

Energy Efficient Side Discharge Inverter System
AC / Heat Pump / Dual Fuel

Take Comfort.
It's an Amana® brand.



R-32 MODELS



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SLIM / SMART / SOUND / SAVINGS

A legacy of comfort.

The impeccable reputation of an American original

Amana brand heating and cooling systems are a part of the enduring legacy of one of America's most recognized and respected brands. Originating eight decades ago in Amana, Iowa, the brand is synonymous with long-lasting, premium quality products — from home appliances to heating and air conditioning equipment. Chances are, you and generations before you have enjoyed the dependable performance and longevity the Amana brand continues to deliver.

1954

Amana brand's version of the room air conditioner introduced.



1967

Brought the first consumer microwave to the market. The Radarange® microwave.



1997

Goodman Global, Inc. purchased Amana brand's heating and AC business unit.

Heating & Air Conditioning
Amana



2015

Daikin introduces its inverter technology into Amana brand premium cooling products.



1934

Amana brand is founded by George Foerstner in Middle Amana, Iowa.



1957

First bottom-freezer refrigerator.



1986

Amana brand invents revolutionary tubular heat exchanger for gas furnaces.

DAIKIN

2012

Daikin Industries, Ltd. acquired Goodman Global, Inc.

An American original

Amana brand's parent company has invested over \$400M in our state-of-the-art production facility on the outskirts of Houston, TX. The Daikin Texas Technology Park is a sprawling campus covering more than 4 million sq. ft. with more than 4,000 personnel. The facility practices Daikin's philosophy of a full 360-degree focus to research and development, manufacturing quality and reliability, robust sales networks and extensive support infrastructure.



ComfortBridge™

2018

ComfortBridge technology is introduced and factory-installed in select gas furnaces and air handlers.

R32

2024

Complete redesign of Amana brand units to support R-32 refrigerant.

Heating & Air Conditioning
Amana®

S-SERIES



2017

Daikin Texas Technology Park commenced operations just outside of Houston, Texas.

2022

Launch of the Amana brand S-series side discharge system and Amana brand smart thermostat.



2024

All-Climate Amana brand S-series Heat Pump

Introducing the Amana brand S-series system - A new way of thinking about HVAC.

The Amana brand S-series is a slim side discharge style system that provides a premium mid-efficiency solution at an affordable price. It connects to traditional ducted equipment with ease, and the slim profile provides a solution when traditional cube style options cannot.

The Amana brand S-series system offers the same high-quality design, performance, and features as other Amana brand systems, but at a fraction of their size. With clearance space as little as 4" from a wall, the S-series works when installation space is restricted. Because of its slim design, it is easy to transport and install.



UNIT DIMENSIONS (AXV6S/AZV6S)	
1.5-3 TON	3.5-5 TON
W: 36.6" x D: 13.8" x H: 27.4"	W: 37" x D: 12.6" x H: 39"
UNIT DIMENSIONS (AXV9S/AZV7S)	
2 TON	3, 3.5, AND 4 TON
W: 36.6" x D: 13.8" x H: 27.4"	W: 37" x D: 12.6" x H: 39"
UNIT DIMENSIONS	
AZV9S	AZV7S/AXV9S
2 AND 3 TON	5 TON
W: 37" x D: 12.625" x H: 56.3125"	



Slim, yet flexible.

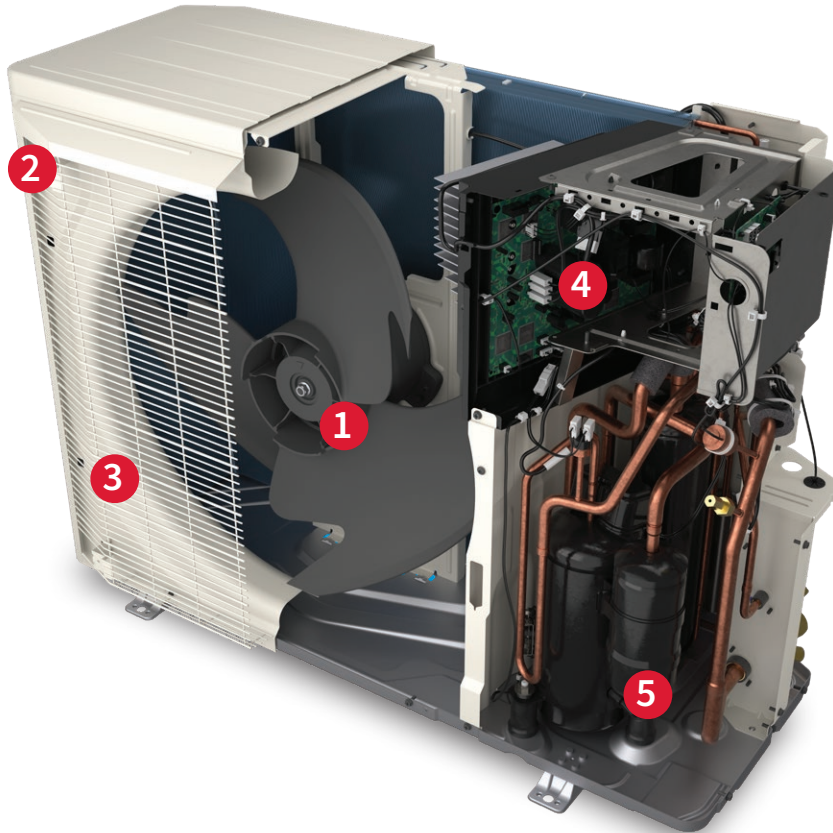
■ **Slim style + small footprint =**

- Flexibility in design and installation to meet demands of most projects.
- Install on pad or as a wall mount.
- Will support zero lot line and small patio/backyard spaces.



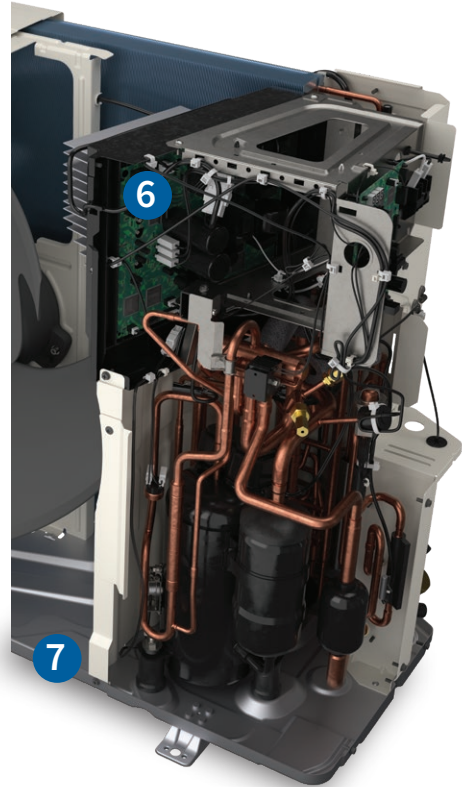
Technology overview.

AC (AXV6S/AXV9S)



- 1 Variable-Speed DC Fan
- 2 Blue Fin Corrosion Coating
- 3 7mm Coil
- 4 Inverter Board Cooled by Refrigerant Circuit¹
- 5 Swing Compressor

HEAT PUMP (AZV6S/AZV7S)



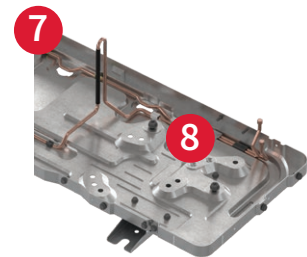
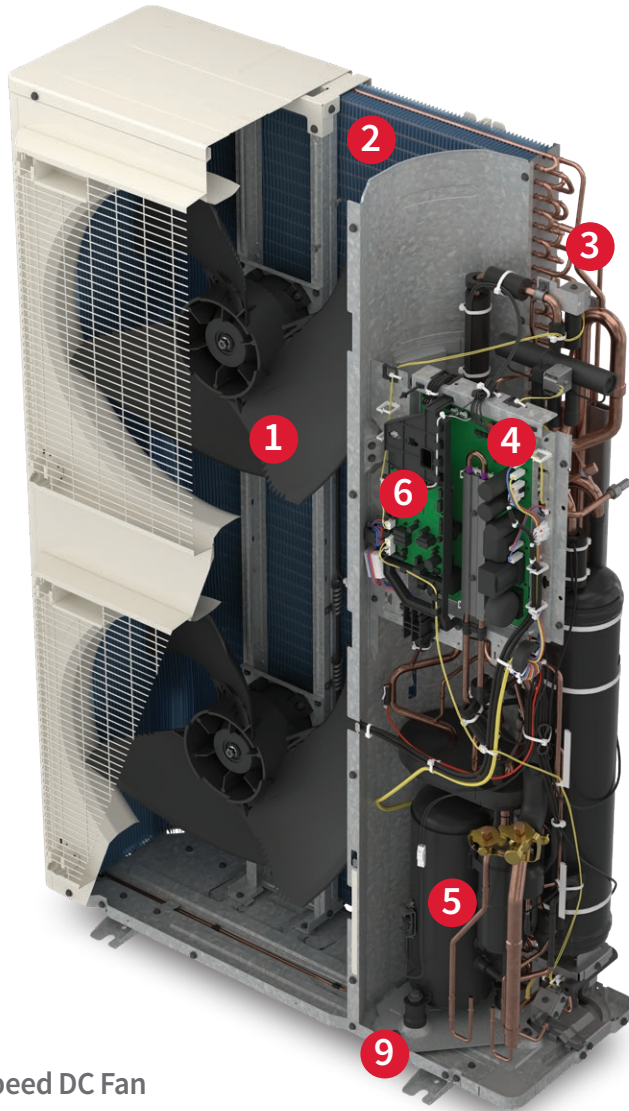
- 6 Intelligent Defrost Mode
- 7 Advanced water-shedding drain pan

¹ Model specific, refer to product engineering manual for details.

R32

Technology overview.

HEAT PUMP
(AZV9S/AZV7S)



- 1 Variable-Speed DC Fan
- 2 Blue Fin Corrosion Coating
- 3 7mm Coil
- 4 Inverter Board Cooled by Refrigerant Circuit¹
- 5 Swing Compressor
- 6 Intelligent Defrost Mode
- 7 Advanced water-shedding drain pan
- 8 Drain pan heating with Hot-Gas-Bypass
- 9 Three-way Installation Provision

¹ Model specific, refer to product engineering manual for details.

Smart engineering (cont'd).



Intelligent defrost mode.

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.



Hot start technology.

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



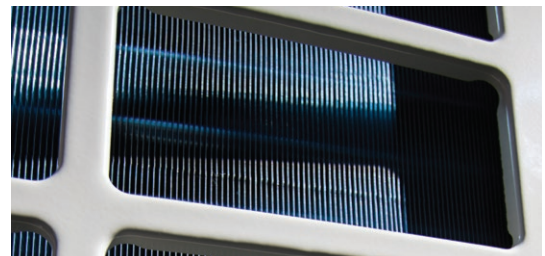
Advanced water-shedding drain pan technology.

Engineered with multiple drain holes and channels to help provide effective water shedding.



Blue Fin corrosion coating.

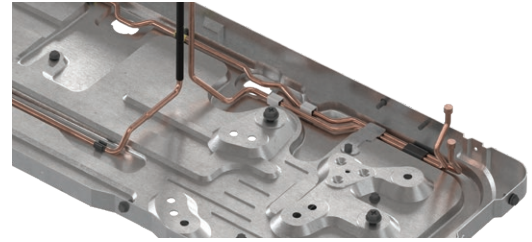
The Amana brand S-series unit features a 1000-hour salt spray rated coil as standard. This hydrophilic coating helps keep the coil clean.





Drain pan heating with Hot-Gas-Bypass.

During heating operation hot-gas-bypass helps prevent ice accumulation in the drain pan by facilitating its removal, ensuring effective ice suppression.



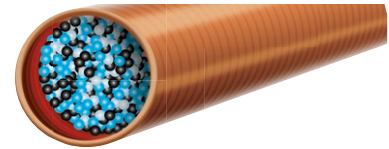
Inverter board cooled by refrigerant circuit.

Elimination of condenser fan pressure drop caused by heat sink used.



7mm Coil.

High heat exchanger efficiency and compact casing design.



Proprietary swing compressor technology.

Quiet and dependable. The smooth rotation with little friction allows for high operation efficiency, low vibrations, and low noise.



Variable-Speed DC fan.

High efficiency and low sound levels.



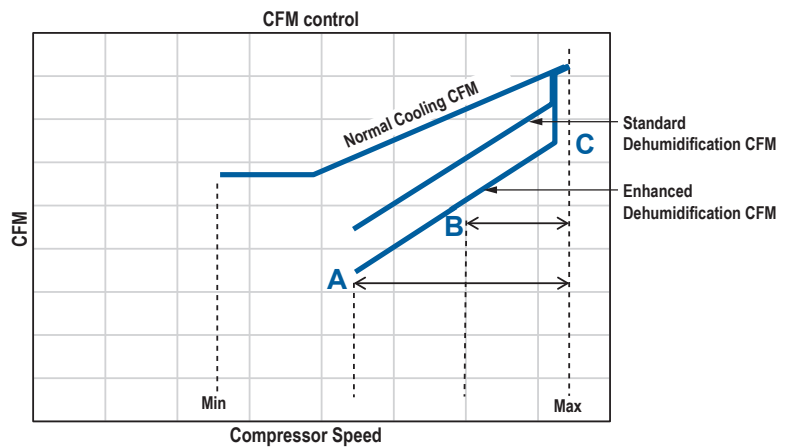
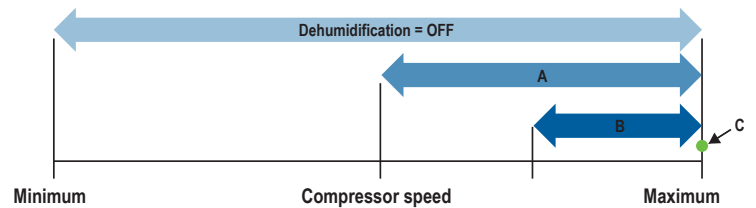
Smart engineering (cont'd).



Dehumidification.

The Amana brand S-series has three levels of humidification that allows for the system to be set up based on the geographical region and humidity levels.

- The suggested setting for most applications is option A or B.
- These settings control the speed of the compressor and the speed of the indoor blower to maximize the evaporator coil temperature while minimizing airflow. In short, minimizing airflow — maximum dehumidification.
- See below for a visual of the dehumidification mode.



DEHUMIDIFICATION LEVELS			
STANDARD	A	B	C
Improves dehum by lowering airflow	Max dehum with wide compressor and airflow range	Moderate dehum with reduced compressor and airflow range	Min dehum, compressor fixed at 100%, airflow @70%



Heating & Air Conditioning
Amana

PROPS WARNING
FOR CALIFORNIA CONSUMERS
WARNING
Cancer and Reproductive Harm -
www.P65Warnings.ca.gov

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PARA LOS CONSUMIDORES DE CALIFORNIA
ADVERTENCIA
Cáncer y Daño Reproductivo -
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FRONT

MADE IN THAILAND/Engineered in Japan

Smart engineering (cont'd).

Inverter Technology.

The Amana brand S-series system features inverter technology, giving the S-series added intelligence, allowing it to adjust operations to match desired comfort levels. Inverter technology helps the system run at an energy-conserving level, despite the climate conditions, by making slight adjustments to the compressor's speed. As a result, the S-series will be able to reach the desired set-point faster and maintain a more consistent indoor comfort level compared to traditional non-inverter systems.

Single Stage



The ON/OFF operation may create abrupt temperature swings, impacting indoor comfort.

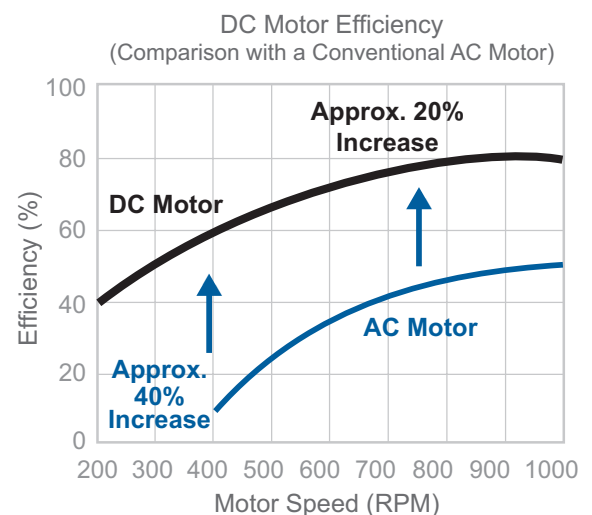


Minimizes the temperature swings often found with single-stage equipment, allowing for steady and consistent indoor comfort.

Digitally Commutated Motor.

Another reason the Amana brand S-series can be called smart is the inverter compressor. The inverter technology is responsible for delivering intelligent comfort with efficiency based on demand. The inverter (variable-speed) compressor provides the capacity required to maintain desired room conditions, typically reducing energy consumption by up to 30% or more (compared to traditional fixed-speed systems).

The enhanced functionality of the variable-speed DC fan motor can offer an increase of approximately 20% in efficiency (compared to systems with a conventional AC motor).

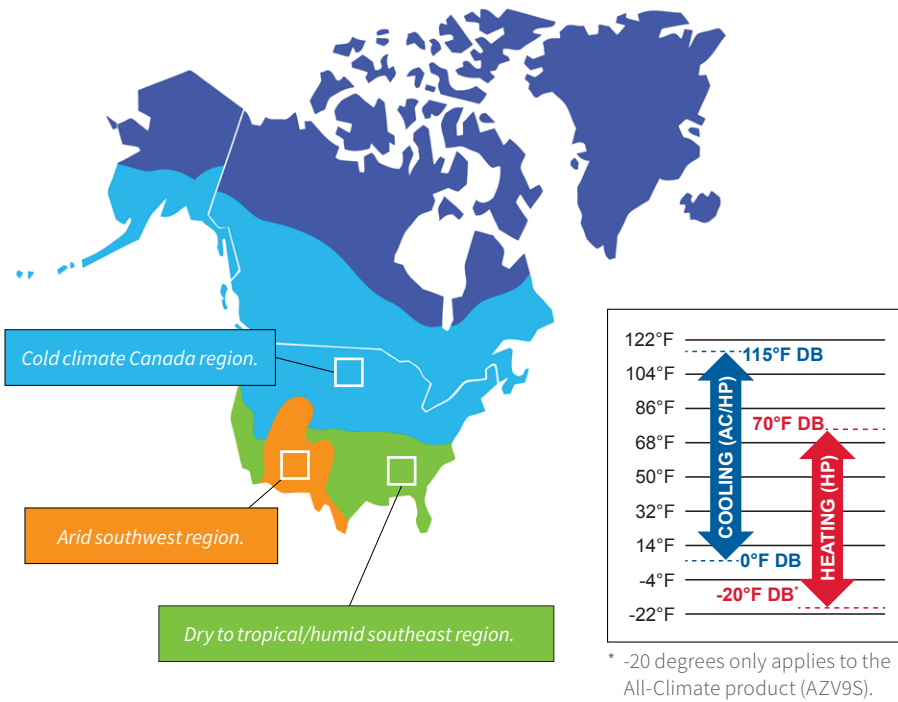


Note: Data is based on studies conducted under controlled conditions at one of our laboratories.

Operation and piping range.

The Amana brand S-series system is an ideal choice for most single, two, and three-story homes with existing ductwork. The ability to utilize existing line sets and connect up to 100' of pipe (for typical installations) can offer new solutions to help overcome project obstacles. Additionally, the S-series features operation ranges to accommodate most homes in North America. So, whether you're in Iowa, Arizona, or Texas, the Amana brand S-series can offer solutions to meet most HVAC project needs.

OPERATION RANGE



X	Allowable combination
1	For marked combinations, if normal ambient operation temperature is less than 14°F, limit line set length to 50 ft. max.

PIPING RANGE

CONNECTING PIPING (maximum)

1.5 - 5 TON

LENGTH	HEIGHT
100 FT.	90 FT.

ALLOWABLE LINE SET DIAMETER (AXV6S/AZV6S)

UNIT TONS	LIQUID			SUCTION			
	1/4"	5/16"	3/8"	5/8"	3/4"	7/8"	1 1/8"
1.5	X	X	X	X ¹	X		
2.0		X	X	X ¹	X		
2.5		X	X		X ¹	X	
3.0		X	X		X ¹	X	
3.5			X			X	X
4.0			X			X	X
5.0			X			X	X

ALLOWABLE LINE SET DIAMETER (AXV9S)

UNIT TONS	LIQUID			SUCTION			
	1/4"	5/16"	3/8"	5/8"	3/4"	7/8"	1 1/8"
2.0		X	X	X	X ¹	X	
3.0			X	X		X	X
4.0			X	X		X	X
5.0			X			X	X

ALLOWABLE LINE SET DIAMETER (AZV7S)

UNIT TONS	LIQUID			SUCTION			
	1/4"	5/16"	3/8"	5/8"	3/4"	7/8"	1 1/8"
2.0		X	X		X ¹	X	
3.0			X			X	X
3.5			X			X	X
4.0			X			X	X
5.0			X			X	X

ALLOWABLE LINE SET DIAMETER (ALL-CLIMATE HEAT PUMP)

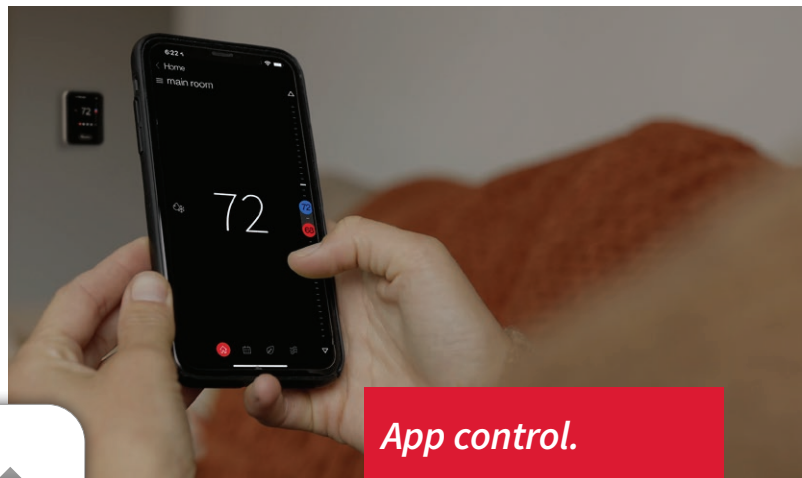
UNIT TONS	LIQUID			SUCTION			
	1/4"	5/16"	3/8"	5/8"	3/4"	7/8"	1 1/8"
2.0		X	X	X	X ¹	X	
3.0		X	X			X	X



Introducing the Amana® brand smart thermostat.

The Amana brand S-series system wouldn't be complete without a smart thermostat to support control and comfort. The new Amana brand smart thermostat communicating control does just that! The capacitive touchscreen is not only stylish but easy to use.

Homeowners will appreciate the feature-rich design and intuitive functionality. A single configurable auxiliary output allows control of an external humidifier, dehumidifier, or secondary heat source. The Amana brand smart thermostat is also compatible with the *SkyportHome* app for end-user control from anywhere on their smart device, as well as voice control compatibility with Amazon and Google smart devices (with Wi-Fi).



SkyportHome



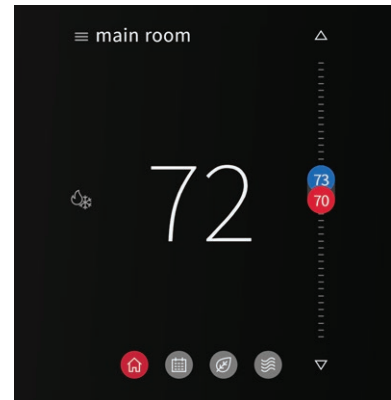
Voice control.





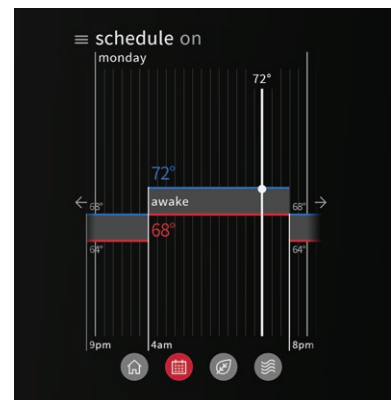
Home Screen.

A simple, central **home screen** displays the current temperature, the current mode, and a slider for adjusting the temperature. The top-level screens are accessible through icons at the bottom of this screen.



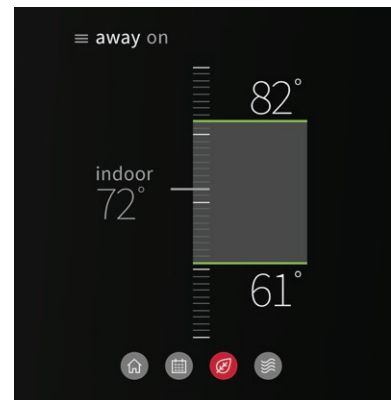
Schedule Screen.

The **schedule screen** displays upcoming set-point changes and scheduled times. Plus, it offers access to edit mode, where you can adjust the schedule using simple controls.



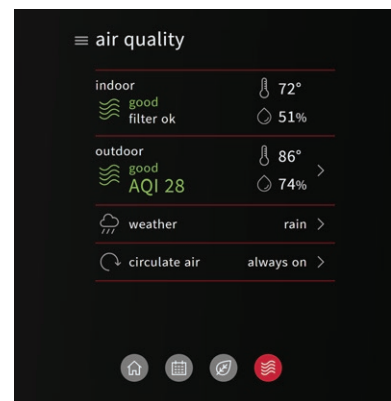
Away Screen.

When you're away from home, you can help keep energy consumption down with away mode. The **away screen** displays energy saving set-points that can be invoked manually or automatically, when the mobile app recognizes everyone is away.



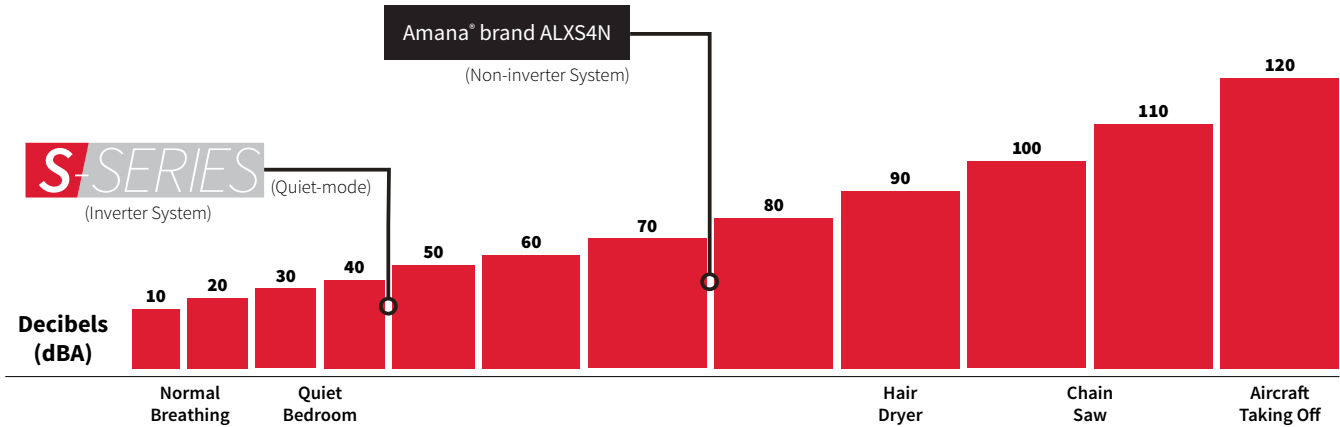
Air Quality Screen.

Know what's in the air around your home. The **air quality screen** displays outdoor air quality, and weather will be displayed when connected to the internet when the thermostat is added in the mobile app under home location.



Say goodbye to a noisy outdoor unit.

With sound levels from 45 dB(A) to 56 dB(A), quiet-mode, and swing compressor technology, homeowners will enjoy peace and quiet inside and out with the Amana brand S-series system.



Quiet-Mode.

This mode provides enhanced acoustical comfort up to 3 different sound levels (as low as 45dB(A) in quiet mode). When activated (before sleep, etc.) homeowners will enjoy additional quiet within their space.



Proprietary swing compressor technology.

Quiet and dependable. The smooth rotation with little friction allows for high operation efficiency, low vibrations, and low noise.

Efficiency and quality.

The purchase of an indoor comfort system is not one to be taken lightly. However, it's one you can make with an air of confidence when you consider all that distinguishes the venerable Amana brand. With all that the Amana brand S-series system has to offer, there's no wonder why we're America's brand for comfort!

AC

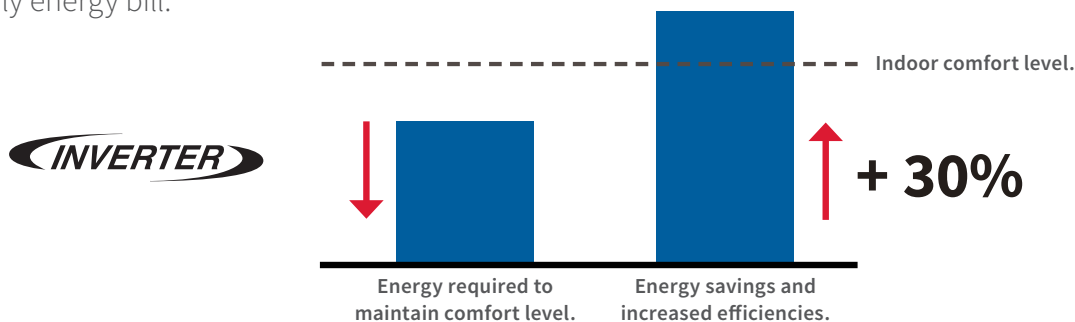
- Up to 19.0 SEER2

Heat Pump

- Up to 19.0 SEER2 / Up to 8.8 HSPF2

Inverter technology = additional savings.

Thanks to inverter technology, the Amana brand S-series can increase efficiency by up to 30% or more compared to conventional fixed-speed systems. This results in additional opportunities to save on monthly energy bill.



[^] Energy reduction is based on SEER2 cooling efficiency ratings. Actual performance and savings may vary based on home size, usage behavior, local climate, ductwork, and installation quality. Comparing Amana brand S Series (Models: AXV6S and AXV9S) to 13.4 SEER2 split-system air conditioner (U.S. Department of Energy 2023 minimum efficiency North region).

Outstanding limited warranty* protection.

Every Amana brand indoor comfort product is built to our highest standards. The Amana brand S-series is no different. The high quality of our product limited warranties[†] reflects the high standards of our manufacturing processes. Take comfort with 10-Year parts and 10-Year Unit Replacement limited warranties[†]. Also available are One-time Unit Replacement, and One-time Compressor limited warranties[‡] for years 11 - 99 through an ASURE extended service plan.



[†] Complete warranty available from your local dealer or at www.amana-hac.com. To receive the 10-Year Parts Limited Warranty and/or 10-Year Unit Replacement Limited Warranty (good for as long as you own your home), online registration must be completed within 60 days of installation. Online registration is not required in California, Florida, or Québec. The duration of warranty coverages in Texas and Florida differs in some cases. Changes in law, regulations, or technology may result in an equivalent unit not being available. Other limitations and exclusions apply, refer to complete warranty details for full list of limitations and exclusions, as well as rights and obligations should an equivalent unit not be available.

[‡] One-time Unit Replacement coverage and One-time Compressor Replacement coverage is available to the original homeowner for years 11-99 after the installation date through an ASURE Extended Service Plan. Complete details about the Extended Service Plan options available from your ASURE dealer.

Tried and True.



Trust the experts.

Your local Amana brand dealer plays a critical role in ensuring that your household's heating and air conditioning needs are met. That is why we are excited to work with an extensive network of local HVAC professionals that distinguish themselves based on their customer service, business standards and technical competency. Please ask your local Amana brand dealer about why they can provide you with outstanding service and support, as well as industry leading Amana brand products.



Relax, we've got you covered!

Worry-Free Coverage.

An *ASURE* Extended Service Plan gives you the peace of mind that you won't be faced with unexpected repair or part replacement costs for your heating and air conditioning system. We give you comfort, knowing you and your family won't have to endure any long periods without heating or cooling – you're covered!

The *ASURE* Extended Service Plan complements the standard limited¹ product warranty by providing labor coverage and additional years of parts coverage, based on the plan selected. Your *ASURE* dealer can provide you with details on the different coverage options available.

What Does the Plan Cover?

The *ASURE* Extended Service Plan provides extended coverage for all functional parts of your newly-installed Amana brand air conditioning and heating equipment. If a repair is needed, an authorized *ASURE* dealer will respond promptly and make repairs with quality Amana brand specific parts.

¹ Complete warranty details available from your local dealer or at www.Amana-hac.com.

AsureSM
EXTENDED SERVICE PLAN

How Affordable is *ASURE*?

Isn't your comfort worth only pennies a day? *ASURE* eliminates the cost of unbudgeted system repairs. *ASURE*'s got you covered today and for years into the future, no matter how much the cost of a service call may increase during that time.



We have financing options.

Financing for your Amana brand home comfort system is available via EGIA. For more details and enrollment information, visit <https://amana.egia.org/> or call 888-691-0387.



Specifications.

AMANA BRAND S-SERIES - AC OUTDOOR UNIT

	AXV6SS 1810A*	AXV6SS 2410A*	AXV6SS 3010A*	AXV6SS 3610A*	AXV6SS 4210A*	AXV6SS 4810A*	AXV6SS 6010A*	AXV6SA 1810A*	AXV6SA 2410A*	AXV6SA 3010A*	AXV6SA 3610A*
CAPACITIES (AHRI RATED)											
Max. Cooling (BTU/h)	17,100	23,200	28,400	34,200	41,000	45,500	53,500	17,100	23,200	28,400	33,000
AMBIENT OPERATION RANGE COOLING (°FDB(°CDB))	0 to 115 (-17.8 to 46.1)							0 to 115 (-17.8 to 46.1)			
COMPRESSOR											
Type	Swing	Swing	Swing	Swing	Swing	Swing	Swing	Swing	Swing	Swing	Swing
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
REFRIGERATION SYSTEM											
Refrigerant Line Size ¹											
Liquid Line Size ("O.D.)	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Suction Line Size ("O.D.)	3/4"	3/4"	7/8"	7/8"	1 1/8"	1 1/8"	1 1/8"	3/4"	3/4"	7/8"	7/8"
Refrigerant Connection Size											
Liquid Valve Size ("O.D.)	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Suction Valve Size ("O.D.)	3/4"	3/4"	7/8"	7/8"	7/8"	7/8"	7/8"	3/4"	3/4"	7/8"	7/8"
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.)	74	74	76	83	100	100	118	74	74	76	83
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
Fan/Compressor Inverter Drive Input	8.1	13.3	17.6	17.6	25.4	25.4	30	8.1	13.3	17.6	17.6
Minimum Circuit Ampacity ²	12.8	16.8	22.4	22.4	31.8	31.8	37.5	12.8	16.8	22.4	22.4
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	1/2"	1/2"	1/2"	1/2"	1/2" or 3/4"	1/2" or 3/4"	1/2" or 3/4"	1/2"	1/2"	1/2"	1/2"
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 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.

AMANA BRAND S-SERIES - AC OUTDOOR UNIT				
	AXV9S A2410A*	AXV9S A3610A*	AXV9S A4810A*	AXV9S A6010A*
CAPACITY AND RATINGS				
Max. Cooling (BTU/h)	23,200	35,000	46,500	57,000
AMBIENT OPERATION RANGE	0 to 115 (-17.8 to 46.1)			
COOLING (°FDB(°CDB))				
COMPRESSOR				
Type	Swing	Swing	Swing	Scroll
CONDENSER FAN MOTOR				
Horsepower	0.20	0.36	0.36	2 x 0.32
REFRIGERATION SYSTEM				
Refrigerant Line Size ¹				
Liquid Line Size ("O.D.)	3/8"	3/8"	3/8"	3/8"
Suction Line Size ("O.D.)	7/8"	1 1/8"	1 1/8"	1 1/8"
Refrigerant Connection Size				
Liquid Valve Size ("O.D.)	3/8"	3/8"	3/8"	3/8"
Suction Valve Size ("O.D.)	7/8"	7/8"	7/8"	7/8"
Valve Connection Type	Front Sealing	Front and Back Sealing	Front and Back Sealing	Front and Back Sealing
Refrigerant Charge (oz.)	76	100	118	162
Expansion Device	EEV	EEV	EEV	EEV
Superheat at Service Valve	Auto-control	Auto-control	Auto-control	Auto-control
Subcooling at Service Valve	14±1°F	8±1°F	9±1°F	11±1°F
ELECTRICAL DATA				
Voltage / Phase (60 Hz)	208-230/1	208-230/1	208-230/1	208-230/1
Fan/Compressor Inverter Drive Input	17.6	25.4	30	24.5
Minimum Circuit Ampacity ²	22.4	31.8	37.5	34.4
Max. Overcurrent Protection ³	25	35	40	40
Min / Max Volts	197/253	197/253	197/253	197/253
Electrical Conduit Size	1/2"	1/2" or 3/4"	1/2" or 3/4"	1/2" or 3/4"
EQUIPMENT WEIGHT (LBS)	129	163	174	236
SHIP WEIGHT (LBS)	143	183	196	271

¹ Tested and rated in accordance with 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 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.



Specifications (cont'd).

AMANA BRAND S-SERIES - HEAT PUMP OUTDOOR UNIT							
	AZV6SA 1810A ¹	AZV6SA A2410A ¹	AZV6SA A3010A ¹	AZV6SA A3610A ¹	AZV6SA A4210A ¹	AZV6SA A4810A ¹	AZV6SA A6010A ¹
CAPACITIES (AHRI RATED)							
Max. Cooling (BTU/h)-95F	17,100	23,200	28,400	34,200	41,000	45,500	53,500
Max. Heating (BTU/h)-47F	17,400	23,200	28,800	34,600	40,000	45,500	54,500
Max. Heating (BTU/h)-5F	13,000	14,200	17,300	20,000	27,400	28,000	33,000
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
CONDENSER FAN MOTOR							
Horsepower	0.09	0.09	0.20	0.20	0.36	0.36	0.36
REFRIGERATION SYSTEM							
Refrigerant Line Size ¹							
Liquid Line Size ("O.D.)	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Suction Line Size ("O.D.)	3/4"	3/4"	7/8"	7/8"	1 1/8"	1 1/8"	1 1/8"
Refrigerant Connection Size							
Liquid Valve Size ("O.D.)	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Suction Valve Size ("O.D.)	3/4"	3/4"	7/8"	7/8"	7/8"	7/8"	7/8"
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.)	74	74	76	83	100	100	118
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
Fan/Compressor Inverter Drive Input	8.1	13.3	17.6	17.6	25.4	25.4	30
Minimum Circuit Ampacity ²	12.8	16.8	22.4	22.4	31.8	31.8	37.5
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	1/2"	1/2"	1/2"	1/2"	1/2" or 3/4"	1/2" or 3/4"	1/2" or 3/4"
EQUIPMENT WEIGHT (LBS)	122	122	132	137	168	168	179
SHIP WEIGHT (LBS)	137	137	147	151	185	185	198
ENERGY STAR® CERTIFIED		NO	NO	NO	NO	NO	NO
ENERGY STAR® MOST EFFICIENT 2025							

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 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.

ENERGY STAR NOTES

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Proper sizing and installation of equipment is critical to achieving optimal performance. Split system air conditioners and heat pumps must be matched with appropriate coil components to meet **ENERGY STAR** criteria. Ask your contractor for details or visit www.energystar.gov. The www.energystar.gov website provides up-to-date system combinations certified to meet **ENERGY STAR** requirements

AMANA BRAND S-SERIES - HEAT PUMP OUTDOOR UNIT (ENHANCED CAPACITY MODELS)					
	AZV7SA 2410A*	AZV7SA 3610A*	AZV7SA 4210A*	AZV7SA 4810A*	AZV7SA 6010A*
CAPACITIES (AHRI RATED)					
Max. Cooling (BTU/h)-95F	23,200	35,000	41,000	46,500	52,000
Max. Heating (BTU/h)-47F	23,200	35,000	41,000	47,500	54,000
Max. Heating (BTU/h)-5F	17,000	29,000	31,000	33,600	46,000
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
CONDENSER FAN MOTOR					
Horsepower	0.20	0.36	0.36	0.36	2 x 0.32
REFRIGERATION SYSTEM					
Refrigerant Line Size ¹					
Liquid Line Size ("O.D.)	3/8"	3/8"	3/8"	3/8"	3/8"
Suction Line Size ("O.D.)	7/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"
Refrigerant Connection Size					
Liquid Valve Size ("O.D.)	3/8"	3/8"	3/8"	3/8"	3/8"
Suction Valve Size ("O.D.)	7/8"	7/8"	7/8"	7/8"	7/8"
Valve Connection Type	Front Sealing	Front and Back Sealing	Front and Back Sealing	Front and Back Sealing	Front and Back Sealing
Refrigerant Charge (oz.)	76	100	118	118	162
Expansion Device	EEV	EEV	EEV	EEV	EEV
Superheat at Service Valve	Auto-control	Auto-control	Auto-control	Auto-control	Auto-control
Subcooling at Service Valve	14±1°F	9±1°F	9±1°F	9±1°F	11±1°F
ELECTRICAL DATA					
Voltage / Phase (60 Hz)	208-230/1	208-230/1	208-230/1	208-230/1	208-230/1
Fan/Compressor Inverter Drive Input	17.6	25.4	30	30	24.5
Minimum Circuit Ampacity ²	22.4	31.8	37.5	37.5	34.4
Max. Overcurrent Protection ³	25	35	40	40	40
Min / Max Volts	197/253	197/253	197/253	197/253	197/253
Electrical Conduit Size	1/2"	1/2" or 3/4"	1/2" or 3/4"	1/2" or 3/4"	1/2" or 3/4"
EQUIPMENT WEIGHT (LBS)	132	168	179	179	236
SHIP WEIGHT (LBS)	147	185	198	198	271
ENERGY STAR® CERTIFIED					
ENERGY STAR® MOST EFFICIENT 2025					

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 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.

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Specifications (cont'd).

AMANA BRAND S-SERIES - HEAT PUMP OUTDOOR UNIT		
	AZV9SA 241CA*	AZV9SA 361CA*
CAPACITIES (AHRI RATED)		
Max. Cooling (BTU/h)-95F	24,000	36,000
Max. Heating (BTU/h)-47F	24,000	36,000
Max. Heating (BTU/h)-5F	24,000	36,000
AMBIENT OPERATION RANGE		
Cooling (°FDB(°CDB))	0 to 115 (-17.8 to 46.1)	
Heating (°FDB(°CDB))	-20 to 70 (-23.3 to 21.1)	
COMPRESSOR		
Type	Swing	Swing
CONDENSER FAN MOTOR		
Horsepower	2 x 0.32	2 x 0.32
REFRIGERATION SYSTEM		
Refrigerant Line Size ¹		
Liquid Line Size ("O.D.)	3/8"	3/8"
Suction Line Size ("O.D.)	7/8"	7/8"
Refrigerant Connection Size		
Liquid Valve Size ("O.D.)	3/8"	3/8"
Suction Valve Size ("O.D.)	7/8"	7/8"
Valve Connection Type	Front and Back Sealing	Front and Back Sealing
Refrigerant Charge (oz.)	162	162
Expansion Device	EEV	EEV
Superheat at Service Valve	Auto-control	Auto-control
Subcooling at Service Valve	11±1°F	9±1°F
ELECTRICAL DATA		
Voltage / Phase (60 Hz)	208-230/1	208-230/1
Fan/Compressor Inverter Drive Input	8.0	12.0
Minimum Circuit Ampacity ²	17.4	21.8
Max. Overcurrent Protection ³	20	25
Min / Max Volts	197/253	197/253
Electrical Conduit Size	1/2" or 3/4"	1/2" or 3/4"
EQUIPMENT WEIGHT (LBS)	230	230
SHIP WEIGHT (LBS)	265	265
ENERGY STAR® CERTIFIED		
ENERGY STAR® MOST EFFICIENT 2025		

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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.
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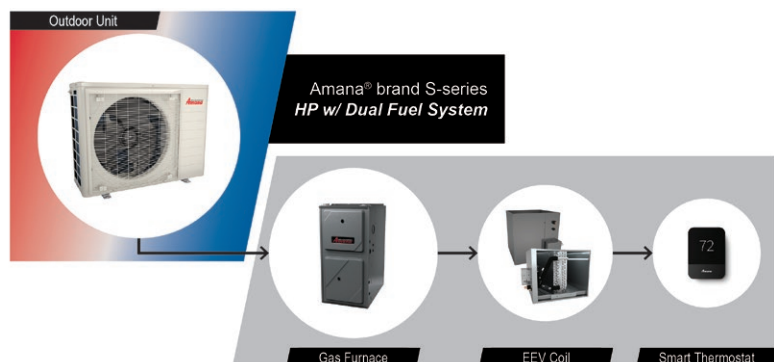
System overview.

A whole home solution.

The Amana brand S-series system is available in AC, heat pump, and dual fuel configurations. So, whether you are looking to replace your system before it breaks down or because it just has, trust the Amana brand, one of America's most trusted and enduring consumer brands, for your new indoor comfort system!



LEARN MORE AT
www.amana-hac.com



Compatible IAQ equipment.

CLEAN COMFORT® INDOOR AIR ESSENTIALS

Our complete family of Clean Comfort® products helps to improve indoor air quality.

Clean Comfort Indoor Air Essentials can help improve the quality and comfort of your home's indoor air. Components can be installed on the Amana brand S-series system and in virtually any home or installation.



Compatible indoor units



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:**
 - Outstanding heat transfer properties
 - Improve refrigerant balance between the Indoor and Outdoor units.
- **Variable-speed Electrically Commutated Motor (ECM):**
 - Provides gradual startup and shutdown for unobtrusive operation with lower energy consumption (compared to units without an ECM motor).
 - Constant low-speed operation for outstanding filtration and comfort levels.
- **Electronic Expansion Valve:**
 - Better utilization of the Evaporator.
 - Wide operation range.
- **Communicating:** Compatible with the Amana brand smart thermostat and other communicating Amana brand equipment.
- Available in both **115V and 230V configurations**
- Factory installed **R-32 detection sensor** designed for the lifetime of the coil



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 your 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.



MBVK Modular Blower.

- Communicating (Compatible with the Amana brand smart thermostat and other communicating Amana brand equipment).
- Variable-speed ECM indoor blower motor.
- Provides constant CFM over a wide range of static pressure conditions independent of duct system.
- CFM indicator.
- Fault recall of six most recent faults.
- Built-in dehumidification feature.
- Blower section usable as an electric furnace.
- 21-inch-deep cabinet for easy attic access.
- Control board includes a blower time-delay in the cooling mode.
- Foil-faced insulation lines the cabinet to help reduce operating sound and cabinet condensation.
- Horizontal or vertical configuration.
- Optional 3-stage heater kit available for cold climate products (field installed)



All Aluminum EEV Coils.

- Available in 1.5-Ton through 5-Ton capacities
- Dual fuel application is available for 1.5 ton to 5 ton CAPEA and CHPEA EEV coils
- AZV9S models can be paired with the new HE multi-position CAHEA EEV coil.
- Engineered for compatibility with Amana brand S-series AC and Heat Pump units
 - Multi-position EEV cased coil compatible only with All Climate Heat Pumps.
- Electronic Expansion Valve (EEV) models feature
 - Compatibility with the Amana brand smart thermostat and other Amana brand communicating equipment
 - Cooling and heat pump applications
 - Fault recall of six most recent faults
 - PID control loop for precision capacity control
- Seamless integration to full suite of Amana brand controls using communicating control board
- 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
- Single front access panel for easy installation and service access
- Lightweight all aluminum evaporator coil
- Ships factory standard upflow with easy field conversion to downflow



Amana® brand products average 4.7 out of 5 stars in homeowner satisfaction with thousands of reviews captured on **Amana** brand Heating and Air Conditioning products.

Don't just take our word for it...

See the reviews on
www.amana-hac.com/reviews.

AMANA IS SOCIAL!



www.amana-hac.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.

WARNINGS:

Always use a licensed installer or contractor to install this product. Do not try to install the product yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion.

Use only those parts and accessories supplied or specified by Goodman. Ask a licensed contractor to install those parts and accessories. Use of unauthorized parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.

Read the Product Manuals carefully before using this product. The Product Manuals provide important safety instructions and warnings. Be sure to follow these instructions and warnings.

For any inquiries, contact your local Goodman brand sales office.

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