

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



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, lowa, 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.



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



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





1934 Amana brand is founded by George Foerstner in Middle Amana, Iowa.



1957 First bottomfreezer refrigerator.



1986 Amana brand invents revolutionary tubular heat exchanger for gas furnaces.



_____ www.amana-hac.com

An American original brand continues to invest in the USA

While many other HVAC manufacturers have moved, or are planning to move production outside of the United States, 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 on research and development, manufacturing quality and reliability, robust sales networks and extensive support infrastructure.



2015 Daikin introduces its inverter technology into Amana brand premium cooling products.

2012 Daikin Industries, Ltd. acquired Goodman Global, Inc.



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.

by design.

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

SLIM

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.



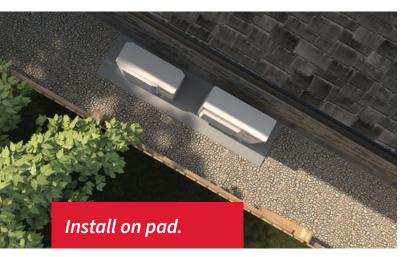
UNIT DIMENSIONS						
1.5-3 TON	3.5-5 TON					
W: 36.6" x D: 13.8" x H: 27.4"	W: 37" x D: 12.6" x H: 39"					



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.











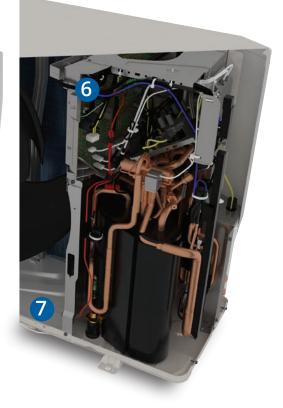


engineering.

Technology overview.

AC (ASXS6)

HEAT PUMP (ASZS6)



- **1** Variable-Speed DC Fan. High efficiency and low sound levels.
- **2** Blue Fin Corrosion Coating.
- **3** 7mm Coil.

High heat exchanger efficiency and compact casing design.

- Inverter Board Cooled by Refrigerant Circuit¹. Elimination of condenser fan pressure drop caused by heat sink used.
- Swing Compressor. High efficiency/low sound levels.

- 6 Intelligent Defrost Mode.
- **O** Advanced water-shedding drain pan.

6



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.

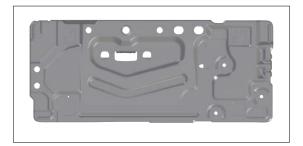




Advanced water-shedding drain pan technology.

Hot start 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.



Smart engineering (cont'd).

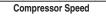




Dehumidification.

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.



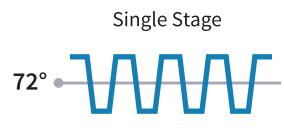
Min

DEHUMIDIFICATION LEVELS							
STANDARD	А	В	С				
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%				

Max

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.



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

(INVERTER)

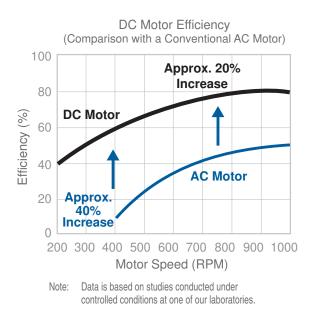


Minimizes the temperature swings often found with single-stage equipment, allowing for steady and consistent indoor comfort.

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).

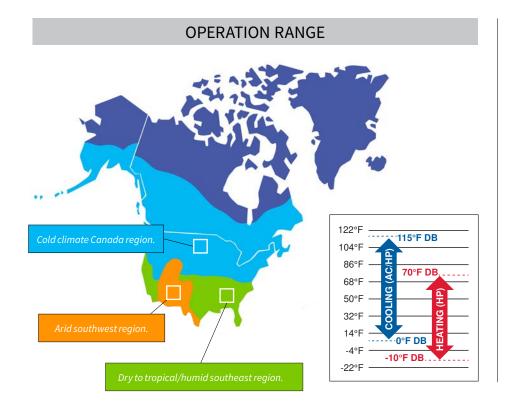
The enhanced functionality of the variable-speed DC fan motor can offer an increase of approximately 20% in efficiency (compared to systems with a conventional AC motor).



Smart engineering (cont'd).

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.



PIPING RANGE											
	CONNECTING PIPING (maximum)										
	1.5 - 5 TON										
	LENGTH HEIGHT										
		100	FT.			90	FT.				
	ALLOWABLE LINE SET DIAMETER										
ι	INIT		LIQUID)		SUC	TION				
Т	ONS	1/4"	5/16"	3/8"	5/8"	3/4"	7/8"	1 1/8"			
	1.5	Х	Х	Х	X	Х					
	2.0		X2	Х	X	Х					
	2.5		X2	Х		X	Х				
	3.0		X ² X			X	Х				
	3.5			Х			Х	Х			
	4.0			Х		Х					
_	5.0	Х Х Х									
Х	All	owabl	e comb	inatio	n						
	For marked combinations, if normal										
1	1 ambient operation temperature is less than										
	14	°F, limi	t line se	et leng	th to 5	0 ft. ma	ax.				
	Fo	r mark	ed com	nbinati	ons, lir	ne set					
2			ll have			of 25					
	ft.	and a	maxim	um of T	70 ft.						



10



and connected.

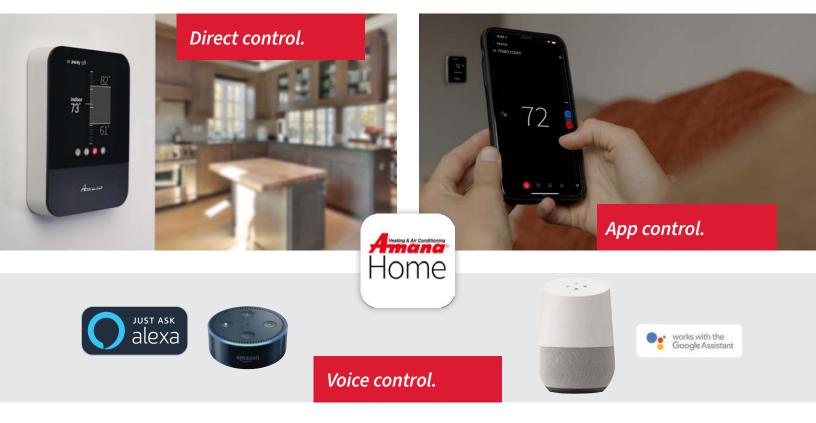
Introducing the Amana[•] brand smart thermostat.

SMART

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 new **Amana** brand home 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).







Home Screen.

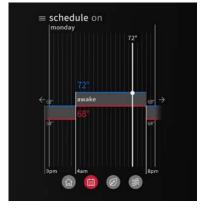
A simple, central **home screen** displays the current temperature, the current mode, and a slider for adjusting the temperature. The top-level screens are accessible through icons at the bottom of this screen.





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.

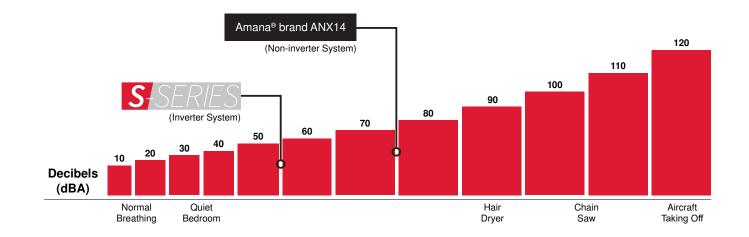


you barely hear.

Say goodbye to a noisy outdoor unit.

SOUND

With sound levels as low as 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. 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.

SAV/NGS that matter.

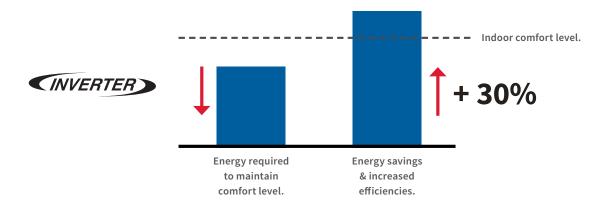
Efficiency and quality.

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 Heat Pump Up to 17.2 SEER2 Up to 17.5 SEER2 / Up to 8.5 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.



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 a 10-year parts and a Lifetime Unit Replacement limited warranties*.



* Complete warranty details available from your local dealer or at www.Amana-hac.com. To receive the Lifetime Unit Replacement Limited Warranty (good for as long as you own your home) and 10-Year Parts Limited Warranty, online registration must be completed within 60 days of installation. Online registration is not required in California or Quebec. The duration of warranty coverages in Texas differs in some cases.

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.



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 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.

sure DED SERVICE

How Affordable is Asure?

Isn't your comfort worth only pennies a day? Asure eliminates the cost of unbudgeted system repairs. You will never be faced with a deductible. 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											
	ASXS6 S1810A*	ASXS6 S2410A*	ASXS6 S3010A*	ASXS6 S3610A*	ASXS6 S4210A*	ASXS6 S4810A*	ASXS6 S6010A*	ASXS6 01810A*	ASXS6 02410A*	ASXS6 03010A*	ASXS6 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											
Туре	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											
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"	11/8"	11/8"	11/8"	3⁄4"	3⁄4"	%"	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"	%"	3⁄4"	3⁄4"	7∕8"	7∕8"
Valve Connection Type	Ŭ	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-contro
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	1⁄2"	1⁄2"	1⁄2"	1/2"	1⁄2" or 3⁄4"	½" or ¾"	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

 $^{\rm 1}$ 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 $\%^{\prime\prime}$ to $1\%^{\prime\prime}$ adapters for suction line connections.

» Unit is charged with refrigerant for 15' of X" liquid line. System charge must be adjusted per Installation Instructions Final Charge Procedure.

(See table below for allowable line set diameter)



AMANA BRAND S-SERIES - HEAT PUMP OUTDOOR UNIT										
	ASZS6 01810A*	ASZS6 02410A*	ASZS6 03010A*	ASZS6 03610A*	ASZS6 04210A*	ASZS6 04810A*	ASZS6 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	o 115 (-17.8 to 4	6.1)					
Heating (°FDB(°CDB))			-10	to 70 (-23.3 to 2	21.1)					
COMPRESSOR										
Туре	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										
Liquid Line Size ("O.D.)	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3⁄8"			
Suction Line Size ("O.D.)	3/411	3⁄4"	78"	78"	11/8"	11/8"	11/8"			
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.)	3/411	3/4"	7⁄8"	7⁄8"	7⁄8"	7⁄8"	78"			
Valve Connection Type	Front Sealing	Front Sealing	Front Sealing	Front Sealing		Front and Back				
Refrigerant Charge (oz.)	81	81	88	88	Sealing 118	Sealing 118	Sealing 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	10_11			10_11	0_11	5111	5111			
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	208-230/1	208-230/1	34.4	34.4	36.2			
Max. Overcurrent Protection	14.0	20	25	25.5	35	34.4	40			
Min / Max Volts	197/253	197/253	197/253	197/253	197/253	197/253	197/253			
Electrical Conduit Size	197/255	197/255	197/255	1977255	197/255 ½" or ¾"	197/255 ½" or ¾"	197/255 ½" or ¾"			
EQUIPMENT WEIGHT (LBS)	122	122	132	137	168	168	179			
	122			137		185				
Ship Weight (lbs)	137	137	147	151	185	192	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

 $^{\rm 3}$ Must use time-delay fuses or HACR-type circuit breakers of the same size as noted.

NOTES

» Installer will need to supply %'' to 1%'' adapters for suction line connections.

» Unit is charged with refrigerant for 15' of 1/" liquid line. System charge must be adjusted per Installation Instructions Final Charge Procedure.

(See table below for allowable line set diameter)

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





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.



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 energyefficient performance as compared to single-speed blowers.

Compatible indoor units (cont'd).



MBVC 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 timedelay in the cooling mode.
- Foil-faced insulation lines the cabinet to help reduce operating sound and cabinet condensation.
- Horizontal or vertical configuration.



All Aluminum EEV Coils.

- Available in 1.5-Ton through 5-Ton capacities
- Engineered for compatibility with
 Amana brand S-series AC and Heat
 Pump units
 - CAPEA: Compatible with
 Amana brand S-series AC units
 - CHPE is for horizontal applications - compatible with
 Amana brand S-series AC units
- 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
- 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)

Compatible IAQ equipment.

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.



CLEAN COMFORT







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!

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



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.





A DAIKIN BRAND

Our continuing commitment to quality products may mean a change in specifications without notice. © 2022 DAIKIN COMFORT TECHNOLOGIES NORTH AMERICA, INC. · Houston, Texas · USA · www.amana-hac.com

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