



Air Conditioning & Heating

# GSH13

## 1½- To 5-TON SPLIT SYSTEM HEAT PUMPS 13 SEER / R-22

### Contents

Nomenclature .....	2
Product Specifications .....	3
AHRI Ratings.....	4
Dimensions .....	5
Wiring Diagrams .....	6
Accessories .....	7



### Standard Features

- Energy-efficient compressor
- Quiet condenser fan system
- Copper tube/aluminum fin coil
- For use with R-22 refrigerant and charged with inert gas for shipping
- Factory-installed bi-flow liquid line filter drier
- Low-pressure switch
- Time-initiated, temperature-terminated defrost control
- Service valves with sweat connections and easy-access gauge ports
- Contactor with lug connection
- Ground lug connection
- ETL Listed

### Cabinet Features

- Louver design sound control top
- Steel louver coil guard
- Heavy-gauge, galvanized-steel cabinet with rust-resistant screws
- Attractive Architectural Gray powder-paint finish with 500-hour salt-spray approval
- Single-panel access to controls with space provided for field-installed accessories
- When properly anchored, meets the 2010 Florida Building Code unit integrity requirements for hurricane-type winds (Anchor bracket kits available.)



\* Complete warranty details available from your local dealer or at [www.goodmanmfg.com](http://www.goodmanmfg.com).

NOMENCLATURE

	<b>G</b>	<b>S</b>	<b>H</b>	<b>13</b>	<b>036</b>	<b>1</b>	<b>A</b>	<b>A</b>	
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4,5</b>	<b>6,7,8</b>	<b>9</b>	<b>10</b>	<b>11</b>	
<b>Brand</b>	G Goodman® (Standard Feature Set Models)								<b>Engineering *</b> Minor Revision
<b>Product Category</b>	S Split System								<b>Engineering *</b> Major Revision
<b>Unit Type</b>	C Condenser R-22		H Heat Pump R-22				1 208/230 V, 1 Phase, 60 Hz		<b>Electrical</b>
<b>Efficiency</b>	13 13 SEER								<b>Nominal Capacity</b>
					018 1½ Tons		042 3½ Tons		
					024 2 Tons		048 4 Tons		
					030 2½ Tons		060 5 Tons		
					036 3 Tons				

\* Neither used for order entry or inventory management.



**SPECIFICATIONS**

	<b>GSH13 0181C*</b>	<b>GSH13 0241C*</b>	<b>GSH13 0301C*</b>	<b>GSH13 0361C*</b>	<b>GSH13 0421B*</b>	<b>GSH13 0481B*</b>	<b>GSH13 0601A*</b>
<b>CAPACITIES AND RATINGS</b>							
Tonnage	1½	2	2½	3	3½	4	5
Decibels	73	71	72	71	76	76	77
<b>COMPRESSOR</b>							
RLA	8.3	10.8	13.5	14.1	19.2	19.9	25.0
LRA	40.3	56.0	68.0	75.0	112.0	104.0	148.0
Type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
<b>CONDENSER FAN MOTOR</b>							
Horsepower	1/8	1/8	1/8	¼	¼	¼	1/6
FLA	0.7	0.7	0.7	1.5	1.5	1.5	1.1
<b>REFRIGERANT SYSTEM</b>							
Refrigerant Line Size							
Liquid Line Size ("O.D.)	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"
Suction Line Size ("O.D.)	¾"	¾"	¾"	⅞"	1⅛"	1⅛"	1⅛"
Refrigerant Connection Size							
Liquid Valve Size ("O.D.)	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"
Suction Valve Size ("O.D.)	¾"	¾"	¾"	⅞"	⅞"	⅞"	⅞"
Valve Type	Sweat	Sweat	Sweat	Sweat	Sweat	Sweat	Sweat
Refrigerant Charge	127	122	130	188	246	208	233
<b>ELECTRICAL DATA</b>							
Voltage-Phase (60 Hz)	208/230-1	208/230-1	208/230-1	208/230-1	208/230-1	208/230-1	208/230-1
Minimum Circuit Ampacity <sup>2</sup>	11.1	14.2	17.6	19.1	25.5	26.4	32.3
Max. Overcurrent Protection <sup>3</sup>	15	25	30	30	40	45	50
Min / Max Volts	197/253	197/253	197/253	197/253	197/253	197/253	197/253
Electrical Conduit Size	½" or ¾"	½" or ¾"	½" or ¾"	½" or ¾"	½" or ¾"	½" or ¾"	½" or ¾"
<b>EQUIPMENT WEIGHT (LBS)</b>	142	147	146	146	152	152	278
<b>SHIP WEIGHT (LBS)</b>	159	164	164	164	170	170	300

<sup>1</sup> Tested and rated in accordance with AHRI Standard 210/240

<sup>2</sup> Wire size should be determined in accordance with National Electrical Codes; extensive wire runs will require larger wire sizes

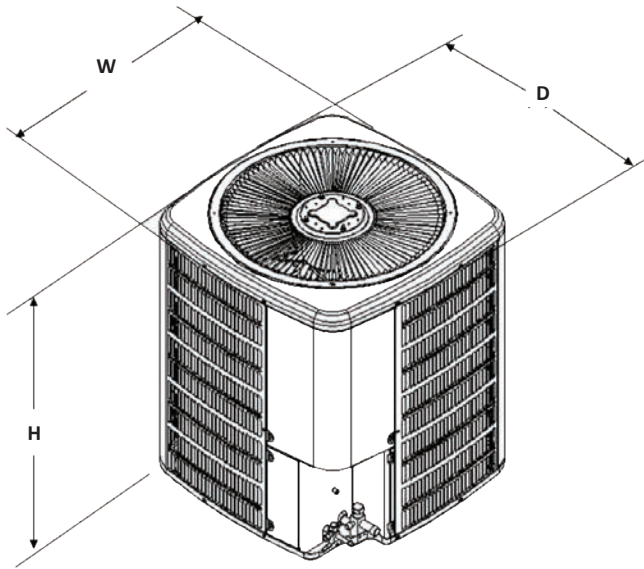
<sup>3</sup> Must use time-delay fuses or HACR-type circuit breakers of the same size as noted.

**NOTES**

- Always check the S&R plate for electrical data on the unit being installed.
- Installer will need to supply ⅞" to 1⅛" adapters for suction line connections.
- Charge to be added for 15' of ⅜" liquid line. System charge must be adjusted per Installation Instructions Final Charge Procedure.
- Installation of these units requires the specified TXV Kit to be installed on the indoor coil. THE SPECIFIED TXV IS DETERMINED BY THE OUTDOOR UNIT NOT THE INDOOR COIL.

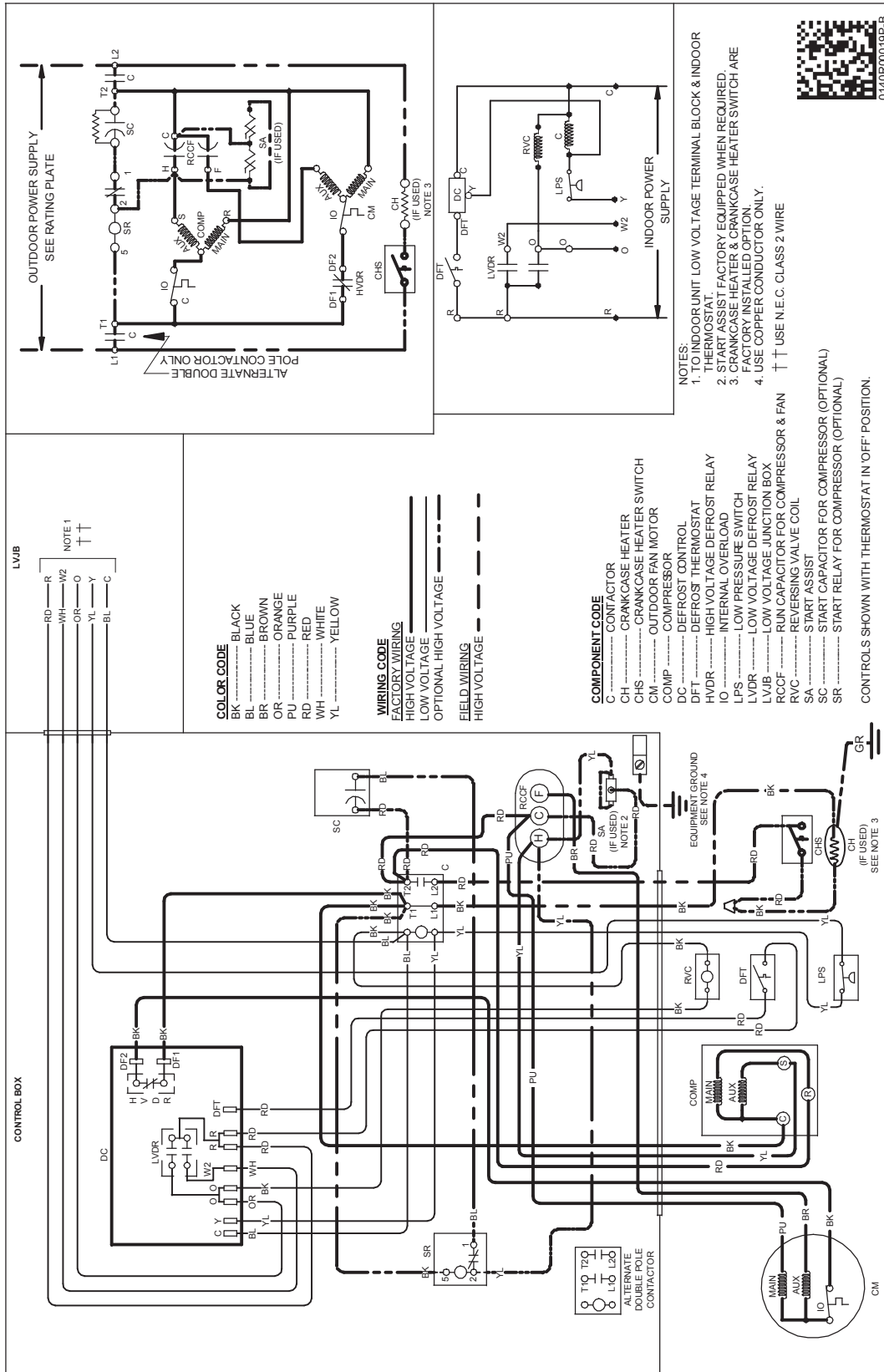


## DIMENSIONS



MODEL	DIMENSIONS		
	W"	D"	H"
GSH130181C	26	26	32 $\frac{1}{4}$
GSH130241C	26	26	32 $\frac{1}{4}$
GSH130301C	29	29	34 $\frac{3}{4}$
GSH130361C	29	29	38 $\frac{1}{4}$
GSH130421B	29	29	32 $\frac{1}{4}$
GSH130481B	29	29	34 $\frac{3}{4}$
GSH130601A	35 $\frac{1}{2}$	35 $\frac{1}{2}$	34 $\frac{3}{4}$

# WIRING DIAGRAM



## ACCESSORIES

MODEL	DESCRIPTION	GSH13 018	GSH13 024	GSH13 030	GSH13 036	GSH13 042	GSH13 048	GSH13 060
ABK-20	Anchor Bracket Kit *	X	X	X	X	X	X	X
ASC01	Anti-Short Cycle Kit	X	X	X	X	X	X	X
CSR-U-1	Hard-start Kit	X	X	X	X	X	X	
CSR-U-2	Hard-start Kit							
CSR-U-3	Hard-start Kit							X
FSK01A <sup>1</sup>	Freeze Protection Kit	X	X	X	X	X	X	X
OT/EHR18-60	Emergency Heat Relay kit	X	X	X	X	X	X	X
OT18-60A <sup>2</sup>	Outdoor Thermostat with Lockout Stat	X	X	X	X	X	X	X

\* Contains 20 brackets; four brackets needed to anchor unit to pad

<sup>1</sup> Installed on indoor coil

<sup>2</sup> Required for heat pump applications where ambient temperatures fall below 0 °F with 50% or higher relative humidity.

<sup>3</sup> Condensing units and heat pumps with reciprocating compressors require the use of start-assist components when used in conjunction with an indoor coil using a non-bleed thermal expansion valve refrigerant metering device. The TXV should always be sized based on the tonnage of the outdoor unit.

**NOTES**



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