	0.89	0.80	0.65	0.95	0.92	0.83	0.67	0.98	0.94	0.85	0.69	1.00	0.97	0.88	0.71	1.00	1.00	0.91	0.74	1.00	1.00	0.92	0.74		
	Delta T	27	26	25	22	27	27	25	22	27	27	25	22	27	27	25	22	26	26	25	22	24	24	23	20		
	KW	2.35	2.40	2.48	2.56	2.53	2.59	2.67	2.76	2.70	2.76	2.85	2.94	2.84	2.90	3.00	3.10	2.96	3.03	3.13	3.23	3.06	3.13	3.24	3.35		
	AMPS	9.9	10.1	10.4	10.7	10.6	10.8	11.1	11.5	11.4	11.6	12.0	12.4	12.1	12.4	12.8	13.2	12.8	13.1	13.5	14.0	13.5	13.8	14.3	14.8		
1050	HI PR	244	263	277	289	274	295	311	324	311	335	354	369	355	382	403	420	399	429	453	473	441	474	501	522		
	LO PR	111	118	129	138	118	125	136	145	122	130	142	151	128	136	149	159	134	143	156	166	139	148	162	172		

NOTE: Shaded area reflects ARI rating conditions

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		
80	1350	MBh	36.5	37.3	39.9	42.6	35.7	36.4	38.9	41.6	34.8	35.6	38.0	40.6	34.0	34.7	37.1	39.6	32.3	33.0	35.2	37.7	29.9	30.5	32.6	34.9	
		S/T	0.95	0.89	0.73	0.54	1.00	0.93	0.75	0.56	1.00	0.95	0.77	0.58	1.00	1.00	0.80	0.60	1.00	1.00	0.83	0.62	1.00	1.00	0.83	0.62	
		Delta T	24	23	20	16	24	23	20	16	24	23	20	16	23	24	20	16	22	22	22	20	16	20	21	19	15
		KW	2.41	2.46	2.54	2.62	2.60	2.66	2.74	2.83	2.76	2.83	2.92	3.02	2.91	2.98	3.08	3.18	3.04	3.11	3.21	3.32	3.14	3.22	3.33	3.44	
		AMPS	10.1	10.3	10.6	11.0	10.8	11.1	11.4	11.8	11.7	11.9	12.3	12.7	12.4	12.7	13.1	13.6	13.2	13.5	13.9	14.4	13.9	14.2	14.7	15.2	15.2
	1200	HI PR	252	271	286	298	282	304	321	334	321	345	365	380	366	393	415	433	411	443	467	487	454	489	516	539	
		LO PR	115	122	133	142	121	129	141	150	126	134	146	156	132	141	154	164	139	147	161	171	143	153	167	177	
		MBh	35.4	36.2	38.7	41.4	34.6	35.4	37.8	40.4	33.8	34.5	36.9	39.4	33.0	33.7	36.0	38.5	31.3	32.0	34.2	36.6	29.0	29.7	31.7	33.9	
		S/T	0.91	0.85	0.69	0.52	0.94	0.88	0.72	0.54	0.97	0.91	0.74	0.55	1.00	0.93	0.76	0.57	1.00	0.97	0.79	0.59	1.00	0.98	0.80	0.60	
		Delta T																									

COOLING PERFORMANCE DATA

GPH1442H41A*

MODEL: GPH1442H41A* EXPANDED PERFORMANCE DATA COOLING OPERATION

Design Subcooling, 11 ± 2 °F @ the liquid access fitting connection AHRI 95 test conditions. Design Superheat 7 ± 2 °F @ the compressor suction access fitting connection.

IDB*	Airflow	Outdoor Ambient Temperature																																												
		65					75					85					95					105					115																			
		59	63	67	71	75	59	63	67	71	75	59	63	67	71	75	59	63	67	71	75	59	63	67	71	75	59	63	67	71	75															
70	1461	MBh	39.2	40.6	44.5	-	38.3	39.7	43.5	-	0.78	0.65	0.45	-	0.79	0.66	0.46	-	0.82	0.69	0.47	-	36.5	37.8	41.4	-	34.6	35.9	39.3	-	0.85	0.71	0.49	-	19	16	12	-	3.41	3.36	3.48	-	31.2	32.3	35.4	-
		S/T	0.75	0.62	0.43	-	0.78	0.65	0.45	-	0.79	0.66	0.46	-	0.82	0.69	0.47	-	19	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	0.86	0.72	0.50	-
		Delta T	18	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	17	15	11	-
		KW	2.62	2.67	2.76	-	2.82	2.88	2.97	-	3.00	3.06	3.16	-	3.16	3.23	3.33	-	3.29	3.36	3.48	-	3.29	3.36	3.48	-	3.29	3.36	3.48	-	3.29	3.36	3.48	-	3.29	3.36	3.48	-	3.29	3.36	3.48	-	3.29	3.36	3.48	-
		AMPS	10.6	10.8	11.1	-	11.4	11.6	12.0	-	12.3	12.6	13.0	-	13.2	13.5	13.9	-	14.0	14.3	14.8	-	14.0	14.3	14.8	-	14.0	14.3	14.8	-	14.0	14.3	14.8	-	14.0	14.3	14.8	-	14.0	14.3	14.8	-	14.8	15.2	15.7	-
	HI PR	240	258	272	-	269	289	305	-	306	329	347	-	348	375	396	-	392	422	445	-	392	422	445	-	392	422	445	-	392	422	445	-	392	422	445	-	392	422	445	-	433	466	492	-	
	LO PR	111	118	129	-	117	125	136	-	122	130	141	-	128	136	149	-	128	136	149	-	128	136	149	-	128	136	149	-	128	136	149	-	128	136	149	-	128	136	149	-	139	148	161	-	
	MBh	38.1	39.4	43.2	-	37.2	38.5	42.2	-	36.3	37.6	41.2	-	35.4	36.7	40.2	-	33.6	34.9	38.2	-	33.6	34.9	38.2	-	33.6	34.9	38.2	-	33.6	34.9	38.2	-	33.6	34.9	38.2	-	33.6	34.9	38.2	-	31.2	32.3	35.4	-	
	S/T	0.71	0.60	0.41	-	0.74	0.62	0.43	-	0.76	0.63	0.44	-	0.78	0.65	0.45	-	0.81	0.68	0.47	-	0.81	0.68	0.47	-	0.81	0.68	0.47	-	0.81	0.68	0.47	-	0.81	0.68	0.47	-	0.81	0.68	0.47	-	0.82	0.68	0.47	-	
	Delta T	19	17	13	-	19	17	13	-	19	17	13	-	20	17	13	-	20	17	13	-	20	17	13	-	20	17	13	-	20	17	13	-	20	17	13	-	20	17	13	-	18	16	12	-	
1300	KW	2.60	2.65	2.73	-	2.80	2.86	2.95	-	2.97	3.04	3.14	-	3.13	3.20	3.30	-	3.26	3.34	3.45	-	3.26	3.34	3.45	-	3.26	3.34	3.45	-	3.26	3.34	3.45	-	3.26	3.34	3.45	-	3.26	3.34	3.45	-	3.38	3.45	3.57	-	
	AMPS	10.5	10.7	11.0	-	11.3	11.5	11.9	-	12.2	12.5	12.9	-	13.0	13.4	13.8	-	13.9	14.2	14.7	-	13.9	14.2	14.7	-	13.9	14.2	14.7	-	13.9	14.2	14.7	-	13.9	14.2	14.7	-	13.9	14.2	14.7	-	14.7	15.0	15.5	-	
	HI PR	237	255	270	-	266	286	302	-	303	326	344	-	345	371	392	-	388	417	441	-	388	417	441	-	388	417	441	-	388	417	441	-	388	417	441	-	388	417	441	-	429	461	487	-	
	LO PR	110	117	128	-	116	123	135	-	121	128	140	-	127	135	147	-	123	131	143	-	123	131	143	-	123	131	143	-	123	131	143	-	123	131	143	-	123	131	143	-	137	146	159	-	
	MBh	35.1	36.4	39.9	-	34.3	35.6	39.0	-	33.5	34.7	38.0	-	32.7	33.9	37.1	-	31.0	32.2	35.2	-	31.0	32.2	35.2	-	31.0	32.2	35.2	-	31.0	32.2	35.2	-	31.0	32.2	35.2	-	28.8	29.8	32.7	-					
S/T	0.69	0.57	0.40	-	0.71	0.60	0.41	-	0.73	0.61	0.42	-	0.75	0.63	0.44	-	0.78	0.65	0.45	-	0.78	0.65	0.45	-	0.78	0.65	0.45	-	0.78	0.65	0.45	-	0.78	0.65	0.45	-	0.78	0.65	0.45	-	0.79	0.66	0.46	-		
Delta T	19	17	13	-	20	17	13	-	20	17	13	-	20	17	13	-	20	17	13	-	20	17	13	-	20	17	13	-	20	17	13	-	20	17	13	-	20	17	13	-	18	16	12	-		
75	1461	MBh	39.9	41.0	44.4	47.7	38.9	40.1	43.4	46.6	38.0	39.1	42.4	45.5	37.1	38.2	41.3	44.4	35.2	36.3	39.3	42.1	32.6	33.6	36.4	39.0																				
		S/T	0.85	0.76	0.58	0.37	0.88	0.79	0.60	0.38	0.90	0.81	0.61	0.39	0.93	0.83	0.63	0.41	0.97	0.87	0.66	0.42	0.98	0.87	0.66	0.43																				
		Delta T	21	20	16	11	22	20	16	11	22	20	16	11	22	20	16	11	22	20	16	11	21	20	16	11	20	18	15	10																
		KW	2.64	2.69	2.78	2.87	2.84	2.90	3.00	3.10	3.20	3.09	3.19	3.30	3.40	3.18	3.25	3.36	3.47	3.32	3.39	3.51	3.62	3.43	3.51	3.63	3.75																			
		AMPS	10.6	10.9	11.2	11.6	11.5	11.7	12.1	12.6	12.4	12.7	13.2	13.6	13.3	13.6	14.0	14.6	14.1	14.5	14.9	15.5	14.9	15.3	15.8	16.4																				
	HI PR	242	260	275	287	272	292	309	322	309	332	351	366	352	379	400	417	396	426	450	469	437	471	497	518																					
	LO PR	112	119	130	139	118	126	137	146	123	131	143	152	129	137	150	160	135	144	157	168	140	149	163	173																					
	MBh	38.7	39.8	43.1	46.3	37.8	38.9	42.1	45.2	36.9	38.0	41.1	44.1	36.0	37.1	40.1	43.1	34.2	35.2	38.1	40.9	31.7	32.6	35.3	37.9																					
	S/T	0.81	0.73	0.55	0.35	0.84	0.75	0.57	0.37	0.86	0.77	0.58	0.38	0.89	0.80	0.60	0.39	0.92	0.83	0.62	0.40	0.93	0.83	0.63	0.41																					
	Delta T	22	20	17	12	22	21	17	12	22	21	17	12	23	21	17	12	23	21	17	12	22	21	17	12	21	19	16	11																	
1300	KW	2.62	2.67	2.76	2.85	2.82	2.88	2.97	3.07	3.00	3.06	3.16	3.27	3.16	3.23	3.33	3.44	3.29	3.36	3.48	3.59	3.41	3.48	3.60	3.72																					
	AMPS	10.6	10.8	11.1	11.5	11.4	11.6	12.0	12.5	12.3	12.6	13.0	13.5	13.2	13.5	13.9	14.4	14.0	14.3	14.8	15.3	14.8	15.2	15.7	16.2																					
	HI PR	240	258	272	284	269	289	306	319	306	329	347	362	348	375	396	413	392	422	445	464	433	466	492	513																					
	LO PR	111	118	129	137	117	125	136	145	122	130	141	151	128	136	149	158	134	143	156	166	139	148	161	172																					
	MBh	35.7	36.8	39.8	42.7	34.9	35.9	38.9	41.7	34.1	35.1	38.0	40.7	33.2	34.2	37.0	39.7	31.6	32.5	35.2	37.8	29.2	30.1	32.6	35.0																					
S/T	0.78	0.70	0.53	0.34	0.81	0.72	0.55	0.35	0.83	0.74	0.56	0.36	0.86	0.77	0.58	0.37	0.89	0.80	0.60	0.39	0.90	0.80	0.61	0.39																						
Delta T	23	21	17	12	23	21	17	12	23	21	17	12	23	21	17	12	23	21	17	12	23	21	17	12	21	20	16	11																		
1139	KW	2.55	2.61	2.69	2.78	2.75	2.81	2.90	2.99	2.92	2.99	3.09	3.19	3.08	3.14	3.25	3.36	3.21	3.28	3.39	3.50	3.32	3.39	3.51	3.63																					
	AMPS	10.3	10.5	10.8	11.2	11.1	11.3	11.7	12.1	12.0	12.3	12.7	13.1	12.8	13.1	13.5	14.0	13.6	13.9	14.4	14.9	14.4	14.7	15.2	15.8																					
	HI PR	232	250	264	275	261	281	296	309	297	319	337	352	338	364	384	400	380	409	432	450	420	452	477	498																					
	LO PR	108	114	125	133	114	121	132	141	118	126	137	146	124	132	144	154	130	138	151	161	135	143	156	166																					
	MBh	35.7	36.8	39.8	42.7	34.9	35.9	38.9	41.7	34.1	35.1	38.0	40.7	33.2	34.2	37.0	39.7	31.6	32.5	35.2	37.8	29.2	30.1	32.6	35.0																					

* IDB: Entering Indoor Dry Bulb Temperature

High and low pressures are measured at the liquid and suction access fittings.

NOTE: Shaded area is ACCA (TVA) conditions

MODEL: **GPH1442H41A***

EXPANDED PERFORMANCE DATA

COOLING OPERATION

Design Subcooling, 11 ± 2 °F @ the liquid access fitting connection AHRI 95 test conditions. Design Superheat 7 ± 2 °F @ the compressor suction access fitting connection.

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							
80	1461	MBh	40.6	41.5	44.3	47.3	39.6	40.5	43.3	46.2	38.7	39.5	42.2	45.1	37.7	38.6	41.2	44.0	35.9	36.6	39.1	41.8	1.00	1.00	0.81	0.61	33.2	33.9	36.3	38.8		
		S/T	0.93	0.87	0.71	0.53	0.97	0.91	0.74	0.55	1.00	0.93	0.76	0.57	1.00	0.96	0.78	0.58	1.00	1.00	1.00	0.81	0.61	1.00	1.00	0.81	0.61	1.00	1.00	0.82	0.61	
		Delta T	24	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16	24	23	23	20	16	21	21	21	19	15	15	15	15	
		KW	2.66	2.72	2.80	2.89	2.87	2.93	3.02	3.12	3.05	3.12	3.22	3.33	3.21	3.28	3.39	3.50	3.42	3.35	3.42	3.54	3.66	3.46	3.46	3.54	3.66	3.79	3.79	3.79	3.79	
		AMPS	10.7	11.0	11.3	11.7	11.6	11.9	12.2	12.7	12.6	12.9	13.3	13.8	13.4	13.7	14.2	14.7	14.7	14.2	14.6	15.1	15.6	15.1	15.4	15.4	15.9	16.5	16.5	16.5	16.5	
		HI PR	244	263	278	290	274	295	312	325	312	336	354	370	355	382	404	421	400	400	430	454	474	442	442	475	502	523	523	523	523	
		LO PR	113	120	131	140	120	127	139	148	124	132	144	154	131	139	152	161	152	137	146	159	169	141	141	151	164	175	175	175	175	
		MBh	39.4	40.2	43.0	46.0	38.5	39.3	42.0	44.9	37.6	38.4	41.0	43.8	36.6	37.4	40.0	42.8	34.8	35.6	38.0	40.6	32.2	32.9	35.2	37.6	37.6	37.6	37.6	37.6		
		S/T	0.89	0.83	0.68	0.51	0.92	0.86	0.70	0.53	0.95	0.89	0.72	0.54	0.98	0.91	0.74	0.56	1.00	1.00	0.95	0.77	0.58	1.00	1.00	0.96	0.78	0.58	0.58	0.58	0.58	
		Delta T	25	24	21	16	25	24	21	17	25	24	21	17	25	24	21	17	25	24	24	21	17	24	23	22	19	16	16	16	16	
1300	1300	KW	2.64	2.69	2.78	2.87	2.84	2.90	3.00	3.10	3.02	3.09	3.19	3.30	3.18	3.25	3.36	3.47	3.32	3.39	3.51	3.62	3.43	3.51	3.63	3.75	3.75	3.75	3.75	3.75		
		AMPS	10.6	10.9	11.2	11.6	11.5	11.7	12.1	12.6	12.4	12.7	13.2	13.6	13.3	13.6	14.0	14.6	14.1	14.5	14.9	15.5	14.9	15.3	15.8	16.4	16.4	16.4	16.4	16.4	16.4	
		HI PR	242	260	275	287	272	292	309	322	309	332	351	366	352	379	400	417	396	426	450	469	437	437	471	497	518	518	518	518	518	
		LO PR	112	119	130	139	118	126	137	146	123	131	143	152	129	137	150	160	135	144	157	168	140	140	149	163	173	173	173	173	173	
		MBh	36.4	37.1	39.7	42.4	35.5	36.3	38.8	41.4	34.7	35.4	37.8	40.5	33.8	34.6	36.9	39.5	32.1	32.8	35.1	37.5	29.8	30.4	32.5	34.7	34.7	34.7	34.7	34.7	34.7	
		S/T	0.86	0.80	0.65	0.49	0.89	0.83	0.68	0.51	0.91	0.85	0.70	0.52	0.94	0.88	0.72	0.54	0.98	0.92	0.75	0.56	0.98	0.98	0.92	0.75	0.56	0.56	0.56	0.56	0.56	
		Delta T	25	24	21	17	25	24	21	17	25	24	21	17	26	25	21	17	26	25	24	21	17	24	23	20	16	16	16	16	16	
		KW	2.57	2.63	2.71	2.80	2.77	2.83	2.92	3.02	2.95	3.01	3.11	3.21	3.10	3.17	3.28	3.39	3.23	3.31	3.42	3.53	3.35	3.42	3.54	3.66	3.66	3.66	3.66	3.66	3.66	
		AMPS	10.4	10.6	10.9	11.3	11.2	11.4	11.8	12.2	12.1	12.4	12.8	13.3	12.9	13.2	13.7	14.2	13.7	14.1	14.5	15.1	14.5	14.9	15.4	15.9	16.7	16.7	16.7	16.7	16.7	16.7
		HI PR	235	253	267	278	263	283	299	312	300	322	340	355	341	367	388	404	384	413	436	455	424	424	456	482	503	503	503	503	503	503
LO PR	109	116	126	134	115	122	133	142	119	127	139	148	125	133	146	155	131	140	153	163	136	136	145	158	168	168	168	168	168	168		

NOTE: Shaded area reflects AHRI rating conditions

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								
85	1461	MBh	41.3	42.1	44.1	47.0	40.3	41.1	43.0	45.9	39.4	40.1	42.0	44.8	38.4	39.1	41.0	43.7	36.5	37.2	38.9	41.5	33.8	34.4	36.1	38.5	38.5	38.5	38.5	38.5			
		S/T	0.98	0.94	0.85	0.69	1.00	0.98	0.88	0.72	1.00	1.00	0.90	0.73	1.00	1.00	0.93	0.76	1.00	1.00	1.00	0.97	0.79	1.00	1.00	0.98	0.79	0.79	0.79	0.79	0.79		
		Delta T	25	25	24	20	25	25	24	21	25	25	24	21	24	24	21	17	24	23	23	24	21	21	22	19	19	19	19	19	19		
		KW	2.68	2.74	2.82	2.92	2.89	2.95	3.05	3.15	3.07	3.14	3.24	3.35	3.24	3.31	3.42	3.53	3.37	3.45	3.57	3.69	3.49	3.57	3.69	3.82	3.82	3.82	3.82	3.82	3.82		
		AMPS	10.8	11.1	11.4	11.9	11.7	12.0	12.3	12.8	12.7	13.0	13.4	13.9	13.5	13.8	14.3	14.8	14.4	14.7	15.2	15.8	15.2	15.6	16.1	16.7	16.7	16.7	16.7	16.7	16.7	16.7	
		HI PR	247	266	281	293	277	298	315	328	315	339	358	373	359	386	408	425	404	434	459	478	446	446	480	507	529	529	529	529	529	529	
		LO PR	114	122	133	141	121	128	140	149	126	134	146	155	132	140	153	163	138	147	160	171	143	143	152	166	177	177	177	177	177	177	
		MBh	40.1	40.9	42.8	45.6	39.1	39.9	41.8	44.6	38.2	39.0	40.8	43.5	37.3	38.0	39.8	42.5	35.4	36.1	37.8	40.3	32.8	33.4	35.0	37.4	37.4	37.4	37.4	37.4	37.4	37.4	
		S/T	0.93	0.90	0.81	0.66	0.97	0.93	0.84	0.68	0.99	0.96	0.86	0.70	1.00	0.99	0.89	0.72	1.00	1.00	1.00	0.92	0.75	1.00	1.00	0.93	0.76	0.76	0.76	0.76	0.76	0.76	
		Delta T	26	26	25	21	27	26	25	22	27	26	25	22	26	27	25	22	26	27	26	25	21	23	24	23	20	20	20	20	20	20	
1300	1300	KW	2.66	2.72	2.80	2.89	2.87	2.93	3.02	3.12	3.05	3.12	3.22	3.33	3.21	3.28	3.39	3.50	3.35	3.42	3.54	3.66	3.46	3.54	3.66	3.79	3.79	3.79	3.79	3.79	3.79		
		AMPS	10.7	11.0	11.3	11.7	11.6	11.9	12.2	12.7	12.6	12.9	13.3	13.8	13.4	13.7	14.2	14.7	14.2	14.6	15.1	15.6	15.1	15.4	15.9	16.5	16.5	16.5	16.5	16.5	16.5	16.5	
		HI PR	244	263	278	290	274	295	312	325	312	336	354	370	355	382	404	421	400	430	454	474	442	442	475	502	523	523	523	523	523	523	
		LO PR	113	120	131	140	120	127	139	148	124	132	144	154	131	139	152	161	137	146	159	169	141	141	151	164	175	175	175	175	175	175	175
		MBh	37.0	37.7	39.5	42.1	36.1	36.8	38.6	41.2	35.3	36.0	37.7	40.2	34.4	35.1	36.7	39.2	32.7	33.3	34.9	37.2	30.3	30.9	32.3	34.5	34.5	34.5	34.5	34.5	34.5	34.5	
		S/T	0.90	0.87	0.78	0.64	0.93	0.90	0.81	0.66	0.96	0.92	0.83	0.67	0.99	0.95	0.86	0.70	1.00	1.00	0.99	0.89	0.72	1.00	1.00	0.90	0.73	0.73	0.73	0.73	0.73	0.73	
		Delta T	27	26	25	22	27	27	25	22	27	27	25	22	27	27	25	22	27	27	26	25	22	24	25	23	20	20	20	20	20	20	
		KW	2.59	2.65	2.73	2.82	2.80	2.86	2.95	3.04	2.97	3.04	3.14	3.24	3.13	3.20	3.30	3.41	3.26	3.33	3.45	3.56	3.38	3.45	3.57	3.69	3.69	3.69	3.69	3.69	3.69	3.69	
		AMPS	10.5	10.7	11.0	11.4	11.3	11.5	11.9	12.3	12.2	12.5	12.9	13.4	13.0	13.3	13.8	14.3	13.9	14.2	14.7	15.2	14.7	15.0	15.5	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1
		HI PR	237	255	269	281	266	286	302	315	303	326	344	359	345	371	392	408	388	417	441	460	428	428	461	487	508	508	508	508	508	508	508
LO PR	110	117	127	136	116	123	135	143	121	128	140	149	127	135	147	157	133	141	154	164	137	137	146	159	170	170	170	170	170	170	170		

* Entering Indoor Dry Bulb Temperature

High and low pressures are measured at the liquid and suction access fittings.

NOTE: Shaded area is AHRI Rating Conditions

KW = Total system power

AMPS: Unit amps (comp. +

MODEL: **GPH1448H41A***

EXPANDED PERFORMANCE DATA

COOLING OPERATION

Design Subcooling, 11 ± 2 °F @ the liquid access fitting connection. AHR1 95 test conditions. Design Superheat 7 ± 2 °F @ the compressor suction access fitting connection.

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		
80	1798	MBh	46.7	47.7	50.9	54.4	45.6	46.6	49.7	53.2	44.5	45.5	48.6	51.9	43.4	44.3	47.4	50.6	41.2	42.1	45.0	48.1	38.2	39.0	41.7	44.6	
		ST	0.97	0.91	0.74	0.55	1.00	0.94	0.76	0.57	1.00	0.96	0.78	0.59	1.00	1.00	0.81	0.60	1.00	1.00	0.84	0.63	1.00	1.00	0.85	0.63	
		Delta T	23	22	19	15	23	22	19	16	23	22	19	16	22	23	20	16	22	21	22	19	15	20	20	18	14
		KW	3.04	3.10	3.20	3.30	3.27	3.34	3.45	3.56	3.47	3.55	3.66	3.78	3.65	3.73	3.86	3.99	3.81	3.81	3.89	4.02	4.16	3.94	4.03	4.16	4.30
		AMPS	13.1	13.4	13.7	14.2	14.0	14.3	14.7	15.2	15.1	15.4	15.9	16.4	16.0	16.4	16.9	17.5	17.0	17.4	17.9	18.5	17.9	18.3	18.9	19.5	20.5
	1600	HI PR	247	266	281	293	277	298	315	329	315	339	358	374	359	386	408	426	404	435	459	479	446	480	507	529	
		LO PR	112	119	130	138	118	125	137	146	123	130	142	152	129	137	149	159	135	143	157	167	140	148	162	173	
		MBh	45.3	46.3	49.5	52.9	44.2	45.2	48.3	51.6	43.2	44.1	47.2	50.4	42.1	43.1	46.0	49.2	40.0	40.9	43.7	46.7	37.1	37.9	40.5	43.3	
		ST	0.92	0.86	0.70	0.53	0.95	0.90	0.73	0.54	0.98	0.92	0.75	0.56	1.00	0.95	0.77	0.58	1.00	0.98	0.80	0.60	1.00	0.99	0.81	0.60	
		Delta T	24	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16	24	23	23	20	16	21	22	19	15
1402	KW	3.01	3.08	3.17	3.27	3.24	3.31	3.42	3.53	3.45	3.52	3.63	3.75	3.62	3.70	3.83	3.95	3.78	3.86	3.99	4.12	3.91	3.99	4.13	4.27		
	AMPS	13.0	13.2	13.6	14.1	13.9	14.2	14.6	15.1	15.0	15.3	15.8	16.3	15.9	16.3	16.8	17.3	16.8	17.2	17.7	18.4	17.7	18.1	18.7	19.4		
	HI PR	245	263	278	290	274	295	312	325	312	336	355	370	356	383	404	421	400	430	455	474	442	476	502	524		
	LO PR	110	118	128	137	117	124	136	144	121	129	141	150	127	136	148	158	134	142	155	165	138	147	160	171		
	MBh	41.8	42.7	45.6	48.8	40.8	41.7	44.6	47.7	39.9	40.7	43.5	46.5	38.9	39.7	42.5	45.4	36.9	37.8	40.3	43.1	34.2	35.0	37.4	39.9		

NOTE: Shaded area reflects AHR1 rating conditions

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		
85	1798	MBh	47.5	48.4	50.7	54.1	46.4	47.3	49.5	52.8	45.3	46.1	48.3	51.6	44.2	45.0	47.1	50.3	42.0	42.8	44.8	47.8	38.9	39.6	41.5	44.3	
		ST	1.00	0.98	0.88	0.72	1.00	1.00	0.91	0.74	1.00	1.00	0.94	0.76	1.00	1.00	0.97	0.78	1.00	1.00	0.94	0.81	1.00	1.00	0.94	0.82	
		Delta T	24	24	23	20	24	24	23	20	23	24	23	20	23	23	23	20	23	21	22	23	20	20	20	21	19
		KW	3.06	3.13	3.22	3.33	3.29	3.37	3.47	3.59	3.50	3.58	3.69	3.82	3.68	3.77	3.89	4.02	3.84	3.92	4.05	4.19	3.97	4.06	4.20	4.34	
		AMPS	13.2	13.5	13.9	14.3	14.1	14.4	14.9	15.4	15.2	15.6	16.0	16.6	16.2	16.5	17.0	17.6	17.1	17.5	18.0	18.7	18.0	18.5	19.0	19.7	
	1600	HI PR	250	269	284	296	280	301	318	332	318	343	362	377	363	390	412	430	408	439	464	484	451	485	512	534	
		LO PR	113	120	131	139	119	127	138	147	124	132	144	153	130	138	151	161	136	145	158	169	141	150	164	174	
		MBh	46.1	47.0	49.2	52.5	45.0	45.9	48.1	51.3	43.9	44.8	46.9	50.1	42.9	43.7	45.8	48.8	40.7	41.5	43.5	46.4	37.7	38.5	40.3	43.0	
		ST	0.97	0.93	0.84	0.68	1.00	0.97	0.87	0.71	1.00	0.99	0.89	0.73	1.00	1.00	0.92	0.75	1.00	1.00	0.96	0.78	1.00	1.00	0.97	0.78	
		Delta T	26	25	24	21	26	25	24	21	25	25	24	21	25	25	24	21	23	24	24	21	22	22	22	19	
1402	KW	3.04	3.10	3.20	3.30	3.27	3.34	3.45	3.56	3.47	3.55	3.66	3.78	3.65	3.73	3.86	3.99	3.81	3.89	4.02	4.16	3.94	4.03	4.16	4.30		
	AMPS	13.1	13.4	13.7	14.2	14.0	14.3	14.7	15.2	15.1	15.4	15.9	16.4	16.0	16.4	16.9	17.5	17.0	17.4	17.9	18.5	17.9	18.3	18.9	19.5		
	HI PR	247	266	281	293	277	298	315	329	315	339	358	374	359	386	408	426	404	435	459	479	446	480	507	529		
	LO PR	112	119	130	138	118	125	137	146	123	130	142	152	129	137	149	159	135	143	157	167	140	148	162	173		
	MBh	42.5	43.4	45.4	48.5	41.5	42.4	44.4	47.3	40.6	41.3	43.3	46.2	39.6	40.3	42.2	45.1	37.6	38.3	40.1	42.8	34.8	35.5	37.2	39.7		

* Entering Indoor Dry Bulb Temperature
 High and low pressures are measured at the liquid and suction access fittings.
 KW = Total system power
 AMPS: Unit amps (comp.+ evaporator + condenser fan motors)

COOLING PERFORMANCE DATA

GPH1460H41A*

MODEL: GPH1460H41A*

EXPANDED PERFORMANCE DATA

COOLING OPERATION

Design Subcooling, 7 ± 2 °F @ the liquid access fitting connection AHR1 95 test conditions. Design Superheat 7 ± 2 °F @ the compressor suction access fitting connection.

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	1798	MBh	55.9	57.9	63.4	-	54.6	56.5	62.0	-	53.3	55.2	60.5	-	52.0	53.9	59.0	-	49.4	51.2	56.1	-	46.7	47.4	51.9	-
		S/T	0.71	0.59	0.41	-	0.74	0.62	0.43	-	0.76	0.63	0.44	-	0.78	0.65	0.45	-	0.81	0.68	0.47	-	0.82	0.68	0.47	-
		Delta T	20	18	13	-	21	18	14	-	21	18	14	-	21	18	14	-	20	18	13	-	19	17	13	-
		KW	3.69	3.77	3.90	-	3.99	4.08	4.22	-	4.25	4.35	4.49	-	4.48	4.58	4.74	-	4.68	4.79	4.95	-	4.85	4.96	5.13	-
		AMPS	15.6	15.9	16.4	-	16.8	17.1	17.7	-	18.1	18.5	19.1	-	19.3	19.7	20.4	-	20.5	20.9	21.6	-	21.6	22.1	22.8	-
	1600	HI PR	237	255	269	-	266	286	302	-	302	325	343	-	344	370	391	-	387	417	440	-	428	460	486	-
		LO PR	107	114	124	-	113	120	131	-	118	125	137	-	124	131	144	-	130	138	150	-	134	143	156	-
		MBh	54.2	56.2	61.6	-	53.0	54.9	60.1	-	51.7	53.6	58.7	-	50.4	52.3	57.3	-	47.9	49.7	54.4	-	44.4	46.0	50.4	-
		S/T	0.68	0.57	0.39	-	0.70	0.59	0.41	-	0.72	0.60	0.42	-	0.74	0.62	0.43	-	0.77	0.65	0.45	-	0.78	0.65	0.45	-
		Delta T	21	18	14	-	21	19	14	-	21	19	14	-	22	19	14	-	21	18	14	-	20	17	13	-
1402	KW	3.66	3.74	3.87	-	3.96	4.04	4.18	-	4.22	4.31	4.46	-	4.44	4.55	4.70	-	4.64	4.75	4.91	-	4.81	4.92	5.09	-	
	AMPS	15.5	15.8	16.3	-	16.6	17.0	17.5	-	18.0	18.4	18.9	-	19.1	19.6	20.2	-	20.3	20.8	21.4	-	21.4	21.9	22.6	-	
	HI PR	234	252	266	-	263	283	299	-	299	322	340	-	341	367	387	-	383	412	435	-	423	456	481	-	
	LO PR	106	113	123	-	112	119	130	-	116	124	135	-	122	130	142	-	128	136	149	-	133	141	154	-	
	MBh	50.1	51.9	56.8	-	48.9	50.7	55.5	-	47.7	49.5	54.2	-	46.6	48.3	52.9	-	44.2	45.8	50.2	-	41.0	42.5	46.5	-	
75	1798	S/T	0.65	0.55	0.38	-	0.68	0.57	0.39	-	0.70	0.58	0.40	-	0.72	0.60	0.42	-	0.75	0.62	0.43	-	0.76	0.63	0.43	-
		Delta T	21	19	14	-	22	19	14	-	22	19	14	-	22	19	14	-	22	19	14	-	20	17	13	-
		KW	3.57	3.65	3.77	-	3.86	3.94	4.07	-	4.11	4.20	4.34	-	4.33	4.43	4.58	-	4.52	4.62	4.78	-	4.68	4.79	4.95	-
		AMPS	15.1	15.4	15.9	-	16.2	16.6	17.1	-	17.5	17.9	18.5	-	18.6	19.1	19.7	-	19.8	20.2	20.8	-	20.9	21.3	22.0	-
		HI PR	227	245	258	-	255	275	290	-	290	312	330	-	330	356	375	-	372	400	422	-	411	442	467	-
	1600	LO PR	103	109	120	-	109	116	126	-	113	120	131	-	119	126	138	-	124	132	144	-	129	137	149	-
		MBh	56.8	58.5	63.3	67.9	55.5	57.1	61.8	66.4	54.2	55.8	60.4	64.8	52.8	54.4	58.9	63.2	50.2	51.7	55.9	60.0	46.5	47.9	51.8	55.6
		S/T	0.81	0.72	0.55	0.35	0.84	0.75	0.57	0.37	0.86	0.77	0.58	0.37	0.89	0.79	0.60	0.39	0.92	0.82	0.62	0.40	0.93	0.83	0.63	0.40
		Delta T	24	22	18	12	24	22	18	12	24	22	18	12	24	22	18	12	24	22	18	12	22	20	17	12
		KW	3.72	3.81	3.93	4.06	4.02	4.11	4.25	4.40	4.29	4.39	4.53	4.69	4.52	4.63	4.78	4.95	4.72	4.83	4.99	5.17	4.89	5.00	5.18	5.36
1402	AMPS	15.7	16.1	16.6	17.1	16.9	17.3	17.8	18.4	18.3	18.7	19.3	20.0	19.5	19.9	20.5	21.3	20.6	21.1	21.8	22.6	21.8	22.3	23.0	23.9	
	HI PR	239	257	272	283	268	289	305	318	305	328	347	362	348	374	395	412	391	421	444	463	432	465	491	512	
	LO PR	108	115	126	134	114	122	133	141	119	126	138	147	125	133	145	154	131	139	152	162	135	144	157	167	
	MBh	55.1	56.8	61.5	66.0	53.9	55.5	60.0	64.4	52.6	54.1	58.6	62.9	51.3	52.8	57.2	61.4	48.7	50.2	54.3	58.3	45.1	46.5	50.3	54.0	
	S/T	0.77	0.69	0.52	0.34	0.80	0.72	0.54	0.35	0.82	0.73	0.56	0.36	0.85	0.76	0.57	0.37	0.88	0.79	0.59	0.38	0.89	0.79	0.60	0.39	
75	1600	Delta T	24	23	18	13	25	23	19	13	25	23	19	13	25	23	19	13	25	23	19	13	23	21	17	12
		KW	3.69	3.78	3.90	4.03	3.99	4.08	4.22	4.36	4.25	4.35	4.50	4.65	4.48	4.59	4.74	4.91	4.68	4.79	4.95	5.12	4.85	4.96	5.13	5.31
		AMPS	15.6	15.9	16.4	17.0	16.8	17.1	17.7	18.3	18.1	18.5	19.1	19.8	19.3	19.7	20.4	21.1	20.5	20.9	21.6	22.4	21.6	22.1	22.8	23.7
		HI PR	237	255	269	281	266	286	302	315	302	325	343	358	344	370	391	408	387	417	440	459	428	460	486	507
		LO PR	107	114	124	133	113	120	131	140	118	125	137	146	124	131	144	153	130	138	150	160	134	143	156	166
	1402	MBh	50.9	52.4	56.7	60.9	49.7	51.2	55.4	59.5	48.5	50.0	54.1	58.1	47.3	48.8	52.8	56.6	45.0	46.3	50.1	53.8	41.7	42.9	46.4	49.8
		S/T	0.74	0.67	0.50	0.32	0.77	0.69	0.52	0.34	0.79	0.71	0.54	0.34	0.82	0.73	0.55	0.36	0.85	0.76	0.57	0.37	0.85	0.76	0.58	0.37
		Delta T	25	23	19	13	25	23	19	13	25	23	19	13	25	23	19	13	25	23	19	13	23	22	18	12
		KW	3.60	3.68	3.80	3.93	3.89	3.98	4.11	4.25	4.14	4.24	4.38	4.53	4.37	4.47	4.62	4.78	4.56	4.66	4.82	4.99	4.72	4.83	5.00	5.17
		AMPS	15.2	15.5	16.0	16.6	16.3	16.7	17.2	17.8	17.7	18.1	18.6	19.3	18.8	19.2	19.8	20.5	19.9	20.4	21.0	21.8	21.0	21.5	22.2	23.0
75	HI PR	230	247	261	272	258	277	293	305	293	315	333	347	334	359	379	396	376	404	427	445	415	447	471	492	
	LO PR	104	111	121	129	110	117	128	136	114	121	133	141	120	128	139	148	126	134	146	155	130	138	151	161	

* IDB: Entering Indoor Dry Bulb Temperature

High and low pressures are measured at the liquid and suction access fittings.

NOTE: Shaded area is ACCA (TVA) conditions

COOLING PERFORMANCE DATA

GPH1460H41A*

EXPANDED PERFORMANCE DATA

EXPANDED PERFORMANCE DATA

MODEL: GPH1460H41A*

Design Subcooling, 7 ± 2 °F @ the liquid access fitting connection AHRI 95 test conditions. Design Superheat 7 ± 2 °F @ the compressor suction access fitting connection.

IDB*	Airflow	85												95												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																		
80	1798	MBh	57.8	59.1	63.1	67.5	56.5	57.7	61.6	65.9	55.1	56.3	60.2	64.3	53.8	55.0	58.7	62.8	51.1	52.2	55.8	59.6	47.3	48.4	51.7	55.2																							
		S/T	0.89	0.83	0.68	0.51	0.92	0.86	0.70	0.52	0.94	0.88	0.72	0.54	1.00	0.91	0.74	0.56	1.00	0.95	0.77	0.58	1.00	0.96	0.78	0.58																							
		Delta T	26	25	22	17	27	25	22	18	27	25	22	18	27	26	22	18	24	26	25	22	18	24	24	21	16																						
		KW	3.76	3.84	3.97	4.10	4.06	4.15	4.29	4.43	4.33	4.42	4.57	4.73	4.56	4.67	4.83	4.99	4.76	4.87	5.04	5.22	4.93	5.05	5.22	5.41																							
		AMPS	15.9	16.2	16.7	17.3	17.0	17.4	18.0	18.6	18.4	18.9	19.4	20.1	19.6	20.1	20.7	21.5	20.8	21.2	22.8	22.8	22.0	22.5	23.2	24.1																							
		HI PR	242	260	274	286	271	292	308	321	308	332	350	365	351	378	399	416	395	425	449	468	436	470	496	517																							
		LO PR	109	116	127	135	116	123	134	143	120	128	139	148	126	134	146	156	132	141	153	163	137	145	159	169																							
		MBh	56.1	57.4	61.3	65.5	54.8	56.0	59.9	64.0	53.5	54.7	58.4	62.5	52.2	53.4	57.0	60.9	49.6	50.7	54.2	57.9	45.9	46.9	50.2	53.6																							
		S/T	0.85	0.79	0.65	0.48	0.88	0.82	0.67	0.50	0.90	0.84	0.69	0.51	0.93	0.87	0.71	0.53	0.96	0.90	0.74	0.55	0.97	0.91	0.74	0.55																							
		Delta T	27	26	23	18	28	26	23	18	28	27	23	18	28	27	23	19	27	26	23	18	26	25	21	17																							
KW	3.72	3.81	3.93	4.06	4.02	4.11	4.25	4.40	4.29	4.39	4.53	4.69	4.52	4.63	4.78	4.95	4.72	4.83	5.00	5.17	4.89	5.01	5.18	5.36																									
AMPS	15.7	16.1	16.6	17.1	16.9	17.3	17.8	18.4	18.3	18.7	19.3	20.0	19.5	19.9	20.5	21.3	20.6	21.1	21.8	22.6	21.8	22.3	23.0	23.9																									
HI PR	239	257	272	283	268	289	305	318	305	328	347	362	348	374	395	412	391	421	444	463	432	465	491	512																									
LO PR	108	115	126	134	114	122	133	141	119	126	138	147	125	133	145	154	131	139	152	162	135	144	157	167																									
MBh	51.8	52.9	56.6	60.5	50.6	51.7	55.2	59.1	49.4	50.5	53.9	57.6	48.2	49.2	52.6	56.2	45.8	46.8	50.0	53.4	42.4	43.3	46.3	49.5																									
S/T	0.82	0.77	0.62	0.47	0.85	0.79	0.65	0.48	0.87	0.81	0.66	0.49	0.90	0.84	0.68	0.51	0.93	0.87	0.71	0.53	0.94	0.88	0.72	0.53																									
Delta T	28	27	23	18	28	27	23	19	28	27	23	19	28	27	23	19	28	27	23	19	26	25	22	17																									
KW	3.63	3.71	3.83	3.96	3.92	4.01	4.14	4.28	4.18	4.27	4.42	4.57	4.41	4.51	4.66	4.82	4.60	4.70	4.86	5.03	4.76	4.87	5.04	5.22																									
AMPS	15.3	15.7	16.1	16.7	16.5	16.8	17.4	18.0	17.8	18.2	18.8	19.4	19.0	19.4	20.0	20.7	20.1	20.6	21.2	22.0	21.2	21.7	22.4	23.2																									
HI PR	232	250	264	275	260	280	296	309	296	319	336	351	337	363	383	400	379	408	431	450	419	451	476	497																									
LO PR	105	112	122	130	111	118	129	137	115	123	134	143	121	129	141	150	127	135	147	157	131	140	152	162																									

NOTE: Shaded area reflects AHRI rating conditions

IDB*	Airflow	85												95												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																		
85	1798	MBh	58.8	60.0	62.8	67.0	57.5	58.6	61.3	65.4	56.1	57.2	59.9	63.9	54.7	55.8	58.4	62.3	52.0	53.0	55.5	59.2	48.2	49.1	51.4	54.8																							
		S/T	0.93	0.90	0.81	0.66	0.96	0.93	0.84	0.68	0.99	0.95	0.86	0.70	1.00	0.99	0.89	0.72	1.00	1.00	0.92	0.75	1.00	1.00	0.93	0.75																							
		Delta T	28	28	26	23	28	28	26	23	28	28	26	23	28	28	27	23	27	27	26	23	25	25	24	21																							
		KW	3.79	3.87	4.00	4.13	4.09	4.18	4.32	4.47	4.36	4.46	4.61	4.77	4.60	4.71	4.87	5.04	4.80	4.91	5.08	5.26	4.98	5.09	5.27	5.45																							
		AMPS	16.0	16.3	16.8	17.4	17.2	17.6	18.1	18.8	18.6	19.0	19.6	20.3	19.8	20.3	20.9	21.7	21.0	21.5	22.2	23.0	22.2	22.7	23.5	24.3																							
		HI PR	244	263	277	289	274	295	311	324	311	335	354	369	355	382	403	420	399	429	453	473	441	474	501	522																							
		LO PR	110	117	128	137	117	124	135	144	121	129	141	150	127	135	148	158	133	142	155	165	138	147	160	171																							
		MBh	57.1	58.2	61.0	65.0	55.8	56.9	59.6	63.5	54.5	55.5	58.1	62.0	53.1	54.2	56.7	60.5	50.5	51.4	53.9	57.5	46.7	47.7	49.9	53.2																							
		S/T	0.89	0.86	0.77	0.63	0.92	0.89	0.80	0.65	0.94	0.91	0.82	0.67	0.97	0.94	0.85	0.69	1.00	0.98	0.88	0.71	1.00	0.98	0.89	0.72																							
		Delta T	29	29	27	23	29	29	27	24	30	29	27	24	30	29	28	24	29	29	29	27	24	27	27	25	22																						
KW	3.76	3.84	3.97	4.10	4.06	4.15	4.29	4.43	4.33	4.42	4.57	4.73	4.56	4.67	4.83	4.99	4.76	4.87	5.04	5.22	4.93	5.05	5.22	5.41																									
AMPS	15.9	16.2	16.7	17.3	17.0	17.4	18.0	18.6	18.4	18.9	19.4	20.1	19.6	20.1	20.7	21.5	20.8	21.3	22.0	22.8	22.0	22.5	23.2	24.1																									
HI PR	242	260	274	286	271	292	308	321	308	332	350	365	351	378	399	416	395	425	449	468	436	470	496	517																									
LO PR	109	116	127	135	116	123	134	143	120	128	139	148	126	134	146	156	132	141	153	163	137	145	159	169																									
MBh	52.7	53.7	56.3	60.0	51.5	52.5	55.0	58.6	50.3	51.2	53.7	57.2	49.0	50.0	52.3	55.8	46.6	47.5	49.7	53.1	43.1	44.0	46.1	49.1																									
S/T	0.86	0.83	0.75	0.60	0.89	0.86	0.77	0.63	0.91	0.88	0.79	0.64	0.94	0.91	0.82	0.66	0.97	0.94	0.85	0.69	0.98	0.95	0.86	0.69																									
Delta T	30	29	27	24	30	29	28	24	30	29	28	24	30	30	30	28	24	30	29	28	24	28	27	26	22																								
KW	3.66	3.74	3.87	3.99	3.96	4.04	4.18	4.32	4.21	4.31	4.46	4.61	4.44	4.54	4.70	4.86	4.64	4.74	4.91	5.08	4.81	4.92	5.09	5.26																									
AMPS	15.5	15.8	16.3	16.8	16.6	17.0	17.5	18.1	18.0	18.4	18.9	19.6	19.1	19.6	20.2	20.9	20.3	20.7	21.4	22.2	21.4	21.9	22.6	23.4																									
HI PR	234	252	266	278	263	283	299	312	299	322	340	354	341	366	387	404	383	412	435	454	423	456	481	502																									
LO PR	106	113	123	131	112	119	130	139	116	124	135	144	122	130	142	151	128	136	149	159	133	141	154	164																									

NOTE: Shaded area is AHRI Rating Conditions

* Entering Indoor Dry Bulb Temperature

High and low pressures are measured at the liquid and suction access fittings.

KW = Total system power

AMPS: Unit amps (comp. + evaporator + condenser fan motors)

PACKAGE HEAT PUMP SPECIFICATIONS GPH14[24-36]H41A*

EXPANDED PERFORMANCE DATA

MODEL: GPH1424H41A*

HEATING OPERATION

	Outdoor Ambient Temperature																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	-5	-10	
MBh	28.7	27.1	25.5	23.9	22.8	22.1	20.5	18.9	16.2	15.0	13.8	13.0	12.5	11.2	10.0	8.7	7.4	6.1
DELTA T	31.2	29.6	27.8	26.0	24.8	24.1	22.4	20.6	17.6	16.3	15.0	14.2	13.6	12.2	10.8	9.5	8.1	6.6
KW	1.86	1.82	1.78	1.75	1.73	1.71	1.67	1.63	1.65	1.61	1.58	1.55	1.54	1.50	1.46	1.42	1.38	1.34
AMPS	9.1	8.4	7.9	7.5	7.2	7.1	6.7	6.4	6.2	5.9	5.6	5.5	5.5	5.2	4.9	4.6	4.3	3.9
COP	4.51	4.36	4.19	4.00	3.87	3.78	3.59	3.39	2.87	2.71	2.56	2.45	2.38	2.19	2.00	1.79	1.57	1.32
EER	15.4	14.9	14.3	13.7	13.2	12.9	12.3	11.6	9.8	9.3	8.7	8.4	8.1	7.5	6.8	6.1	5.4	4.5
HI PR	367	352	338	324	316	310	298	286	274	262	251	245	241	232	223	214	206	199
LO PR	142	132	123	113	107	103	95	84	76	68	60	56	54	45	39	33	29	23

Above information is for nominal CFM and 70 degree indoor dry bulb. Instantaneous capacity listed.

MODEL: GPH1430H41A*

HEATING OPERATION

	Outdoor Ambient Temperature																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0	-5	-10
MBh	34.7	32.8	30.9	28.9	27.6	26.7	24.8	22.9	19.2	17.7	16.3	15.4	14.8	13.3	11.8	10.3	8.8	7.2
DELTA T	30.6	29.0	27.3	25.5	24.3	23.6	21.9	20.2	16.9	15.6	14.4	13.6	13.1	11.7	10.4	9.1	7.7	6.3
KW	2.26	2.22	2.17	2.13	2.10	2.08	2.04	1.99	1.98	1.93	1.89	1.86	1.84	1.79	1.75	1.70	1.66	1.61
AMPS	11.0	10.3	9.7	9.1	8.8	8.7	8.2	7.8	7.5	7.2	6.9	6.8	6.7	6.4	6.0	5.7	5.3	4.9
COP	4.48	4.33	4.16	3.97	3.84	3.76	3.56	3.36	2.84	2.68	2.53	2.42	2.36	2.17	1.97	1.77	1.55	1.30
EER	15.3	14.8	14.2	13.6	13.1	12.8	12.2	11.5	9.7	9.2	8.6	8.3	8.1	7.4	6.7	6.0	5.3	4.5
HI PR	374	359	345	330	322	316	304	291	279	267	256	250	245	236	227	218	210	203
LO PR	134	124	117	107	101	97	89	80	72	64	56	52	51	43	37	31	27	21

Above information is for nominal CFM and 70 degree indoor dry bulb. Instantaneous capacity listed.

MODEL: GPH1436H41A*

HEATING OPERATION

	Outdoor Ambient Temperature																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0	-5	-10
MBh	41.5	39.3	37.0	34.6	33.0	32.0	29.7	27.4	26.9	24.8	22.9	21.6	20.8	18.7	16.5	14.4	12.3	10.1
DELTA T	32.0	30.3	28.5	26.7	25.5	24.7	22.9	21.1	20.8	19.2	17.7	16.7	16.1	14.4	12.8	11.1	9.5	7.8
KW	2.74	2.68	2.63	2.57	2.54	2.52	2.47	2.41	2.64	2.58	2.52	2.48	2.46	2.39	2.33	2.27	2.21	2.15
AMPS	13.5	12.6	11.9	11.2	10.9	10.7	10.1	9.7	9.3	8.9	8.5	8.4	8.3	7.9	7.4	7.1	6.6	6.1
COP	4.44	4.29	4.12	3.93	3.80	3.71	3.52	3.32	2.98	2.82	2.66	2.55	2.48	2.28	2.08	1.86	1.63	1.37
EER	15.2	14.6	14.1	13.4	13.0	12.7	12.0	11.4	10.2	9.6	9.1	8.7	8.5	7.8	7.1	6.4	5.6	4.7
HI PR	367	352	338	323	316	310	298	286	274	262	251	245	241	232	223	214	206	199
LO PR	135	125	117	108	102	98	90	80	72	65	57	53	51	43	37	31	27	21

Above information is for nominal CFM and 70 degree indoor dry bulb. Instantaneous capacity listed.

PERFORMANCE TEST

All data based upon listed indoor dry bulb temperature. .00 inches external static pressure on coil of outdoor section. Indoor air cubic feet per minute (CFM) as listed in the Performance Data Sheets:

If conditions vary from this, results will change as follows:

1. As indoor dry bulb temperatures increase, a slight increase will occur in indoor air temperature drop (Delta T). Low and high side pressures and power will not change.
2. As indoor CFM decreases, a slight increase will occur in indoor temperature drop (Delta T). A slight decrease will occur in low and high side pressures and power.

A properly operating unit should be within plus or minus **3 degrees** of the typical (**Delta T**) value shown.

A properly operating unit should be within plus or minus **7 PSIG** of the **HI PR** shown.

A properly operating unit should be within plus or minus **3 PSIG** of the **LO PR** shown.

A properly operating unit should be within plus or minus **3 Amps** of the typical value shown.

PACKAGE HEAT PUMP SPECIFICATIONS GPH14[42-60]H41A*

EXPANDED PERFORMANCE DATA

MODEL: GPH1442H41A*

HEATING OPERATION

	Outdoor Ambient Temperature																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0	-5	-10
MBh	47.1	44.6	42.0	39.3	37.5	36.3	33.8	31.1	26.7	24.6	22.7	21.4	20.6	18.5	16.4	14.3	12.2	10.0
DELTA T	33.6	31.8	29.9	28.0	26.7	25.9	24.0	22.2	19.0	17.5	16.1	15.2	14.7	13.2	11.7	10.2	8.7	7.1
KW	3.07	3.01	2.95	2.89	2.85	2.83	2.77	2.71	2.39	2.33	2.28	2.25	2.23	2.18	2.12	2.07	2.02	1.97
AMPS	12.5	11.6	10.9	10.3	9.9	9.8	9.2	8.8	8.4	8.1	7.7	7.5	7.5	7.1	6.7	6.3	5.9	5.3
COP	4.50	4.34	4.17	3.98	3.85	3.76	3.57	3.36	3.27	3.09	2.91	2.78	2.71	2.49	2.26	2.02	1.77	1.49
EER	15.4	14.8	14.2	13.6	13.1	12.9	12.2	11.5	11.2	10.5	9.9	9.5	9.2	8.5	7.7	6.9	6.0	5.1
HI PR	370	355	341	326	319	313	301	288	276	264	253	247	243	234	225	215	208	200
LO PR	137	127	119	109	103	99	91	81	73	65	58	54	52	44	38	32	28	22

Above information is for nominal CFM and 70 degree indoor dry bulb. Instantaneous capacity listed.

MODEL: GPH1448H41A*

HEATING OPERATION

	Outdoor Ambient Temperature																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0	-5	-10
MBh	56.6	53.6	50.4	47.1	45.0	43.6	40.5	37.4	32.4	29.9	27.5	26.0	25.0	22.5	19.9	17.4	14.8	12.1
DELTA T	32.7	31.0	29.2	27.3	26.0	25.2	23.4	21.6	18.7	17.3	15.9	15.0	14.5	13.0	11.5	10.1	8.6	7.0
KW	3.61	3.54	3.47	3.40	3.36	3.33	3.26	3.19	3.17	3.10	3.03	2.99	2.96	2.89	2.82	2.75	2.67	2.60
AMPS	18.5	17.2	16.2	15.4	14.9	14.6	13.8	13.2	12.7	12.2	11.7	11.5	11.3	10.8	10.2	9.7	9.1	8.3
COP	4.59	4.43	4.25	4.06	3.92	3.84	3.64	3.43	2.99	2.82	2.66	2.55	2.48	2.28	2.07	1.85	1.62	1.37
EER	15.7	15.1	14.5	13.9	13.4	13.1	12.4	11.7	10.2	9.6	9.1	8.7	8.5	7.8	7.1	6.3	5.5	4.7
HI PR	383	368	353	338	330	324	311	299	286	273	262	256	251	242	233	223	215	208
LO PR	135	126	118	108	102	98	90	80	73	65	57	53	51	43	37	31	27	22

Above information is for nominal CFM and 70 degree indoor dry bulb. Instantaneous capacity listed.

MODEL: GPH1460H41A*

HEATING OPERATION

	Outdoor Ambient Temperature																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0	-5	-10
MBh	68.5	64.9	61.0	57.1	54.5	52.8	49.1	45.2	42.1	38.9	35.8	33.8	32.5	29.2	25.9	22.6	19.3	15.8
DELTA T	39.6	37.5	35.3	33.0	31.5	30.6	28.4	26.2	24.4	22.5	20.7	19.6	18.8	16.9	15.0	13.1	11.1	9.1
KW	4.76	4.67	4.57	4.47	4.41	4.37	4.28	4.18	4.08	3.98	3.88	3.83	3.79	3.69	3.59	3.50	3.40	3.30
AMPS	23.9	22.2	20.9	19.7	19.0	18.7	17.7	16.8	16.1	15.4	14.8	14.4	14.2	13.6	12.7	12.0	11.2	10.2
COP	4.21	4.07	3.91	3.74	3.61	3.54	3.36	3.17	3.02	2.86	2.70	2.58	2.51	2.32	2.11	1.89	1.66	1.40
EER	14.4	13.9	13.4	12.8	12.3	12.1	11.5	10.8	10.3	9.8	9.2	8.8	8.6	7.9	7.2	6.5	5.7	4.8
HI PR	407	390	375	358	350	343	330	317	303	290	278	272	267	257	247	237	228	220
LO PR	130	121	113	104	98	94	87	77	70	62	55	51	49	41	36	30	26	21

Above information is for nominal CFM and 70 degree indoor dry bulb. Instantaneous capacity listed.

PERFORMANCE TEST

All data based upon listed indoor dry bulb temperature. .00 inches external static pressure on coil of outdoor section. Indoor air cubic feet per minute (CFM) as listed in the Performance Data Sheets:

If conditions vary from this, results will change as follows:

1. As indoor dry bulb temperatures increase, a slight increase will occur in indoor air temperature drop (Delta T). Low and high side pressures and power will not change.
2. As indoor CFM decreases, a slight increase will occur in indoor temperature drop (Delta T). A slight decrease will occur in low and high side pressures and power.

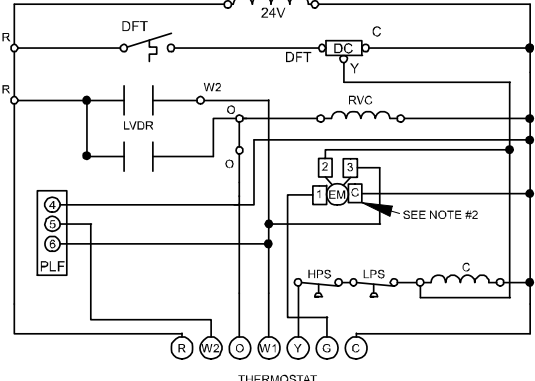
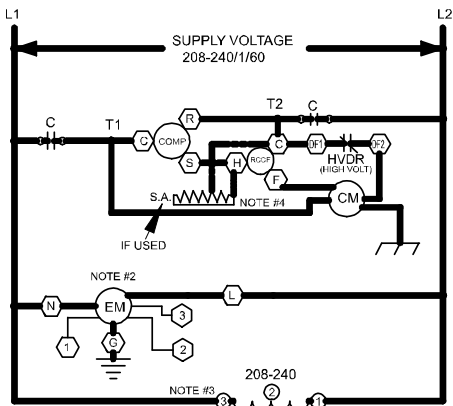
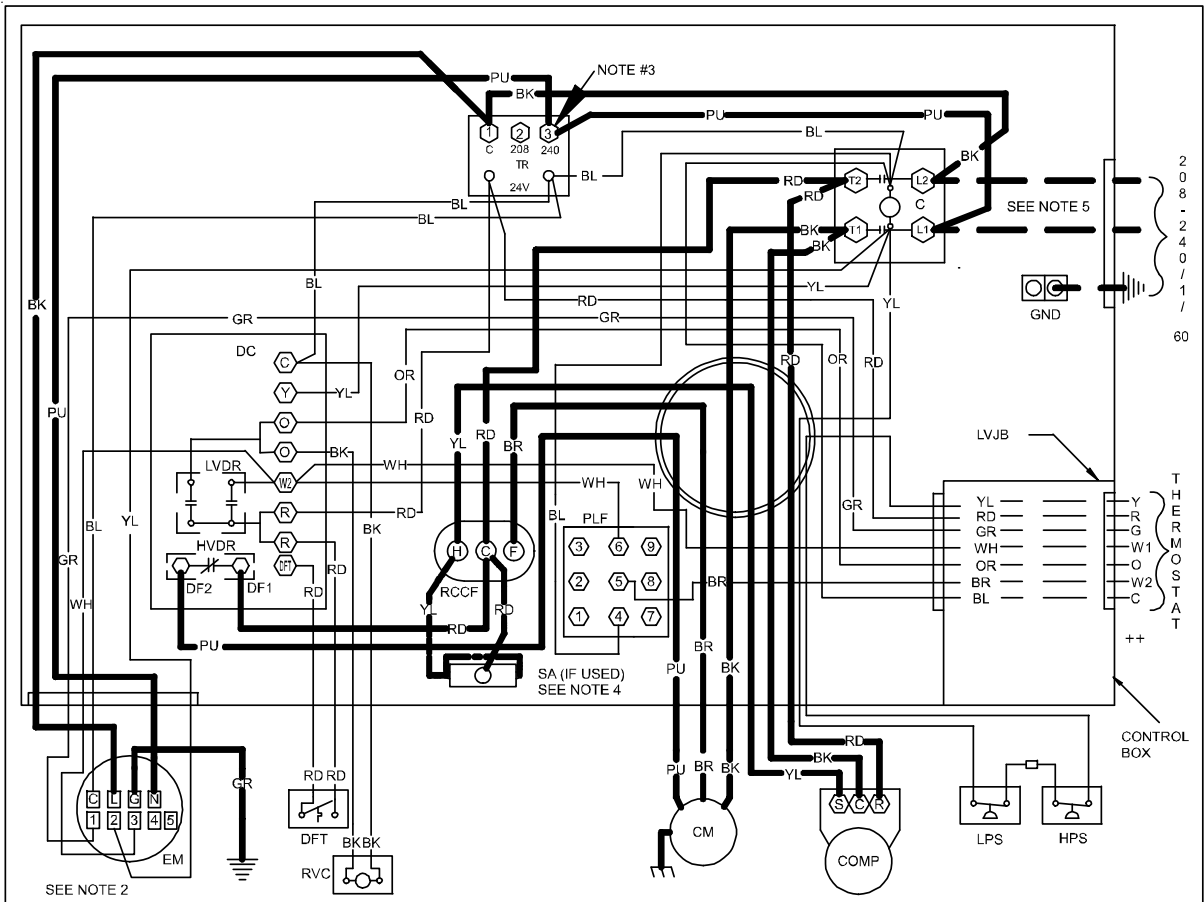
A properly operating unit should be within plus or minus **3 degrees** of the typical (**Delta T**) value shown.

A properly operating unit should be within plus or minus **7 PSIG** of the **HI PR** shown.

A properly operating unit should be within plus or minus **3 PSIG** of the **LO PR** shown.

A properly operating unit should be within plus or minus **3 Amps** of the typical value shown.

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.



COMPONENT LEGEND

- C CONTACTOR
- CM CONDENSER MOTOR
- COMP COMPRESSOR
- DC DEFROST CONTROL
- DFT DEFROST THERMOSTAT
- EM EVAPORATOR MOTOR
- GND EQUIPMENT GROUND
- HVDR HIGH VOLTAGE DEFROST RELAY
- LPS LOW PRESSURE SWITCH
- LVDR LOW VOLTAGE DEFROST RELAY
- LVJB LOW VOLTAGE JUNCTION BOX
- PLF FEMALE PLUG / CONNECTOR
- RCCF REVERSING VALVE COIL
- RCCF RUN CAPACITOR FOR COMPRESSOR AND FAN
- SA START ASSIST
- TR TRANSFORMER
- HPS HIGH PRESSURE SWITCH

FACTORY WIRING

- LINE VOLTAGE
- LOW VOLTAGE
- OPTIMAL HIGH VOLTAGE

FIELD WIRING

- HIGH VOLTAGE
- LOW VOLTAGE

WIRE CODE

- BK BLACK
- BL BLUE
- BR BROWN
- GR GREEN
- OR ORANGE
- PU PURPLE
- RD RED
- WH WHITE
- YL YELLOW

NOTES:

1. REPLACEMENT WIRE MUST BE SAME SIZE AND TYPE INSULATION AS ORIGINAL (AT LEAST 105°C) USE COPPER CONDUCTOR ONLY.
2. TO CHANGE EVAPORATOR MOTOR SPEED MOVE WHITE AND YELLOW LEADS FROM EM"2" AND "3" TO "4" AND "5". IF BOTH LEADS ARE ENERGIZED, THE HIGHER SPEED SETTING IS USED.
3. FOR 208 VOLT TRANSFORMER OPERATION MOVE PURPLE WIRES FROM TERMINAL 3 TO TERMINAL 2 ON TRANSFORMER.
4. START ASSIST FACTOR EQUIPPED WHEN REQUIRED
5. USE COPPER CONDUCTORS ONLY
- ++ USE N.E.C. CLASS 2 WIRE

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

Wiring is subject to change, always refer to the wiring diagram on the unit for the most up-to-date wiring.