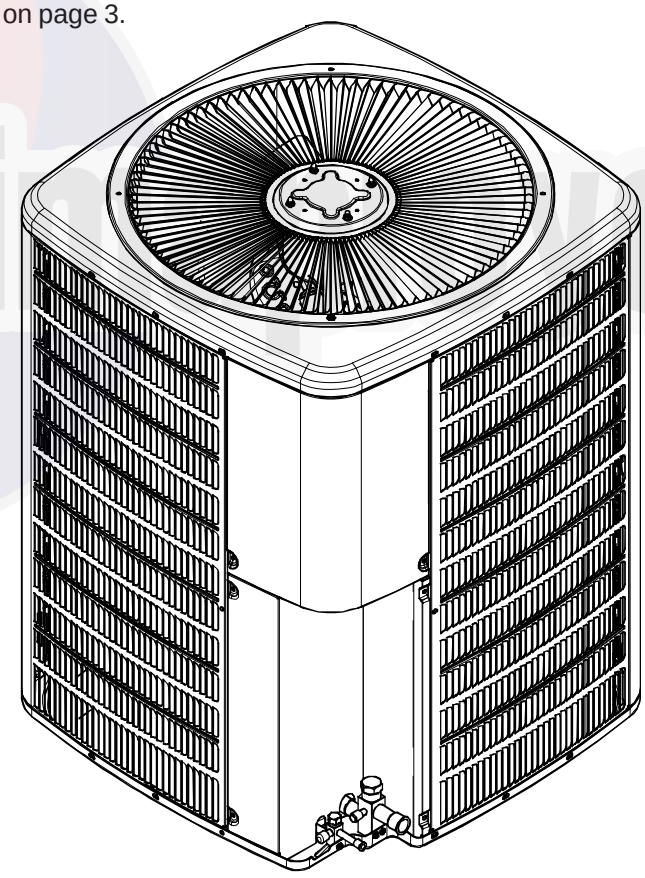
Goodman® TECHNICAL MANUAL

GSH 13 SEER
Split System Heat Pump

(Shipped Without Refrigerant Charge)

- Refer to Service Manual RS6100004 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.

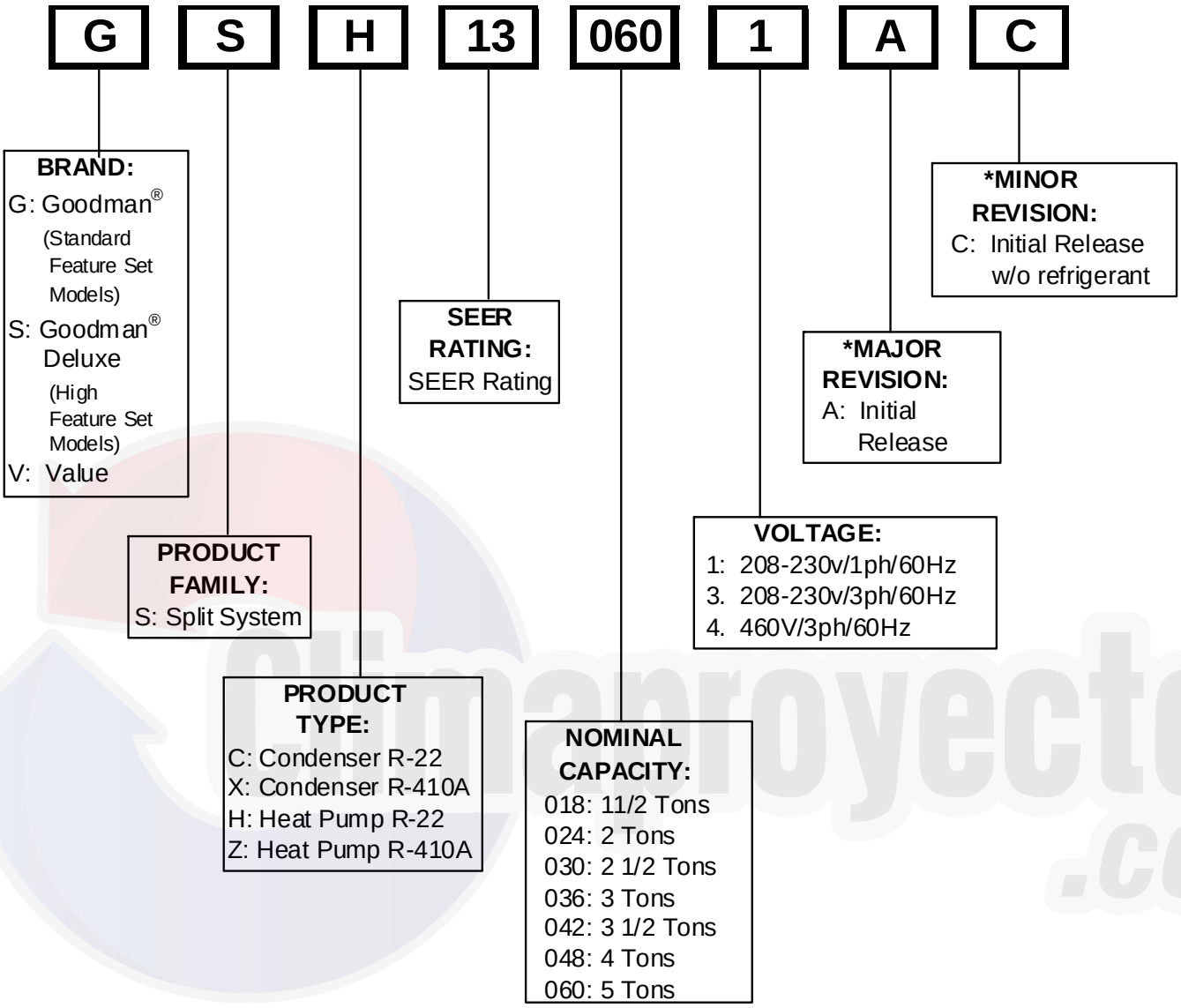


This manual is to be used by qualified, professionally trained HVAC technicians only. Goodman does not assume any responsibility for property damage or personal injury due to improper service procedures or services performed by an unqualified person.

RT6212010r5
April 2014

PRODUCT IDENTIFICATION

The model number is used for positive identification of component parts used in manufacturing. Please use this number when requesting service or parts information.



**Specific models without refrigerant charge (with their major & minor revision levels) are listed on the following page.*

⚠ 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 the requirements (at a minimum) 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 number is used for positive identification of component parts used in manufacturing. Please use this number when requesting service or parts information.

GSH130421AF/AG	GSH130181BB	GSH130181C*
GSH130481AE/AF	GSH130241BB	GSH130241C*
GSH130601AC/AD	GSH130301BB	GSH130301C*
	GSH130361BC	GSH130361C*
	GSH130421B*	
	GSH130481B*	

** Indicates minor revision & is not used for order entry or inventory management*

⚠ WARNING **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.**

⚠ WARNING **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.**

⚠ WARNING **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

These GSH13 SEER heat pump models are shipped with a nitrogen holding charge only and are available in 3 through 5 ton sizes for 208/230 volt single phase applications.

These units are designed for free air discharge. Air is drawn through the outdoor coil by a propeller fan, and is discharged vertically out the top of the unit. No additional restriction (ductwork) shall be applied.

All units come equipped with suction and liquid valves designed for connection to refrigerant-type copper. Non-back seating valves are factory installed to accept the field run copper.

Systems should be properly sized by heat gain and loss calculations made according to methods of the Air Conditioning Contractors Association (ACCA) or equivalent. It is the contractors responsibility to ensure the system has adequate capacity to heat or cool the conditioned space.

GSH13 units use a mix of reciprocating and scroll compressors. There are a number of design characteristics which are different from the scroll compared to the traditional reciprocating compressor.

Due to their design, Scroll compressors are inherently more tolerant of liquid refrigerant.

Note: Even though the compressor section of a Scroll compressor is more tolerant of liquid refrigerant, continued floodback or flooded start conditions may wash oil from the bearing surfaces causing premature bearing failure.

R22 scroll compressors use "POE" or polyolester oil which is NOT compatible with mineral based lubricants like 3GS. "POE" oil must be used if additional oil is required.

GSH13 model heat pumps do not use a reversing relay to energize the reversing valve. The reversing valve is energized in the cooling cycle through the "O" terminal on the room thermostat.

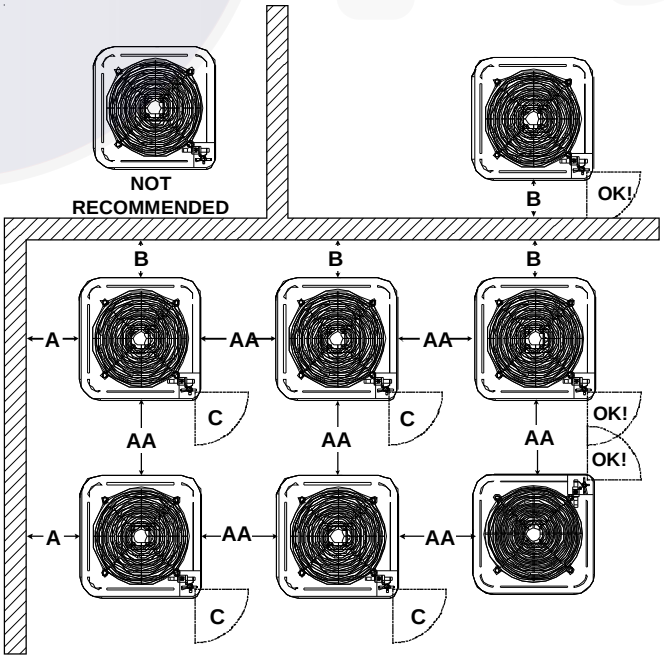
This unit is for outdoor installation only. Refer to minimum figure for clearances from the sides of the unit to full walls and other objects.

NOTE: This unit cannot be completely enclosed. At least one side must be unrestricted.

These clearances will help avoid air recirculation. If installing two or more units at the same location, allow at least 24 inches between units. If only one side is restricted (for example, against the outside wall of a house), the unit may be placed as close as 8" to that one wall.

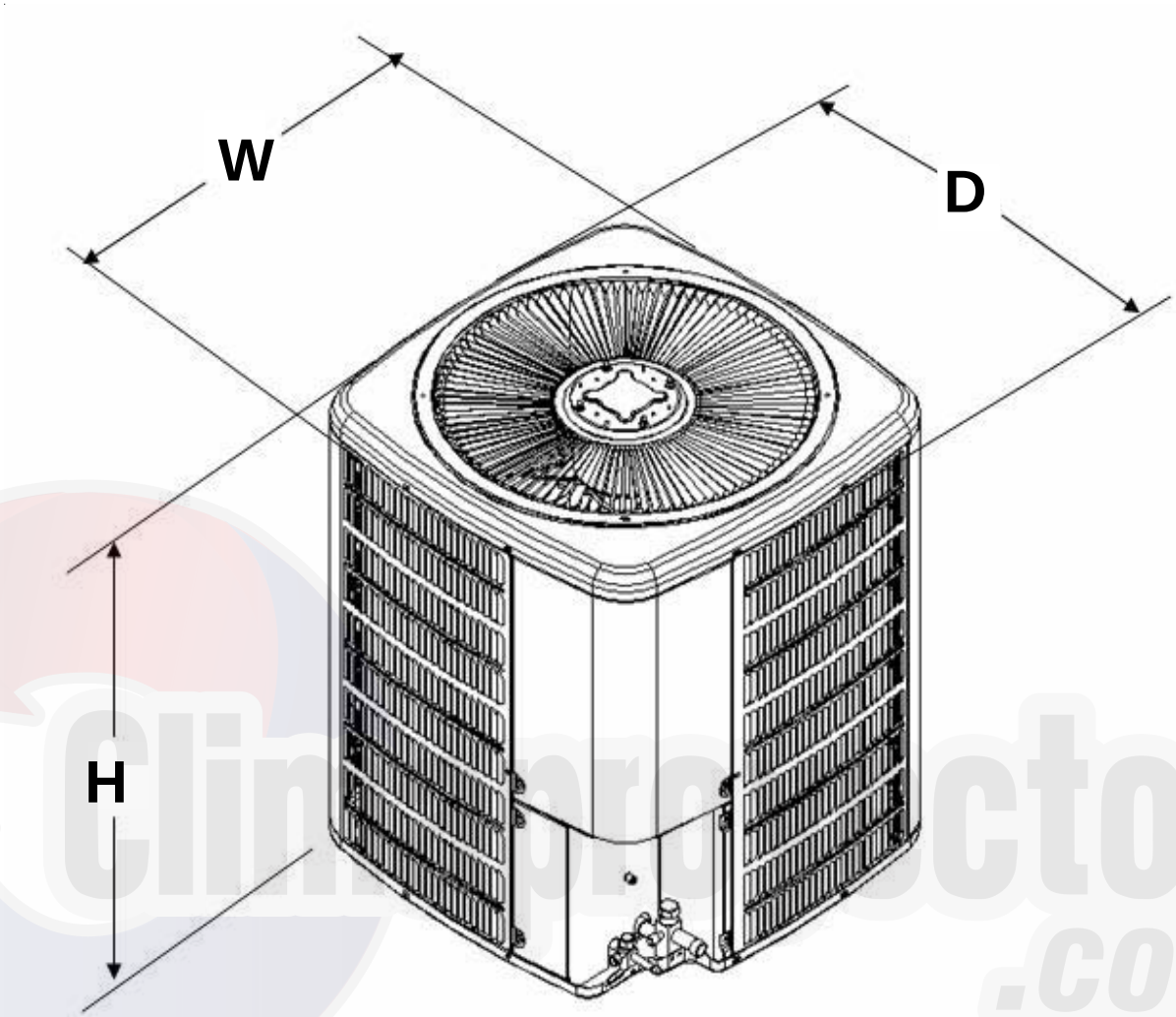
DO **NOT** locate the unit:

* Directly under a vent termination for a gas appliance.
* Within 3 feet of a clothes drier vent
* Where the refreezing of defrost water would create a hazard
* Where water may rise into the unit.



Minimum Airflow Clearance				
Model Type	**A**	**B**	**C**	**AA**
Residential	10"	10"	18"	20"
Light Commercial	12"	12"	18"	24"

PRODUCT DIMENSIONS



Model	Dimensions - W x D x H
GSH130181BB/C*	26 x 26 x 32¼
GSH130241BB/C*	26 x 26 x 32¼
GSH130301BB/C*	26 x 26 x 34¼
GSH130361BC/C*	29 x 29 x 38¼
GSH130421AF/AG/B*	29 x 29 x 32¼
GSH130481AE/AF/B*	29 x 29 x 34¼
GSH130601AC/AD	35½ x 35½ x 34¼

HEAT PUMP SPECIFICATIONS

GSH130[18-60]1A*/B*

	GSH130421AF	GSH130421AG	GSH130481AE GSH130481AF	GSH130601AC GSH130601AD
Cooling Capacity, BTUH	40,000	40,000	45,000	55,500
Compressor				
R.L. Amps	16.5	16.5	17.9	25
L.R. Amps	95	95	104	148
Loss of Charge Pressure Switch				
Open / Close	7 PSIG/25 PSIG	7 PSIG/25 PSIG	7 PSIG/25 PSIG	7 PSIG/25 PSIG
Condenser Fan Motor				
Horsepower	1/4	1/4	1/4	1/6
F.L. Amps	1.5	1.5	1.5	1.1
Liquid Line, Inches O.D.	3/8"	3/8"	3/8"	3/8"
Suction Line, Inches O.D.	7/8"	7/8"	7/8"	7/8"
Refrigerant Charge	213	213	223	233
Design Subcooling Cooling (°F)	9 ± 3	9 ± 3	9 ± 3	9 ± 3
Power Supply	208/230-60-1	208/230-60-1	208/230-60-1	208/230-60-1
Minimum Circuit Ampacity[1]	22.1	22.1	23.9	32.3
Maximum Overcurrent Device[2]	30	35	40	50
Electrical Conduit Size				
Power Supply (Inches)	1/2 or 3/4	1/2 or 3/4	1/2 or 3/4	1/2 or 3/4
Approximate Shipping Weight	219	219	225	298

	GSH130181BB	GSH130241BB	GSH130361BC
Cooling Capacity, BTUH	18,000	23,000	35,000
Compressor			
R.L. Amps	6.2	9.2	12.2
L.R. Amps	60	43	73
Loss of Charge Pressure Switch			
Open / Close	7 PSIG/25 PSIG	7 PSIG/25 PSIG	7 PSIG/25 PSIG
Condenser Fan Motor			
Horsepower	1/6	1/6	1/4
F.L. Amps	1.1	1.1	1.5
Liquid Line, Inches O.D.	3/8"	3/8"	3/8"
Suction Line, Inches O.D.	3/4"	3/4"	7/8"
Refrigerant Charge	127	122	188
Design Subcooling Cooling (°F)	9 ± 3	9 ± 3	9 ± 3
Power Supply	208/230-60-1	208/230-60-1	208/230-60-1
Minimum Circuit Ampacity[1]	8.9	12.6	17
Maximum Overcurrent Device[2]	15	20	25
Electrical Conduit Size			
Power Supply (Inches)	1/2 or 3/4	1/2 or 3/4	1/2 or 3/4
Approximate Shipping Weight	193	210	220

[1] Wire size should be determined in accordance with National Electrical Codes. Extensive wire runs will require larger wire sizes.
[2] Maximum Overcurrent Protection: **Must** use fuses or HACR-type Circuit Breakers of the same size as noted.

NOTES:
* Always check the S&R plate for electrical data on the unit being installed.
* Installer will need to supply 7/8" to 1 1/8" adapters for suction line connections.
* Unit is charged with refrigerant for 15' of 3/8" liquid line. System charge must be adjusted per Installation Instructions Final Charge Procedure.
* Installation of these units that require a TXV Kit to be installed on the indoor coil: **PLEASE NOTE:** THE SPECIFIED TXV IS DETERMINED BY THE OUTDOOR UNIT NOT THE INDOOR COIL

HEAT PUMP SPECIFICATIONS GSH130[18-36]1C*

	GSH130181CA	GSH130241CA	GSH130301C*	GSH130361C*
Cooling Capacity, BTUH	18,000	23,000	28,000	33,600
Compressor				
R.L. Amps	8.3	10.8	13.5	14.1
L.R. Amps	40	56	68	75
Loss of Charge Pressure Switch				
Open / Close	7 PSIG/25 PSIG	7 PSIG/25 PSIG	7 PSIG/25 PSIG	7 PSIG/25 PSIG
Condenser Fan Motor				
Horsepower	1/8	1/8	1/8	1/4
F.L. Amps	0.7	0.7	0.7	1.5
Liquid Line, Inches O.D.	3/8"	3/8"	3/8"	3/8"
Suction Line, Inches O.D.	3/4"	3/4"	3/4"	3/4"
Refrigerant Charge	127	122	130	188
Design Subcooling Cooling (°F)	9 ± 3	9 ± 3	9 ± 3	9 ± 3
Power Supply	208/230-60-1	208/230-60-1	208/230-60-1	208/230-60-1
Minimum Circuit Ampacity[1]	11.1	14.2	17.6	19.1
Maximum Overcurrent Device[2]	15	25	30	30
Electrical Conduit Size				
Power Supply (Inches)	1/2 or 3/4	1/2 or 3/4	1/2 or 3/4	1/2 or 3/4
Approximate Shipping Weight	151	150	157	188

[1] Wire size should be determined in accordance with National Electrical Codes. Extensive wire runs will require larger wire sizes.
[2] Maximum Overcurrent Protection: **Must** use fuses or HACR-type Circuit Breakers of the same size as noted.

NOTES:
* Always check the S&R plate for electrical data on the unit being installed.
* Installer will need to supply 7/8" to 1 1/8" adapters for suction line connections.
* Unit is charged with refrigerant for 15' of 3/8" liquid line. System charge must be adjusted per Installation Instructions Final Charge Procedure.
* Installation of these units that require a TXV Kit to be installed on the indoor coil: **PLEASE NOTE:** THE SPECIFIED TXV IS DETERMINED BY THE OUTDOOR UNIT NOT THE INDOOR COIL

EXPANDED PERFORMANCE DATA

COOLING OPERATION

MODEL: GSH130421A* / ARUF49-00*-1* / ARUF36421A*

			Outdoor Ambient Temperature																							
			65				75				85				95				105				115			
			Entering Indoor Wet Bulb Temperature																							
IDB*	Airflow		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	1688	MBh	39.2	40.6	44.5	-	38.3	39.7	43.5	-	37.4	38.7	42.4	-	36.5	37.8	41.4	-	34.6	35.9	39.3	-	32.1	33.3	36.4	-
		S/T	0.77	0.64	0.44	-	0.79	0.66	0.46	-	0.81	0.68	0.47	-	0.84	0.70	0.49	-	0.87	0.73	0.50	-	0.88	0.73	0.51	-
		Delta T	16	14	11	-	17	14	11	-	17	14	11	-	17	14	11	-	16	14	11	-	15	13	10	-
		KW	2.84	2.90	2.98	-	3.05	3.11	3.20	-	3.22	3.29	3.39	-	3.38	3.45	3.56	-	3.51	3.59	3.70	-	3.63	3.70	3.82	-
		AMPS	10.6	10.8	11.2	-	11.4	11.7	12.1	-	12.4	12.7	13.1	-	13.2	13.6	14.0	-	14.1	14.4	14.9	-	14.9	15.3	15.8	-
		HI PR	137	148	156	-	154	166	175	-	175	188	199	-	199	215	227	-	224	241	255	-	248	267	282	-
		LO PR	60	64	70	-	64	68	74	-	66	70	77	-	70	74	81	-	73	78	85	-	75	80	88	-
	1500	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	-	31.2	32.3	35.4	-
		S/T	0.73	0.61	0.42	-	0.76	0.63	0.44	-	0.78	0.65	0.45	-	0.80	0.67	0.46	-	0.83	0.69	0.48	-	0.84	0.70	0.49	-
		Delta T	17	15	11	-	17	15	11	-	17	15	11	-	17	15	11	-	17	15	11	-	16	14	11	-
		KW	2.82	2.88	2.96	-	3.02	3.08	3.17	-	3.20	3.26	3.36	-	3.35	3.42	3.53	-	3.49	3.56	3.67	-	3.60	3.68	3.79	-
		AMPS	10.5	10.7	11.1	-	11.3	11.6	11.9	-	12.3	12.6	13.0	-	13.1	13.4	13.9	-	13.9	14.3	14.8	-	14.8	15.1	15.6	-
		HI PR	136	146	154	-	152	164	173	-	173	187	197	-	197	212	224	-	222	239	252	-	245	264	279	-
		LO PR	60	63	69	-	63	67	73	-	66	70	76	-	69	73	80	-	72	77	84	-	75	79	87	-
	1313	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	-	28.8	29.8	32.7	-
		S/T	0.70	0.59	0.41	-	0.73	0.61	0.42	-	0.75	0.63	0.43	-	0.77	0.65	0.45	-	0.80	0.67	0.46	-	0.81	0.68	0.47	-
		Delta T	17	15	11	-	18	15	12	-	18	15	12	-	18	15	12	-	17	15	11	-	16	14	11	-
		KW	2.76	2.82	2.90	-	2.96	3.01	3.10	-	3.13	3.19	3.28	-	3.28	3.34	3.45	-	3.40	3.47	3.58	-	3.51	3.59	3.70	-
		AMPS	10.2	10.4	10.8	-	11.0	11.3	11.6	-	11.9	12.2	12.6	-	12.7	13.1	13.5	-	13.6	13.9	14.4	-	14.4	14.7	15.2	-
		HI PR	132	142	150	-	148	159	168	-	168	181	191	-	191	206	218	-	215	232	245	-	238	256	270	-
		LO PR	58	62	67	-	61	65	71	-	64	68	74	-	67	71	78	-	70	74	81	-	72	77	84	-
75	1688	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	0.87	0.78	0.59	0.38	0.90	0.81	0.61	0.39	0.93	0.83	0.63	0.40	0.95	**0.85**	0.65	0.42	0.99	0.89	0.67	0.43	1.00	0.89	0.68	0.44
		Delta T	19	17	14	10	19	18	14	10	19	18	14	10	19	**18**	15	10	19	18	14	10	18	16	13	9
		KW	2.87	2.92	3.01	3.10	3.07	3.13	3.22	3.32	3.25	3.31	3.41	3.52	3.41	**3.48**	3.58	3.70	3.54	3.62	3.73	3.85	3.66	3.73	3.85	3.97
		AMPS	10.7	10.9	11.3	11.7	11.5	11.8	12.2	12.6	12.5	12.8	13.2	13.7	13.4	**13.7**	14.1	14.7	14.2	14.6	15.0	15.6	15.1	15.4	15.9	16.5
		HI PR	139	149	157	164	155	167	177	184	177	190	201	210	201	**217**	229	239	227	244	257	269	250	269	285	297
		LO PR	61	65	71	75	64	68	75	80	67	71	78	83	70	**75**	82	87	74	78	85	91	76	81	88	94
	1500	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	0.83	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	0.95	0.85	0.64	0.41	0.95	0.85	0.65	0.42
		Delta T	20	18	15	10	20	18	15	10	20	18	15	10	20	**19**	15	10	20	18	15	10	19	17	14	10
		KW	2.84	2.90	2.98	3.07	3.05	3.11	3.20	3.30	3.22	3.29	3.39	3.49	3.38	**3.45**	3.56	3.67	3.51	3.59	3.70	3.82	3.63	3.70	3.82	3.94
		AMPS	10.6	10.8	11.2	11.6	11.4	11.7	12.1	12.5	12.4	12.7	13.1	13.6	13.2	**13.6**	14.0	14.5	14.1	14.4	14.9	15.5	14.9	15.3	15.8	16.4
		HI PR	137	148	156	163	154	166	175	182	175	188	199	208	199	**215**	227	236	224	241	255	266	248	267	282	294
		LO PR	60	64	70	75	64	68	74	79	66	70	77	82	70	**74**	81	86	73	78	85	90	75	80	88	93
	1313	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	0.80	0.72	0.54	0.35	0.83	0.74	0.56	0.36	0.85	0.76	0.58	0.37	0.88	**0.79**	0.59	0.38	0.91	0.82	0.62	0.40	0.92	0.82	0.62	0.40
		Delta T	20	18	15	10	20	19	15	11	20	19	15	11	20	**19**	15	11	20	19	15	10	19	17	14	10
		KW	2.78	2.84	2.92	3.00	2.98	3.04	3.13	3.22	3.15	3.21	3.31	3.41	3.30	**3.37**	3.47	3.58	3.43	3.50	3.61	3.72	3.54	3.62	3.73	3.85
		AMPS	10.3	10.5	10.9	11.3	11.1	11.4	11.7	12.2	12.0	12.3	12.7	13.2	12.9	**13.2**	13.6	14.1	13.7	14.0	14.5	15.0	14.5	14.9	15.4	15.9
		HI PR	133	143	151	158	149	161	170	177	170	183	193	201	193	**208**	220	229	218	234	247	258	240	259	273	285
		LO PR	58	62	68	72	62	66	72	76	64	68	75	79	67	**72**	78	83	71	75	82	87	73	78	85	90

Shaded area is ACCA (TVA) conditions IDB: Entering Indoor Dry Bulb Temperature KW=Total system power AMPS=outdoor unit amps (comp.+fan)

High and low pressures are measured at the liquid and suction service valves.

EXPANDED PERFORMANCE DATA

COOLING OPERATION

MODEL: GSH130421A* / ARUF49-00*-1* / ARUF36421A*

			Outdoor Ambient Temperature																							
			65				75				85				95				105				115			
			Entering Indoor Wet Bulb Temperature																							
IDB*	Airflow		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	1688	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	33.2	33.9	36.3	38.8
		S/T	0.95	0.90	0.73	0.54	1.00	0.93	0.76	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	0.84	0.63
		Delta T	21	20	18	14	22	20	18	14	21	20	18	14	21	21	18	14	20	20	18	14	18	18	17	13
		KW	2.89	2.94	3.03	3.12	3.09	3.15	3.25	3.35	3.27	3.34	3.44	3.55	3.43	3.50	3.61	3.73	3.57	3.64	3.76	3.88	3.69	3.76	3.88	4.01
		AMPS	10.7	11.0	11.4	11.8	11.6	11.9	12.3	12.7	12.6	12.9	13.3	13.8	13.5	13.8	14.3	14.8	14.3	14.7	15.2	15.8	15.2	15.6	16.1	16.7
		HI PR	140	151	159	166	157	169	178	186	179	192	203	212	203	219	231	241	229	246	260	271	253	272	287	300
		LO PR	62	65	71	76	65	69	75	80	68	72	78	84	71	75	82	88	74	79	86	92	77	82	89	95
	1500	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
		S/T	0.91	0.85	0.70	0.52	0.94	0.89	0.72	0.54	0.97	0.91	0.74	0.55	1.00	0.94	**0.76**	0.57	1.00	0.97	0.79	0.59	1.00	0.98	0.80	0.60
		Delta T	22	21	18	15	22	21	19	15	22	21	19	15	22	21	**19**	15	21	21	18	15	20	20	17	14
		KW	2.87	2.92	3.01	3.10	3.07	3.13	3.22	3.32	3.25	3.31	3.42	3.52	3.41	3.48	**3.58**	3.70	3.54	3.62	3.73	3.85	3.66	3.73	3.85	3.98
		AMPS	10.7	10.9	11.3	11.7	11.5	11.8	12.2	12.6	12.5	12.8	13.2	13.7	13.4	13.7	**14.1**	14.7	14.2	14.6	15.0	15.6	15.1	15.4	15.9	16.5
		HI PR	139	149	157	164	156	167	177	184	177	190	201	210	201	217	**229**	239	227	244	258	269	250	269	285	297
		LO PR	61	65	71	75	64	68	75	80	67	71	78	83	70	75	**82**	87	74	78	85	91	76	81	88	94
	1313	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
		S/T	0.88	0.82	0.67	0.50	0.91	0.85	0.69	0.52	0.93	0.88	0.71	0.53	0.96	0.90	0.74	0.55	1.00	0.94	0.76	0.57	1.01	0.95	0.77	0.58
		Delta T	22	21	19	15	23	22	19	15	23	22	19	15	23	22	19	15	22	22	19	15	21	20	18	14
		KW	2.80	2.86	2.94	3.03	3.00	3.06	3.15	3.25	3.17	3.24	3.34	3.44	3.33	3.40	3.50	3.61	3.46	3.53	3.64	3.75	3.57	3.65	3.76	3.88
		AMPS	10.4	10.6	11.0	11.4	11.2	11.5	11.8	12.3	12.2	12.4	12.9	13.3	13.0	13.3	13.7	14.3	13.8	14.2	14.6	15.2	14.6	15.0	15.5	16.1
		HI PR	134	145	153	159	151	162	171	179	172	185	195	203	195	210	222	232	220	237	250	261	243	261	276	288
		LO PR	59	63	69	73	62	66	72	77	65	69	75	80	68	72	79	84	71	76	83	88	74	79	86	91
85	1688	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
		S/T	1.00	0.97	0.87	0.71	1.00	1.00	0.90	0.73	1.00	1.00	0.93	0.75	1.00	1.00	0.96	0.78	1.00	1.00	0.99	0.81	1.00	1.00	1.00	0.81
		Delta T	22	22	21	18	22	22	21	18	21	22	21	18	21	21	21	18	20	20	21	18	18	19	20	17
		KW	2.91	2.96	3.05	3.14	3.12	3.18	3.27	3.37	3.30	3.37	3.47	3.58	3.46	3.53	3.64	3.76	3.60	3.67	3.79	3.91	3.72	3.79	3.91	4.04
		AMPS	10.8	11.1	11.5	11.9	11.7	12.0	12.4	12.9	12.7	13.0	13.5	14.0	13.6	13.9	14.4	14.9	14.5	14.8	15.3	15.9	15.3	15.7	16.2	16.9
		HI PR	141	152	161	168	159	171	180	188	180	194	205	214	205	221	234	244	231	249	263	274	255	275	290	303
		LO PR	62	66	72	77	66	70	76	81	68	73	79	84	72	76	83	89	75	80	87	93	78	83	90	96
	1500	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
		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	0.95	0.77	1.00	1.00	0.95	0.77
		Delta T	23	23	22	19	24	23	22	19	23	23	22	19	23	23	22	19	22	22	22	19	20	20	20	18
		KW	2.89	2.94	3.03	3.12	3.09	3.15	3.25	3.35	3.27	3.34	3.44	3.55	3.43	3.50	3.61	3.73	3.57	3.64	3.76	3.88	3.69	3.76	3.88	4.01
		AMPS	10.7	11.0	11.4	11.8	11.6	11.9	12.3	12.7	12.6	12.9	13.3	13.8	13.5	13.8	14.3	14.8	14.3	14.7	15.2	15.8	15.2	15.6	16.1	16.7
		HI PR	140	151	159	166	157	169	178	186	179	192	203	212	203	219	231	241	229	246	260	271	253	272	287	300
		LO PR	62	65	71	76	65	69	75	80	68	72	78	84	71	75	82	88	74	79	86	92	77	82	89	95
	1313	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
		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	0.75
		Delta T	24	23	22	19	24	24	22	19	24	24	22	19	24	24	23	20	23	23	22	19	21	22	21	18
		KW	2.82	2.88	2.96	3.05	3.02	3.08	3.17	3.27	3.20	3.26	3.36	3.47	3.35	3.42	3.53	3.64	3.49	3.56	3.67	3.78	3.60	3.67	3.79	3.91
		AMPS	10.5	10.7	11.1	11.5	11.3	11.6	11.9	12.4	12.3	12.6	13.0	13.5	13.1	13.4	13.9	14.4	13.9	14.3	14.8	15.3	14.8	15.1	15.6	16.2
		HI PR	136	146	154	161	152	164	173	181	173	186	197	205	197	212	224	234	222	239	252	263	245	264	279	291
		LO PR	60	63	69	74	63	67	73	78	66	70	76	81	69	73	80	85	72	77	84	89	75	79	87	92

Shaded area is AHRI Rating Conditions IDB: Entering Indoor Dry Bulb Temperature KW=Total system power AMPS=outdoor unit amps (comp.+fan)

High and low pressures are measured at the liquid and suction service valves.

EXPANDED PERFORMANCE DATA

COOLING OPERATION

MODEL: GSH130481A* / ARUF61-00*-1* / ARUF48601A*

			Outdoor Ambient Temperature																							
			65				75				85				95				105				115			
			Entering Indoor Wet Bulb Temperature																							
IDB*	Airflow		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	1800	MBh	44.1	45.7	50.1	-	43.1	44.6	48.9	-	42.0	43.6	47.7	-	41.0	42.5	46.6	-	39.0	40.4	44.3	-	36.1	37.4	41.0	-
		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	-	0.86	0.72	0.50	-	0.87	0.73	0.50	-
		Delta T	17	15	11	-	17	15	11	-	17	15	11	-	17	15	11	-	17	15	11	-	16	14	11	-
		KW	3.22	3.28	3.37	-	3.44	3.51	3.61	-	3.64	3.71	3.82	-	3.81	3.89	4.01	-	3.96	4.04	4.17	-	4.09	4.17	4.30	-
		AMPS	12.1	12.4	12.8	-	13.0	13.4	13.8	-	14.2	14.5	15.0	-	15.1	15.5	16.0	-	16.1	16.5	17.0	-	17.1	17.5	18.1	-
		HI PR	142	153	161	-	159	172	181	-	181	195	206	-	207	222	235	-	232	250	264	-	257	276	292	-
		LO PR	64	68	74	-	67	72	78	-	70	75	81	-	74	78	86	-	77	82	90	-	80	85	93	-
	1600	MBh	42.8	44.4	48.6	-	41.8	43.3	47.5	-	40.8	42.3	46.4	-	39.8	41.3	45.2	-	37.8	39.2	43.0	-	35.0	36.3	39.8	-
		S/T	0.72	0.60	0.42	-	0.75	0.63	0.43	-	0.77	0.64	0.45	-	0.79	0.66	0.46	-	0.82	0.69	0.48	-	0.83	0.69	0.48	-
		Delta T	18	15	12	-	18	16	12	-	18	16	12	-	18	16	12	-	18	16	12	-	17	14	11	-
		KW	3.20	3.26	3.35	-	3.42	3.48	3.58	-	3.61	3.68	3.79	-	3.78	3.86	3.98	-	3.93	4.01	4.13	-	4.06	4.14	4.27	-
		AMPS	12.0	12.3	12.7	-	12.9	13.2	13.7	-	14.0	14.4	14.8	-	15.0	15.4	15.9	-	16.0	16.3	16.9	-	16.9	17.3	17.9	-
		HI PR	141	151	160	-	158	170	179	-	180	193	204	-	205	220	232	-	230	248	261	-	254	274	289	-
		LO PR	63	67	73	-	67	71	78	-	69	74	81	-	73	78	85	-	76	81	89	-	79	84	92	-
	1400	MBh	39.5	41.0	44.9	-	38.6	40.0	43.8	-	37.7	39.1	42.8	-	36.8	38.1	41.7	-	34.9	36.2	39.7	-	32.3	33.5	36.7	-
		S/T	0.70	0.58	0.40	-	0.72	0.60	0.42	-	0.74	0.62	0.43	-	0.77	0.64	0.44	-	0.79	0.66	0.46	-	0.80	0.67	0.46	-
		Delta T	18	16	12	-	18	16	12	-	18	16	12	-	18	16	12	-	18	16	12	-	17	15	11	-
		KW	3.13	3.19	3.28	-	3.34	3.41	3.50	-	3.53	3.60	3.71	-	3.70	3.77	3.89	-	3.84	3.92	4.04	-	3.96	4.04	4.17	-
		AMPS	11.7	11.9	12.3	-	12.6	12.9	13.3	-	13.7	14.0	14.4	-	14.6	14.9	15.4	-	15.5	15.9	16.4	-	16.4	16.8	17.4	-
		HI PR	136	147	155	-	153	165	174	-	174	187	198	-	198	213	225	-	223	240	254	-	247	265	280	-
		LO PR	61	65	71	-	65	69	75	-	67	72	78	-	71	75	82	-	74	79	86	-	77	82	89	-
75	1800	MBh	44.8	46.2	50.0	53.6	43.8	45.1	48.8	52.4	42.8	44.0	47.7	51.1	41.7	**42.9**	46.5	49.9	39.6	40.8	44.2	47.4	36.7	37.8	40.9	43.9
		S/T	0.86	0.77	0.58	0.38	0.89	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	0.66	0.43	0.99	0.89	0.67	0.43
		Delta T	20	18	15	10	20	18	15	10	20	18	15	10	20	**19**	15	11	20	18	15	10	19	17	14	10
		KW	3.24	3.30	3.40	3.50	3.47	3.54	3.64	3.75	3.67	3.74	3.85	3.97	3.84	**3.92**	4.04	4.16	3.99	4.07	4.20	4.33	4.12	4.21	4.34	4.47
		AMPS	12.2	12.5	12.9	13.4	13.2	13.5	13.9	14.4	14.3	14.6	15.1	15.7	15.3	**15.6**	16.2	16.8	16.2	16.6	17.2	17.9	17.2	17.6	18.2	18.9
		HI PR	144	154	163	170	161	173	183	191	183	197	208	217	209	**225**	237	247	235	253	267	278	259	279	295	307
		LO PR	65	69	75	80	68	73	79	84	71	75	82	88	74	**79**	86	92	78	83	91	96	81	86	94	100
	1600	MBh	43.5	44.8	48.5	52.1	42.5	43.8	47.4	50.9	41.5	42.7	46.3	49.7	40.5	**41.7**	45.1	48.4	38.5	39.6	42.9	46.0	35.6	36.7	39.7	42.6
		S/T	0.82	0.74	0.56	0.36	0.85	0.76	0.58	0.37	0.87	0.78	0.59	0.38	0.90	**0.81**	0.61	0.39	0.94	0.84	0.63	0.41	0.94	0.84	0.64	0.41
		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	3.22	3.28	3.37	3.47	3.44	3.51	3.61	3.72	3.64	3.71	3.82	3.94	3.81	**3.89**	4.01	4.13	3.96	4.04	4.17	4.30	4.09	4.17	4.30	4.44
		AMPS	12.1	12.4	12.8	13.2	13.0	13.4	13.8	14.3	14.2	14.5	15.0	15.5	15.1	**15.5**	16.0	16.6	16.1	16.5	17.0	17.7	17.1	17.5	18.1	18.7
		HI PR	142	153	162	168	159	172	181	189	181	195	206	215	207	**222**	235	245	232	250	264	275	257	276	292	304
		LO PR	64	68	74	79	68	72	78	83	70	75	81	87	74	**78**	86	91	77	82	90	96	80	85	93	99
	1400	MBh	40.2	41.4	44.8	48.1	39.3	40.4	43.7	46.9	38.3	39.5	42.7	45.8	37.4	**38.5**	41.7	44.7	35.5	36.6	39.6	42.5	32.9	33.9	36.7	39.3
		S/T	0.79	0.71	0.54	0.35	0.82	0.74	0.56	0.36	0.84	0.75	0.57	0.37	0.87	**0.78**	0.59	0.38	0.90	0.81	0.61	0.39	0.91	0.81	0.62	0.40
		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	3.15	3.21	3.30	3.40	3.37	3.43	3.53	3.64	3.56	3.63	3.74	3.85	3.73	**3.80**	3.92	4.04	3.87	3.95	4.07	4.20	3.99	4.08	4.20	4.33
		AMPS	11.8	12.0	12.4	12.9	12.7	13.0	13.4	13.9	13.8	14.1	14.6	15.1	14.7	**15.1**	15.6	16.2	15.7	16.0	16.6	17.2	16.6	17.0	17.6	18.2
		HI PR	138	148	157	163	155	166	176	183	176	189	200	209	200	**216**	228	238	225	243	256	267	249	268	283	295
		LO PR	62	66	72	77	65	70	76	81	68	72	79	84	71	**76**	83	88	75	80	87	93	77	82	90	96

Shaded area is ACCA (TVA) conditions IDB: Entering Indoor Dry Bulb Temperature KW=Total system power AMPS=outdoor unit amps (comp.+fan)

High and low pressures are measured at the liquid and suction service valves.

EXPANDED PERFORMANCE DATA

COOLING OPERATION

MODEL: GSH130481A* / ARUF61-00*-1* / ARUF48601A*

			Outdoor Ambient Temperature																							
			65				75				85				95				105				115			
			Entering Indoor Wet Bulb Temperature																							
IDB*	Airflow		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	1800	MBh	45.6	46.6	49.8	53.3	44.6	45.6	48.7	52.0	43.5	44.5	47.5	50.8	42.5	43.4	46.4	49.5	40.3	41.2	44.0	47.1	37.4	38.2	40.8	43.6
		S/T	0.95	0.89	0.72	0.54	1.00	0.92	0.75	0.56	1.00	0.94	0.77	0.57	1.00	1.00	0.79	0.59	1.00	1.00	0.82	0.61	1.00	1.00	0.83	0.62
		Delta T	22	21	18	15	23	21	19	15	22	21	19	15	22	22	19	15	21	21	18	15	19	19	17	14
		KW	3.27	3.33	3.42	3.52	3.49	3.56	3.67	3.78	3.69	3.77	3.88	4.00	3.87	3.95	4.07	4.20	4.02	4.11	4.23	4.37	4.15	4.24	4.37	4.51
		AMPS	12.3	12.6	13.0	13.5	13.3	13.6	14.0	14.6	14.4	14.8	15.3	15.8	15.4	15.8	16.3	16.9	16.4	16.8	17.4	18.0	17.4	17.8	18.4	19.1
		HI PR	145	156	165	172	163	175	185	193	185	199	210	219	211	227	240	250	237	255	269	281	262	282	298	311
		LO PR	65	69	76	81	69	73	80	85	72	76	83	89	75	80	87	93	79	84	92	97	81	87	95	101
	1600	MBh	44.3	45.3	48.4	51.7	43.3	44.2	47.3	50.5	42.3	43.2	46.1	49.3	41.2	42.1	**45.0**	48.1	39.2	40.0	42.8	45.7	36.3	37.1	39.6	42.3
		S/T	0.90	0.85	0.69	0.51	0.94	0.88	0.71	0.53	0.96	0.90	0.73	0.55	0.99	0.93	**0.76**	0.56	1.00	0.96	0.78	0.59	1.00	0.97	0.79	0.59
		Delta T	23	22	19	15	23	22	19	15	23	22	19	16	23	22	**20**	16	23	22	19	15	21	21	18	14
		KW	3.24	3.30	3.40	3.50	3.47	3.54	3.64	3.75	3.67	3.74	3.85	3.97	3.84	3.92	**4.04**	4.17	3.99	4.07	4.20	4.33	4.12	4.21	4.34	4.47
		AMPS	12.2	12.5	12.9	13.4	13.2	13.5	13.9	14.4	14.3	14.6	15.1	15.7	15.3	15.6	**16.2**	16.8	16.3	16.6	17.2	17.9	17.2	17.6	18.2	18.9
		HI PR	144	155	163	170	161	173	183	191	183	197	208	217	209	225	**237**	247	235	253	267	278	259	279	295	307
		LO PR	65	69	75	80	68	73	79	84	71	75	82	88	74	79	**86**	92	78	83	91	96	81	86	94	100
	1400	MBh	40.9	41.8	44.7	47.7	39.9	40.8	43.6	46.6	39.0	39.8	42.6	45.5	38.0	38.9	41.5	44.4	36.1	36.9	39.5	42.2	33.5	34.2	36.6	39.1
		S/T	0.87	0.82	0.66	0.50	0.90	0.85	0.69	0.51	0.92	0.87	0.71	0.53	0.95	0.90	0.73	0.54	0.99	0.93	0.76	0.57	1.00	0.94	0.76	0.57
		Delta T	23	22	19	16	24	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16	22	21	18	15
		KW	3.17	3.23	3.32	3.42	3.39	3.46	3.56	3.66	3.58	3.66	3.76	3.88	3.75	3.83	3.95	4.07	3.90	3.98	4.10	4.23	4.03	4.11	4.23	4.37
		AMPS	11.9	12.1	12.5	13.0	12.8	13.1	13.5	14.0	13.9	14.2	14.7	15.3	14.9	15.2	15.7	16.3	15.8	16.2	16.7	17.4	16.7	17.1	17.7	18.4
		HI PR	139	150	158	165	156	168	178	185	178	191	202	211	202	218	230	240	228	245	259	270	252	271	286	298
		LO PR	63	67	73	77	66	70	77	82	69	73	80	85	72	77	84	89	76	81	88	94	78	83	91	97
85	1800	MBh	46.4	47.3	49.6	52.9	45.4	46.2	48.4	51.7	44.3	45.1	47.3	50.4	43.2	44.0	46.1	49.2	41.0	41.8	43.8	46.7	38.0	38.8	40.6	43.3
		S/T	0.99	0.96	0.86	0.70	1.00	0.99	0.90	0.73	1.00	1.00	0.92	0.74	1.00	1.00	0.95	0.77	1.00	1.00	0.98	0.80	1.00	1.00	0.99	0.80
		Delta T	24	23	22	19	23	23	22	19	23	23	22	19	22	22	22	19	21	21	22	19	19	20	21	18
		KW	3.29	3.35	3.45	3.55	3.52	3.59	3.69	3.81	3.72	3.80	3.91	4.03	3.90	3.98	4.10	4.23	4.05	4.14	4.27	4.40	4.19	4.27	4.41	4.55
		AMPS	12.4	12.7	13.1	13.6	13.4	13.7	14.2	14.7	14.6	14.9	15.4	16.0	15.6	15.9	16.5	17.1	16.6	17.0	17.5	18.2	17.5	18.0	18.6	19.3
		HI PR	146	158	166	174	164	177	187	195	187	201	212	222	213	229	242	252	239	258	272	284	265	285	301	314
		LO PR	66	70	76	81	70	74	81	86	72	77	84	89	76	81	88	94	80	85	92	98	82	88	96	102
	1600	MBh	45.1	46.0	48.1	51.4	44.0	44.9	47.0	50.2	43.0	43.8	45.9	49.0	41.9	42.8	44.8	47.8	39.8	40.6	42.5	45.4	36.9	37.6	39.4	42.0
		S/T	0.95	0.91	0.82	0.67	0.98	0.95	0.85	0.69	1.00	0.97	0.88	0.71	1.00	1.00	0.90	0.73	1.00	1.00	0.94	0.76	1.00	1.00	0.95	0.77
		Delta T	25	24	23	20	25	24	23	20	25	24	23	20	24	25	23	20	23	23	23	20	21	22	21	19
		KW	3.27	3.33	3.42	3.52	3.49	3.56	3.67	3.78	3.69	3.77	3.88	4.00	3.87	3.95	4.07	4.20	4.02	4.11	4.23	4.37	4.15	4.24	4.37	4.51
		AMPS	12.3	12.6	13.0	13.5	13.3	13.6	14.0	14.6	14.4	14.8	15.3	15.8	15.4	15.8	16.3	16.9	16.4	16.8	17.4	18.0	17.4	17.8	18.4	19.1
		HI PR	145	156	165	172	163	175	185	193	185	199	210	219	211	227	240	250	237	255	269	281	262	282	298	311
		LO PR	65	69	76	81	69	73	80	85	72	76	83	89	75	80	87	93	79	84	92	97	81	87	95	101
	1400	MBh	41.6	42.4	44.4	47.4	40.6	41.4	43.4	46.3	39.7	40.4	42.4	45.2	38.7	39.5	41.3	44.1	36.8	37.5	39.3	41.9	34.1	34.7	36.4	38.8
		S/T	0.91	0.88	0.79	0.64	0.95	0.91	0.82	0.67	0.97	0.94	0.84	0.68	1.00	0.97	0.87	0.71	1.00	1.00	0.90	0.73	1.00	1.00	0.91	0.74
		Delta T	25	25	23	20	25	25	23	20	25	25	23	20	25	25	24	20	24	25	23	20	22	23	22	19
		KW	3.19	3.26	3.35	3.45	3.42	3.48	3.58	3.69	3.61	3.68	3.79	3.91	3.78	3.86	3.98	4.10	3.93	4.01	4.13	4.26	4.06	4.14	4.27	4.40
		AMPS	12.0	12.3	12.6	13.1	12.9	13.2	13.7	14.2	14.0	14.4	14.8	15.4	15.0	15.4	15.9	16.5	15.9	16.3	16.9	17.5	16.9	17.3	17.9	18.6
		HI PR	141	151	160	167	158	170	179	187	180	193	204	213	204	220	232	242	230	248	261	273	254	273	289	301
		LO PR	63	67	73	78	67	71	78	83	69	74	81	86	73	78	85	90	76	81	89	95	79	84	92	98

* Entering Indoor Dry Bulb Temperature

NOTE: Shaded area is AHRI Rating Conditions

High and low pressures are measured at the liquid and suction service valves.

EXPANDED PERFORMANCE DATA

COOLING OPERATION

MODEL: GSH130601A* / ARUF61-00*-1* / ARUF48601A*

			Outdoor Ambient Temperature																							
			65				75				85				95				105				115			
			Entering Indoor Wet Bulb Temperature																							
IDB*	Airflow		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	2025	MBh	54.4	56.4	61.8	-	53.1	55.1	60.3	-	51.9	53.7	58.9	-	50.6	52.4	57.5	-	48.1	49.8	54.6	-	44.5	46.1	50.6	-
		S/T	0.72	0.60	0.42	-	0.75	0.63	0.43	-	0.77	0.64	0.45	-	0.79	0.66	0.46	-	0.82	0.69	0.48	-	0.83	0.69	0.48	-
		Delta T	18	15	12	-	18	16	12	-	18	16	12	-	18	16	12	-	18	16	12	-	17	15	11	-
		KW	3.84	3.92	4.03	-	4.12	4.20	4.32	-	4.36	4.45	4.58	-	4.57	4.67	4.81	-	4.75	4.85	5.00	-	4.91	5.01	5.17	-
		AMPS	13.8	14.1	14.6	-	14.9	15.2	15.7	-	16.2	16.6	17.1	-	17.3	17.7	18.3	-	18.4	18.8	19.5	-	19.5	20.0	20.6	-
		HI PR	140	151	159	-	157	169	179	-	179	193	204	-	204	220	232	-	229	247	261	-	254	273	288	-
		LO PR	59	63	68	-	62	66	72	-	65	69	75	-	68	72	79	-	71	76	82	-	73	78	85	-
	1800	MBh	52.8	54.7	60.0	-	51.6	53.5	58.6	-	50.3	52.2	57.2	-	49.1	50.9	55.8	-	46.7	48.4	53.0	-	43.2	44.8	49.1	-
		S/T	0.69	0.58	0.40	-	0.72	0.60	0.41	-	0.73	0.61	0.42	-	0.76	0.63	0.44	-	0.79	0.66	0.45	-	0.79	0.66	0.46	-
		Delta T	19	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	17	15	11	-
		KW	3.81	3.89	4.00	-	4.09	4.17	4.29	-	4.32	4.41	4.55	-	4.54	4.63	4.77	-	4.72	4.81	4.96	-	4.87	4.97	5.13	-
		AMPS	13.7	14.0	14.4	-	14.8	15.1	15.6	-	16.0	16.4	17.0	-	17.1	17.5	18.1	-	18.2	18.7	19.3	-	19.3	19.8	20.5	-
		HI PR	139	150	158	-	156	168	177	-	177	191	202	-	202	217	230	-	227	245	258	-	251	270	285	-
		LO PR	58	62	68	-	61	65	71	-	64	68	74	-	67	71	78	-	70	75	82	-	73	77	84	-
	1575	MBh	48.7	50.5	55.3	-	47.6	49.3	54.1	-	46.5	48.2	52.8	-	45.3	47.0	51.5	-	43.1	44.6	48.9	-	39.9	41.4	45.3	-
		S/T	0.67	0.56	0.39	-	0.69	0.58	0.40	-	0.71	0.59	0.41	-	0.73	0.61	0.42	-	0.76	0.63	0.44	-	0.76	0.64	0.44	-
		Delta T	19	16	12	-	19	17	13	-	19	17	13	-	19	17	13	-	19	16	13	-	18	15	12	-
		KW	3.73	3.80	3.91	-	3.99	4.07	4.19	-	4.23	4.31	4.44	-	4.43	4.52	4.66	-	4.60	4.70	4.85	-	4.75	4.85	5.01	-
		AMPS	13.3	13.6	14.0	-	14.4	14.7	15.2	-	15.6	16.0	16.5	-	16.7	17.1	17.6	-	17.7	18.2	18.8	-	18.8	19.2	19.9	-
		HI PR	135	145	153	-	151	163	172	-	172	185	195	-	196	211	223	-	220	237	250	-	244	262	277	-
		LO PR	56	60	66	-	60	63	69	-	62	66	72	-	65	69	76	-	68	73	79	-	71	75	82	-
75	2025	MBh	55.31	56.94	61.64	66.15	54.02	55.62	60.20	64.61	52.73	54.30	58.77	63.08	51.45	52.97	57.34	61.54	48.88	50.32	54.47	58.46	45.27	46.61	50.46	54.15
		S/T	0.82	0.74	0.56	0.36	0.85	0.76	0.58	0.37	0.87	0.78	0.59	0.38	0.90	0.81	0.61	0.39	0.94	0.84	0.63	0.41	0.94	0.84	0.64	0.41
		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	3.87	3.95	4.06	4.18	4.15	4.23	4.36	4.49	4.39	4.48	4.62	4.76	4.61	4.70	4.85	5.00	4.79	4.89	5.04	5.21	4.95	5.05	5.21	5.38
		AMPS	13.9	14.2	14.7	15.2	15.0	15.4	15.9	16.5	16.3	16.7	17.3	17.9	17.4	17.9	18.5	19.2	18.6	19.0	19.7	20.4	19.7	20.2	20.8	21.6
		HI PR	142	153	161	168	159	171	181	189	181	195	206	214	206	222	234	244	232	249	263	275	256	276	291	304
		LO PR	59	63	69	73	63	67	73	78	65	69	76	81	68	73	80	85	72	76	83	89	74	79	86	92
	1800	MBh	53.7	55.3	59.8	64.2	52.4	54.0	58.4	62.7	51.2	52.7	57.1	61.2	50.0	**51.4**	55.7	59.7	47.5	48.9	52.9	56.8	44.0	45.3	49.0	52.6
		S/T	0.78	0.70	0.53	0.34	0.81	0.73	0.55	0.35	0.83	0.75	0.56	0.36	0.86	**0.77**	0.58	0.37	0.89	0.80	0.60	0.39	0.90	0.81	0.61	0.39
		Delta T	22	20	16	11	22	20	16	11	22	20	16	11	22	**20**	17	11	22	20	16	11	20	19	15	11
		KW	3.84	3.92	4.03	4.15	4.12	4.20	4.32	4.46	4.36	4.45	4.58	4.73	4.57	**4.67**	4.81	4.96	4.75	4.85	5.00	5.16	4.91	5.01	5.17	5.34
		AMPS	13.8	14.1	14.6	15.1	14.9	15.2	15.7	16.3	16.2	16.6	17.1	17.8	17.3	**17.7**	18.3	19.0	18.4	18.8	19.5	20.2	19.5	20.0	20.6	21.4
		HI PR	140	151	160	166	158	170	179	187	179	193	204	212	204	**220**	232	242	230	247	261	272	254	273	288	301
		LO PR	59	63	68	73	62	66	72	77	65	69	75	80	68	**72**	79	84	71	76	82	88	73	78	85	91
	1575	MBh	49.6	51.0	55.2	59.3	48.4	49.8	53.9	57.9	47.3	48.7	52.7	56.5	46.1	47.47	51.4	55.1	43.8	45.1	48.8	52.4	40.6	41.8	45.2	48.5
		S/T	0.76	0.68	0.51	0.33	0.78	0.70	0.53	0.34	0.80	0.72	0.54	0.35	0.83	0.74	0.56	0.36	0.86	0.77	0.58	0.38	0.87	0.78	0.59	0.38
		Delta T	22	20	17	11	22	20	17	12	22	20	17	12	22	21	17	12	22	20	17	11	21	19	16	11
		KW	3.76	3.83	3.94	4.06	4.02	4.10	4.23	4.35	4.26	4.34	4.48	4.61	4.46	4.56	4.70	4.84	4.64	4.74	4.88	5.04	4.79	4.89	5.05	5.21
		AMPS	13.4	13.7	14.2	14.7	14.5	14.8	15.3	15.9	15.7	16.1	16.6	17.3	16.8	17.2	17.8	18.5	17.9	18.3	18.9	19.7	19.0	19.4	20.1	20.8
		HI PR	136	147	155	161	153	164	174	181	174	187	197	206	198	213	225	235	223	240	253	264	246	265	280	292
		LO PR	57	61	66	71	60	64	70	74	63	67	73	77	66	70	76	81	69	73	80	85	71	76	83	88

Shaded area is ACCA (TVA) conditions IDB: Entering Indoor Dry Bulb Temperature KW=Total system power AMPS=outdoor unit amps (comp.+fan)

High and low pressures are measured at the liquid and suction service valves.

EXPANDED PERFORMANCE DATA

COOLING OPERATION

MODEL: GSH130601A* / ARUF61-00*-1* / ARUF48601A*

			Outdoor Ambient Temperature																							
			65				75				85				95				105				115			
			Entering Indoor Wet Bulb Temperature																							
IDB*	Airflow		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	2025	MBh	56.3	57.5	61.5	65.7	55.0	56.2	60.0	64.2	53.7	54.8	58.6	62.6	52.4	53.5	57.2	61.1	49.7	50.8	54.3	58.1	46.1	47.1	50.3	53.8
		S/T	0.90	0.85	0.69	0.51	0.94	0.88	0.71	0.53	0.96	0.90	0.73	0.55	1.00	0.93	0.76	0.56	1.00	0.96	0.78	0.59	1.00	1.00	0.79	0.59
		Delta T	23	22	19	15	23	22	19	16	23	22	19	16	24	23	20	16	23	22	19	15	21	21	18	14
		KW	3.90	3.98	4.09	4.22	4.18	4.26	4.39	4.53	4.43	4.52	4.66	4.80	4.64	4.74	4.89	5.04	4.83	4.93	5.09	5.25	4.99	5.09	5.26	5.43
		AMPS	14.0	14.4	14.8	15.4	15.2	15.5	16.0	16.6	16.5	16.9	17.4	18.1	17.6	18.0	18.6	19.3	18.7	19.2	19.8	20.6	19.9	20.3	21.0	21.8
		HI PR	143	154	163	170	161	173	183	190	183	197	208	217	208	224	237	247	234	252	266	278	259	278	294	307
		LO PR	60	64	70	74	63	67	74	78	66	70	76	81	69	74	80	86	72	77	84	90	75	80	87	93
	1800	MBh	54.7	55.8	59.7	63.8	53.4	54.5	58.3	62.3	52.1	53.2	56.9	60.8	50.8	51.9	**55.5**	59.3	48.3	49.4	52.7	56.4	44.7	45.7	48.8	52.2
		S/T	0.86	0.81	0.66	0.49	0.89	0.84	0.68	0.51	0.91	0.86	0.70	0.52	0.94	0.89	**0.72**	0.54	0.98	0.92	0.75	0.56	0.99	0.93	0.75	0.56
		Delta T	24	23	20	16	24	23	20	16	24	23	20	16	25	23	**20**	16	24	23	20	16	23	22	19	15
		KW	3.87	3.95	4.06	4.19	4.15	4.23	4.36	4.49	4.39	4.48	4.62	4.76	4.61	4.70	**4.85**	5.00	4.79	4.89	5.04	5.21	4.95	5.05	5.21	5.38
		AMPS	13.9	14.2	14.7	15.2	15.0	15.4	15.9	16.5	16.3	16.7	17.3	17.9	17.4	17.9	**18.5**	19.2	18.6	19.0	19.7	20.4	19.7	20.2	20.8	21.6
		HI PR	142	153	161	168	159	171	181	189	181	195	206	214	206	222	**234**	244	232	250	263	275	256	276	291	304
		LO PR	59	63	69	73	63	67	73	78	65	69	76	81	68	73	**80**	85	72	76	83	89	74	79	86	92
	1575	MBh	50.4	51.5	55.1	58.9	49.3	50.3	53.8	57.5	48.1	49.1	52.5	56.1	46.9	47.9	51.2	54.8	44.6	45.6	48.7	52.0	41.3	42.2	45.1	48.2
		S/T	0.83	0.78	0.63	0.47	0.86	0.81	0.66	0.49	0.88	0.83	0.67	0.50	0.91	0.85	0.69	0.52	0.94	0.89	0.72	0.54	0.95	0.89	0.73	0.54
		Delta T	24	23	20	16	25	24	21	16	25	24	21	16	25	24	21	17	25	24	20	16	23	22	19	15
		KW	3.79	3.86	3.97	4.09	4.05	4.13	4.26	4.39	4.29	4.38	4.51	4.65	4.50	4.59	4.73	4.88	4.68	4.78	4.92	5.08	4.83	4.93	5.09	5.25
		AMPS	13.5	13.8	14.3	14.8	14.6	15.0	15.5	16.0	15.9	16.3	16.8	17.4	17.0	17.4	18.0	18.6	18.1	18.5	19.1	19.8	19.1	19.6	20.3	21.0
		HI PR	138	148	156	163	154	166	175	183	176	189	199	208	200	215	227	237	225	242	256	267	248	267	282	295
		LO PR	58	61	67	71	61	65	71	75	63	67	73	78	66	71	77	82	70	74	81	86	72	77	84	89
85	2025	MBh	57.3	58.4	61.1	65.2	55.9	57.0	59.7	63.7	54.6	55.7	58.3	62.2	53.3	54.3	56.9	60.7	50.6	51.6	54.0	57.6	46.9	47.8	50.1	53.4
		S/T	0.95	0.91	0.82	0.67	0.98	0.95	0.85	0.69	1.00	0.97	0.88	0.71	1.00	1.00	0.90	0.73	1.00	1.00	0.94	0.76	1.00	1.00	0.95	0.77
		Delta T	25	24	23	20	25	24	23	20	25	25	23	20	24	25	23	20	23	23	23	20	21	22	21	19
		KW	3.93	4.01	4.12	4.25	4.21	4.30	4.43	4.56	4.46	4.55	4.69	4.84	4.68	4.78	4.93	5.08	4.87	4.97	5.13	5.29	5.03	5.14	5.30	5.47
		AMPS	14.2	14.5	15.0	15.5	15.3	15.7	16.2	16.8	16.6	17.0	17.6	18.3	17.8	18.2	18.8	19.5	18.9	19.4	20.0	20.8	20.0	20.5	21.2	22.0
		HI PR	145	156	164	171	162	175	184	192	185	199	210	219	210	226	239	249	237	255	269	280	261	281	297	310
		LO PR	61	64	70	75	64	68	74	79	66	71	77	82	70	74	81	86	73	78	85	91	76	81	88	94
	1800	MBh	55.6	56.7	59.4	63.3	54.3	55.4	58.0	61.9	53.0	54.0	56.6	60.4	51.7	52.7	55.2	58.9	49.1	50.1	52.5	56.0	45.5	46.4	48.6	51.8
		S/T	0.90	0.87	0.79	0.64	0.94	0.90	0.81	0.66	0.96	0.93	0.84	0.68	0.99	0.96	0.86	0.70	1.00	0.99	0.89	0.73	1.00	1.00	0.90	0.73
		Delta T	26	25	24	21	26	26	24	21	26	26	24	21	26	26	24	21	25	25	24	21	23	24	22	19
		KW	3.90	3.98	4.09	4.22	4.18	4.26	4.39	4.53	4.43	4.52	4.66	4.80	4.64	4.74	4.89	5.04	4.83	4.93	5.09	5.25	4.99	5.09	5.26	5.43
		AMPS	14.0	14.4	14.8	15.4	15.2	15.5	16.0	16.6	16.5	16.9	17.4	18.1	17.6	18.0	18.6	19.3	18.7	19.2	19.8	20.6	19.9	20.3	21.0	21.8
		HI PR	143	154	163	170	161	173	183	190	183	197	208	217	208	224	237	247	234	252	266	278	259	278	294	307
		LO PR	60	64	70	74	63	67	74	78	66	70	76	81	69	74	80	86	72	77	84	90	75	80	87	93
	1575	MBh	51.3	52.3	54.8	58.5	50.1	51.1	53.5	57.1	48.9	49.9	52.2	55.7	47.7	48.7	51.0	54.4	45.4	46.2	48.4	51.7	42.0	42.8	44.9	47.9
		S/T	0.87	0.84	0.76	0.61	0.90	0.87	0.79	0.64	0.92	0.89	0.81	0.65	0.95	0.92	0.83	0.67	0.99	0.96	0.86	0.70	1.00	0.96	0.87	0.71
		Delta T	26	26	24	21	26	26	25	21	26	26	25	21	27	26	25	21	26	26	24	21	24	24	23	20
		KW	3.81	3.89	4.00	4.12	4.08	4.17	4.29	4.42	4.32	4.41	4.55	4.69	4.53	4.63	4.77	4.92	4.71	4.81	4.96	5.12	4.87	4.97	5.13	5.29
		AMPS	13.6	14.0	14.4	15.0	14.7	15.1	15.6	16.2	16.0	16.4	17.0	17.6	17.1	17.5	18.1	18.8	18.2	18.7	19.3	20.0	19.3	19.8	20.4	21.2
		HI PR	139	149	158	165	156	168	177	185	177	191	201	210	202	217	229	239	227	244	258	269	251	270	285	297
		LO PR	58	62	68	72	61	65	71	76	64	68	74	79	67	71	78	83	70	75	82	87	73	77	84	90

Shaded area is AHRI Rating Conditions IDB: Entering Indoor Dry Bulb Temperature KW=Total system power AMPS=outdoor unit amps (comp.+fan)

High and low pressures are measured at the liquid and suction service valves.

EXPANDED PERFORMANCE DATA

MODEL: GSH130181B* / AR*F182416* **Design Subcooling 9 ±3 °F @ the liquid service valve, AHRI 95 test conditions**

			Outdoor Ambient Temperature																							
			65				75				85				95				105				115			
			Entering Indoor Wet Bulb Temperature																							
IDB	Airflow		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	731	MBh	17.6	18.3	20.0	-	17.2	17.9	19.6	-	16.8	17.4	19.1	-	16.4	17.0	18.6	-	15.6	16.2	17.7	-	14.4	15.0	16.4	-
		S/T	0.72	0.60	0.42	-	0.75	0.63	0.43	-	0.77	0.64	0.44	-	0.79	0.66	0.46	-	0.82	0.69	0.48	-	0.83	0.69	0.48	-
		Delta T	16	14	11	-	16	14	11	-	16	14	11	-	16	14	11	-	16	14	11	-	15	13	10	-
		KW	1.24	1.26	1.30	-	1.33	1.35	1.40	-	1.41	1.43	1.48	-	1.48	1.51	1.55	-	1.53	1.57	1.61	-	1.58	1.62	1.67	-
		AMPS	4.7	4.8	4.9	-	5.0	5.1	5.3	-	5.4	5.6	5.8	-	5.8	5.9	6.1	-	6.2	6.3	6.5	-	6.5	6.7	6.9	-
		HI PR	135	146	154	-	152	164	173	-	173	186	196	-	197	212	224	-	221	238	252	-	245	263	278	-
		LO PR	63	67	73	-	66	71	77	-	69	73	80	-	72	77	84	-	76	81	88	-	79	84	91	-
	650	MBh	17.1	17.7	19.4	-	16.7	17.3	19.0	-	16.3	16.9	18.5	-	15.9	16.5	18.1	-	15.1	15.7	17.2	-	14.0	14.5	15.9	-
		S/T	0.69	0.58	0.40	-	0.71	0.60	0.41	-	0.73	0.61	0.42	-	0.76	0.63	0.44	-	0.79	0.66	0.45	-	0.79	0.66	0.46	-
		Delta T	17	14	11	-	17	15	11	-	17	15	11	-	17	15	11	-	17	15	11	-	16	14	10	-
		KW	1.23	1.25	1.29	-	1.32	1.34	1.38	-	1.40	1.42	1.47	-	1.46	1.49	1.54	-	1.52	1.55	1.60	-	1.57	1.61	1.66	-
		AMPS	4.6	4.7	4.9	-	5.0	5.1	5.3	-	5.4	5.5	5.7	-	5.8	5.9	6.1	-	6.1	6.3	6.5	-	6.5	6.6	6.9	-
		HI PR	134	144	152	-	150	162	171	-	171	184	194	-	195	210	221	-	219	236	249	-	242	261	275	-
		LO PR	62	66	72	-	66	70	76	-	68	73	79	-	72	76	83	-	75	80	87	-	78	83	90	-
	569	MBh	15.8	16.4	17.9	-	15.4	16.0	17.5	-	15.1	15.6	17.1	-	14.7	15.2	16.7	-	14.0	14.5	15.9	-	12.9	13.4	14.7	-
		S/T	0.67	0.56	0.38	-	0.69	0.58	0.40	-	0.71	0.59	0.41	-	0.73	0.61	0.42	-	0.76	0.63	0.44	-	0.76	0.64	0.44	-
		Delta T	17	15	11	-	17	15	11	-	17	15	11	-	17	15	11	-	17	15	11	-	16	14	10	-
		KW	1.20	1.23	1.26	-	1.29	1.31	1.35	-	1.36	1.39	1.43	-	1.43	1.46	1.50	-	1.49	1.52	1.56	-	1.53	1.57	1.62	-
		AMPS	4.5	4.6	4.7	-	4.8	5.0	5.1	-	5.3	5.4	5.6	-	5.6	5.7	5.9	-	6.0	6.1	6.3	-	6.3	6.5	6.7	-
		HI PR	130	140	148	-	146	157	166	-	166	179	189	-	189	203	215	-	213	229	242	-	235	253	267	-
		LO PR	60	64	70	-	64	68	74	-	66	70	77	-	70	74	81	-	73	78	85	-	75	80	88	-
75	731	MBh	17.9	18.5	20.0	21.5	17.5	18.0	19.5	21.0	17.1	17.6	19.1	20.5	16.7	17.2	18.6	20.0	15.9	16.3	17.7	19.0	14.7	15.1	16.4	17.6
		S/T	0.82	0.74	0.56	0.36	0.85	0.76	0.58	0.37	0.87	0.78	0.59	0.38	0.90	0.81	0.61	0.39	0.94	0.84	0.63	0.41	0.94	0.84	0.64	0.41
		Delta T	19	17	14	10	19	17	14	10	19	17	14	10	19	17	14	10	19	17	14	10	17	16	13	9
		KW	1.25	1.27	1.31	1.35	1.34	1.37	1.41	1.45	1.42	1.45	1.49	1.54	1.49	1.52	1.56	1.61	1.55	1.58	1.63	1.68	1.60	1.63	1.68	1.74
		AMPS	4.7	4.8	5.0	5.1	5.1	5.2	5.4	5.5	5.5	5.6	5.8	6.0	5.9	6.0	6.2	6.4	6.2	6.4	6.6	6.8	6.6	6.8	7.0	7.2
		HI PR	137	147	155	162	154	165	174	182	175	188	198	207	199	214	226	236	224	241	254	265	247	266	281	293
		LO PR	63	67	74	78	67	71	78	83	70	74	81	86	73	78	85	91	77	82	89	95	79	84	92	98
	650	MBh	17.4	17.9	19.4	20.8	17.0	17.5	19.0	20.3	16.6	17.1	18.5	19.9	16.2	**16.7**	18.1	19.4	15.4	15.8	17.2	18.4	14.3	14.7	15.9	17.1
		S/T	0.78	0.70	0.53	0.34	0.81	0.73	0.55	0.35	0.83	0.75	0.56	0.36	0.86	**0.77**	0.58	0.37	0.89	0.80	0.60	0.39	0.90	0.81	0.61	0.39
		Delta T	19	18	15	10	20	18	15	10	20	18	15	10	20	**18**	15	10	19	18	15	10	18	17	14	9
		KW	1.24	1.26	1.30	1.34	1.33	1.35	1.40	1.44	1.41	1.44	1.48	1.53	1.48	**1.51**	1.55	1.60	1.53	1.57	1.62	1.67	1.58	1.62	1.67	1.72
		AMPS	4.7	4.8	4.9	5.1	5.0	5.1	5.3	5.5	5.4	5.6	5.8	6.0	5.8	**5.9**	6.1	6.4	6.2	6.3	6.5	6.8	6.5	6.7	6.9	7.2
		HI PR	135	146	154	161	152	164	173	180	173	186	196	205	197	**212**	224	233	222	238	252	263	245	263	278	290
		LO PR	63	67	73	78	66	71	77	82	69	73	80	85	72	**77**	84	90	76	81	88	94	79	84	91	97
	569	MBh	16.1	16.5	17.9	19.2	15.7	16.2	17.5	18.8	15.3	15.8	17.1	18.3	15.0	15.40	16.7	17.9	14.2	14.6	15.8	17.0	13.2	13.5	14.7	15.7
		S/T	0.76	0.68	0.51	0.33	0.78	0.70	0.53	0.34	0.80	0.72	0.54	0.35	0.83	0.74	0.56	0.36	0.86	0.77	0.58	0.37	0.87	0.78	0.59	0.38
		Delta T	20	18	15	10	20	18	15	10	20	18	15	10	20	18	15	10	20	18	15	10	18	17	14	10
		KW	1.21	1.24	1.27	1.31	1.30	1.32	1.36	1.40	1.37	1.40	1.44	1.49	1.44	1.47	1.52	1.56	1.50	1.53	1.58	1.63	1.55	1.58	1.63	1.68
		AMPS	4.5	4.6	4.8	5.0	4.9	5.0	5.2	5.4	5.3	5.4	5.6	5.8	5.7	5.8	6.0	6.2	6.0	6.2	6.4	6.6	6.4	6.5	6.7	7.0
		HI PR	131	141	149	156	147	159	168	175	168	180	191	199	191	206	217	226	215	231	244	255	237	255	270	281
		LO PR	61	65	71	75	64	68	75	80	67	71	78	83	70	75	82	87	74	78	86	91	76	81	88	94

Shaded area is ACCA (TVA) conditions IDB: Entering Indoor Dry Bulb Temperature KW=Total system power AMPS=outdoor unit amps (comp.+fan)

High and low pressures are measured at the liquid and suction service valves.

EXPANDED PERFORMANCE DATA

COOLING OPERATION

MODEL: GSH130181B* / AR*F182416**

Design Subcooling 9 ±3 °F @ the liquid service valve, AHRI 95 test conditions

			Outdoor Ambient Temperature																							
			65				75				85				95				105				115			
			Entering Indoor Wet Bulb Temperature																							
IDB*	Airflow		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	731	MBh	18.3	18.7	19.9	21.3	17.8	18.2	19.5	20.8	17.4	17.8	19.0	20.3	17.0	17.4	18.5	19.8	16.1	16.5	17.6	18.8	14.9	15.3	16.3	17.4
		S/T	0.90	0.85	0.69	0.51	0.93	0.88	0.71	0.53	0.96	0.90	0.73	0.55	1.00	0.93	0.75	0.56	1.00	0.96	0.78	0.59	1.00	0.97	0.79	0.59
		Delta T	21	20	17	14	21	20	17	14	21	20	17	14	21	20	18	14	20	20	17	14	19	19	16	13
		KW	1.26	1.28	1.32	1.36	1.35	1.38	1.42	1.46	1.43	1.46	1.50	1.55	1.50	1.53	1.58	1.63	1.56	1.59	1.64	1.69	1.61	1.64	1.70	1.75
		AMPS	4.7	4.9	5.0	5.2	5.1	5.2	5.4	5.6	5.5	5.7	5.9	6.1	5.9	6.1	6.3	6.5	6.3	6.4	6.7	6.9	6.7	6.8	7.0	7.3
		HI PR	138	149	157	164	155	167	176	184	176	190	200	209	201	216	228	238	226	243	257	268	250	269	284	296
		LO PR	64	68	74	79	68	72	79	84	70	75	82	87	74	79	86	91	77	82	90	96	80	85	93	99
	650	MBh	17.7	18.1	19.4	20.7	17.3	17.7	18.9	20.2	16.9	17.3	18.5	19.7	16.5	16.8	**18.0**	19.2	15.7	16.0	17.1	18.3	14.5	14.8	15.8	16.9
		S/T	0.86	0.81	0.66	0.49	0.89	0.84	0.68	0.51	0.91	0.86	0.70	0.52	0.94	0.88	**0.72**	0.54	0.98	0.92	0.75	0.56	0.99	0.93	0.75	0.56
		Delta T	22	21	18	14	22	21	18	15	22	21	18	15	22	21	**18**	15	22	21	18	14	20	19	17	13
		KW	1.25	1.27	1.31	1.35	1.34	1.37	1.41	1.45	1.42	1.45	1.49	1.54	1.49	1.52	**1.57**	1.61	1.55	1.58	1.63	1.68	1.60	1.63	1.68	1.74
		AMPS	4.7	4.8	5.0	5.1	5.1	5.2	5.4	5.5	5.5	5.6	5.8	6.0	5.9	6.0	**6.2**	6.4	6.2	6.4	6.6	6.8	6.6	6.8	7.0	7.2
		HI PR	137	147	155	162	154	165	174	182	175	188	198	207	199	214	**226**	236	224	241	254	265	247	266	281	293
		LO PR	63	68	74	78	67	71	78	83	70	74	81	86	73	78	**85**	91	77	82	89	95	79	84	92	98
	569	MBh	16.4	16.7	17.9	19.1	16.0	16.3	17.4	18.6	15.6	15.9	17.0	18.2	15.2	15.6	16.6	17.8	14.5	14.8	15.8	16.9	13.4	13.7	14.6	15.6
		S/T	0.83	0.78	0.63	0.47	0.86	0.81	0.66	0.49	0.88	0.83	0.67	0.50	0.91	0.85	0.69	0.52	0.94	0.89	0.72	0.54	0.95	0.89	0.73	0.54
		Delta T	22	21	18	15	22	21	18	15	22	21	19	15	22	21	19	15	22	21	18	15	21	20	17	14
		KW	1.22	1.24	1.28	1.32	1.31	1.33	1.37	1.42	1.38	1.41	1.46	1.50	1.45	1.48	1.53	1.58	1.51	1.54	1.59	1.64	1.56	1.59	1.64	1.69
		AMPS	4.6	4.7	4.8	5.0	4.9	5.1	5.2	5.4	5.3	5.5	5.7	5.9	5.7	5.8	6.0	6.3	6.1	6.2	6.4	6.7	6.4	6.6	6.8	7.0
		HI PR	133	143	151	157	149	160	169	177	169	182	192	201	193	208	219	229	217	234	247	257	240	258	272	284
		LO PR	62	65	71	76	65	69	76	80	68	72	78	84	71	76	82	88	74	79	86	92	77	82	89	95
85	731	MBh	18.6	18.9	19.8	21.2	18.1	18.5	19.4	20.7	17.7	18.1	18.9	20.2	17.3	17.6	18.4	19.7	16.4	16.7	17.5	18.7	15.2	15.5	16.2	17.3
		S/T	0.95	0.91	0.82	0.67	0.98	0.95	0.85	0.69	1.00	0.97	0.87	0.71	1.00	1.00	0.90	0.73	1.00	1.00	0.94	0.76	1.00	1.00	0.94	0.77
		Delta T	22	22	21	18	22	22	21	18	22	22	21	18	22	22	21	18	21	21	21	18	19	19	19	17
		KW	1.27	1.29	1.33	1.37	1.36	1.39	1.43	1.47	1.44	1.47	1.51	1.56	1.51	1.54	1.59	1.64	1.57	1.60	1.65	1.71	1.62	1.66	1.71	1.77
		AMPS	4.8	4.9	5.1	5.2	5.2	5.3	5.4	5.6	5.6	5.7	5.9	6.1	6.0	6.1	6.3	6.5	6.3	6.5	6.7	7.0	6.7	6.9	7.1	7.4
		HI PR	140	150	159	165	157	169	178	186	178	192	202	211	203	218	231	240	228	246	259	271	252	271	287	299
		LO PR	65	69	75	80	68	73	79	85	71	76	83	88	75	79	87	92	78	83	91	97	81	86	94	100
	650	MBh	18.0	18.4	19.3	20.5	17.6	18.0	18.8	20.1	17.2	17.5	18.4	19.6	16.8	17.1	17.9	19.1	15.9	16.2	17.0	18.2	14.8	15.0	15.8	16.8
		S/T	0.90	0.87	0.79	0.64	0.93	0.90	0.81	0.66	0.96	0.92	0.83	0.68	0.99	0.95	0.86	0.70	1.00	0.99	0.89	0.73	1.00	1.00	0.90	0.73
		Delta T	23	23	21	19	23	23	22	19	23	23	22	19	23	23	22	19	23	23	22	19	21	21	20	17
		KW	1.26	1.28	1.32	1.36	1.35	1.38	1.42	1.46	1.43	1.46	1.50	1.55	1.50	1.53	1.58	1.63	1.56	1.59	1.64	1.69	1.61	1.64	1.70	1.75
		AMPS	4.7	4.9	5.0	5.2	5.1	5.2	5.4	5.6	5.5	5.7	5.9	6.1	5.9	6.1	6.3	6.5	6.3	6.4	6.7	6.9	6.7	6.8	7.0	7.3
		HI PR	138	149	157	164	155	167	176	184	176	190	200	209	201	216	228	238	226	243	257	268	250	269	284	296
		LO PR	64	68	74	79	68	72	79	84	70	75	82	87	74	79	86	91	77	82	90	96	80	85	93	99
	569	MBh	16.6	17.0	17.8	19.0	16.3	16.6	17.4	18.5	15.9	16.2	16.9	18.1	15.5	15.8	16.5	17.6	14.7	15.0	15.7	16.8	13.6	13.9	14.5	15.5
		S/T	0.87	0.84	0.76	0.61	0.90	0.87	0.78	0.64	0.92	0.89	0.80	0.65	0.95	0.92	0.83	0.67	0.99	0.95	0.86	0.70	1.00	0.96	0.87	0.71
		Delta T	23	23	22	19	24	23	22	19	24	23	22	19	24	23	22	19	24	23	22	19	22	22	20	18
		KW	1.23	1.25	1.29	1.33	1.32	1.34	1.38	1.43	1.39	1.42	1.47	1.51	1.46	1.49	1.54	1.59	1.52	1.55	1.60	1.65	1.57	1.60	1.66	1.71
		AMPS	4.6	4.7	4.9	5.0	5.0	5.1	5.3	5.4	5.4	5.5	5.7	5.9	5.8	5.9	6.1	6.3	6.1	6.3	6.5	6.7	6.5	6.6	6.8	7.1
		HI PR	134	144	152	159	150	162	171	178	171	184	194	203	195	210	221	231	219	236	249	260	242	261	275	287
		LO PR	62	66	72	77	66	70	76	81	68	73	79	84	72	76	83	89	75	80	87	93	78	83	90	96

Shaded area is AHRI Rating Conditions IDB: Entering Indoor Dry Bulb Temperature KW=Total system power AMPS=outdoor unit amps (comp.+fan)

High and low pressures are measured at the liquid and suction service valves.

EXPANDED PERFORMANCE DATA

COOLING OPERATION

MODEL: GSH130241B* / AR*F182416**

Design Subcooling 9 ±3 °F @ the liquid service valve, AHRI 95 test conditions

			Outdoor Ambient Temperature																							
			65				75				85				95				105				115			
			Entering Indoor Wet Bulb Temperature																							
IDB	Airflow		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	956	MBh	22.5	23.4	25.6	-	22.0	22.8	25.0	-	21.5	22.3	24.4	-	21.0	21.7	23.8	-	19.9	20.6	22.6	-	18.4	19.1	21.0	-
		S/T	0.74	0.62	0.43	-	0.77	0.64	0.45	-	0.79	0.66	0.46	-	0.81	0.68	0.47	-	0.85	0.71	0.49	-	0.85	0.71	0.49	-
		Delta T	16	14	11	-	16	14	11	-	16	14	11	-	16	14	11	-	16	14	11	-	15	13	10	-
		KW	1.59	1.63	1.68	-	1.71	1.75	1.80	-	1.81	1.85	1.91	-	1.91	1.95	2.01	-	1.98	2.03	2.09	-	2.05	2.09	2.16	-
		AMPS	5.8	6.0	6.2	-	6.3	6.4	6.7	-	6.8	7.0	7.2	-	7.3	7.5	7.7	-	7.8	8.0	8.2	-	8.2	8.4	8.7	-
		HI PR	140	151	159	-	157	169	179	-	179	193	203	-	204	219	232	-	229	247	261	-	253	273	288	-
		LO PR	62	66	72	-	65	69	76	-	68	72	79	-	71	76	83	-	75	79	87	-	77	82	90	-
	850	MBh	21.9	22.7	24.8	-	21.4	22.2	24.3	-	20.9	21.6	23.7	-	20.4	21.1	23.1	-	19.3	20.0	22.0	-	17.9	18.6	20.3	-
		S/T	0.71	0.59	0.41	-	0.73	0.61	0.42	-	0.75	0.63	0.44	-	0.78	0.65	0.45	-	0.81	0.67	0.47	-	0.81	0.68	0.47	-
		Delta T	17	15	11	-	17	15	11	-	17	15	11	-	17	15	11	-	17	15	11	-	16	14	10	-
		KW	1.58	1.61	1.66	-	1.70	1.73	1.79	-	1.80	1.84	1.90	-	1.89	1.93	1.99	-	1.97	2.01	2.07	-	2.03	2.08	2.14	-
		AMPS	5.8	5.9	6.1	-	6.2	6.4	6.6	-	6.8	6.9	7.2	-	7.2	7.4	7.7	-	7.7	7.9	8.1	-	8.2	8.4	8.6	-
		HI PR	139	149	158	-	156	168	177	-	177	191	201	-	202	217	229	-	227	244	258	-	251	270	285	-
		LO PR	61	65	71	-	65	69	75	-	67	71	78	-	70	75	82	-	74	79	86	-	76	81	89	-
	744	MBh	20.2	20.9	22.9	-	19.7	20.4	22.4	-	19.3	20.0	21.9	-	18.8	19.5	21.3	-	17.8	18.5	20.3	-	16.5	17.1	18.8	-
		S/T	0.68	0.57	0.40	-	0.71	0.59	0.41	-	0.73	0.61	0.42	-	0.75	0.63	0.43	-	0.78	0.65	0.45	-	0.78	0.65	0.45	-
		Delta T	17	15	11	-	17	15	11	-	17	15	11	-	17	15	11	-	17	15	11	-	16	14	11	-
		KW	1.55	1.58	1.62	-	1.66	1.69	1.74	-	1.76	1.79	1.85	-	1.85	1.88	1.94	-	1.92	1.96	2.02	-	1.98	2.03	2.09	-
		AMPS	5.6	5.7	5.9	-	6.1	6.2	6.4	-	6.6	6.7	7.0	-	7.0	7.2	7.4	-	7.5	7.7	7.9	-	7.9	8.1	8.4	-
		HI PR	135	145	153	-	151	163	172	-	172	185	195	-	196	211	222	-	220	237	250	-	243	262	276	-
		LO PR	59	63	69	-	63	67	73	-	65	69	76	-	68	73	79	-	72	76	83	-	74	79	86	-
75	956	MBh	22.92	23.60	25.54	27.41	22.39	23.05	24.95	26.78	21.85	22.50	24.36	26.14	21.32	21.95	23.76	25.50	20.25	20.85	22.57	24.23	18.76	19.32	20.91	22.44
		S/T	0.84	0.75	0.57	0.37	0.87	0.78	0.59	0.38	0.90	0.80	0.61	0.39	0.93	0.83	0.63	0.40	0.96	0.86	0.65	0.42	0.97	0.87	0.66	0.42
		Delta T	19	17	14	10	19	17	14	10	19	17	14	10	19	17	14	10	19	17	14	10	17	16	13	9
		KW	1.61	1.64	1.69	1.74	1.72	1.76	1.81	1.87	1.83	1.87	1.93	1.99	1.92	1.96	2.02	2.09	2.00	2.04	2.11	2.18	2.07	2.11	2.18	2.25
		AMPS	5.9	6.0	6.2	6.4	6.3	6.5	6.7	7.0	6.9	7.1	7.3	7.6	7.4	7.5	7.8	8.1	7.8	8.0	8.3	8.6	8.3	8.5	8.8	9.1
		HI PR	142	152	161	168	159	171	181	188	181	195	205	214	206	222	234	244	232	249	263	275	256	275	291	303
		LO PR	62	66	72	77	66	70	76	81	68	73	79	85	72	76	83	89	75	80	87	93	78	83	91	96
	850	MBh	22.3	22.9	24.8	26.6	21.7	22.4	24.2	26.0	21.2	21.8	23.6	25.4	20.7	**21.3**	23.1	24.8	19.7	20.2	21.9	23.5	18.2	18.8	20.3	21.8
		S/T	0.80	0.72	0.54	0.35	0.83	0.75	0.56	0.36	0.86	0.77	0.58	0.37	0.88	**0.79**	0.60	0.38	0.92	0.82	0.62	0.40	0.92	0.83	0.63	0.40
		Delta T	19	18	15	10	20	18	15	10	20	18	15	10	20	**18**	15	10	19	18	15	10	18	17	14	9
		KW	1.60	1.63	1.68	1.73	1.71	1.75	1.80	1.86	1.81	1.85	1.91	1.97	1.91	**1.95**	2.01	2.07	1.98	2.03	2.09	2.16	2.05	2.09	2.16	2.23
		AMPS	5.8	6.0	6.2	6.4	6.3	6.4	6.7	6.9	6.8	7.0	7.2	7.5	7.3	**7.5**	7.7	8.0	7.8	8.0	8.2	8.5	8.2	8.4	8.7	9.1
		HI PR	140	151	159	166	157	169	179	187	179	193	203	212	204	**219**	232	242	229	247	261	272	253	273	288	300
		LO PR	62	66	72	76	65	69	76	81	68	72	79	84	71	**76**	83	88	75	79	87	92	77	82	90	95
	744	MBh	20.5	21.1	22.9	24.6	20.1	20.7	22.4	24.0	19.6	20.2	21.8	23.4	19.1	19.67	21.3	22.9	18.2	18.7	20.2	21.7	16.8	17.3	18.7	20.1
		S/T	0.78	0.69	0.53	0.34	0.80	0.72	0.54	0.35	0.82	0.74	0.56	0.36	0.85	0.76	0.58	0.37	0.88	0.79	0.60	0.38	0.89	0.80	0.60	0.39
		Delta T	20	18	15	10	20	18	15	10	20	18	15	10	20	19	15	10	20	18	15	10	19	17	14	10
		KW	1.56	1.59	1.64	1.69	1.67	1.71	1.76	1.81	1.77	1.81	1.86	1.92	1.86	1.90	1.96	2.02	1.94	1.98	2.04	2.11	2.00	2.04	2.11	2.18
		AMPS	5.7	5.8	6.0	6.2	6.1	6.3	6.5	6.7	6.6	6.8	7.0	7.3	7.1	7.3	7.5	7.8	7.6	7.7	8.0	8.3	8.0	8.2	8.5	8.8
		HI PR	136	146	155	161	153	164	173	181	174	187	197	206	198	213	225	234	222	239	253	264	246	265	279	291
		LO PR	60	64	70	74	63	67	73	78	66	70	76	81	69	73	80	85	72	77	84	89	75	80	87	93

Shaded area is ACCA (TVA) conditions

IDB: Entering Indoor Dry Bulb Temperature

KW=Total system power

AMPS=outdoor unit amps (comp.+fan)

High and low pressures are measured at the liquid and suction service valves.

EXPANDED PERFORMANCE DATA

COOLING OPERATION

MODEL: GSH130241B*/ AR*F182416**

Design Subcooling 9 ±3 °F @ the liquid service valve, AHRI 95 test conditions

			Outdoor Ambient Temperature																							
			65				75				85				95				105				115			
			Entering Indoor Wet Bulb Temperature																							
IDB*	Airflow		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	956	MBh	23.33	23.84	25.47	27.22	22.79	23.28	24.87	26.59	22.24	22.73	24.28	25.96	21.70	22.17	23.69	25.32	20.62	21.07	22.51	24.06	19.10	19.51	20.85	22.29
		S/T	0.93	0.87	0.71	0.53	0.96	0.90	0.73	0.55	1.00	0.92	0.75	0.56	1.00	0.95	0.78	0.58	1.00	1.00	0.80	0.60	1.00	1.00	0.81	0.61
		Delta T	21	20	17	14	21	20	18	14	21	20	18	14	21	20	18	14	20	20	17	14	18	19	16	13
		KW	1.62	1.65	1.70	1.75	1.74	1.77	1.83	1.89	1.84	1.88	1.94	2.00	1.94	1.98	2.04	2.11	2.02	2.06	2.12	2.19	2.08	2.13	2.20	2.27
		AMPS	5.9	6.1	6.3	6.5	6.4	6.6	6.8	7.0	7.0	7.1	7.4	7.6	7.4	7.6	7.9	8.2	7.9	8.1	8.4	8.7	8.4	8.6	8.9	9.2
		HI PR	143	154	163	170	161	173	182	190	183	197	208	216	208	224	236	247	234	252	266	277	259	278	294	306
		LO PR	63	67	73	78	67	71	77	82	69	74	80	86	73	77	84	90	76	81	88	94	79	84	91	97
	850	MBh	22.6	23.1	24.7	26.4	22.1	22.6	24.2	25.8	21.6	22.1	23.6	25.2	21.1	21.5	**23.0**	24.6	20.0	20.5	21.9	23.4	18.5	18.9	20.2	21.6
		S/T	0.88	0.83	0.67	0.50	0.91	0.86	0.70	0.52	0.94	0.88	0.72	0.54	0.97	0.91	**0.74**	0.55	1.00	0.94	0.77	0.57	1.00	0.95	0.77	0.58
		Delta T	22	21	18	14	22	21	18	15	22	21	18	15	22	21	**18**	15	22	21	18	14	20	19	17	14
		KW	1.61	1.64	1.69	1.74	1.73	1.76	1.81	1.87	1.83	1.87	1.93	1.99	1.92	1.96	**2.02**	2.09	2.00	2.04	2.11	2.18	2.07	2.11	2.18	2.25
		AMPS	5.9	6.0	6.2	6.4	6.3	6.5	6.7	7.0	6.9	7.1	7.3	7.6	7.4	7.5	**7.8**	8.1	7.8	8.0	8.3	8.6	8.3	8.5	8.8	9.1
		HI PR	142	152	161	168	159	171	181	188	181	195	205	214	206	222	**234**	244	232	249	263	275	256	275	291	303
		LO PR	62	66	72	77	66	70	76	81	68	73	79	85	72	76	**84**	89	75	80	88	93	78	83	91	96
	744	MBh	20.9	21.4	22.8	24.4	20.4	20.9	22.3	23.8	19.9	20.4	21.8	23.3	19.4	19.9	21.2	22.7	18.5	18.9	20.2	21.6	17.1	17.5	18.7	20.0
		S/T	0.85	0.80	0.65	0.49	0.88	0.83	0.67	0.50	0.90	0.85	0.69	0.52	0.93	0.88	0.71	0.53	0.97	0.91	0.74	0.55	0.98	0.92	0.75	0.56
		Delta T	22	21	18	15	22	21	19	15	22	21	19	15	22	22	19	15	22	21	18	15	21	20	17	14
		KW	1.57	1.60	1.65	1.70	1.69	1.72	1.77	1.83	1.79	1.82	1.88	1.94	1.88	1.91	1.97	2.04	1.95	1.99	2.06	2.12	2.02	2.06	2.13	2.19
		AMPS	5.7	5.9	6.0	6.3	6.2	6.3	6.5	6.8	6.7	6.9	7.1	7.4	7.2	7.3	7.6	7.9	7.6	7.8	8.1	8.4	8.1	8.3	8.6	8.9
		HI PR	137	148	156	163	154	166	175	183	175	189	199	208	200	215	227	237	225	242	255	266	248	267	282	294
		LO PR	60	64	70	75	64	68	74	79	66	71	77	82	70	74	81	86	73	78	85	90	76	80	88	94
85	956	MBh	23.74	24.19	25.34	27.03	23.18	23.63	24.75	26.40	22.63	23.07	24.16	25.78	22.08	22.51	23.57	25.15	20.98	21.38	22.39	23.89	19.43	19.81	20.74	22.13
		S/T	0.97	0.94	0.84	0.69	1.00	0.97	0.88	0.71	1.00	0.99	0.90	0.73	1.00	1.00	0.93	0.75	1.00	1.00	0.96	0.78	1.00	1.00	0.97	0.79
		Delta T	22	22	21	18	22	22	21	18	22	22	21	18	21	22	21	18	20	21	21	18	19	19	19	17
		KW	1.63	1.66	1.72	1.77	1.75	1.79	1.84	1.90	1.86	1.90	1.96	2.02	1.95	1.99	2.06	2.12	2.03	2.08	2.14	2.21	2.10	2.15	2.22	2.29
		AMPS	6.0	6.1	6.3	6.6	6.5	6.6	6.8	7.1	7.0	7.2	7.4	7.7	7.5	7.7	7.9	8.2	8.0	8.2	8.5	8.8	8.5	8.7	9.0	9.3
		HI PR	145	156	164	171	162	175	184	192	184	198	210	219	210	226	239	249	236	254	269	280	261	281	297	309
		LO PR	64	68	74	79	67	71	78	83	70	74	81	86	73	78	85	91	77	82	89	95	79	85	92	98
	850	MBh	23.0	23.5	24.6	26.2	22.5	22.9	24.0	25.6	22.0	22.4	23.5	25.0	21.4	21.9	22.9	24.4	20.4	20.8	21.7	23.2	18.9	19.2	20.1	21.5
		S/T	0.93	0.89	0.81	0.65	0.96	0.93	0.84	0.68	0.98	0.95	0.86	0.69	1.00	0.98	0.88	0.72	1.00	1.00	0.92	0.74	1.00	1.00	0.93	0.75
		Delta T	23	23	21	19	23	23	22	19	23	23	22	19	23	23	22	19	22	22	22	19	20	21	20	17
		KW	1.62	1.65	1.70	1.75	1.74	1.77	1.83	1.89	1.84	1.88	1.94	2.00	1.94	1.98	2.04	2.11	2.02	2.06	2.12	2.19	2.08	2.13	2.20	2.27
		AMPS	5.9	6.1	6.3	6.5	6.4	6.6	6.8	7.0	7.0	7.1	7.4	7.6	7.4	7.6	7.9	8.2	7.9	8.1	8.4	8.7	8.4	8.6	8.9	9.2
		HI PR	143	154	163	170	161	173	182	190	183	197	208	216	208	224	236	247	234	252	266	277	259	278	294	306
		LO PR	63	67	73	78	67	71	77	82	69	74	80	86	73	77	84	90	76	81	88	94	79	84	91	97
	744	MBh	21.3	21.7	22.7	24.2	20.8	21.2	22.2	23.7	20.3	20.7	21.7	23.1	19.8	20.2	21.1	22.5	18.8	19.2	20.1	21.4	17.4	17.7	18.6	19.8
		S/T	0.89	0.86	0.78	0.63	0.92	0.89	0.81	0.65	0.95	0.91	0.83	0.67	0.98	0.94	0.85	0.69	1.00	0.98	0.88	0.72	1.00	0.99	0.89	0.72
		Delta T	23	23	22	19	24	23	22	19	24	23	22	19	24	24	22	19	23	23	22	19	22	22	20	18
		KW	1.58	1.61	1.66	1.71	1.70	1.73	1.79	1.84	1.80	1.84	1.89	1.95	1.89	1.93	1.99	2.05	1.97	2.01	2.07	2.14	2.03	2.08	2.14	2.21
		AMPS	5.8	5.9	6.1	6.3	6.2	6.4	6.6	6.8	6.8	6.9	7.2	7.4	7.2	7.4	7.7	7.9	7.7	7.9	8.1	8.5	8.2	8.4	8.6	9.0
		HI PR	139	149	158	165	156	168	177	185	177	191	201	210	202	217	229	239	227	244	258	269	251	270	285	297
		LO PR	61	65	71	76	65	69	75	80	67	71	78	83	70	75	82	87	74	79	86	91	76	81	89	94

Shaded area is AHRI Rating Conditions

IDB: Entering Indoor Dry Bulb Temperature

KW=Total system power

AMPS=outdoor unit amps (comp.+fan)

High and low pressures are measured at the liquid and suction service valves.

EXPANDED PERFORMANCE DATA

COOLING OPERATION

MODEL: GSH130301 B* / ARUF363616B*

			Outdoor Ambient Temperature																							
			65				75				85				95				105				115			
			Entering Indoor Wet Bulb Temperature																							
IDB*	Airflow		59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71
70	1500	MBh	27.6	28.6	31.3	-	26.9	27.9	30.6	-	26.3	27.2	29.9	-	25.6	26.6	29.1	-	24.4	25.3	27.7	-	22.6	23.4	25.6	-
		S/T	0.74	0.62	0.43	-	0.77	0.64	0.45	-	0.79	0.66	0.46	-	0.82	0.68	0.47	-	0.85	0.71	0.49	-	0.85	0.71	0.49	-
		Delta T	13	11	8	-	13	11	8	-	13	11	8	-	13	11	8	-	13	11	8	-	12	10	8	-
		KW	2.56	2.56	2.56	-	2.56	2.56	2.56	-	2.56	2.56	2.56	-	2.56	2.56	2.56	-	2.56	2.56	2.56	-	2.56	2.56	2.56	-
		AMPS	10.0	10.0	10.0	-	10.0	10.0	10.0	-	10.0	10.0	10.0	-	10.0	10.0	10.0	-	10.0	10.0	10.0	-	10.0	10.0	10.0	-
		HI PR	149	160	169	-	167	180	190	-	190	205	216	-	217	233	246	-	244	262	277	-	269	290	306	-
		LO PR	62	66	72	-	66	70	76	-	68	73	79	-	72	76	83	-	75	80	87	-	78	83	90	-
	1025	MBh	26.6	27.6	30.3	-	26.0	27.0	29.5	-	25.4	26.3	28.8	-	24.8	25.7	28.1	-	23.5	24.4	26.7	-	21.8	22.6	24.8	-
		S/T	0.70	0.58	0.40	-	0.72	0.61	0.42	-	0.74	0.62	0.43	-	0.77	0.64	0.44	-	0.80	0.66	0.46	-	0.80	0.67	0.46	-
		Delta T	17	14	11	-	17	15	11	-	17	15	11	-	17	15	11	-	17	15	11	-	16	14	10	-
		KW	2.56	2.56	2.56	-	2.56	2.56	2.56	-	2.56	2.56	2.56	-	2.56	2.56	2.56	-	2.56	2.56	2.56	-	2.56	2.56	2.56	-
		AMPS	10.0	10.0	10.0	-	10.0	10.0	10.0	-	10.0	10.0	10.0	-	10.0	10.0	10.0	-	10.0	10.0	10.0	-	10.0	10.0	10.0	-
		HI PR	146	157	166	-	164	176	186	-	186	201	212	-	212	228	241	-	239	257	271	-	264	284	300	-
		LO PR	61	65	71	-	64	69	75	-	67	71	78	-	70	75	82	-	74	78	86	-	76	81	89	-
	2000	MBh	27.6	28.6	31.3	-	26.9	27.9	30.6	-	26.3	27.2	29.9	-	25.6	26.6	29.1	-	24.4	25.3	27.7	-	22.6	23.4	25.6	-
		S/T	0.74	0.62	0.43	-	0.77	0.64	0.45	-	0.79	0.66	0.46	-	0.82	0.68	0.47	-	0.85	0.71	0.49	-	0.85	0.71	0.49	-
		Delta T	9	8	6	-	10	8	6	-	10	8	6	-	10	8	6	-	9	8	6	-	9	8	6	-
		KW	2.56	2.56	2.56	-	2.56	2.56	2.56	-	2.56	2.56	2.56	-	2.56	2.56	2.56	-	2.56	2.56	2.56	-	2.56	2.56	2.56	-
		AMPS	10.0	10.0	10.0	-	10.0	10.0	10.0	-	10.0	10.0	10.0	-	10.0	10.0	10.0	-	10.0	10.0	10.0	-	10.0	10.0	10.0	-
		HI PR	149	160	169	-	167	180	190	-	190	205	216	-	217	233	246	-	244	262	277	-	269	290	306	-
		LO PR	62	66	72	-	66	70	76	-	68	73	79	-	72	76	83	-	75	80	87	-	78	83	90	-
75	1500	MBh	28.0	28.9	31.2	33.5	27.4	28.2	30.5	32.8	26.7	27.5	29.8	32.0	26.1	**26.9**	29.1	31.2	24.8	25.5	27.6	29.6	23.0	23.6	25.6	27.5
		S/T	0.84	0.76	0.57	0.37	0.88	0.78	0.59	0.38	0.90	0.80	0.61	0.39	0.93	**0.83**	0.63	0.40	0.96	0.86	0.65	0.42	0.97	0.87	0.66	0.42
		Delta T	15	13	11	8	15	14	11	8	15	14	11	8	15	**14**	11	8	15	13	11	8	14	13	10	7
		KW	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	**2.56**	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56
		AMPS	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	**10.0**	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
		HI PR	151	162	171	178	169	182	192	200	192	207	218	228	219	**235**	249	259	246	265	280	292	272	293	309	322
		LO PR	63	67	73	78	66	71	77	82	69	73	80	85	73	**77**	84	90	76	81	88	94	79	84	91	97
	1025	MBh	27.1	27.9	30.2	32.4	26.5	27.2	29.5	31.6	25.8	26.6	28.8	30.9	25.2	**25.9**	28.1	30.1	23.9	24.6	26.7	28.6	22.2	22.8	24.7	26.5
		S/T	0.79	0.71	0.54	0.35	0.82	0.74	0.56	0.36	0.84	0.76	0.57	0.37	0.87	**0.78**	0.59	0.38	0.90	0.81	0.61	0.39	0.91	0.82	0.62	0.40
		Delta T	19	18	15	10	20	18	15	10	20	18	15	10	20	**18**	15	10	19	18	15	10	18	17	14	9
		KW	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	**2.56**	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56
		AMPS	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	**10.0**	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
		HI PR	148	159	168	175	166	178	188	196	188	203	214	223	214	**231**	244	254	241	260	274	286	267	287	303	316
		LO PR	62	66	72	76	65	69	76	81	68	72	79	84	71	**76**	83	88	75	79	87	92	77	82	90	95
	2000	MBh	28.0	28.9	31.2	33.5	27.4	28.2	30.5	32.8	26.7	27.5	29.8	32.0	26.1	**26.9**	29.1	31.2	24.8	25.5	27.6	29.6	23.0	23.6	25.6	27.5
		S/T	0.84	0.76	0.57	0.37	0.88	0.78	0.59	0.38	0.90	0.80	0.61	0.39	0.93	**0.83**	0.63	0.40	0.96	0.86	0.65	0.42	0.97	0.87	0.66	0.42
		Delta T	11	10	8	6	11	10	8	6	11	10	8	6	11	**10**	8	6	11	10	8	6	10	9	8	5
		KW	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	**2.56**	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56
		AMPS	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	**10.0**	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
		HI PR	151	162	171	178	169	182	192	200	192	207	218	228	219	**235**	249	259	246	265	280	292	272	293	309	322
		LO PR	63	67	73	78	66	71	77	82	69	73	80	85	73	**77**	84	90	76	81	88	94	79	84	91	97

Shaded area is ACCA (TVA) conditions IDB: Entering Indoor Dry Bulb Temperature KW=Total system power AMPS=outdoor unit amps (comp.+fan)

High and low pressures are measured at the liquid and suction service valves.

EXPANDED PERFORMANCE DATA

COOLING OPERATION

MODEL: GSH130301 B* / ARUF363616B*

			Outdoor Ambient Temperature																							
			65				75				85				95				105				115			
			Entering Indoor Wet Bulb Temperature																							
IDB*	Airflow		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	1500	MBh	28.5	29.2	31.2	33.3	27.9	28.5	30.4	32.5	27.2	27.8	29.7	31.8	26.5	27.1	29.0	31.0	25.2	25.8	27.5	29.4	23.4	23.9	25.5	27.3
		S/T	0.93	0.87	0.71	0.53	0.96	0.90	0.73	0.55	1.00	0.92	0.75	0.56	1.00	0.95	0.78	0.58	1.00	1.00	0.81	0.60	1.00	1.00	0.81	0.61
		Delta T	16	16	14	11	16	16	14	11	17	16	14	11	16	16	14	11	15	16	14	11	14	15	13	10
		KW	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56
		AMPS	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
		HI PR	152	164	173	180	171	184	194	202	194	209	220	230	221	238	251	262	249	268	283	295	275	296	312	326
		LO PR	64	68	74	79	67	71	78	83	70	74	81	86	73	78	85	91	77	82	89	95	79	84	92	98
	1025	MBh	27.6	28.2	30.1	32.2	26.9	27.5	29.4	31.4	26.3	26.9	28.7	30.7	25.6	26.2	**28.0**	29.9	24.4	24.9	26.6	28.4	22.6	23.1	24.6	26.3
		S/T	0.87	0.82	0.67	0.50	0.90	0.85	0.69	0.52	0.93	0.87	0.71	0.53	0.96	0.90	**0.73**	0.55	0.99	0.93	0.76	0.57	1.00	0.94	0.76	0.57
		Delta T	22	21	18	14	22	21	18	15	22	21	18	15	22	21	**18**	15	22	21	18	14	20	19	17	13
		KW	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	**2.56**	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56
		AMPS	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	**10.0**	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
		HI PR	149	160	169	177	167	180	190	198	190	205	216	225	217	233	**246**	257	244	262	277	289	269	290	306	319
		LO PR	62	66	72	77	66	70	76	81	68	73	79	85	72	76	**83**	89	75	80	87	93	78	83	90	96
	2000	MBh	28.5	29.2	31.2	33.3	27.9	28.5	30.4	32.5	27.2	27.8	29.7	31.8	26.5	27.1	29.0	31.0	25.2	25.8	27.5	29.4	23.4	23.9	25.5	27.3
		S/T	0.93	0.87	0.71	0.53	0.96	0.90	0.73	0.55	1.00	0.92	0.75	0.56	1.00	0.95	0.78	0.58	1.00	1.00	0.81	0.60	1.00	1.00	0.81	0.61
		Delta T	12	12	10	8	12	12	10	8	13	12	10	8	12	12	10	8	12	12	10	8	11	11	10	8
		KW	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56
		AMPS	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
		HI PR	152	164	173	180	171	184	194	202	194	209	220	230	221	238	251	262	249	268	283	295	275	296	312	326
		LO PR	64	68	74	79	67	71	78	83	70	74	81	86	73	78	85	91	77	82	89	95	79	84	92	98
85	1500	MBh	29.0	29.6	31.0	33.1	28.4	28.9	30.3	32.3	27.7	28.2	29.6	31.5	27.0	27.5	28.8	30.8	25.7	26.2	27.4	29.2	23.8	24.2	25.4	27.1
		S/T	0.97	0.94	0.85	0.69	1.00	0.97	0.88	0.71	1.00	1.00	0.90	0.73	1.00	1.00	0.93	0.75	1.00	1.00	0.96	0.78	1.00	1.00	0.97	0.79
		Delta T	17	17	16	14	17	17	16	14	17	17	16	14	17	17	16	14	16	16	16	14	15	15	15	13
		KW	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56
		AMPS	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
		HI PR	154	165	175	182	172	185	196	204	196	211	223	232	223	240	254	265	251	270	285	298	277	299	315	329
		LO PR	64	68	74	79	68	72	79	84	70	75	82	87	74	79	86	92	78	82	90	96	80	85	93	99
	1025	MBh	28.1	28.6	29.9	32.0	27.4	27.9	29.3	31.2	26.7	27.3	28.6	30.5	26.1	26.6	27.9	29.7	24.8	25.3	26.5	28.2	23.0	23.4	24.5	26.2
		S/T	0.91	0.88	0.80	0.65	0.95	0.91	0.82	0.67	0.97	0.94	0.85	0.69	1.00	0.97	0.87	0.71	1.00	1.00	0.91	0.74	1.00	1.00	0.91	0.74
		Delta T	23	23	21	19	23	23	22	19	23	23	22	19	23	23	22	19	22	23	22	19	21	21	20	17
		KW	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56
		AMPS	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
		HI PR	151	162	171	178	169	182	192	200	192	207	218	228	219	235	249	259	246	265	280	292	272	293	309	322
		LO PR	63	67	73	78	66	71	77	82	69	73	80	85	73	77	84	90	76	81	88	94	79	84	91	97
	2000	MBh	29.0	29.6	31.0	33.1	28.4	28.9	30.3	32.3	27.7	28.2	29.6	31.5	27.0	27.5	28.8	30.8	25.7	26.2	27.4	29.2	23.8	24.2	25.4	27.1
		S/T	0.97	0.94	0.85	0.69	1.00	0.97	0.88	0.71	1.00	1.00	0.90	0.73	1.00	1.00	0.93	0.75	1.00	1.00	0.96	0.78	1.00	1.00	0.97	0.79
		Delta T	13	13	12	10	13	13	12	11	13	13	12	11	12	13	12	11	12	12	12	10	11	11	11	10
		KW	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56
		AMPS	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
		HI PR	154	165	175	182	172	185	196	204	196	211	223	232	223	240	254	265	251	270	285	298	277	299	315	329
		LO PR	64	68	74	79	68	72	79	84	70	75	82	87	74	79	86	92	78	82	90	96	80	85	93	99

Shaded area is AHRI Rating Conditions IDB: Entering Indoor Dry Bulb Temperature KW=Total system power AMPS=outdoor unit amps (comp.+fan)

High and low pressures are measured at the liquid and suction service valves.

EXPANDED PERFORMANCE DATA

COOLING OPERATION

MODEL: GSH130361 / ARUF49-00*-1* / ARUF36421A***

			Outdoor Ambient Temperature																							
			65				75				85				95				105				115			
			Entering Indoor Wet Bulb Temperature																							
IDB*	Airflow		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	1425	MBh	33.8	35.0	38.4	-	33.0	34.2	37.5	-	32.2	33.4	36.6	-	31.4	32.6	35.7	-	29.9	31.0	33.9	-	27.7	28.7	31.4	-
		S/T	0.76	0.63	0.44	-	0.79	0.66	0.45	-	0.80	0.67	0.47	-	0.83	0.69	0.48	-	0.86	0.72	0.50	-	0.87	0.73	0.50	-
		Delta T	17	14	11	-	17	14	11	-	17	14	11	-	17	15	11	-	17	14	11	-	16	13	10	-
		KW	2.47	2.52	2.60	-	2.65	2.70	2.79	-	2.81	2.86	2.95	-	2.95	3.01	3.10	-	3.06	3.13	3.23	-	3.16	3.23	3.33	-
		AMPS	9.2	9.4	9.7	-	9.9	10.1	10.5	-	10.7	11.0	11.3	-	11.5	11.7	12.1	-	12.2	12.5	12.9	-	12.9	13.2	13.6	-
		HI PR	143	154	163	-	161	173	183	-	183	197	208	-	208	224	236	-	234	252	266	-	259	278	294	-
		LO PR	65	69	76	-	69	73	80	-	72	76	83	-	75	80	87	-	79	84	91	-	81	87	95	-
	1275	MBh	33.3	34.5	37.8	-	32.5	33.7	36.9	-	31.7	32.9	36.1	-	31.0	32.1	35.2	-	29.4	30.5	33.4	-	27.3	28.3	31.0	-
		S/T	0.73	0.61	0.42	-	0.75	0.63	0.43	-	0.77	0.64	0.45	-	0.80	0.66	0.46	-	0.83	0.69	0.48	-	0.83	0.70	0.48	-
		Delta T	17	15	11	-	18	15	12	-	18	15	12	-	18	15	12	-	18	15	12	-	16	14	11	-
		KW	2.46	2.51	2.58	-	2.64	2.69	2.77	-	2.79	2.85	2.94	-	2.93	2.99	3.08	-	3.05	3.11	3.21	-	3.15	3.21	3.32	-
		AMPS	9.1	9.3	9.6	-	9.8	10.1	10.4	-	10.7	10.9	11.3	-	11.4	11.7	12.0	-	12.1	12.4	12.8	-	12.8	13.1	13.6	-
		HI PR	142	153	162	-	159	172	181	-	181	195	206	-	207	222	235	-	232	250	264	-	257	276	292	-
		LO PR	65	69	75	-	68	73	79	-	71	76	82	-	75	79	87	-	78	83	91	-	81	86	94	-
	1125	MBh	31.6	32.8	35.9	-	30.9	32.0	35.1	-	30.2	31.3	34.3	-	29.4	30.5	33.4	-	28.0	29.0	31.7	-	25.9	26.8	29.4	-
		S/T	0.69	0.58	0.40	-	0.72	0.60	0.42	-	0.74	0.62	0.43	-	0.76	0.64	0.44	-	0.79	0.66	0.46	-	0.80	0.67	0.46	-
		Delta T	18	16	12	-	18	16	12	-	18	16	12	-	18	16	12	-	18	16	12	-	17	15	11	-
		KW	2.42	2.47	2.54	-	2.60	2.65	2.73	-	2.75	2.81	2.89	-	2.88	2.94	3.03	-	3.00	3.06	3.16	-	3.10	3.16	3.26	-
		AMPS	9.0	9.2	9.5	-	9.7	9.9	10.2	-	10.5	10.7	11.1	-	11.2	11.4	11.8	-	11.9	12.2	12.6	-	12.6	12.9	13.3	-
		HI PR	139	150	158	-	156	168	178	-	178	191	202	-	202	218	230	-	228	245	259	-	252	271	286	-
		LO PR	63	67	74	-	67	71	78	-	70	74	81	-	73	78	85	-	77	82	89	-	79	84	92	-
75	1425	MBh	34.4	35.4	38.3	41.1	33.6	34.6	37.4	40.2	32.8	33.7	36.5	39.2	32.0	**32.9**	35.6	38.2	30.4	31.3	33.8	36.3	28.1	29.0	31.4	33.7
		S/T	0.86	0.77	0.58	0.37	0.89	0.80	0.60	0.39	0.91	0.82	0.62	0.40	0.94	**0.84**	0.64	0.41	0.98	0.88	0.66	0.43	0.99	0.88	0.67	0.43
		Delta T	19	18	14	10	19	18	15	10	19	18	15	10	19	**18**	15	10	19	18	14	10	18	17	14	9
		KW	2.49	2.54	2.62	2.69	2.67	2.72	2.81	2.89	2.83	2.89	2.98	3.07	2.97	**3.03**	3.13	3.23	3.09	3.15	3.25	3.36	3.19	3.26	3.36	3.47
		AMPS	9.3	9.5	9.8	10.1	10.0	10.2	10.5	10.9	10.8	11.1	11.4	11.9	11.6	**11.8**	12.2	12.7	12.3	12.6	13.0	13.5	13.0	13.3	13.8	14.3
		HI PR	145	156	164	171	162	175	184	192	185	199	210	219	210	**226**	239	249	236	254	269	280	261	281	297	310
		LO PR	66	70	76	81	70	74	81	86	72	77	84	89	76	**81**	88	94	80	85	92	98	82	88	96	102
	1275	MBh	33.9	34.9	37.7	40.5	33.1	34.1	36.9	39.6	32.3	33.2	36.0	38.6	31.5	**32.4**	35.1	37.7	29.9	30.8	33.3	35.8	27.7	28.5	30.9	33.2
		S/T	0.82	0.74	0.56	0.36	0.85	0.76	0.58	0.37	0.88	0.78	0.59	0.38	0.90	**0.81**	0.61	0.39	0.94	0.84	0.64	0.41	0.95	0.85	0.64	0.41
		Delta T	20	19	15	10	20	19	15	11	20	19	15	11	21	**19**	15	11	20	19	15	11	19	17	14	10
		KW	2.48	2.53	2.60	2.68	2.66	2.71	2.79	2.88	2.81	2.87	2.96	3.05	2.95	**3.01**	3.11	3.21	3.07	3.14	3.23	3.34	3.17	3.24	3.34	3.45
		AMPS	9.2	9.4	9.7	10.1	9.9	10.2	10.5	10.9	10.8	11.0	11.4	11.8	11.5	**11.8**	12.1	12.6	12.2	12.5	12.9	13.4	12.9	13.2	13.7	14.2
		HI PR	144	155	163	170	161	173	183	191	183	197	208	217	209	**225**	237	247	235	253	267	278	259	279	295	307
		LO PR	65	70	76	81	69	73	80	85	72	76	83	89	75	**80**	88	93	79	84	92	98	82	87	95	101
	1125	MBh	32.2	33.1	35.9	38.5	31.4	32.4	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	0.79	0.71	0.53	0.34	0.82	0.73	0.55	0.36	0.84	0.75	0.57	0.37	0.87	**0.77**	0.59	0.38	0.90	0.80	0.61	0.39	0.91	0.81	0.61	0.39
		Delta T	21	19	16	11	21	19	16	11	21	19	16	11	21	**20**	16	11	21	19	16	11	20	18	15	10
		KW	2.44	2.49	2.56	2.64	2.62	2.67	2.75	2.83	2.77	2.83	2.91	3.00	2.91	**2.97**	3.06	3.16	3.02	3.09	3.18	3.28	3.12	3.19	3.29	3.39
		AMPS	9.0	9.2	9.5	9.9	9.7	10.0	10.3	10.7	10.6	10.8	11.2	11.6	11.3	**11.5**	11.9	12.4	12.0	12.3	12.7	13.2	12.7	13.0	13.4	13.9
		HI PR	141	151	160	167	158	170	179	187	180	193	204	213	205	**220**	232	242	230	248	261	273	254	274	289	301
		LO PR	64	68	74	79	68	72	79	84	70	75	82	87	74	**79**	86	91	77	82	90	96	80	85	93	99

Shaded area is ACCA (TVA) conditions IDB: Entering Indoor Dry Bulb Temperature KW=Total system power AMPS=outdoor unit amps (comp.+fan)

High and low pressures are measured at the liquid and suction service valves.

EXPANDED PERFORMANCE DATA

COOLING OPERATION

MODEL: GSH130361 / ARUF49-00*-1* / ARUF36421A***

			Outdoor Ambient Temperature																							
			65				75				85				95				105				115			
			Entering Indoor Wet Bulb Temperature																							
IDB*	Airflow		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	1425	MBh	35.0	35.7	38.2	40.8	34.2	34.9	37.3	39.9	33.4	34.1	36.4	38.9	32.5	33.3	35.5	38.0	30.9	31.6	33.7	36.1	28.6	29.3	31.3	33.4
		S/T	0.94	0.89	0.72	0.54	0.98	0.92	0.75	0.56	1.00	0.94	0.77	0.57	1.00	0.97	0.79	0.59	1.00	1.00	0.82	0.61	1.00	1.00	0.83	0.62
		Delta T	21	20	18	14	22	21	18	14	22	21	18	14	21	21	18	14	20	20	18	14	18	19	17	13
		KW	2.51	2.56	2.64	2.72	2.69	2.75	2.83	2.92	2.85	2.91	3.00	3.09	2.99	3.06	3.15	3.25	3.11	3.18	3.28	3.38	3.22	3.28	3.39	3.50
		AMPS	9.3	9.6	9.9	10.2	10.1	10.3	10.6	11.0	10.9	11.2	11.6	12.0	11.7	11.9	12.3	12.8	12.4	12.7	13.1	13.6	13.1	13.4	13.9	14.4
		HI PR	146	157	166	173	164	176	186	194	186	201	212	221	212	228	241	252	239	257	271	283	264	284	300	313
		LO PR	66	71	77	82	70	75	82	87	73	78	85	90	77	82	89	95	80	85	93	99	83	88	97	103
	1275	MBh	34.5	35.2	37.6	40.2	33.7	34.4	36.8	39.3	32.9	33.6	35.9	38.4	32.1	32.8	**35.0**	37.4	30.5	31.1	33.3	35.5	28.2	28.8	30.8	32.9
		S/T	0.90	0.85	0.69	0.52	0.94	0.88	0.72	0.53	0.96	0.90	0.73	0.55	0.99	0.93	**0.76**	0.57	1.00	0.97	0.79	0.59	1.00	0.97	0.79	0.59
		Delta T	22	22	19	15	23	22	19	15	23	22	19	15	23	22	**19**	15	22	22	19	15	20	20	18	14
		KW	2.50	2.55	2.62	2.70	2.68	2.73	2.81	2.90	2.84	2.89	2.98	3.08	2.98	3.04	**3.13**	3.23	3.10	3.16	3.26	3.37	3.20	3.27	3.37	3.48
		AMPS	9.3	9.5	9.8	10.2	10.0	10.2	10.6	11.0	10.9	11.1	11.5	11.9	11.6	11.9	**12.3**	12.7	12.3	12.6	13.0	13.5	13.0	13.4	13.8	14.3
		HI PR	145	156	165	172	163	175	185	193	185	199	210	219	211	227	**240**	250	237	255	270	281	262	282	298	311
		LO PR	66	70	77	82	70	74	81	86	72	77	84	90	76	81	**88**	94	80	85	93	99	83	88	96	102
	1125	MBh	32.7	33.5	35.7	38.2	32.0	32.7	34.9	37.3	31.2	31.9	34.1	36.4	30.5	31.1	33.3	35.5	28.9	29.6	31.6	33.8	26.8	27.4	29.3	31.3
		S/T	0.87	0.81	0.66	0.49	0.90	0.84	0.69	0.51	0.92	0.86	0.70	0.53	0.95	0.89	0.73	0.54	0.99	0.92	0.75	0.56	0.99	0.93	0.76	0.57
		Delta T	23	22	19	15	23	22	20	16	23	23	20	16	24	23	20	16	23	22	19	16	22	21	18	14
		KW	2.46	2.51	2.58	2.66	2.64	2.69	2.77	2.86	2.79	2.85	2.94	3.03	2.93	2.99	3.08	3.18	3.05	3.11	3.21	3.31	3.15	3.21	3.32	3.42
		AMPS	9.1	9.3	9.6	10.0	9.8	10.1	10.4	10.8	10.7	10.9	11.3	11.7	11.4	11.7	12.0	12.5	12.1	12.4	12.8	13.3	12.8	13.1	13.6	14.1
		HI PR	142	153	162	168	159	172	181	189	181	195	206	215	207	222	235	245	232	250	264	275	257	276	292	304
		LO PR	65	69	75	80	68	73	79	85	71	76	82	88	75	79	87	92	78	83	91	97	81	86	94	100
85	1425	MBh	35.6	36.3	38.0	40.5	34.8	35.4	37.1	39.6	33.9	34.6	36.2	38.7	33.1	33.8	35.3	37.7	31.5	32.1	33.6	35.8	29.1	29.7	31.1	33.2
		S/T	0.99	0.96	0.86	0.70	1.00	0.99	0.89	0.72	1.00	1.00	0.92	0.74	1.00	1.00	0.95	0.77	1.00	1.00	0.98	0.80	1.00	1.00	0.99	0.80
		Delta T	23	22	21	18	22	23	21	19	22	22	21	19	21	22	22	19	20	21	21	18	19	19	20	17
		KW	2.53	2.58	2.66	2.74	2.71	2.77	2.85	2.94	2.87	2.93	3.02	3.12	3.02	3.08	3.18	3.28	3.14	3.20	3.31	3.41	3.24	3.31	3.42	3.53
		AMPS	9.4	9.6	9.9	10.3	10.2	10.4	10.7	11.1	11.0	11.3	11.7	12.1	11.8	12.1	12.4	12.9	12.5	12.8	13.2	13.7	13.2	13.6	14.0	14.5
		HI PR	148	159	168	175	166	178	188	196	188	203	214	223	214	231	244	254	241	260	274	286	267	287	303	316
		LO PR	67	71	78	83	71	75	82	88	74	78	86	91	77	82	90	96	81	86	94	100	84	89	97	104
	1275	MBh	35.1	35.7	37.4	39.9	34.3	34.9	36.6	39.0	33.4	34.1	35.7	38.1	32.6	33.3	34.8	37.2	31.0	31.6	33.1	35.3	28.7	29.3	30.6	32.7
		S/T	0.95	0.91	0.83	0.67	0.98	0.95	0.86	0.69	1.00	0.97	0.88	0.71	1.00	1.00	0.91	0.73	1.00	1.00	0.94	0.76	1.00	1.00	0.95	0.77
		Delta T	24	24	22	19	24	24	23	20	24	24	23	20	24	24	23	20	22	23	22	19	21	21	21	18
		KW	2.52	2.57	2.64	2.72	2.70	2.75	2.84	2.92	2.86	2.92	3.01	3.10	3.00	3.06	3.16	3.26	3.12	3.19	3.29	3.39	3.22	3.29	3.40	3.51
		AMPS	9.4	9.6	9.9	10.2	10.1	10.3	10.7	11.1	11.0	11.2	11.6	12.0	11.7	12.0	12.4	12.8	12.4	12.7	13.2	13.6	13.2	13.5	13.9	14.5
		HI PR	146	158	166	174	164	177	187	195	187	201	212	222	213	229	242	252	240	258	272	284	265	285	301	314
		LO PR	67	71	77	82	70	75	82	87	73	78	85	91	77	82	89	95	81	86	94	100	83	89	97	103
	1125	MBh	33.3	34.0	35.6	37.9	32.5	33.2	34.7	37.1	31.8	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	31.1
		S/T	0.91	0.88	0.79	0.64	0.94	0.91	0.82	0.66	0.96	0.93	0.84	0.68	1.00	0.96	0.87	0.70	1.00	1.00	0.90	0.73	1.00	1.00	0.91	0.74
		Delta T	25	24	23	20	25	25	23	20	25	25	23	20	25	25	23	20	24	24	23	20	22	23	22	19
		KW	2.48	2.53	2.60	2.68	2.66	2.71	2.79	2.88	2.81	2.87	2.96	3.05	2.95	3.01	3.11	3.21	3.07	3.14	3.23	3.34	3.17	3.24	3.34	3.45
		AMPS	9.2	9.4	9.7	10.1	9.9	10.2	10.5	10.9	10.8	11.0	11.4	11.8	11.5	11.8	12.1	12.6	12.2	12.5	12.9	13.4	12.9	13.2	13.7	14.2
		HI PR	144	154	163	170	161	173	183	191	183	197	208	217	209	225	237	247	235	253	267	278	259	279	295	307
		LO PR	65	69	76	81	69	73	80	85	72	76	83	89	75	80	88	93	79	84	92	98	82	87	95	101

Shaded area is AHRI Rating Conditions IDB: Entering Indoor Dry Bulb Temperature KW=Total system power AMPS=outdoor unit amps (comp.+fan)

High and low pressures are measured at the liquid and suction service valves.

EXPANDED PERFORMANCE DATA

COOLING OPERATION

MODEL: GSH130421B* / AR*F374316B*

			Outdoor Ambient Temperature																							
			65				75				85				95				105				115			
			Entering Indoor Wet Bulb Temperature																							
IDB*	Airflow		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	1103	MBh	39.0	40.4	44.3	-	38.1	39.5	43.3	-	37.2	38.5	42.2	-	36.3	37.6	41.2	-	34.5	35.7	39.1	-	31.9	33.1	36.2	-
		S/T	0.66	0.55	0.38	-	0.68	0.57	0.39	-	0.70	0.58	0.40	-	0.72	0.60	0.42	-	0.75	0.63	0.43	-	0.76	0.63	0.44	-
		Delta T	21	19	14	-	22	19	14	-	22	19	14	-	22	19	14	-	22	19	14	-	20	17	13	-
		KW	2.23	2.29	2.38	-	2.44	2.50	2.59	-	2.62	2.68	2.78	-	2.77	2.85	2.95	-	2.91	2.98	3.10	-	3.03	3.10	3.22	-
		AMPS	9.7	9.9	10.3	-	10.5	10.7	11.0	-	11.3	11.6	11.9	-	12.0	12.3	12.7	-	12.8	13.1	13.5	-	13.5	13.8	14.3	-
		HI PR	117	126	133	-	131	141	149	-	149	161	170	-	170	183	193	-	191	206	218	-	211	228	240	-
		LO PR	59	63	69	-	63	67	73	-	65	69	76	-	68	73	79	-	72	76	83	-	74	79	86	-
	1260	MBh	42.2	43.8	48.0	-	41.3	42.8	46.9	-	40.3	41.8	45.7	-	39.3	40.7	44.6	-	37.3	38.7	42.4	-	34.6	35.8	39.3	-
		S/T	0.68	0.57	0.40	-	0.71	0.59	0.41	-	0.73	0.61	0.42	-	0.75	0.63	0.43	-	0.78	0.65	0.45	-	0.78	0.65	0.45	-
		Delta T	21	18	14	-	21	18	14	-	21	18	14	-	21	19	14	-	21	18	14	-	20	17	13	-
		KW	2.30	2.36	2.44	-	2.51	2.57	2.67	-	2.69	2.76	2.86	-	2.86	2.93	3.04	-	2.99	3.07	3.19	-	3.11	3.19	3.31	-
		AMPS	10.0	10.2	10.5	-	10.7	11.0	11.3	-	11.6	11.9	12.3	-	12.4	12.7	13.1	-	13.1	13.4	13.9	-	13.9	14.2	14.7	-
		HI PR	121	130	137	-	135	146	154	-	154	166	175	-	175	189	199	-	197	212	224	-	218	235	248	-
		LO PR	61	65	71	-	65	69	75	-	67	71	78	-	70	75	82	-	74	79	86	-	76	81	89	-
	1418	MBh	43.5	45.1	49.4	-	42.5	44.1	48.3	-	41.5	43.0	47.1	-	40.5	42.0	46.0	-	38.5	39.9	43.7	-	35.6	36.9	40.4	-
		S/T	0.72	0.60	0.41	-	0.74	0.62	0.43	-	0.76	0.64	0.44	-	0.79	0.66	0.45	-	0.82	0.68	0.47	-	0.82	0.69	0.48	-
		Delta T	20	17	13	-	20	18	13	-	20	18	13	-	21	18	14	-	20	18	13	-	19	16	12	-
		KW	2.32	2.38	2.47	-	2.53	2.60	2.69	-	2.72	2.79	2.89	-	2.88	2.96	3.07	-	3.02	3.10	3.22	-	3.14	3.22	3.35	-
		AMPS	10.1	10.3	10.6	-	10.8	11.1	11.4	-	11.7	12.0	12.4	-	12.5	12.8	13.2	-	13.2	13.6	14.0	-	14.0	14.3	14.8	-
		HI PR	122	131	139	-	137	147	155	-	156	167	177	-	177	191	201	-	199	214	226	-	220	237	250	-
		LO PR	62	66	72	-	65	69	76	-	68	72	79	-	71	76	83	-	75	79	87	-	77	82	90	-
75	1103	MBh	39.7	40.8	44.2	47.4	38.7	39.9	43.2	46.3	37.8	38.9	42.1	45.2	36.9	**38.0**	41.1	44.1	35.0	36.1	39.1	41.9	32.5	33.4	36.2	38.8
		S/T	0.75	0.67	0.51	0.33	0.78	0.69	0.53	0.34	0.80	0.71	0.54	0.35	0.82	**0.73**	0.56	0.36	0.85	0.76	0.58	0.37	0.86	0.77	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	21	18	12
		KW	2.26	2.31	2.40	2.49	2.46	2.52	2.62	2.72	2.64	2.71	2.81	2.92	2.80	**2.87**	2.98	3.09	2.94	3.01	3.13	3.24	3.05	3.13	3.25	3.37
		AMPS	9.8	10.0	10.3	10.7	10.6	10.8	11.1	11.5	11.4	11.7	12.0	12.5	12.2	**12.4**	12.8	13.3	12.9	13.2	13.6	14.1	13.6	14.0	14.4	14.9
		HI PR	118	127	134	140	133	143	151	157	151	162	171	179	172	**185**	195	204	193	208	220	229	214	230	243	253
		LO PR	60	64	70	74	63	67	73	78	66	70	76	81	69	**73**	80	85	72	77	84	89	75	80	87	93
	1260	MBh	43.0	44.2	47.9	51.4	42.0	43.2	46.8	50.2	41.0	42.2	45.7	49.0	40.0	**41.1**	44.5	47.8	38.0	39.1	42.3	45.4	35.2	36.2	39.2	42.1
		S/T	0.78	0.69	0.53	0.34	0.80	0.72	0.54	0.35	0.83	0.74	0.56	0.36	0.85	**0.76**	0.58	0.37	0.88	0.79	0.60	0.38	0.89	0.80	0.60	0.39
		Delta T	24	22	18	13	25	23	19	13	25	23	19	13	25	**23**	19	13	24	23	18	13	23	21	17	12
		KW	2.32	2.38	2.47	2.56	2.53	2.60	2.69	2.80	2.72	2.79	2.89	3.00	2.88	**2.96**	3.07	3.19	3.02	3.10	3.22	3.34	3.14	3.22	3.35	3.47
		AMPS	10.1	10.3	10.6	11.0	10.8	11.1	11.4	11.8	11.7	12.0	12.4	12.8	12.5	**12.8**	13.2	13.7	13.2	13.6	14.0	14.5	14.0	14.3	14.8	15.3
		HI PR	122	131	139	144	137	147	155	162	156	167	177	184	177	**191**	201	210	199	215	227	236	220	237	250	261
		LO PR	62	66	72	76	65	69	76	81	68	72	79	84	71	**76**	83	88	75	79	87	92	77	82	90	95
	1418	MBh	44.3	45.6	49.3	52.9	43.2	44.5	48.2	51.7	42.2	43.4	47.0	50.5	41.2	**42.4**	45.9	49.2	39.1	40.3	43.6	46.8	36.2	37.3	40.4	43.3
		S/T	0.81	0.73	0.55	0.35	0.84	0.75	0.57	0.37	0.87	0.77	0.59	0.38	0.89	**0.80**	0.60	0.39	0.93	0.83	0.63	0.40	0.93	0.84	0.63	0.41
		Delta T	23	22	18	12	24	22	18	12	24	22	18	12	24	**22**	18	12	24	22	18	12	22	20	17	11
		KW	2.34	2.40	2.49	2.59	2.56	2.62	2.72	2.82	2.75	2.81	2.92	3.03	2.91	**2.99**	3.10	3.22	3.05	3.13	3.25	3.37	3.17	3.26	3.38	3.51
		AMPS	10.2	10.4	10.7	11.1	10.9	11.2	11.5	11.9	11.8	12.1	12.5	12.9	12.6	**12.9**	13.3	13.8	13.4	13.7	14.1	14.6	14.1	14.5	14.9	15.5
		HI PR	123	133	140	146	138	149	157	164	157	169	179	186	179	**193**	203	212	201	217	229	239	222	239	253	264
		LO PR	62	66	72	77	66	70	76	81	68	73	79	85	72	**76**	83	89	75	80	87	93	78	83	91	96

Shaded area is ACCA (TVA) conditions IDB: Entering Indoor Dry Bulb Temperature KW=Total system power AMPS=outdoor unit amps (comp.+fan)

High and low pressures are measured at the liquid and suction service valves.

EXPANDED PERFORMANCE DATA

COOLING OPERATION

MODEL: GSH130421B* / AR*F374316B*

			Outdoor Ambient Temperature																							
			65				75				85				95				105				115			
			Entering Indoor Wet Bulb Temperature																							
IDB*	Airflow		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	1103	MBh	40.4	41.2	44.1	47.1	39.4	40.3	43.0	46.0	38.5	39.3	42.0	44.9	37.5	38.4	41.0	43.8	35.7	36.4	38.9	41.6	33.0	33.8	36.1	38.6
		S/T	0.82	0.77	0.63	0.47	0.85	0.80	0.65	0.49	0.87	0.82	0.67	0.50	0.90	0.84	0.69	0.51	0.93	0.88	0.71	0.53	0.94	0.88	0.72	0.54
		Delta T	28	26	23	18	28	27	23	19	28	27	23	19	28	27	23	19	28	27	23	19	26	25	22	17
		KW	2.28	2.33	2.42	2.51	2.48	2.55	2.64	2.74	2.67	2.73	2.84	2.94	2.83	2.90	3.01	3.12	2.97	3.04	3.16	3.28	3.08	3.16	3.28	3.41
		AMPS	9.9	10.1	10.4	10.8	10.6	10.9	11.2	11.6	11.5	11.8	12.1	12.6	12.3	12.5	12.9	13.4	13.0	13.3	13.7	14.2	13.8	14.1	14.5	15.1
		HI PR	119	129	136	142	134	144	152	159	152	164	173	181	174	187	197	206	195	210	222	232	216	232	245	256
		LO PR	60	64	70	75	64	68	74	79	66	71	77	82	70	74	81	86	73	78	85	90	76	80	88	94
	1260	MBh	43.7	44.7	47.7	51.0	42.7	43.6	46.6	49.8	41.7	42.6	45.5	48.7	40.7	41.6	**44.4**	47.5	38.6	39.5	42.2	45.1	35.8	36.6	39.1	41.8
		S/T	0.85	0.80	0.65	0.49	0.88	0.83	0.67	0.50	0.90	0.85	0.69	0.52	0.93	0.88	**0.71**	0.53	0.97	0.91	0.74	0.55	0.98	0.92	0.75	0.56
		Delta T	27	26	23	18	27	26	23	18	28	26	23	18	28	27	**23**	18	27	26	23	18	26	24	21	17
		KW	2.34	2.40	2.49	2.59	2.56	2.62	2.72	2.82	2.75	2.81	2.92	3.03	2.91	2.99	**3.10**	3.22	3.05	3.13	3.25	3.37	3.17	3.26	3.38	3.51
		AMPS	10.2	10.4	10.7	11.1	10.9	11.2	11.5	11.9	11.8	12.1	12.5	12.9	12.6	12.9	**13.3**	13.8	13.4	13.7	14.1	14.6	14.1	14.5	14.9	15.5
		HI PR	123	133	140	146	138	149	157	164	157	169	179	186	179	193	**203**	212	201	217	229	239	222	239	253	264
		LO PR	62	66	72	77	66	70	76	81	68	73	79	85	72	76	**84**	89	75	80	88	93	78	83	91	96
	1418	MBh	45.0	46.0	49.2	52.6	44.0	45.0	48.0	51.3	42.9	43.9	46.9	50.1	41.9	42.8	45.7	48.9	39.8	40.7	43.5	46.4	36.9	37.7	40.2	43.0
		S/T	0.89	0.84	0.68	0.51	0.93	0.87	0.71	0.53	0.95	0.89	0.72	0.54	1.00	0.92	0.75	0.56	1.00	0.95	0.78	0.58	1.00	0.96	0.78	0.58
		Delta T	26	25	22	17	26	25	22	18	26	25	22	18	27	26	22	18	26	25	22	17	24	23	20	16
		KW	2.37	2.42	2.52	2.61	2.58	2.65	2.75	2.85	2.77	2.84	2.95	3.06	2.94	3.01	3.13	3.25	3.08	3.16	3.28	3.41	3.21	3.29	3.41	3.54
		AMPS	10.2	10.5	10.8	11.2	11.0	11.3	11.6	12.0	11.9	12.2	12.6	13.0	12.7	13.0	13.4	13.9	13.5	13.8	14.2	14.8	14.3	14.6	15.1	15.6
		HI PR	124	134	141	147	140	150	159	165	159	171	180	188	181	195	205	214	203	219	231	241	225	242	255	266
		LO PR	63	67	73	78	67	71	77	82	69	74	80	86	73	77	84	90	76	81	88	94	79	84	91	97
85	1103	MBh	41.1	41.9	43.8	46.8	40.1	40.9	42.8	45.7	39.2	39.9	41.8	44.6	38.2	38.9	40.8	43.5	36.3	37.0	38.7	41.3	33.6	34.3	35.9	38.3
		S/T	0.86	0.83	0.75	0.61	0.89	0.86	0.78	0.63	0.91	0.88	0.80	0.65	0.94	0.91	0.82	0.67	0.98	0.95	0.85	0.69	0.99	0.95	0.86	0.70
		Delta T	29	29	27	24	30	29	28	24	30	29	28	24	30	30	28	24	30	29	28	24	28	27	26	22
		KW	2.30	2.36	2.44	2.54	2.51	2.57	2.67	2.77	2.69	2.76	2.86	2.97	2.86	2.93	3.04	3.15	2.99	3.07	3.19	3.31	3.11	3.19	3.31	3.44
		AMPS	10.0	10.2	10.5	10.9	10.7	11.0	11.3	11.7	11.6	11.9	12.3	12.7	12.4	12.7	13.1	13.5	13.1	13.4	13.9	14.4	13.9	14.2	14.7	15.2
		HI PR	121	130	137	143	135	146	154	160	154	166	175	182	175	189	199	208	197	212	224	234	218	235	248	258
		LO PR	61	65	71	76	65	69	75	80	67	71	78	83	70	75	82	87	74	79	86	91	76	81	89	94
	1260	MBh	44.5	45.4	47.5	50.7	43.5	44.3	46.4	49.5	42.4	43.2	45.3	48.3	41.4	42.2	44.2	47.1	39.3	40.1	42.0	44.8	36.4	37.1	38.9	41.5
		S/T	0.89	0.86	0.78	0.63	0.93	0.89	0.81	0.65	0.95	0.92	0.83	0.67	0.98	0.94	0.85	0.69	1.00	0.98	0.89	0.72	1.00	0.99	0.89	0.72
		Delta T	29	29	27	23	29	29	27	24	29	29	27	24	30	29	27	24	29	29	27	23	27	27	25	22
		KW	2.37	2.42	2.52	2.61	2.58	2.65	2.75	2.85	2.77	2.84	2.95	3.06	2.94	3.01	3.13	3.25	3.08	3.16	3.28	3.41	3.21	3.29	3.41	3.54
		AMPS	10.2	10.5	10.8	11.2	11.0	11.3	11.6	12.0	11.9	12.2	12.6	13.0	12.7	13.0	13.4	13.9	13.5	13.8	14.2	14.8	14.3	14.6	15.1	15.6
		HI PR	124	134	141	147	140	150	159	165	159	171	180	188	181	195	205	214	203	219	231	241	225	242	255	266
		LO PR	63	67	73	78	67	71	77	82	69	74	80	86	73	77	84	90	76	81	88	94	79	84	91	97
	1418	MBh	45.8	46.7	48.9	52.2	44.8	45.6	47.8	51.0	43.7	44.5	46.6	49.8	42.6	43.5	45.5	48.6	40.5	41.3	43.2	46.1	37.5	38.2	40.0	42.7
		S/T	0.94	0.90	0.82	0.66	0.97	0.94	0.84	0.69	0.99	0.96	0.87	0.70	1.00	0.99	0.89	0.73	1.00	1.00	0.93	0.75	1.00	1.00	0.94	0.76
		Delta T	28	27	26	22	28	28	26	23	28	28	26	23	28	28	26	23	26	27	26	23	24	25	24	21
		KW	2.39	2.45	2.54	2.63	2.61	2.67	2.77	2.88	2.80	2.87	2.98	3.09	2.97	3.04	3.16	3.28	3.11	3.19	3.31	3.44	3.24	3.32	3.44	3.58
		AMPS	10.3	10.6	10.9	11.3	11.1	11.4	11.7	12.1	12.0	12.3	12.7	13.2	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	126	135	143	149	141	152	160	167	160	173	182	190	183	196	207	216	205	221	233	243	227	244	258	269
		LO PR	64	68	74	79	67	71	78	83	70	74	81	86	73	78	85	91	77	82	89	95	79	85	92	98

Shaded area is AHRI Rating Conditions IDB: Entering Indoor Dry Bulb Temperature KW=Total system power AMPS=outdoor unit amps (comp.+fan)

High and low pressures are measured at the liquid and suction service valves.

EXPANDED PERFORMANCE DATA

COOLING OPERATION

MODEL: GSH130481B* / AR*F4860*6**

IDB*	Airflow		Outdoor Ambient Temperature 65 / Entering Indoor Wet Bulb Temperature 59	63	67	71	Outdoor Ambient Temperature 75 / Entering Indoor Wet Bulb Temperature 59	63	67	71	Outdoor Ambient Temperature 85 / Entering Indoor Wet Bulb Temperature 59	63	67	71	Outdoor Ambient Temperature 95 / Entering Indoor Wet Bulb Temperature 59	63	67	71	Outdoor Ambient Temperature 105 / Entering Indoor Wet Bulb Temperature 59	63	67	71	Outdoor Ambient Temperature 115 / Entering Indoor Wet Bulb Temperature 59	63	67	71
70	1400	MBh	43.5	45.1	49.5	-	42.5	44.1	48.3	-	41.5	43.0	47.2	-	40.5	42.0	46.0	-	38.5	39.9	43.7	-	35.6	36.9	40.5	-
		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	20	17	13	-	20	17	13	-	20	17	13	-	20	17	13	-	20	17	13	-	18	16	12	-
		KW	2.60	2.67	2.77	-	2.84	2.91	3.02	-	3.05	3.13	3.25	-	3.24	3.32	3.44	-	3.39	3.48	3.61	-	3.53	3.62	3.76	-
		AMPS	9.7	9.9	10.2	-	10.4	10.6	11.0	-	11.2	11.5	11.8	-	12.0	12.2	12.6	-	12.7	13.0	13.4	-	13.4	13.7	14.2	-
		HI PR	117	126	133	-	131	141	149	-	150	161	170	-	170	183	194	-	192	206	218	-	212	228	241	-
		LO PR	59	63	69	-	63	67	73	-	65	69	76	-	68	73	79	-	72	76	83	-	74	79	86	-
	1600	MBh	47.2	48.9	53.6	-	46.1	47.8	52.3	-	45.0	46.6	51.1	-	43.9	45.5	49.8	-	41.7	43.2	47.3	-	38.6	40.0	43.9	-
		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	19	17	13	-	20	17	13	-	20	17	13	-	20	17	13	-	19	17	13	-	18	16	12	-
		KW	2.68	2.75	2.85	-	2.92	3.00	3.11	-	3.14	3.22	3.34	-	3.33	3.42	3.55	-	3.49	3.58	3.72	-	3.64	3.73	3.87	-
		AMPS	9.9	10.1	10.4	-	10.7	10.9	11.2	-	11.5	11.8	12.2	-	12.3	12.6	13.0	-	13.0	13.3	13.8	-	13.8	14.1	14.6	-
		HI PR	121	130	137	-	136	146	154	-	154	166	175	-	176	189	200	-	198	213	224	-	218	235	248	-
		LO PR	61	65	71	-	65	69	75	-	67	71	78	-	70	75	82	-	74	79	86	-	76	81	89	-
	1800	MBh	48.6	50.4	55.2	-	47.5	49.2	53.9	-	46.3	48.0	52.6	-	45.2	46.9	51.3	-	42.9	44.5	48.8	-	39.8	41.2	45.2	-
		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	19	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	19	16	12	-	17	15	11	-
		KW	2.70	2.77	2.88	-	2.95	3.03	3.14	-	3.17	3.25	3.37	-	3.36	3.45	3.58	-	3.53	3.62	3.76	-	3.67	3.76	3.91	-
		AMPS	10.0	10.2	10.5	-	10.8	11.0	11.3	-	11.6	11.9	12.3	-	12.4	12.7	13.1	-	13.1	13.5	13.9	-	13.9	14.2	14.7	-
		HI PR	122	131	139	-	137	147	156	-	156	168	177	-	177	191	202	-	200	215	227	-	220	237	250	-
		LO PR	62	66	72	-	65	69	76	-	68	72	79	-	71	76	83	-	75	79	87	-	77	82	90	-
75	1400	MBh	44.3	45.6	49.4	53.0	43.3	44.5	48.2	51.7	42.2	43.5	47.1	50.5	41.2	**42.4**	45.9	49.3	39.1	40.3	43.6	46.8	36.3	37.3	40.4	43.4
		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	0.79	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	21	20	16	11
		KW	2.63	2.69	2.79	2.90	2.87	2.94	3.05	3.17	3.08	3.16	3.28	3.40	3.27	**3.35**	3.48	3.61	3.43	3.51	3.65	3.79	3.56	3.66	3.80	3.94
		AMPS	9.7	10.0	10.3	10.6	10.5	10.7	11.0	11.4	11.3	11.6	12.0	12.4	12.1	**12.3**	12.7	13.2	12.8	13.1	13.5	14.0	13.5	13.8	14.3	14.8
		HI PR	118	127	135	140	133	143	151	157	151	163	172	179	172	**185**	196	204	194	208	220	229	214	230	243	253
		LO PR	60	64	70	74	63	67	73	78	66	70	76	81	69	**73**	80	85	72	77	84	89	75	80	87	93
	1600	MBh	48.0	49.4	53.5	57.4	46.9	48.3	52.2	56.1	45.7	47.1	51.0	54.7	44.6	**46.0**	49.7	53.4	42.4	43.7	47.3	50.7	39.3	40.4	43.8	47.0
		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	22	21	17	12	23	21	17	12	23	21	17	12	23	**21**	17	12	22	21	17	12	21	19	16	11
		KW	2.70	2.77	2.88	2.99	2.95	3.03	3.14	3.26	3.17	3.25	3.37	3.50	3.36	**3.45**	3.58	3.72	3.53	3.62	3.76	3.90	3.67	3.76	3.91	4.06
		AMPS	10.0	10.2	10.5	10.9	10.8	11.0	11.3	11.7	11.6	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	122	131	139	145	137	147	156	162	156	168	177	185	177	**191**	202	210	200	215	227	237	220	237	251	261
		LO PR	62	66	72	76	65	69	76	81	68	72	79	84	71	**76**	83	88	75	79	87	92	77	82	90	95
	1800	MBh	49.4	50.9	55.1	59.1	48.3	49.7	53.8	57.7	47.1	48.5	52.5	56.4	46.0	**47.3**	51.2	55.0	43.7	45.0	48.7	52.2	40.5	41.7	45.1	48.4
		S/T	0.85	0.76	0.57	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	0.86	0.65	0.42	0.97	0.87	0.66	0.42
		Delta T	21	20	16	11	22	20	16	11	22	20	16	11	22	**20**	16	11	22	20	16	11	20	19	15	10
		KW	2.73	2.80	2.90	3.01	2.98	3.06	3.17	3.29	3.20	3.28	3.41	3.54	3.40	**3.48**	3.62	3.75	3.56	3.65	3.79	3.94	3.71	3.80	3.95	4.10
		AMPS	10.1	10.3	10.6	11.0	10.8	11.1	11.4	11.8	11.7	12.0	12.4	12.8	12.5	**12.8**	13.2	13.7	13.3	13.6	14.0	14.5	14.0	14.4	14.8	15.4
		HI PR	123	133	140	146	138	149	157	164	157	169	179	186	179	**193**	204	212	202	217	229	239	223	240	253	264
		LO PR	62	66	72	77	66	70	76	81	68	73	79	85	72	**76**	83	89	75	80	87	93	78	83	91	96

Shaded area is ACCA (TVA) conditions IDB: Entering Indoor Dry Bulb Temperature KW=Total system power AMPS=outdoor unit amps (comp.+fan)

High and low pressures are measured at the liquid and suction service valves.

EXPANDED PERFORMANCE DATA

COOLING OPERATION

MODEL: GSH130481B* / AR*F4860*6**

			Outdoor Ambient Temperature																							
			65				75				85				95				105				115			
			Entering Indoor Wet Bulb Temperature																							
IDB*	Airflow		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	1400	MBh	45.1	46.1	49.2	52.6	44.0	45.0	48.1	51.4	43.0	43.9	46.9	50.2	41.9	42.8	45.8	48.9	39.8	40.7	43.5	46.5	36.9	37.7	40.3	43.1
		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	25	24	21	17	26	25	21	17	26	25	21	17	26	25	22	17	25	24	21	17	24	23	20	16
		KW	2.65	2.72	2.82	2.93	2.89	2.97	3.08	3.20	3.11	3.19	3.31	3.44	3.30	3.38	3.51	3.65	3.46	3.55	3.68	3.83	3.60	3.69	3.83	3.98
		AMPS	9.8	10.0	10.4	10.7	10.6	10.8	11.1	11.5	11.4	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	120	129	136	142	134	144	152	159	153	164	173	181	174	187	197	206	196	210	222	232	216	232	245	256
		LO PR	60	64	70	75	64	68	74	79	66	71	77	82	70	74	81	86	73	78	85	90	76	80	88	94
	1600	MBh	48.8	49.9	53.3	57.0	47.7	48.7	52.1	55.7	46.6	47.6	50.8	54.3	45.4	46.4	**49.6**	53.0	43.2	44.1	47.1	50.4	40.0	40.8	43.6	46.7
		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	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	25	24	21	17	25	24	21	17	25	24	21	17	25	24	**21**	17	25	24	21	17	23	22	19	16
		KW	2.73	2.80	2.90	3.01	2.98	3.06	3.17	3.29	3.20	3.28	3.41	3.54	3.40	3.48	**3.62**	3.76	3.56	3.65	3.79	3.94	3.71	3.80	3.95	4.10
		AMPS	10.1	10.3	10.6	11.0	10.8	11.1	11.4	11.8	11.7	12.0	12.4	12.8	12.5	12.8	**13.2**	13.7	13.3	13.6	14.0	14.5	14.0	14.4	14.8	15.4
		HI PR	123	133	140	146	138	149	157	164	157	169	179	186	179	193	**204**	212	202	217	229	239	223	240	253	264
		LO PR	62	66	72	77	66	70	76	81	68	73	79	85	72	76	**84**	89	75	80	88	93	78	83	91	96
	1800	MBh	50.3	51.4	54.9	58.7	49.1	50.2	53.6	57.3	48.0	49.0	52.4	56.0	46.8	47.8	51.1	54.6	44.4	45.4	48.5	51.9	41.2	42.1	44.9	48.1
		S/T	0.93	0.87	0.71	0.53	0.96	0.90	0.74	0.55	1.00	0.93	0.75	0.56	1.00	0.96	0.78	0.58	1.00	1.00	0.81	0.60	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	23	23	20	16	21	21	19	15
		KW	2.76	2.82	2.93	3.04	3.01	3.09	3.20	3.32	3.23	3.31	3.44	3.57	3.43	3.52	3.65	3.79	3.60	3.69	3.83	3.98	3.74	3.84	3.98	4.14
		AMPS	10.2	10.4	10.7	11.1	10.9	11.2	11.5	11.9	11.8	12.1	12.5	12.9	12.6	12.9	13.3	13.8	13.4	13.7	14.1	14.7	14.1	14.5	15.0	15.5
		HI PR	125	134	141	148	140	150	159	166	159	171	181	188	181	195	206	214	204	219	231	241	225	242	256	267
		LO PR	63	67	73	78	67	71	77	82	69	74	80	86	73	77	84	90	76	81	88	94	79	84	91	97
85	1400	MBh	45.9	46.7	49.0	52.2	44.8	45.7	47.8	51.0	43.7	44.6	46.7	49.8	42.7	43.5	45.5	48.6	40.5	41.3	43.3	46.2	37.5	38.3	40.1	42.8
		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	27	27	25	22	27	27	25	22	27	27	25	22	28	27	26	22	27	27	25	22	25	25	24	20
		KW	2.68	2.74	2.85	2.96	2.92	3.00	3.11	3.23	3.14	3.22	3.34	3.47	3.33	3.42	3.55	3.68	3.49	3.58	3.72	3.86	3.63	3.73	3.87	4.02
		AMPS	9.9	10.1	10.4	10.8	10.7	10.9	11.2	11.6	11.5	11.8	12.2	12.6	12.3	12.6	13.0	13.4	13.0	13.3	13.8	14.3	13.8	14.1	14.5	15.1
		HI PR	121	130	137	143	136	146	154	161	154	166	175	183	176	189	199	208	197	213	224	234	218	235	248	259
		LO PR	61	65	71	76	65	69	75	80	67	71	78	83	70	75	82	87	74	79	86	91	76	81	89	94
	1600	MBh	49.7	50.6	53.0	56.6	48.5	49.5	51.8	55.3	47.4	48.3	50.6	54.0	46.2	47.1	49.3	52.6	43.9	44.8	46.9	50.0	40.7	41.5	43.4	46.3
		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	0.98	0.89	0.72	1.00	1.00	0.92	0.75	1.00	1.00	0.93	0.75
		Delta T	27	26	25	21	27	26	25	22	27	26	25	22	27	27	25	22	25	26	25	22	23	24	23	20
		KW	2.76	2.82	2.93	3.04	3.01	3.09	3.20	3.32	3.23	3.31	3.44	3.57	3.43	3.52	3.65	3.79	3.60	3.69	3.83	3.98	3.74	3.84	3.98	4.14
		AMPS	10.2	10.4	10.7	11.1	10.9	11.2	11.5	11.9	11.8	12.1	12.5	12.9	12.6	12.9	13.3	13.8	13.4	13.7	14.1	14.7	14.1	14.5	15.0	15.5
		HI PR	125	134	141	148	140	150	159	166	159	171	181	188	181	195	206	214	204	219	231	241	225	242	256	267
		LO PR	63	67	73	78	67	71	77	82	69	74	80	86	73	77	84	90	76	81	88	94	79	84	91	97
	1800	MBh	51.2	52.2	54.6	58.3	50.0	51.0	53.4	56.9	48.8	49.7	52.1	55.6	47.6	48.5	50.8	54.2	45.2	46.1	48.3	51.5	41.9	42.7	44.7	47.7
		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	0.78	1.00	1.00	0.98	0.79
		Delta T	25	25	24	21	26	25	24	21	25	25	24	21	24	25	24	21	23	24	24	21	21	22	22	19
		KW	2.78	2.85	2.96	3.07	3.04	3.11	3.23	3.36	3.26	3.35	3.47	3.61	3.46	3.55	3.69	3.83	3.63	3.73	3.87	4.02	3.78	3.88	4.02	4.18
		AMPS	10.3	10.5	10.8	11.2	11.0	11.3	11.6	12.1	11.9	12.2	12.6	13.1	12.7	13.0	13.4	13.9	13.5	13.8	14.3	14.8	14.3	14.6	15.1	15.6
		HI PR	126	135	143	149	141	152	160	167	160	173	182	190	183	197	208	217	206	221	234	244	227	244	258	269
		LO PR	64	68	74	79	67	71	78	83	70	74	81	86	73	78	85	91	77	82	89	95	79	85	92	98

* Entering Indoor Dry Bulb Temperature

NOTE: Shaded area is AHRI Rating Conditions

High and low pressures are measured at the liquid and suction service valves.

HEATING PERFORMANCE DATA

EXPANDED PERFORMANCE DATA

MODEL: GSH130181 / AR*F182416****

HEATING OPERATION

	Outdoor Ambient Temperature																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0	-5	-10
MBh	21.1	20.0	18.8	17.6	16.8	16.3	15.1	13.9	10.8	10.0	9.2	8.7	8.4	7.5	6.7	5.8	5.0	4.1
Delta T	30.1	28.5	26.8	25.1	23.9	23.2	21.5	19.9	15.4	14.3	13.1	12.4	11.9	10.7	9.5	8.3	7.1	5.8
KW	1.55	1.53	1.50	1.47	1.45	1.44	1.41	1.38	1.36	1.33	1.30	1.28	1.27	1.24	1.21	1.18	1.15	1.12
AMPS	7.2	6.7	6.3	5.9	5.7	5.6	5.3	5.0	4.8	4.6	4.4	4.3	4.2	4.0	3.7	3.5	3.3	3.0
COP	3.98	3.84	3.68	3.51	3.39	3.31	3.14	2.96	2.34	2.21	2.08	1.99	1.93	1.78	1.61	1.44	1.26	1.06
EER	13.6	13.1	12.6	12.0	11.6	11.3	10.7	10.1	8.0	7.5	7.1	6.8	6.6	6.1	5.5	4.9	4.3	3.6
HI PR	252	242	232	222	217	213	205	196	188	180	173	168	165	159	153	147	141	136
LO PR	82	76	72	66	62	60	55	49	44	39	35	32	31	26	23	19	17	13

EXPANDED PERFORMANCE DATA

MODEL: GSH130241 / AR*F182416****

HEATING OPERATION

	Outdoor Ambient Temperature																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0	-5	-10
MBh	27.7	26.2	24.6	23.0	22.0	21.3	19.8	18.3	15.0	13.8	12.7	12.0	11.6	10.4	9.2	8.0	6.8	5.6
Delta T	30.1	28.5	26.8	25.1	24.0	23.2	21.6	19.9	16.3	15.0	13.8	13.1	12.6	11.3	10.0	8.7	7.5	6.1
KW	1.99	1.95	1.91	1.87	1.85	1.84	1.80	1.76	1.70	1.66	1.62	1.60	1.59	1.55	1.51	1.48	1.44	1.40
AMPS	9.0	8.3	7.8	7.3	7.1	6.9	6.5	6.2	5.9	5.7	5.4	5.3	5.2	4.9	4.6	4.3	4.0	3.6
COP	4.07	3.93	3.77	3.60	3.47	3.40	3.22	3.03	2.58	2.44	2.29	2.19	2.13	1.96	1.78	1.59	1.39	1.17
EER	13.9	13.4	12.9	12.3	11.9	11.6	11.0	10.4	8.8	8.3	7.8	7.5	7.3	6.7	6.1	5.4	4.8	4.0
HI PR	238	228	220	210	205	201	193	186	178	170	163	159	156	150	145	139	134	129
LO PR	80	74	69	63	60	58	53	47	43	38	33	31	30	25	22	18	16	13

EXPANDED PERFORMANCE DATA

MODEL: GSH130301 - ARUF363616B***

HEATING OPERATION

	Outdoor Ambient Temperature																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0	-5	-10
MBh	32.2	30.5	28.7	26.8	25.6	24.8	23.0	21.2	19.1	17.6	16.2	15.3	14.7	13.2	11.7	10.2	8.7	7.1
Delta T	29.1	27.5	25.9	24.2	23.1	22.4	20.8	19.2	17.2	15.9	14.6	13.8	13.3	11.9	10.6	9.2	7.9	6.5
KW	2.17	2.18	2.19	2.19	2.20	2.20	2.21	2.22	1.85	1.87	1.89	1.90	1.91	1.93	1.95	1.97	1.99	2.01
AMPS	8.1	8.2	8.3	8.4	8.5	8.5	8.6	8.7	8.8	8.8	8.9	8.9	8.9	9.0	9.1	9.1	9.2	9.3
COP	4.35	4.10	3.84	3.57	3.41	3.29	3.05	2.80	3.02	2.76	2.51	2.36	2.26	2.01	1.76	1.52	1.28	1.04
EER	14.9	14.0	13.1	12.2	11.6	11.3	10.4	9.6	10.3	9.4	8.6	8.1	7.7	6.9	6.0	5.2	4.4	3.6
HI PR	232	223	214	205	200	196	189	181	173	166	159	155	152	147	141	135	130	126
LO PR	76	71	66	61	58	55	51	45	41	37	32	30	29	24	21	18	15	12

EXPANDED PERFORMANCE DATA

MODEL: GSH130361BC/C[A-B] / ARUF49-00*-1* / ARUF36421A*

HEATING OPERATION

	Outdoor Ambient Temperature																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0	-5	-10
MBh	40.2	38.1	35.8	33.5	32.0	31.0	28.8	26.6	19.9	18.4	16.9	16.0	15.4	13.8	12.3	10.7	9.1	7.5
Delta T	29.2	27.7	26.0	24.3	23.2	22.5	20.9	19.3	14.5	13.4	12.3	11.6	11.2	10.0	8.9	7.8	6.6	5.4
KW	2.90	2.84	2.79	2.73	2.70	2.68	2.63	2.58	2.42	2.37	2.32	2.29	2.27	2.22	2.17	2.12	2.07	2.02
AMPS	13.0	12.1	11.3	10.7	10.3	10.1	9.5	9.1	8.7	8.3	7.9	7.7	7.6	7.3	6.8	6.4	5.9	5.4
COP	4.07	3.92	3.76	3.59	3.46	3.39	3.21	3.02	2.41	2.27	2.14	2.05	1.99	1.82	1.65	1.48	1.29	1.08
EER	13.9	13.4	12.9	12.3	11.8	11.6	11.0	10.3	8.2	7.8	7.3	7.0	6.8	6.2	5.7	5.0	4.4	3.7
HI PR	230	221	212	203	198	194	187	179	172	164	158	154	151	145	140	134	129	125
LO PR	80	74	70	64	60	58	54	48	43	38	34	31	30	26	22	19	16	13

High pressure is measured at the suction service valve (the larger valve).

Low pressure is measured at the gauge port connection.

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

AMPS = Outdoor unit amps (comp.+fan)

KW = Total system power

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

HEATING PERFORMANCE DATA

EXPANDED PERFORMANCE DATA

MODEL: GSH13042-1A* / ARUF49-00*-1* / ARUF36421A* **HEATING OPERATION**

	Outdoor Ambient Temperature																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0	-5	-10
MBh	49.0	46.4	43.7	40.8	39.0	37.8	35.1	32.4	28.7	26.5	24.4	23.0	22.1	19.9	17.6	15.4	13.1	10.7
Delta T	30.3	28.6	27.0	25.2	24.1	23.3	21.7	20.0	17.7	16.3	15.0	14.2	13.7	12.3	10.9	9.5	8.1	6.6
KW	3.59	3.52	3.46	3.39	3.35	3.32	3.26	3.19	3.08	3.01	2.95	2.91	2.88	2.82	2.75	2.69	2.62	2.56
AMPS	16.7	15.5	14.5	13.6	13.1	12.9	12.1	11.5	11.0	10.5	10.0	9.8	9.7	9.2	8.6	8.1	7.4	6.7
COP	4.00	3.86	3.70	3.53	3.41	3.33	3.15	2.97	2.72	2.57	2.42	2.31	2.25	2.06	1.87	1.67	1.46	1.23
EER	13.7	13.2	12.6	12.1	11.6	11.4	10.8	10.1	9.3	8.8	8.3	7.9	7.7	7.1	6.4	5.7	5.0	4.2
HI PR	237	227	218	209	204	200	192	184	177	169	162	158	155	149	144	138	133	128
LO PR	75	70	65	60	57	54	50	45	40	36	32	29	28	24	21	17	15	12

EXPANDED PERFORMANCE DATA

MODEL: GSH13048-1A* / ARUF61-00*-1* / ARUF48601A* **HEATING OPERATION**

	Outdoor Ambient Temperature																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0	-5	-10
MBh	54.1	51.2	48.2	45.0	43.0	41.7	38.7	35.7	33.6	31.1	28.6	27.0	26.0	23.3	20.7	18.0	15.4	12.6
Delta T	31.3	29.6	27.9	26.1	24.9	24.1	22.4	20.7	19.5	18.0	16.5	15.6	15.0	13.5	12.0	10.4	8.9	7.3
KW	3.84	3.77	3.70	3.63	3.59	3.56	3.49	3.42	3.34	3.27	3.20	3.16	3.13	3.06	3.00	2.93	2.86	2.79
AMPS	18.1	16.8	15.7	14.8	14.3	14.0	13.2	12.5	12.0	11.5	10.9	10.7	10.5	10.0	9.3	8.8	8.1	7.3
COP	4.12	3.98	3.81	3.63	3.51	3.43	3.24	3.05	2.95	2.78	2.62	2.50	2.43	2.23	2.02	1.80	1.58	1.32
EER	14.1	13.6	13.0	12.4	12.0	11.7	11.1	10.4	10.1	9.5	8.9	8.5	8.3	7.6	6.9	6.2	5.4	4.5
HI PR	224	215	207	198	193	189	182	175	167	160	154	150	147	142	136	131	126	121
LO PR	74	69	64	59	56	54	49	44	40	35	31	29	28	24	20	17	15	12

EXPANDED PERFORMANCE DATA

MODEL: GSH13060-1A* / ARUF61-00*-1* / ARUF48601A* **HEATING OPERATION**

	Outdoor Ambient Temperature																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0	-5	-10
MBh	69.8	66.0	62.2	58.1	55.5	53.8	50.0	46.1	43.6	40.3	37.1	35.0	33.7	30.2	26.8	23.4	20.0	16.3
Delta T	35.9	34.0	32.0	29.9	28.5	27.7	25.7	23.7	22.4	20.7	19.1	18.0	17.3	15.6	13.8	12.0	10.3	8.4
KW	5.04	4.95	4.85	4.75	4.70	4.66	4.57	4.47	4.30	4.21	4.11	4.06	4.02	3.93	3.84	3.75	3.65	3.56
AMPS	22.7	21.0	19.6	18.4	17.8	17.4	16.4	15.6	14.9	14.2	13.5	13.2	13.0	12.4	11.5	10.8	10.0	9.0
COP	4.05	3.91	3.75	3.58	3.46	3.38	3.20	3.02	2.97	2.80	2.64	2.52	2.45	2.25	2.05	1.83	1.60	1.34
EER	13.8	13.4	12.8	12.2	11.8	11.5	10.9	10.3	10.1	9.6	9.0	8.6	8.4	7.7	7.0	6.2	5.5	4.6
HI PR	255	244	235	225	219	215	207	198	190	182	174	170	167	161	155	148	143	138
LO PR	75	70	65	60	57	54	50	45	40	36	32	29	28	24	21	17	15	12

High pressure is measured at the suction service valve (the larger valve).
Low pressure is measured at the gauge port connection.
Calculations are based on nominal CFM and 70 °F indoor dry bulb.

AMPS = Outdoor unit amps (comp.+fan)
KW = Total system power

HEATING PERFORMANCE DATA

EXPANDED PERFORMANCE DATA

MODEL: GSH130421B* / AR*F374316B* **HEATING OPERATION**

	Outdoor Ambient Temperature																	
	65	**60**	**55**	**50**	**47**	**45**	**40**	**35**	**30**	**25**	**20**	**17**	**15**	**10**	**5**	**0**	**-5**	**-10**
MBh	51.0	48.3	45.5	42.5	**40.6**	39.3	36.5	33.7	29.2	26.9	24.8	23.4	22.6	20.2	17.9	15.6	13.4	10.9
Delta T	37.5	35.5	33.4	31.2	29.8	28.9	26.8	24.8	21.4	19.8	18.2	17.2	16.6	14.9	13.2	11.5	9.8	8.0
KW	3.61	3.53	3.45	3.36	**3.32**	3.28	3.20	3.12	3.07	2.99	2.91	2.86	2.83	2.74	2.66	2.58	2.49	2.41
AMPS	17.9	16.6	15.5	14.6	14.1	13.8	13.1	12.4	11.9	11.4	10.9	10.6	10.5	10.0	9.3	8.8	8.2	7.4
COP	4.13	4.00	3.86	3.70	3.58	3.51	3.34	3.16	2.78	2.64	2.50	2.40	2.34	2.16	1.97	1.78	1.57	1.33
EER	14.1	13.7	13.2	12.6	12.2	12.0	11.4	10.8	9.5	9.0	8.5	8.2	8.0	7.4	6.7	6.1	5.4	4.5
HI PR	246	235	226	216	211	207	199	191	183	175	168	164	161	155	149	143	138	133
LO PR	75	70	65	60	57	54	50	45	40	36	32	29	28	24	21	17	15	12

EXPANDED PERFORMANCE DATA

MODEL: GSH130481B* / AR*F4860*6** **HEATING OPERATION**

	Outdoor Ambient Temperature																	
	65	**60**	**55**	**50**	**47**	**45**	**40**	**35**	**30**	**25**	**20**	**17**	**15**	**10**	**5**	**0**	**-5**	**-10**
MBh	57.9	54.8	51.6	48.2	**46.0**	44.6	41.4	38.2	34.8	32.2	29.6	28.0	26.9	24.2	21.4	18.7	15.9	13.1
Delta T	33.5	31.7	29.8	27.9	26.6	25.8	24.0	22.1	20.2	18.6	17.1	16.2	15.6	14.0	12.4	10.8	9.2	7.6
KW	4.35	4.25	4.15	4.05	**3.99**	3.95	3.85	3.75	3.49	3.40	3.30	3.25	3.21	3.11	3.02	2.93	2.83	2.74
AMPS	18.8	17.4	16.3	15.3	14.8	14.5	13.7	13.0	12.5	11.9	11.4	11.1	11.0	10.4	9.8	9.2	8.5	7.7
COP	3.89	3.77	3.64	3.48	3.37	3.30	3.15	2.98	2.92	2.77	2.63	2.52	2.46	2.27	2.08	1.87	1.65	1.40
EER	13.3	12.9	12.4	11.9	11.5	11.3	10.7	10.2	10.0	9.5	9.0	8.6	8.4	7.8	7.1	6.4	5.6	4.8
HI PR	257	246	237	226	221	217	208	200	192	183	176	171	168	162	156	149	144	139
LO PR	75	69	65	60	56	54	50	44	40	36	31	29	28	24	21	17	15	12

High pressure is measured at the suction service valve (the larger valve).
Low pressure is measured at the gauge port connection.
Calculations are based on nominal CFM and 70 °F indoor dry bulb.

AMPS = Outdoor unit amps (comp.+fan)
KW = Total system power

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 **2 degrees** of the subcooling value shown in the Heat Pump Specifications.

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.

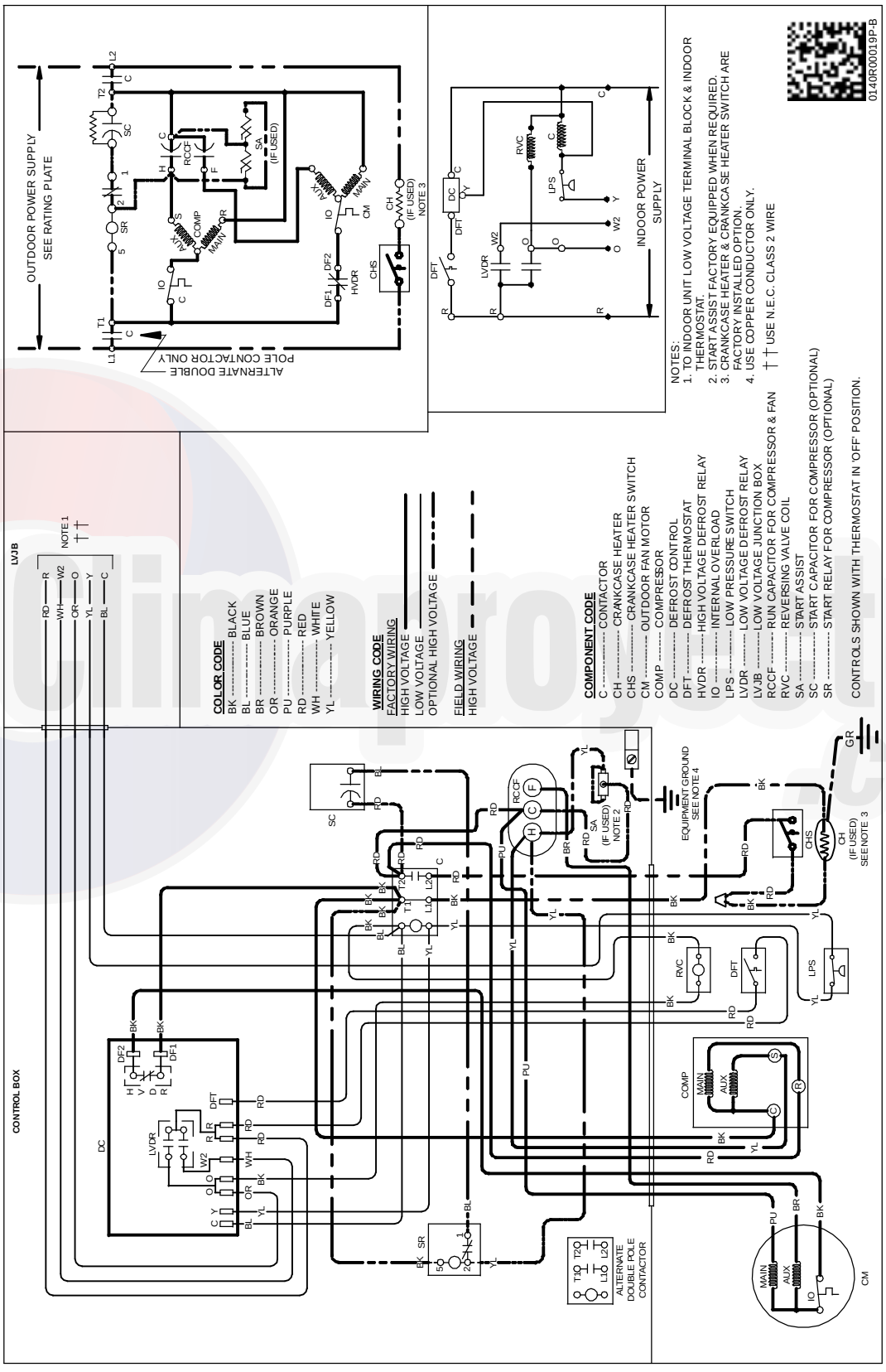
A properly operating unit should be within plus or minus **3 PSIG** of the **LO PR** shown.

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

WIRING DIAGRAMS

WARNING

HIGH VOLTAGE!
DISCONNECT ALL POWER BEFORE SERVICING OR INSTALLING THIS UNIT. MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.



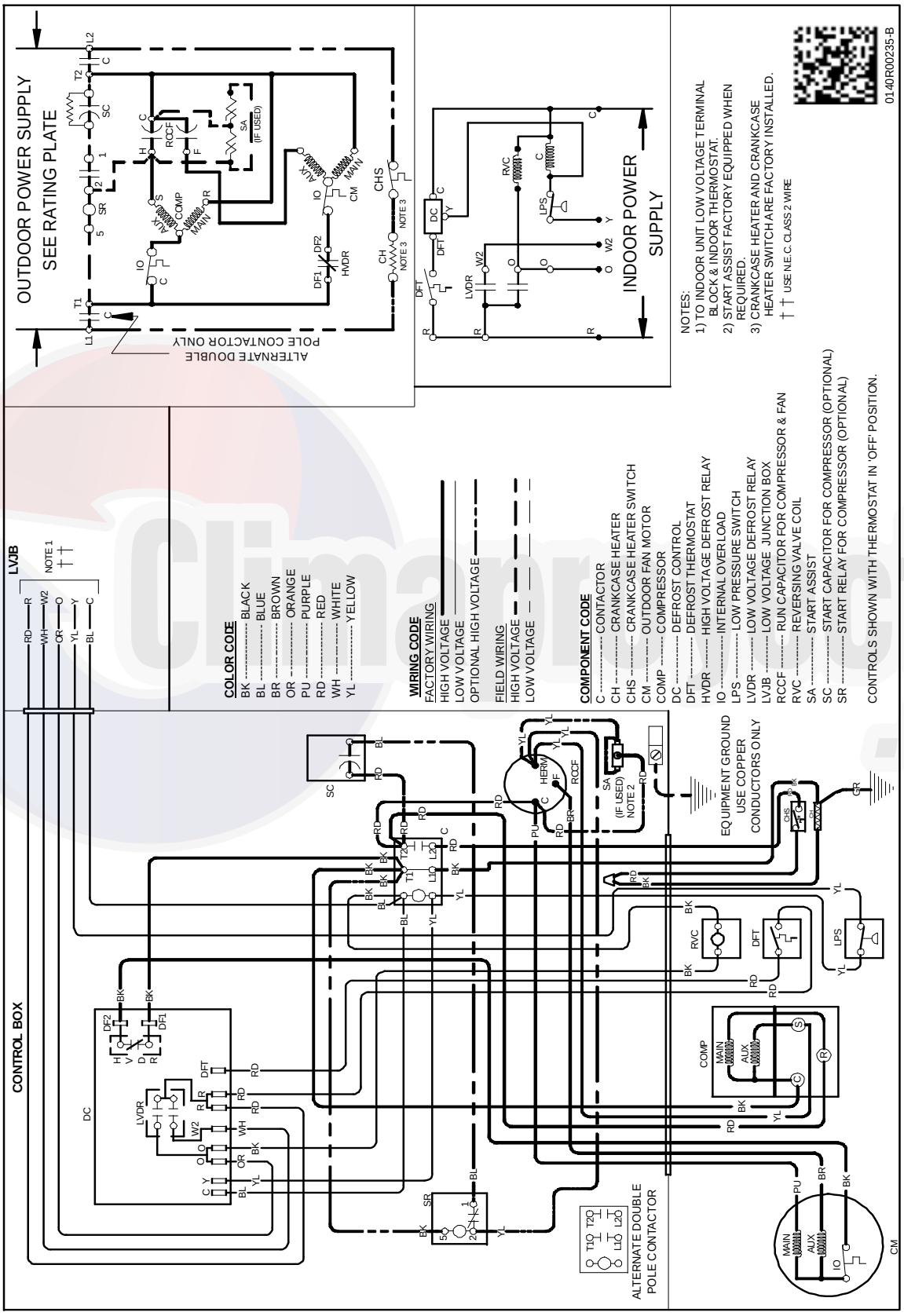
Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.

WIRING DIAGRAMS

GSH130301BB/C*

WARNING

HIGH VOLTAGE!
DISCONNECT ALL POWER BEFORE SERVICING OR INSTALLING THIS UNIT. MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.



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