



Air Conditioning & Heating

GSC13

SPLIT SYSTEM AIR CONDITIONER
13 SEER / R-22

1½ TO 5 TONS

Contents

Nomenclature.....	2
Product Specifications.....	3
Expanded Cooling Data	4
AHRI Ratings	18
Wiring Diagram	19
Dimensions	20
Accessories	20



Standard Features

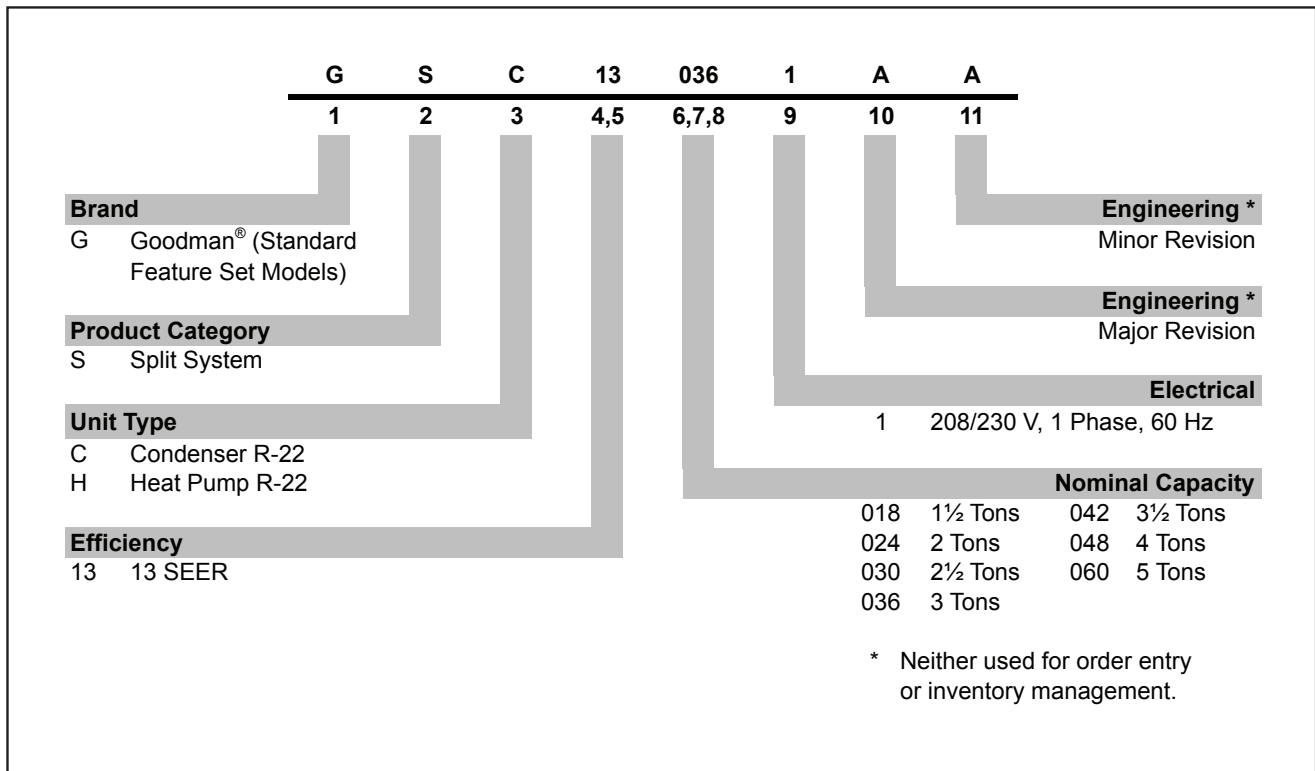
- Energy-efficient compressor
- Quiet condenser fan system
- Factory-installed liquid-line filter drier
- Copper tube/aluminum fin coil
- For use with R-22 refrigerant; charged with inert gas for shipping
- R-22 piston kit included
- Brass liquid and suction service valves with sweat connections
- Contactor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



	GSC13 0181G*	GSC13 0241F*	GSC13 0301E*	GSC13 0361G*	GSC13 0421C*	GSC13 0481C*	GSC13 0601D*
COOLING CAPACITIES							
Tonnage	1½	2	2½	3	3½	4	5
Decibels	76	76	72	75	76	76	77
COMPRESSOR							
RLA	6.8	10.8	13.5	13.4	15.4	19.2	21.8
LRA	40	56	68	74	87	112	137
CONDENSER FAN MOTOR							
Horsepower	1/8	1/8	1/8	1/6	¼	¼	¼
FLA	0.65	0.65	0.7	1.1	1.5	1.5	1.5
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"	1½"	1½"	1½"
Refrigerant Connection Size							
Liquid Valve Size ("O.D.)	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"
Suction Valve Size ("O.D.) ³	¾"	¾"	¾"	¾" ³	¾" ³	⅞" ⁴	⅞" ⁴
Valve Type	Sweat	Sweat	Sweat	Sweat	Sweat	Sweat	Sweat
Refrigerant Charge	87	77	66	77	108	128	118
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	9.2	14.2	17.6	17.9	20.8	25.5	28.8
Max. Overcurrent Device ²	15	25	30	30	35	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"
EQUIPMENT WEIGHT (LBS)							
	104	107	120	158	158	159	174
SHIP WEIGHT (LBS)							
	121	122	137	176	176	177	192

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 ¾" to 1½" 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.

Table with columns for Airflow, IDB, Outdoor Ambient Temperature (75, 85, 95, 105, 115), and Entering Indoor Wet Bulb Temperature. Rows include models 963, 1100, and 1238 under various conditions (MBh, S/T, ΔT, kW, Amps, HI PR, LO PR).

Table with columns for Airflow, IDB, Outdoor Ambient Temperature (75, 85, 95, 105, 115), and Entering Indoor Wet Bulb Temperature. Rows include models 963, 1100, and 1238 under various conditions (MBh, S/T, ΔT, kW, Amps, HI PR, LO PR).

IDB: Entering Indoor Dry Bulb Temperature. High and low pressures are measured at the liquid and suction service valves. kW = Total system power. Shaded area reflects ACCA (TVA) conditions. Design Subcooling 9 ±3 °F @ the liquid service valve, ARI 95 test conditions. Amps = outdoor unit amps (comp.+fan)

OUTDOOR UNIT	INDOOR UNITS	COOLING RATINGS				CFM	AHRI #
	COILS/AIR HANDLERS	TOTAL ¹	SENS. ¹	SEER ²	EER ³		
GSC130181F*	CA*F1824*6B*+EEP	18,000	13,600	13	11	600	4700185
GSC130181G*	CA*F1824*6B*+EEP	18,000	13,100	13	11	600	5897360
GSC130241F*	CA*F1824*6B*+EEP	22,800	17,600	13	11	800	4700186
GSC130301(D,E)*	CA*F3030*6B*+EEP	27,600	21,000	13	11	950	4705227
GSC130361G*	CA*F3642*6C*+EEP	33,400	24,200	13	11	1,200	5528471
GSC130421C*	CA*F4860*6B*+EEP	39,500	28,200	13	11	1,400	5528472
GSC130481C*	CA*F4961*6A*+EEP	44,500	33,800	13	11	1,600	5528473
GSC130601D*	CA*F4961*6A*+EEP	53,000	38,000	13	11	1,600	5528476

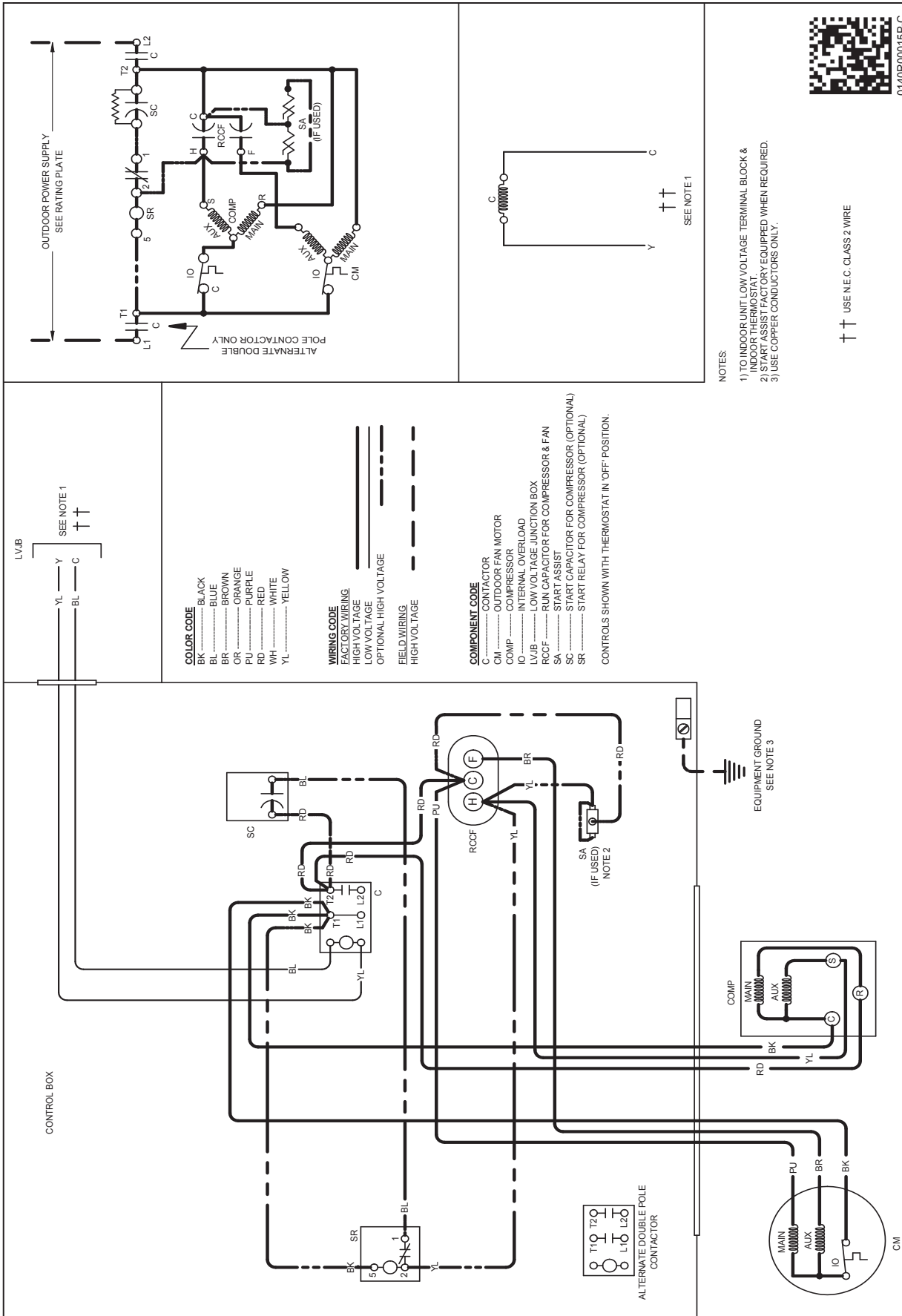
¹ BTU/h

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.



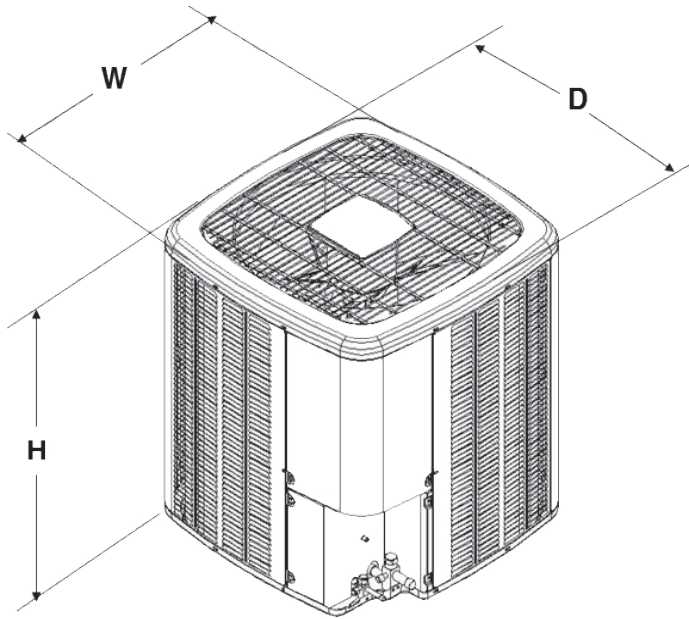
⚡

WARNING

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

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

DIMENSIONS



MODEL	DIMENSIONS		
	W"	D"	H"
GSC130181G*	26	26	27½
GSC130241F*	23½	23½	25¾
GSC130301E*	26	26	30¾
GSC130361G*	29	29	30¾
GSC130421BC*	29	29	30¾
GSC130481C*	29	29	36¾
GSC130601D*	29	29	40

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	X	X	X
CSR-U-2	Hard-start Kit			X				
CSR-U-3	Hard-start Kit							
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.