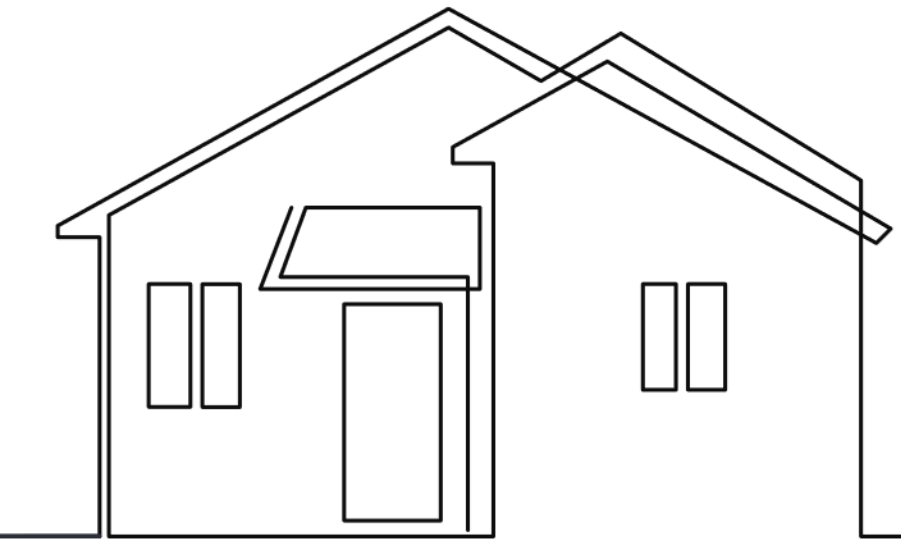
THANK GOODNESS FOR GOODMAN

Goodman SD

Side Discharge Inverter System

WE'VE TURNED HVAC ON ITS SIDE.

AC - UP TO 17.2 SEER2
HP - UP TO 17.5 SEER2 / 8.6 HSPF2



Goodman®
Air Conditioning & Heating

A name you can **trust.**

Quality comfort:

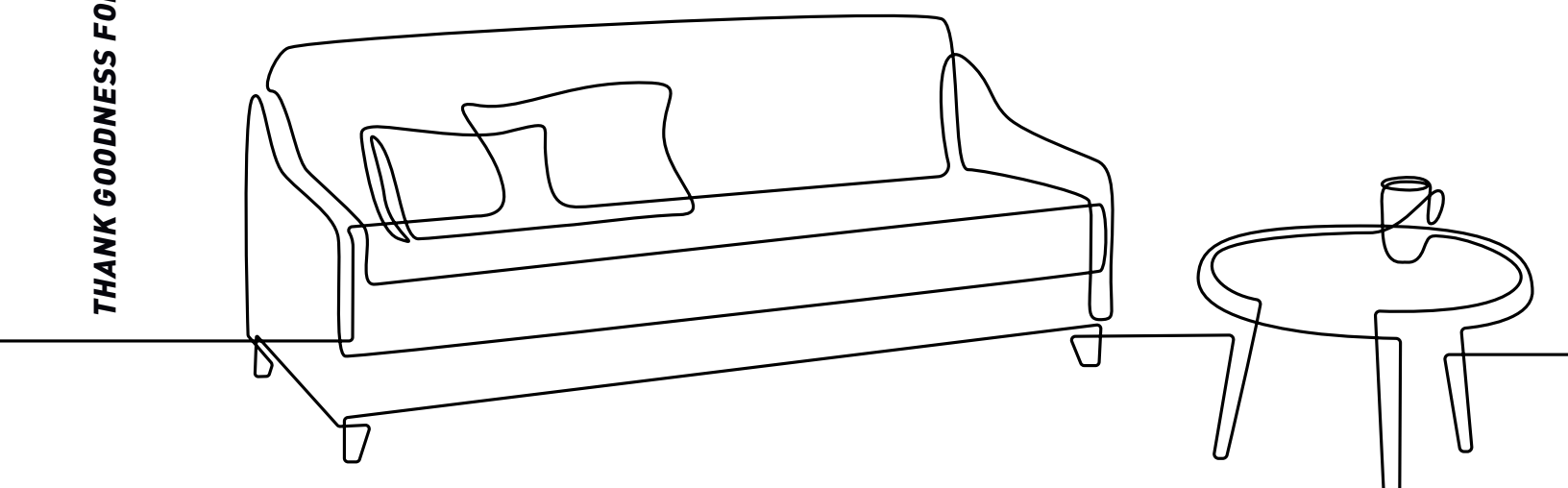


DEDICATED TO YOUR COMFORT

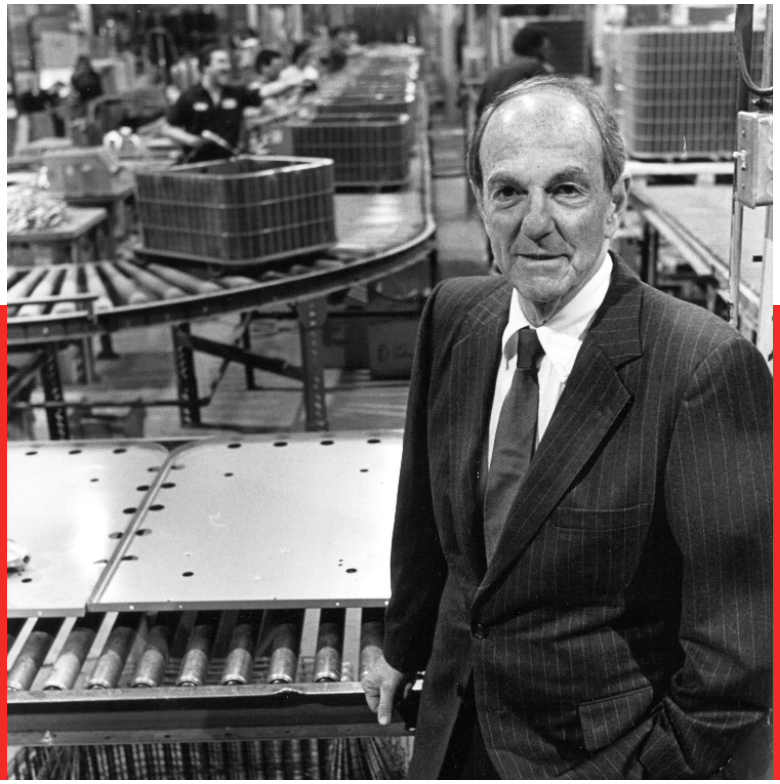
The best comfort system is the kind you don't have to worry about. It comes on the moment you need it and then runs quietly and efficiently all year long. Goodman brand systems are loaded with features designed to provide outstanding performance for years to come.

Our systems are priced to help add comfort to your budget from a local independent Goodman brand dealer. And that's only the beginning. We want you to smile every time you open your utility bill, so we design energy-efficient technology into our units.

THANK GOODNESS FOR GOODMAN



Trusted for **over 45 years.**



OUR HERITAGE

In 1954, Harold V. Goodman, founder of Goodman, became an air conditioning contractor in the rapidly growing city of Houston, Texas. As the steamy Gulf Coast city grew, so did Harold's business, and by the late 1960s, he was one of the most successful HVAC contractors in the United States.

These same principles guide Goodman today. We remain focused on providing high-quality products at an affordable price, and protecting them with what we believe to be some of the best warranties in the industry*. This clear focus has led to Goodman being a leading unit manufacturer of residential and light commercial heating and air conditioning products and systems in North America.

* Complete warranty details available from your local dealer or at www.goodmanmfg.com.

Good things come in small packages.

WE'VE TURNED HVAC ON ITS SIDE.

Don't get us wrong, we love our traditional HVAC cube style units, but we know they're not always "one-size-fits-all." Introducing the Goodman brand SD (Side Discharge) HVAC system - redefining efficiency and convenience. The Goodman brand SD offers a compact space-saving solution for homes that may have limited installation options. Whether homeowners need to free up space in the backyard, on a rooftop, or patio, the Goodman brand SD was designed to optimize space, comfort, and performance.



EFFICIENCY:

- **AC:** Up to 17.2 SEER2
- **HP:** Up to 17.5 SEER2 / Up to 8.5 HSPF2

OPERATION:

- **COOLING (AC/HP):** 0°F DB - 115°F DB
- **HEATING (HP):** -10°F DB - 70°F DB

DIMENSIONS:

- **1.5-3 TON:** W: 36.6" x D: 13.8" x H: 27.4"
- **3.5-5 TON:** W: 37" x D: 12.6" x H: 39"



THANK GOODNESS FOR GOODMAN

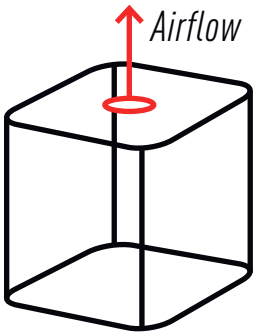


WE'VE TURNED HVAC ON ITS SIDE.

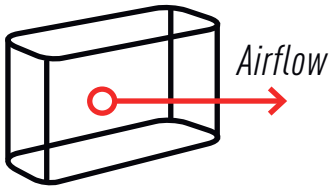
Life's good,
here's to comfort.

What's the difference?

APPEARANCE & WEIGHT



CUBE STYLE



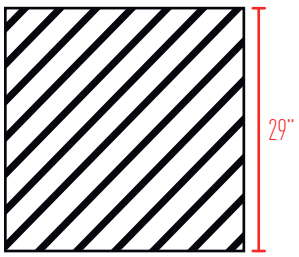
GOODMAN SD UNIT

UP TO
53%[1]
LIGHTER
&
UP TO
40%[1]
SMALLER
THAN A CUBE STYLE UNIT

[1]COMPARING A 3-TON CUBE TO A 3-TON SD STYLE.

FOOTPRINT

CUBE STYLE



GOODMAN SD



SAVINGS

UP TO
30%^
IN ENERGY SAVINGS
with inverter technology.

INVERTER

^COMPARED TO NON-INVERTER SYSTEMS

SOUND



Non-inverter units can be as loud as
75 dBA
(VACUUM CLEANER: 75 dBA)



The Goodman SD is as quiet as
56 dBA+
(REFRIGERATOR: 50 dBA)

+45 dBA IN QUIET MODE

THANK GOODNESS FOR GOODMAN

COMFORT

HOT START

When the heating operation starts or when the Goodman SD changes from cooling to heating, there is no cold draft released into the room.

QUIET-MODE

When activated, quiet-mode offers additional acoustical comfort outside, plus allows the system to reach decibel levels as low as 45 dBA.

INVERTER TECHNOLOGY

Inverter technology allows the Goodman SD system to run at an energy-conserving levels by making slight adjustments to the compressor's speed. As a result, the system will be able to reach the desired indoor set-point faster and maintain a more consistent indoor comfort level compared to traditional non-inverter systems. Unlike non-inverter systems (which can generate persistent noise) inverter technology offers noise reduction for a peaceful and undisturbed environment.

CONTROL



GOODMAN GTST
CONNECTED THERMOSTAT



Options are **good.**

Installation flexibility:

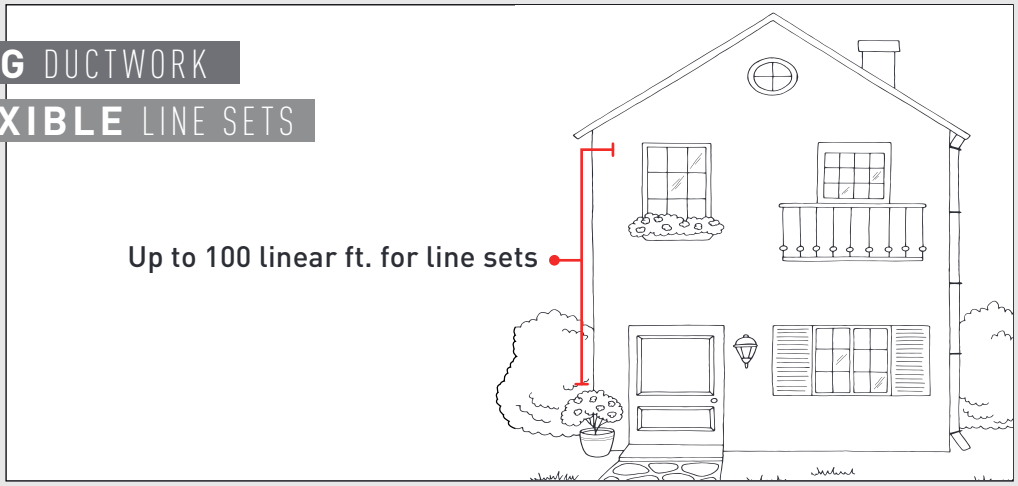


With the size and style of the Goodman SD system, it opens the door to meet the needs of many installations often uncommon to most traditional cube style units.

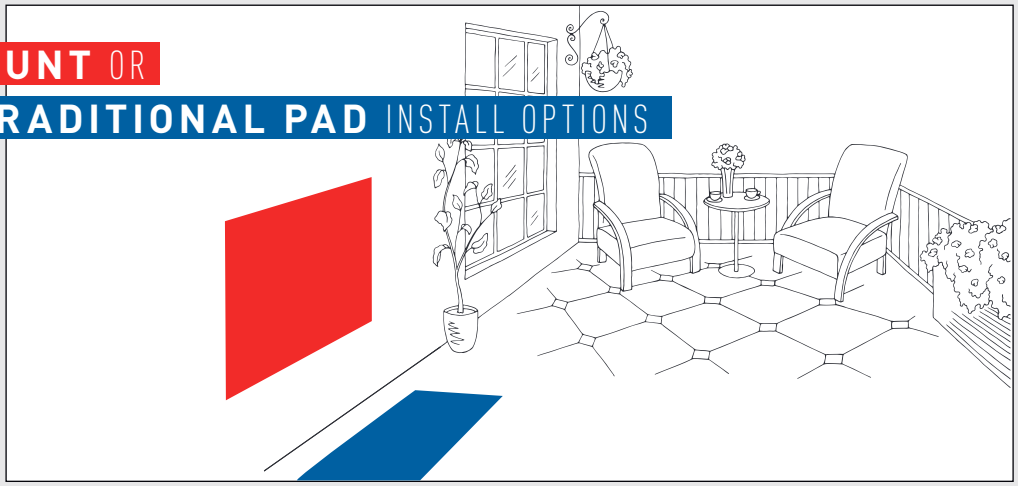
- **Installation:** Requiring only 4" of space from a wall the the Goodman SD can set nicely mounted on a wall or directly on a pad.
- **Utilize Existing Ductwork:** The Goodman SD is designed to work with a home's existing ductwork, if the installing Goodman brand dealer determines there are no issues with the existing ductwork within a home.
- **Flexible Line Sets:** Installation flexibility to connect up to 100 linear feet of pipe for standard installations.
- **Accommodates Most Homes in North America:** The operation range and dehumidification feature allows the Goodman SD to accommodate most homes in North America. With three levels of dehumidification options, Goodman brand contractors will be able to adjust it to meet the needs of the region or desired humidity control.

THANK GOODNESS FOR GOODMAN

EXISTING DUCTWORK
& FLEXIBLE LINE SETS



WALL MOUNT OR
TRADITIONAL PAD INSTALL OPTIONS



ZERO LOT/SMALL SPACES



Darn good design.

Features & Benefits:



1 **Variable-Speed Digitally Commutated Fan –** High efficiency and low sound levels.

2 **Blue Fin Corrosion Coating –** The Goodman SD features a 1000 hour salt spray rated coil as standard. This hydrophilic coating helps keep the coil clean.

3 **7mm Coil –** High heat exchanger efficiency and compact casing design.

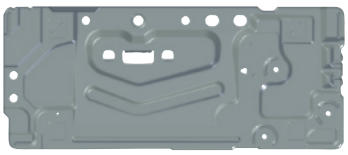
4 **Inverter Board Cooled by Refrigerant Circuit[1] –** Elimination of condenser fan pressure drop caused by heat sink used.

5 **Proprietary swing compressor technology –** High efficiency/low sound levels. Less wear and tear compared to non-swing compressors.

6 **Intelligent Defrost Mode[2] –** The outdoor unit will enable this mode to help reduce frost/ice from building up in cold climate conditions. It will also help with longer heating operation time for additional comfort for occupants (compared to HVAC systems without this function).

A selectable defrost backup heat option, when turned off, will lower power consumption during defrost.

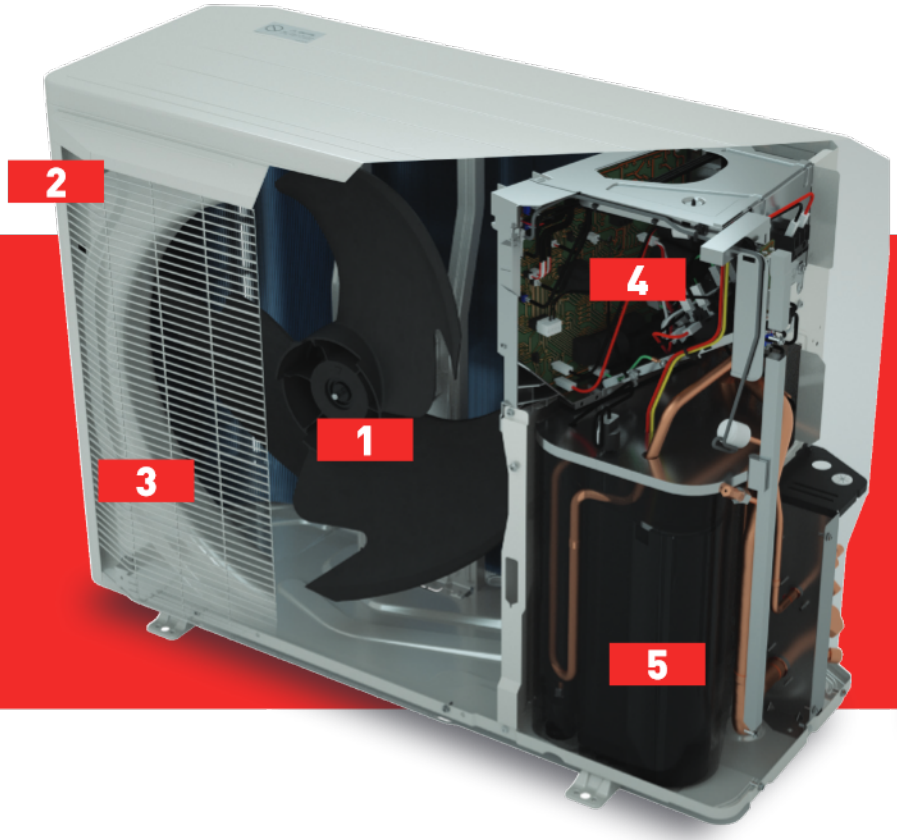
7 **Advanced water-shedding drain pan[2] –** The drain pan is engineered with multiple drain holes and channels to help provide effective water shedding.



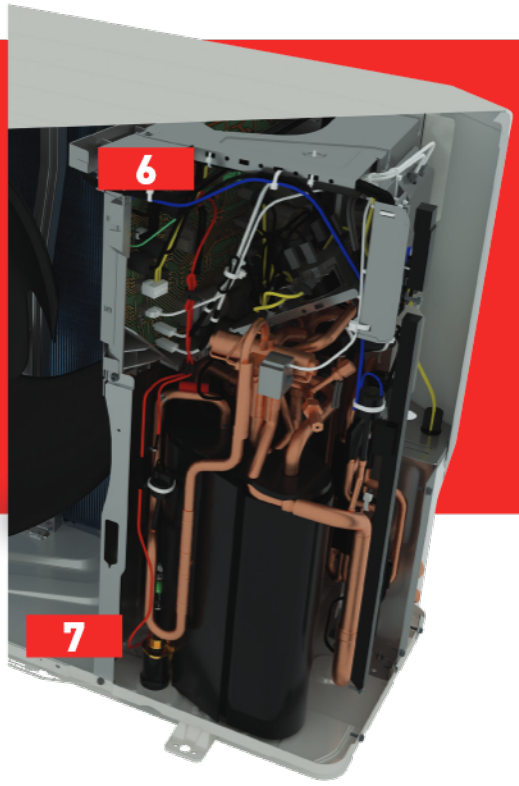
1 Model specific, refer to product engineering manual for details.
2 Available on Heat Pump models only.

THANK GOODNESS FOR GOODMAN

AC - GSXS6



HEAT PUMP - GSZS6



1 Variable-Speed Digitally Commutated Fan

2 Blue Fin Corrosion Coating



3 7mm Coil

4 Inverter Board Cooled by Refrigerant Circuit[1]

5 Proprietary Swing Compressor Technology

6 Intelligent Defrost Mode[2]

7 Advanced water-shedding drain pan[2]

1 Model specific, refer to product engineering manual for details.
2 Available on Heat Pump models only.

We know **comfort.**

Rest easy:

STANDARD AC



GAS FURNACE, AHU, OR BLOWER



EEV COIL



THERMOSTAT



HEAT PUMP



AHU



THERMOSTAT

HEAT PUMP with DUAL FUEL*

*With upflow/downflow coils

GAS FURNACE



EEV COIL



OPTIONS THAT MAKE SENSE:

The Goodman SD is a feature-rich system available in AC, Heat Pump, or Heat Pump with Dual Fuel system options.

How are AC and Heat Pumps similar?

When it's hot outside, both an air conditioner and a heat pump cool indoor spaces. These systems are designed to remove humidity from the air inside a house, creating the sensation of cooler, conditioned air in the home. Air conditioners and heat pumps rely on the same principle of a "closed-loop" refrigeration cycle. This means that the same refrigerant is continuously circulated as it passes through the air conditioner or heat pump and the evaporator coil.

THANK GOODNESS FOR GOODMAN



How are they different?

The heat pump and the air conditioner may rely on the same basic refrigeration principle, but if all of the cooling details are identical, there is still one key difference. Just like a reversible jacket, the "magic" happens when there is a change in direction! In the warmer months, the heat pump can act as an air conditioner - drawing out interior heat and humidity and redirecting it to the outside. During colder months, heat from the outdoor air is extracted and transferred to the interior of your home.

Discover more at www.goodmanmfg.com



Feel good about your decision.

Compatible equipment:



AHVE MULTI-POSITION, VARIABLE-SPEED AIR HANDLER:

- Multi-position AHU: Upflow/downflow, and horizontal left/right orientations.
- *SmartFrame* Sub-Structure
- 7mm All Aluminum Evaporator Coil: Offers outstanding heat transfer properties and helps improve refrigerant balance between the Indoor and Outdoor units.
- Variable-speed ECM blower Motor: Provides gradual startup and shutdown for unobtrusive operation with lower energy consumption (compared to units without an ECM motor).
- Electronic Expansion Valve: Better utilization of the evaporator and wide operation range.
- Compatible with the Goodman brand GTST connected thermostat and other Goodman brand communicating equipment.

80%, 96%, OR 97% AFUE COMMUNICATING GAS FURNACES:

- Durable heat exchanger: Unique tubular stainless-steel construction formed using wrinkle-bend technology results in an extremely durable heat exchanger. Paired with a stainless-steel secondary heat exchanger, this combination provides for reliability, durability and efficiency.
- Modulating gas valve: Operates between 35% - 100% capacity, providing precise efficiency and the ultimate in comfort.
- Continuous air circulation: Provides filtration and keeps air moving throughout the home to help maintain comfort.
- Self-diagnostic control board: Continuously monitors the system for consistent, reliable operation.
- Quiet, variable-speed induced draft blower: Provides precise control and enhanced energy-efficient performance as compared to single-speed blowers.

THANK GOODNESS FOR GOODMAN



ALL ALUMINUM EEV COILS:

- Available in 1.5-Ton through 5-Ton capacities
- Engineered for compatibility with Goodman brand SD AC and Heat Pump units
  - CAPEA: Compatible with AC and Dual Fuel applications
  - CHPE: For horizontal applications - compatible with AC units
- Electronic Expansion Valve (EEV) models feature
  - Compatibility with Goodman brand communicating equipment
  - Cooling and heat pump applications
  - Fault recall of six most recent faults
  - PID control loop for precision capacity control
- Air cleaner and humidifier integration capable (rules apply, refer to installation manual for details).
- UV and rust resistant, 5VA rated thermoplastic drain pan with integrated secondary drain
- Foil-faced insulation covers internal casing to reduce cabinet condensation
- Split seam front for easy installation and service access (except for CAPEA)
- Lightweight all aluminum evaporator coil
- Ships factory standard upflow with easy field conversion to downflow (CAPEA & CAPE).

MBVC MODULAR BLOWER:

- All-Aluminum Coil
- *SmartFrame* Sub-Structure
- Auto configuration of the airflow and tonnage in communicating mode
- Provides constant CFM over a wide range of static pressure conditions independent of duct system CFM indicator
- Built-in dehumidification feature.
- 21-inch-deep cabinet for easy attic access / Horizontal or vertical configuration.

Be good to yourself.

Connectivity:



GOODMAN BRAND GTST CONNECTED THERMOSTAT:

The Goodman GTST connected thermostat is designed to provide the ultimate inverter experience when installed as a part of the Goodman SD system. The GTST is compatible with all Goodman communicating unitary equipment. It can be linked via Wi-Fi to the Goodman Home app for control from an iOS or Android phone or tablet. In addition, the GTST can be voice-controlled with Amazon Alexa or Google Assistant. For efficiency and comfort, homeowners can program up to four schedule events each day on a seven day schedule. Here are some of the features of the GTST:

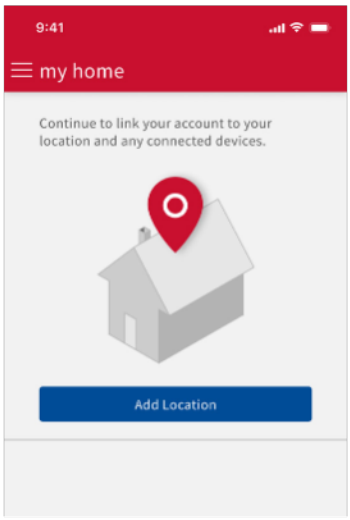
- Compact and programmable (4 events, 7 days)
- Energy and comfort functions: Away mode and geo-fencing
- Outdoor environment monitoring: outdoor temperature, outdoor humidity, and weather forecast



THANK GOODNESS FOR GOODMAN

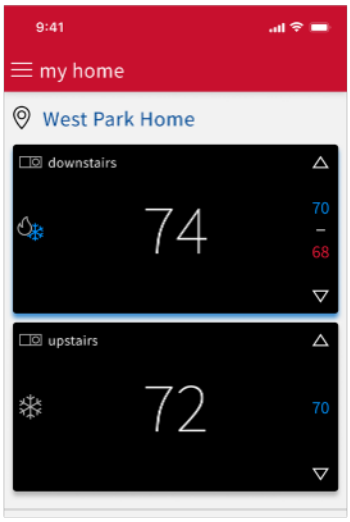


- Multifunction push buttons and multi-language support: English, Spanish, French (Goodman Home app only)
- Over-the-air software update capable (requires Wi-Fi connection)
- Wireless on-site commissioning with the Goodman Installer app



App Feature View:
Away mode and geo-fencing.

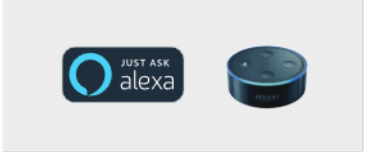
App Feature View:
System zone control



Goodman HOME APP

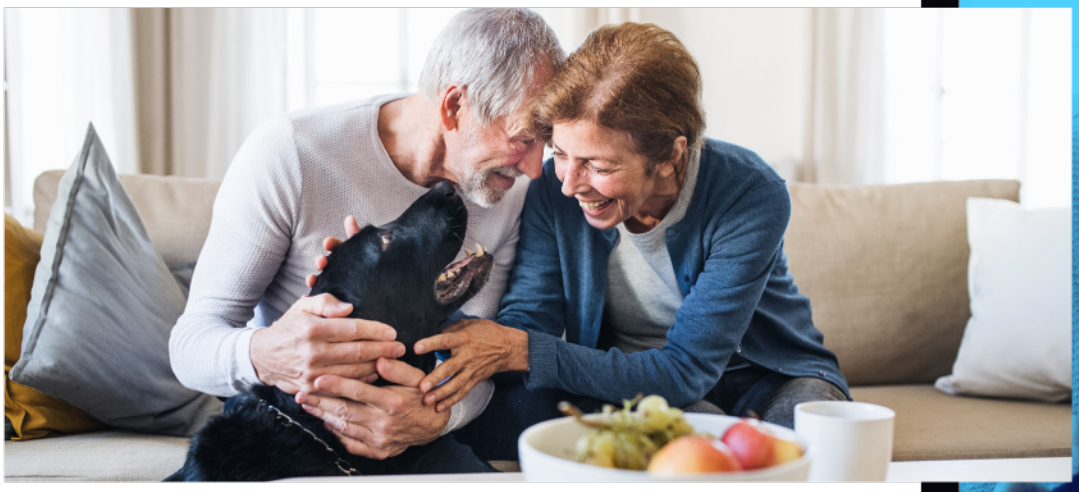
Install the Goodman Home app to control the Goodman GTST connected thermostat from virtually anywhere (with a Wi-Fi connection).





Here's to even more
of **a good thing.**

Feel the difference:



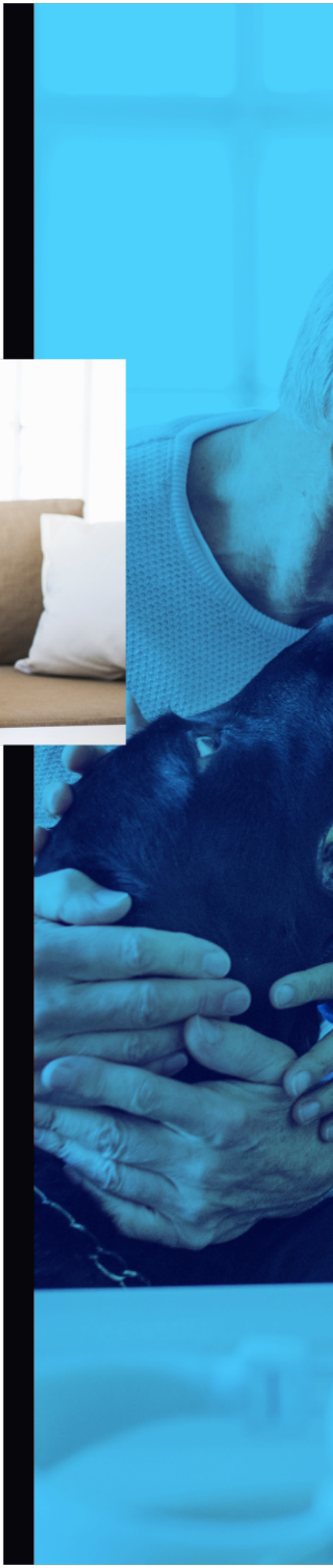
INVERTER

Inverter technology, which is factory-installed in the Goodman brand SD system, allows for adaptable speed levels of operation depending on your heating or cooling demands — full, 100% capacity for extreme temperatures or reduced capacity for milder days.

Why Does Inverter Technology Matter?

- **Energy-Efficient Savings**
- **Consistent Indoor Comfort**
- **A Comfortable Home**

To learn more about the benefits of Inverter Technology, scan or visit www.goodmanmfg.com/invertertechnology



THANK GOODNESS FOR GOODMAN



Indoor Air Quality:

WHOLE-HOME INDOOR AIR QUALITY SOLUTIONS.

Clean Comfort Indoor Air Essentials can improve the quality and comfort of your home's indoor air. Components can be installed on virtually any brand of HVAC equipment in any home or installation.

Our complete family of *Clean Comfort* products helps to improve indoor air quality:

FILTRATION

PURIFICATION

HUMIDITY CONTROL

DEHUMIDIFICATION

VENTILATION

ZONING

CLEAN COMFORT®
INDOOR AIR ESSENTIALS



LEARN MORE AT: www.cleancomfort.com

Good things are right around the corner!

We're here to help:

WHY DOES GOODMAN HAVE SUCH A LARGE FAN BASE?

For nearly four decades, the Goodman brand has concentrated on something more important than simple brand-recognition consumer advertising. We've focused on the design, engineering, and manufacturing of dependable products that have helped millions and millions of homeowners achieve reliable, high-quality, and affordable indoor comfort. In addition, the Goodman brand has earned the loyalty and respect from thousands of local independent heating and cooling professionals across North America.

We believe that your local HVAC (Heating, Ventilation and Air Conditioning) professional knows best about your specific indoor comfort needs and indoor air quality solutions. When they recommend a Goodman brand product, rest assured that you and your family will soon be receiving great indoor comfort, at a refreshingly affordable price.





THANK GOODNESS FOR GOODMAN



Additional **Peace-of-Mind.**



Asure℠
EXTENDED SERVICE PLAN

ASURE℠ PROVIDES YEARS OF WORRY-FREE COMFORT

With an Asure Extended Service Plan**, you'll have your choice of 5-years*, 10-years*, or even up to 99-years* (compressor only) of worry-free comfort without the unexpected cost of replacement parts or labor expenses should your Goodman brand equipment require covered service. If a covered repair is needed, an Authorized Asure Dealer will respond promptly and make repairs with quality Goodman brand parts.

Asure coverage is affordable, on average costing only pennies a day. It's valuable coverage that protects you today and, in the future, no matter how much the cost of service may increase over the life of your Goodman brand equipment. With an Asure extended service plan, your comfort is in the warranty.

An Asure Service Agreement is only available through an Authorized Asure Dealer. Visit the Dealer Locator to find an Asure Dealer near you.

*Ask your dealer for more information or visit www.goodmanmfg.com.
**Not available in all states.

To learn more about financing and extended service plans, ask you Goodman contractor!

Specifications: AC

	GSXS6 S1810A*	GSXS6 S2410A*	GSXS6 S3010A*	GSXS6 S3610A*	GSXS6 S4210A*	GSXS6 S4810A*	GSXS6 S6010A*	GSXS6 01810A*	GSXS6 02410A*	GSXS6 03010A*	GSXS6 03610A*
Capacities (AHRI Rated)											
Max. Cooling (BTU/h)	16,600	22,200	27,800	33,600	39,500	45,000	53,000	16,600	22,200	27,800	32,400
Ambient Operation Range Cooling (°FDB(°CDB))	0 to 115 (-17.8 to 46.1)										
Compressor											
Type	Swing	Swing	Swing	Swing	Swing	Swing	Swing	Swing	Swing	Swing	Swing
RLA	10.0	13.4	16.8	16.8	25.5	25.5	26.9	10.0	13.4	16.8	16.8
Condenser Fan Motor											
Horsepower	0.09	0.09	0.20	0.20	0.36	0.36	0.36	0.09	0.09	0.20	0.20
FLA	1.15	1.15	2.00	2.00	1.63	1.63	1.63	1.15	1.15	2.00	2.00
Refrigeration System											
Refrigerant Line Size[1]											
Liquid Line Size (˝O.D.)	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"
Suction Line Size (˝O.D.)	¾"	¾"	⅞"	⅞"	1⅛"	1⅛"	1⅛"	¾"	¾"	⅞"	⅞"
Refrigerant Connection Size											
Liquid Valve Size (˝O.D.)	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"
Suction Valve Size (˝O.D.)	¾"	¾"	⅞"	⅞"	⅞"	⅞"	⅞"	¾"	¾"	⅞"	⅞"
Valve Connection Type	Front Sealing	Front Sealing	Front Sealing	Front Sealing	Front and Back Sealing	Front and Back Sealing	Front and Back Sealing	Front Sealing	Front Sealing	Front Sealing	Front Sealing
Refrigerant Charge (oz.)	76	76	79	85	111	111	131	76	76	79	85
Expansion Device	EEV	EEV	EEV	EEV	EEV	EEV	EEV	EEV	EEV	EEV	EEV
Superheat at Service Valve	Auto-control	Auto-control	Auto-control	Auto-control	Auto-control	Auto-control	Auto-control	Auto-control	Auto-control	Auto-control	Auto-control
Subcooling at Service Valve	10±1°F	12±1°F	14±1°F	15±1°F	8±1°F	9±1°F	9±1°F	10±1°F	12±1°F	14±1°F	13±1°F
Electrical Data											
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	208-230/1	208-230/1	208-230/1	208-230/1
Minimum Circuit Ampacity[2]	14.6	18.8	23.9	23.9	34.4	34.4	36.2	14.6	18.8	23.9	23.9
Max. Overcurrent Protection[3]	15	20	25	25	35	35	40	15	20	25	25
Min / Max Volts	197/253	197/253	197/253	197/253	197/253	197/253	197/253	197/253	197/253	197/253	197/253
Electrical Conduit Size	½"	½"	½"	½"	½" or ¾"	½" or ¾"	½" or ¾"	½"	½"	½"	½"
Equipment Weight (lbs)	119	119	129	133	163	163	174	119	119	129	133
Ship Weight (lbs)	133	133	143	148	183	183	196	133	133	143	148

[1] Tested and rated in accordance with ANSI/AHRI Standard 210/240

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

[3] 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.

» Unit is charged with refrigerant for 15' of ⅜" liquid line. System charge must be adjusted per Installation Instructions Final Charge Procedure. (See table available within the full GSXS6 spec sheet for allowable line set diameter)

THANK GOODNESS FOR GOODMAN

Specifications: Heat Pump

	GSZS6 01810A*	GSZS6 02410A*	GSZS6 03010A*	GSZS6 03610A*	GSZS6 04210A*	GSZS6 04810A*	GSZS6 06010A*
Capacities (AHRI Rated)							
Max. Cooling (BTU/h)	16,600	22,200	27,800	33,600	39,500	45,000	53,000
Max. Heating (BTU/h)	17,400	23,200	28,800	34,600	40,000	45,500	54,500
Ambient Operation Range							
Cooling (°FDB(°CDB))	0 to 115 (-17.8 to 46.1)						
Heating (°FDB(°CDB))	-10 to 70 (-23.3 to 21.1)						
Compressor							
Type	Swing	Swing	Swing	Swing	Swing	Swing	Swing
RLA	10.0	13.4	16.8	16.8	25.5	25.5	26.9
Condenser Fan Motor							
Horsepower	0.09	0.09	0.20	0.20	0.36	0.36	0.36
FLA	1.15	1.15	2.00	2.00	1.63	1.63	1.63
Refrigeration System							
Refrigerant Line Size[1]							
Liquid Line Size (˝O.D.)	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"
Suction Line Size (˝O.D.)	¾"	¾"	⅞"	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"	⅞"	⅞"	⅞"	⅞"	⅞"
Valve Connection Type	Front Sealing	Front Sealing	Front Sealing	Front Sealing	Front and Back Sealing	Front and Back Sealing	Front and Back Sealing
Refrigerant Charge (oz.)	81	81	88	88	118	118	127
Expansion Device	EEV	EEV	EEV	EEV	EEV	EEV	EEV
Superheat at Service Valve	Auto-control	Auto-control	Auto-control	Auto-control	Auto-control	Auto-control	Auto-control
Subcooling at Service Valve	10±1°F	12±1°F	14±1°F	15±1°F	8±1°F	9±1°F	9±1°F
Electrical Data							
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[2]	14.6	18.8	23.9	23.9	34.4	34.4	36.2
Max. Overcurrent Protection[3]	15	20	25	25	35	35	40
Min / Max Volts	197/253	197/253	197/253	197/253	197/253	197/253	197/253
Electrical Conduit Size	½"	½"	½"	½"	½" or ¾"	½" or ¾"	½" or ¾"
Equipment Weight (lbs)	122	122	132	137	168	168	179
Ship Weight (lbs)	137	137	147	151	185	185	198

[1] Tested and rated in accordance with ANSI/AHRI Standard 210/240

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

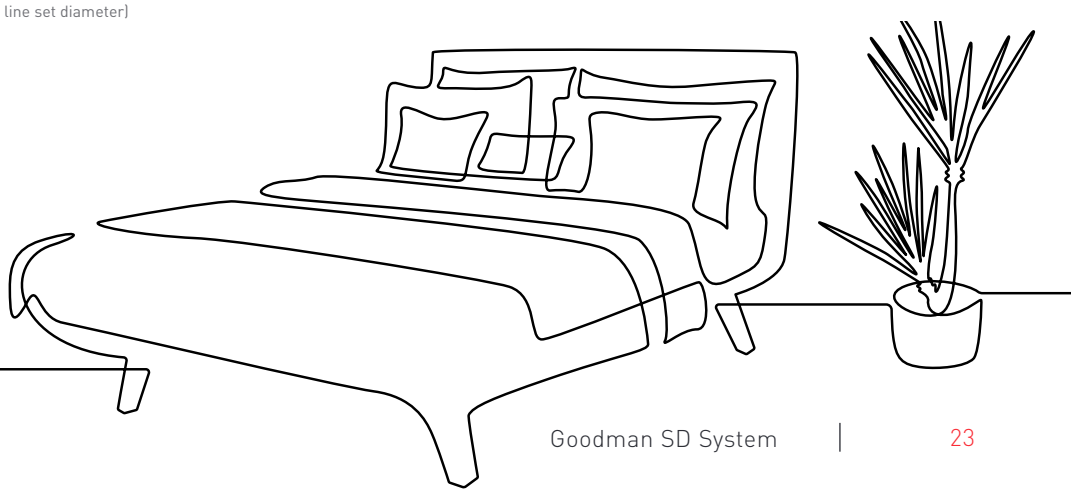
[3] Must use time-delay fuses or HACR-type circuit breakers of the same size as noted.

Notes

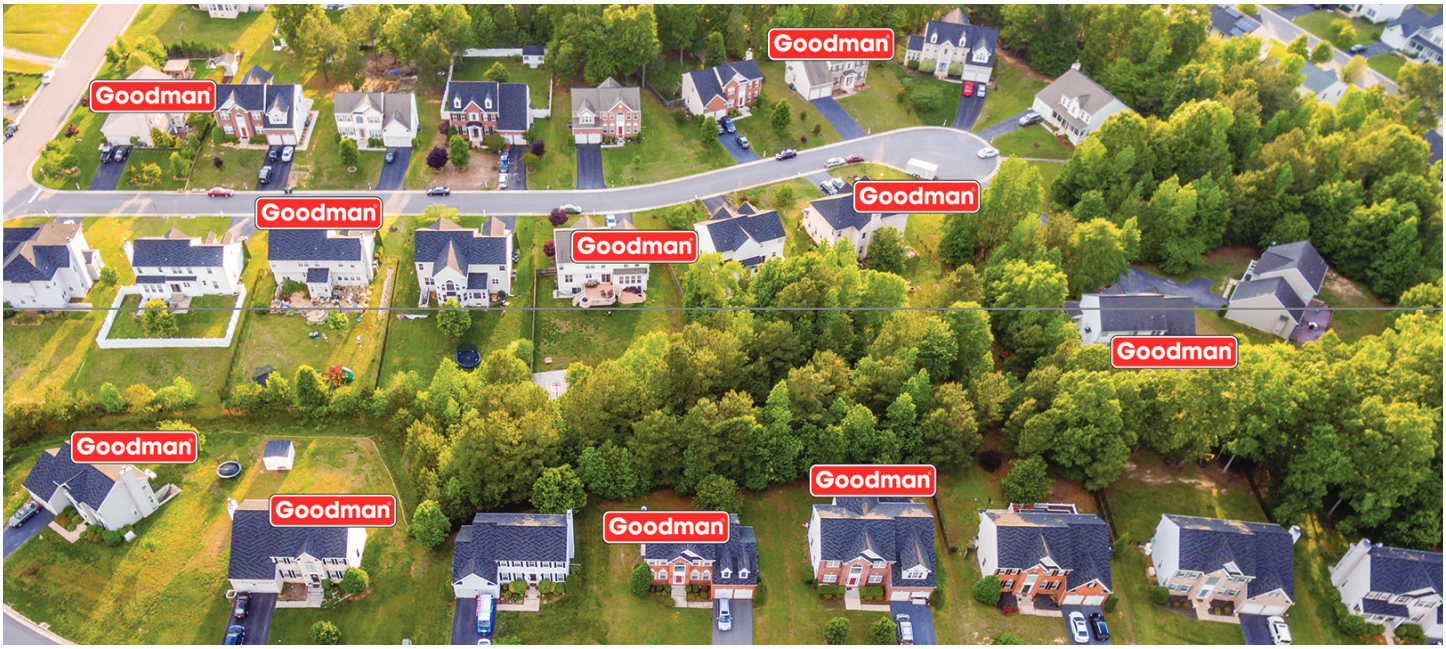
» Always check the S&R plate for electrical data on the unit being installed.

» Installer will need to supply ⅞" to 1⅛" adapters for suction line connections.

» Unit is charged with refrigerant for 15' of ⅜" liquid line. System charge must be adjusted per Installation Instructions Final Charge Procedure. (See table available within the full GSZS6 spec sheet for allowable line set diameter)



ONCE YOU CHOOSE THE GOODMAN BRAND, YOU'LL PROBABLY BE A FAN FOR LIFE.



Millions across North America are big fans already.
Once you choose a Goodman brand, you'll probably be a big fan, too!
See why others are saying, "*Thank Goodness for Goodman.*"

Just go to www.goodmanmfg.com/reviews

GOODMAN IS SOCIAL!

Like us on **Facebook!** facebook.com/GoodmanMfg

Follow us on **Twitter!** twitter.com/Goodman_Mfg

Follow us on **Instagram!** instagram.com/Goodman_Mfg

About Daikin

Daikin Industries, Ltd. (DIL) is a Fortune 1,000 company with more than 84,870 employees worldwide and is the world's #1 indoor comfort solutions provider. Daikin Comfort Technologies North America, Inc. (DNA) is a subsidiary of DIL, providing Daikin, Amana® brand, Goodman brand, and Quietflex brand products. DNA and its affiliates manufacture heating and cooling systems for residential, commercial, and industrial use and are sold via independent HVAC contractors. DNA engineering and manufacturing is located at Daikin Texas Technology Park near Houston, TX. For additional information, visit www.northamerica-daikin.com.

Additional Information

Before purchasing this appliance, read important information about its estimated annual energy consumption, yearly operating cost, or energy efficiency rating that is available from your retailer.

ASSEMBLED IN THE U.S.A.

REGULATIONS 2023 COMPLIANT

Goodman® Air Conditioning & Heating

A DAIKIN BRAND

Our continuing commitment to quality products may mean a change in specifications without notice.

© 2023 DAIKIN COMFORT TECHNOLOGIES NORTH AMERICA, INC.

Houston, Texas · USA · www.goodmanmfg.com

CB-GDMN-SD_09-23

Amana® is a registered trademark of Maytag Corporation or its related companies and is used under license. All rights reserved.