

GSC13

13 SEER / R-22

1½ - TO 5-TON

SPLIT SYSTEM AIR CONDITIONER

Standard Features

- Energy-efficient compressor
- Quiet condenser fan system
- Factory-installed liquid-line filter drier
- Copper tube/aluminum fin coil
- For use with R-22 refrigerant; charged with inert gas for shipping
- R-22 piston kit included
- Brass liquid and suction service valves with sweat connections
- Contactor with lug connections
- Ground lug connection
- ETL Listed

Cabinet Features

- Louver design sound control top
- Steel louver coil guard
- Heavy-gauge galvanized-steel cabinet
- Attractive Architectural Gray powder-paint finish with 500-hour salt-spray approval
- When properly anchored, meets the 2001 Florida Building Code unit integrity requirements for hurricane-type winds (Anchor bracket kits available.)



Contents

Nomenclature	2
Product Specifications	3
Performance Ratings	4
Dimensions	5
Wiring Diagram	6
Accessories	7



* Complete warranty details available from your local dealer or at www.amana-hac.com.

NOMENCLATURE

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

	GSC13 0181F*	GSC13 0241F*	GSC13 0301E*	GSC13 0361G*	GSC13 0421B*	GSC13 0481B*	GSC13 0601C*
COOLING CAPACITIES							
Tonnage	1½	2	2½	3	3½	4	5
Decibels	76	76	72	75	76	76	77
COMPRESSOR							
RLA / LRA	6.4 / 36	10.8 / 56	13.5 / 68	13.4 / 74	19.2 / 104	17.9 / 104	25 / 148
Type	Recip	Recip	Scroll	Recip	Scroll	Scroll	Scroll
CONDENSER FAN MOTOR							
Horsepower	1/8	1/8	1/8	1/6	¼	¼	⅓
FLA	0.7	0.7	0.7	1.1	1.5	1.5	1.1
REFRIGERATION SYSTEM							
Refrigerant Line Size							
Liquid Line Size ("O.D.)	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"
Suction Line Size ("O.D.)	¾"	¾"	¾"	⅞"	1⅝"	1⅝"	1⅝"
Refrigerant Connection Size							
Liquid Valve Size ("O.D.)	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"
Suction Valve Size ("O.D.) ³	¾"	¾"	¾"	⅞" ³	1⅝" ⁴	1⅝" ⁴	1⅝" ⁴
Valve Type	Sweat	Sweat	Sweat	Sweat	Sweat	Sweat	Sweat
Refrigerant Charge	75	77	66	77	95	102	167
ELECTRICAL DATA							
AC Volts/ Hz	208/230-60	208/230-60	208/230-60	208/230-60	208/230-60	208/230-60	208/230-60
Min. Circuit Ampacity ¹	8.7	14.2	17.6	17.9	25.5	23.9	32.3
Max. Overcurrent Device ²	15	25	30	30	40	40	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"
SHIP WEIGHT (LBS)	135	130	159	159	159	225	194

¹ Wire size should be determined in accordance with National Electrical Codes; extensive wire runs will require larger wire sizes

² Must use time-delay fuses or HACR-type circuit breakers of the same size as noted.

³ Installer will need to supply ¾" to ⅞" adapters for suction line connections.

⁴ Installer will need to supply ⅞" to 1⅝" adapters for suction line connections.

NOTES

- Always check the S&R plate for electrical data on the unit being installed.
- Charge with refrigerant charge listed on S&R plate; 15' of ⅜" line included in this charge. System charge must be adjusted per Installation Instructions Final Charge Procedure.

PERFORMANCE RATINGS

OUTDOOR UNITS	INDOOR COIL	COOLING CAPACITY ¹		SEER ²	EER ³
		TOTAL	SENSIBLE		
GSC130181F*	CA*F1824*6B*+EEP	18,000	12,780	13	11
GSC130241F*	CA*F1824*6B*+EEP	22,800	16,640	13	11
GSC130301(D,E)*	CA*F3030*6B*+EEP	27,600	19,870	13	11
GSC130361(F,G)*	CA*F3636*6C*+EEP	33,800	24,670	13	11
GSC130421B*	CA*F3642*6C*+EEP	39,500	28,840	13	11
GSC130481B*	CA*F4860*6B*+EEP	45,500	34,130	13	11
GSC130601C*	CA*F4961*6A*+EEP	55,000	39,960	13	11

¹ BTU/h

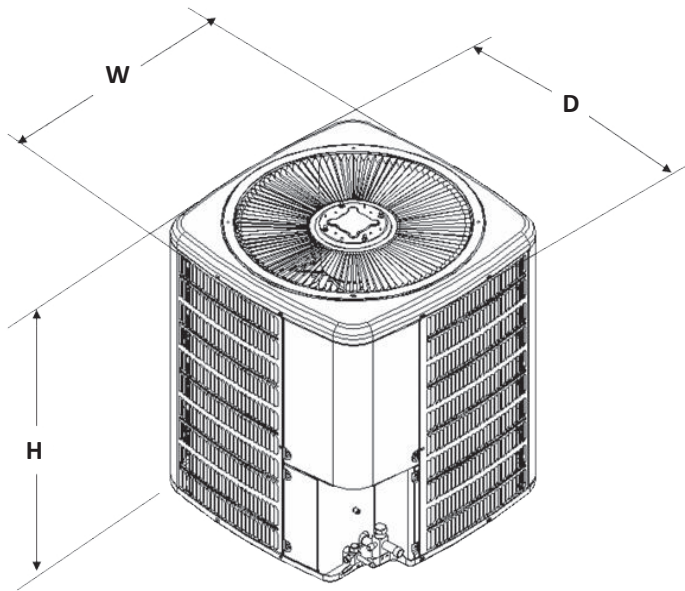
² Seasonal Energy Efficiency Ratio; tested and rated per AHRI 210/240

³ Energy Efficiency Ratio @ 80 °F/67 °F Inside - 95 °F

Notes

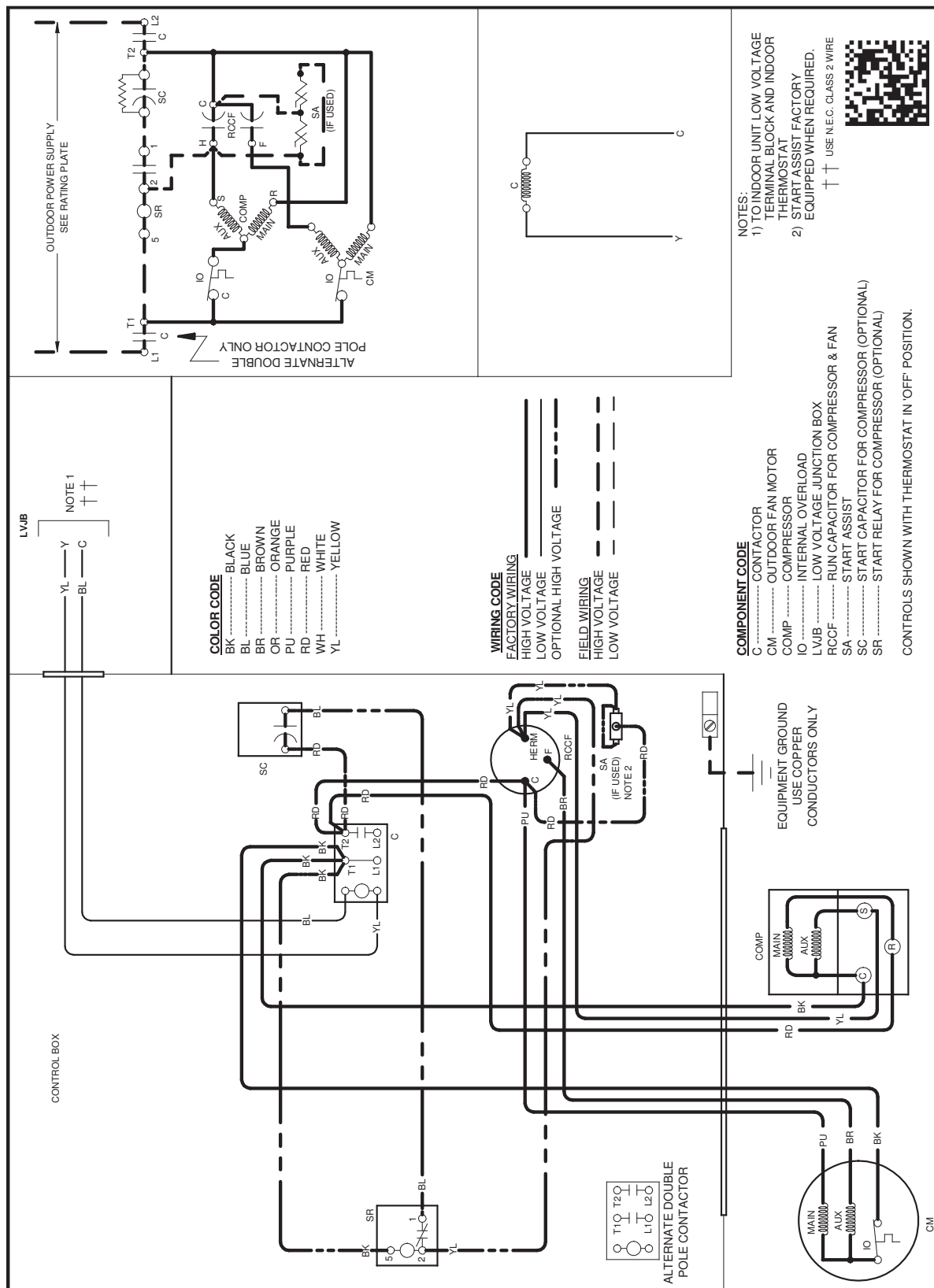
- Always check the S&R plate for electrical data on the unit being installed.
- When matching the outdoor unit to the indoor unit, use the piston supplied with the outdoor unit or that specified on the piston kit chart supplied with the indoor unit.
- EEP: Order from Service Dept. Part No. B13707-38 or new Solid State Board B13707-35S. Part No. B13707-38 is not interchangeable with B13707-35S. The Goodman Gas Furnace contains the EEP cooling time delay.

DIMENSIONS



MODEL	DIMENSIONS		
	W"	D"	H"
GSC130181F*	23½	23½	25¼
GSC130241F*	23½	23½	25¼
GSC130301E*	26	26	30¼
GSC130361G*	29	29	30¼
GSC130421B*	29	29	30¼
GSC130481B*	29	29	36¼
GSC130601C*	29	29	40

WIRING DIAGRAM



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

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.

ACCESSORIES

MODEL	DESCRIPTION	GSC13 018**	GSC13 024**	GSC13 030**	GSC13 036**	GSC13 042**	GSC13 048**	GSC13 060**
ABK-20	Anchor Bracket Kit ▼			X	X	X	X	X
ABK-21	Anchor Bracket Kit ▼	X	X					
ASC-01	Anti-Short Cycle Kit	X	X	X	X	X	X	X
CSR-U-1	Hard-start Kit	X	X	X	X			
CSR-U-2	Hard-start Kit				X	X	X	X
CSR-U-3	Hard-start Kit						X	X
FSK01A	Freeze Protection Kit ¹	X	X	X	X	X	X	X
LSK01A	Liquid Line Solenoid Kit ²	X	X	X	X	X	X	X
0263M00019	Crankcase Heater	X						
OT18-60A	Outdoor Thermostat	X	X	X	X	X	X	X

▼ Contains 20 brackets; four brackets needed to anchor unit to pad

¹ Installed on indoor coil

² Field-installed, non-bleed, expansion valve kit — 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 or liquid line solenoid kit.

NOTES