BOSCH
Invented for life

Inverter Ducted Split Air Source Heat Pump

System with Inverter Technology

Simply Smart

The robust Bosch Inverter Ducted Split Air Source Heat Pump system utilizes just the right amount of energy to achieve ultimate comfort and maximum efficiency while keeping sound levels to a minimum.

boschheatingandcooling.com

Comfort Cruise Control

Inverter Ducted Split Heat Pump System
with Variable Speed, High-Efficiency Inverter Drive

Quality engineering, quiet performance and an unbeatable warranty from Bosch delivers exceptional home comfort. Whether heating or cooling, our reliable inverter heat pumps keep homeowners comfortable by providing precise indoor temperature and humidity control. These high-efficiency, robust and quiet Inverter Ducted Split system heat pumps are available in four sizes ranging from 2 to 5 ton capacity to suit your needs. This system boasts a variable speed inverter drive which adjust the speed of the compressor to optimize comfort, while keeping sound levels to a minimum and utilizing just the right amount of energy to achieve maximum efficiency up to 18 SEER for lower energy bills and higher comfort levels.

UP TO **18** SEER

AS LOW AS **56** dBA SOUND(1)

Key Features & Benefits

- **Ultra-efficient inverter drive system delivers up to 18 SEER and towers over 1 and 2-stage systems**
- **Variable capacity control to precisely match the cooling/heating load - no more no less**
- **One of the quietest and most compact air-to-air systems with outdoor sound levels as low as 56 dBA(1)**
- **Delivers ultimate comfort through stable room temperature using your choice of thermostat**
- **10-year Residential Limited Warranty**

(1) 56 dBA sound level is based on outdoor unit.

Why Choose the Inverter Ducted Split System

Consistent Room Temperature
No Ups and Downs, Ons and Offs
Conventional heat pumps frequent cycling on and off can result in uncomfortable temperature fluctuations while inverter-driven pumps are able to self-adjust, providing consistent room temperature, even when the outdoor temperature dips to 5º F.

Consume Only the Energy You Need
Modulating inverter systems deliver only the amount of hot or cool air needed to achieve the desired temperature – no more, no less. With an 18 SEER rating and 9.5 HSPF, the Inverter Ducted Split system can provide you with maximum comfort levels at a minimum cost.

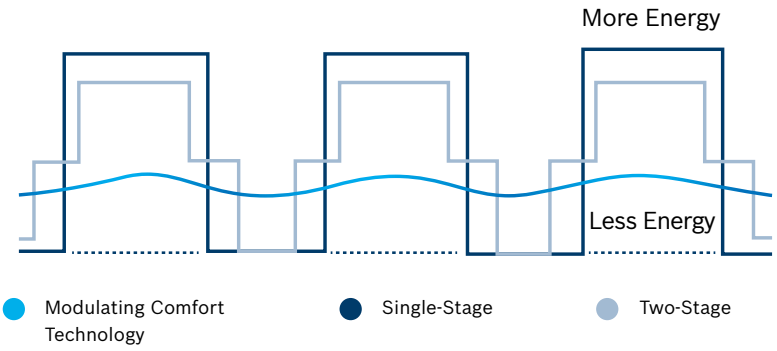
Quiet Comfort Achieved
The Bosch Inverter Ducted Split system is one of the quietest air-to-air systems on the market. Through the use silent blade technology, sound isolating mounts and outdoor condensing section placement - the system can deliver outdoor sound levels as low as 56 dBA - which is far superior to any standard system on the market.

Heats Up Quickly for Fast Response
It takes traditional systems a long time to reach the homeowner's desired temperature, while the boosted compressor speed of inverter systems allow for quicker, smoother and more efficient heating and cooling.

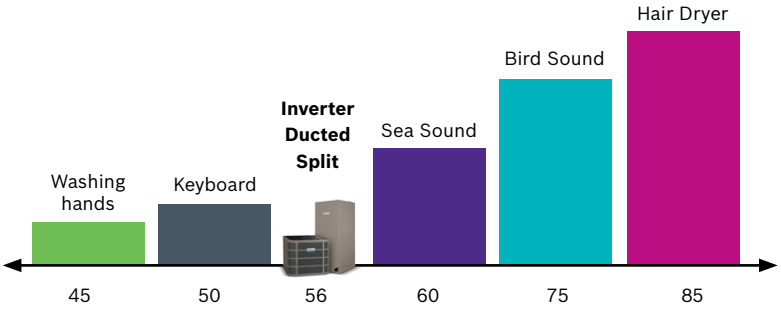
Intelligent Control
The system along with an appropriate thermostat can learn your preferences, and adjust the output capacity to match your ideal temperature levels. The units also are compatible with any traditional thermostat.

Energy Use is Even and Steady
The frequent on and off of traditional units creates an in-rush current surge which uses more energy and causes unneeded wear and tear on your system. The Bosch inverter system smoothly ramps up operation, avoids spikes in energy use and protects the system's life-cycle.

Energy Use Comparison
Traditional vs. Modulating Inverter Technology

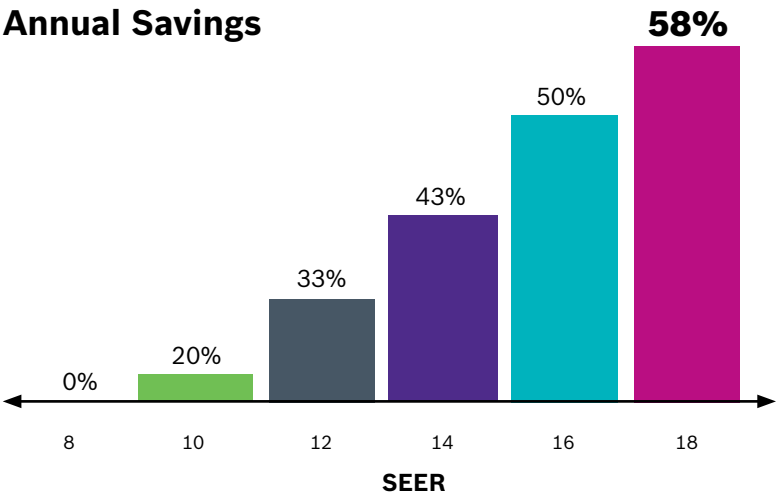


Comparison Sound Ratings
(Decibels)



The lowest average sound rating is 56 dBA for the Inverter Ducted Split 3 and 4 Ton unit. Based on a weighted overall (dBA), according to AHRI-260:2001(100hz-10kHz). Actual sound rating may vary depending on system setting, equipment maintenance, and other factors that may affect the sound rating.

Annual Savings

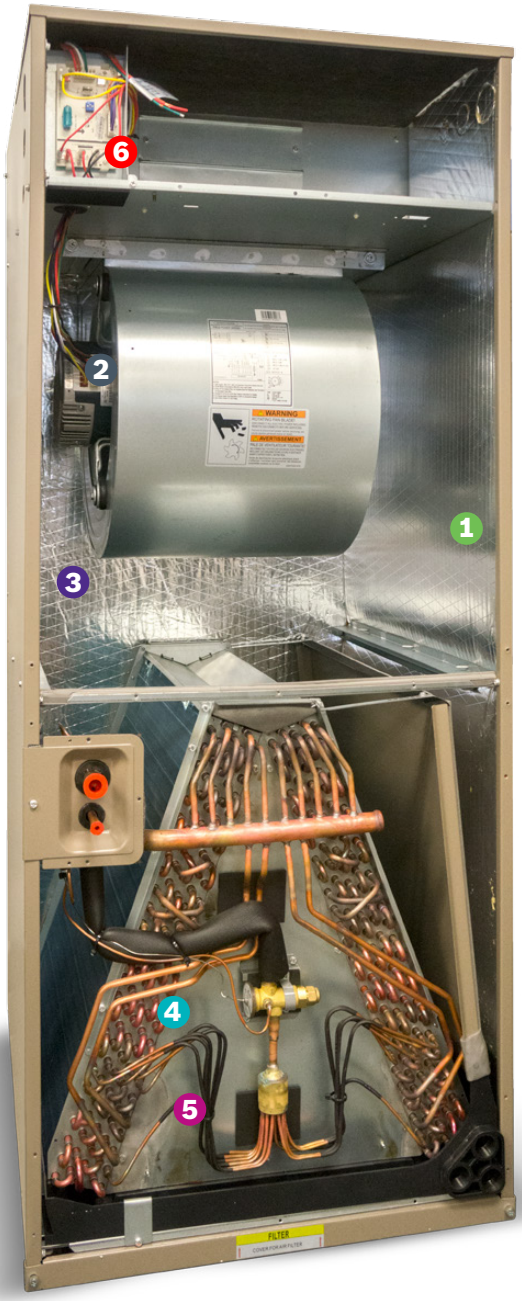


Annual savings for cooling your home, based on the efficiency of a matched system. Potential energy savings may vary depending on your personal lifestyle, system settings, equipment maintenance, local climate, actual construction and installation of equipment and duct system.

Quality Inside and Out

The Bosch Inverter Ducted Split system provides supremely-efficient comfort by adjusting operating speeds rather than a simple on/off control like other units, thereby reducing operating costs and saving you money. These robust and durable units are made with the Bosch quality you expect and deserve. The system's intelligent features work in tandem with your thermostat to automatically learn your preferences, while integrated sound dampening features keep the units nice and quiet for your peace of mind.

Robust and Reliable **Indoor Air Handler**



1. Bosch offers a complete range of air handler units from 2 through 5 ton sizes. These units are robust and constructed with a commercial-grade, powder-coated steel for durability. The unit comes standard for upflow applications. These cabinets are field convertible for horizontal right, horizontal left, or downflow/counterflow applications.

2. The blower motor is a constant torque ECM motor and comes standard in all size units. These intuitive motors can deliver comfortable air flow at quiet sound levels, while adapting to changing conditions in your home. Additionally, the unit is a true modulating unit by varying the compressor speed for smooth temperature transitions and ultimate humidity control within the home.

3. Foil faced insulation helps to prevent fibers entering the air stream and ensure against energy loss through the cabinet.

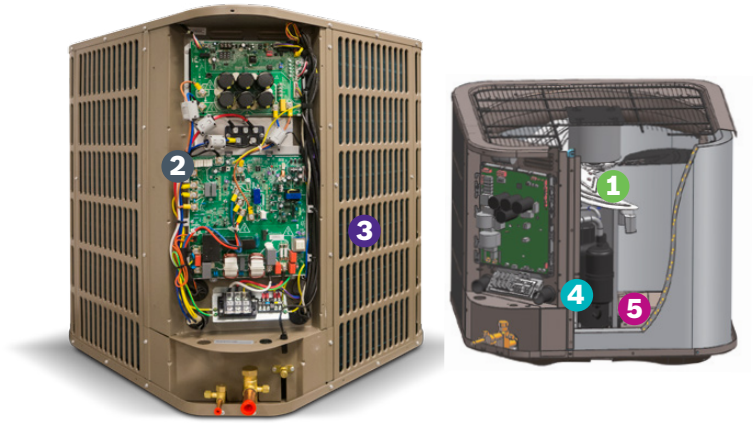
4. The A-Coil is a specifically designed evaporator coil shape that has a low static pressure drop and high efficiency heat transfer capabilities along with latent heat (humidity) removal.

5. Bosch's A-Coil includes two drain pans to accommodate vertical or horizontal installation. Auxiliary drain connections are available should local code require an auxiliary drain pan. The drain pans are made of corrosion-resistant composite material for strength and durability rated to withstand 400º F. For your protection, both drain pans have also been tested to resist UVC light.

6. Electric heat can be added to the air handler for additional heat on-demand when you need it most.

Note: Plenum section may be required based on flow configuration.

High-Efficiency Outdoor **Condensing Section**



1. The direct-drive fan blades provide vortex suppression to reduce sound of airflow exiting the condensing section, thereby retaining relatively low noise at high speed - with sound levels as low as 56 dBA.

2. Intelligent control features help adjust the output capacity allowing the unit to keep the temperature at your desired level without fluctuation and to keep humidity in check during the summer months. Whether it be the summer or winter, the system keeps your home comfortable and the living conditions to your desired taste.

3. The air coil design provides exceptional heat transfer and low air-resistance for high-efficiency operation that can help lower your energy costs.

4. The high-efficiency variable capacity inverter compressor can adjust output to any level between 25% and 110%, to perfectly cool and heat your home using minimal energy for maximum comfort.

5. The condensing units come standard with an electronic expansion valve (EEV) to ensure proper refrigerant flow during all conditions in order to optimize the unit's process to the highest efficiency possible.

Residential Limited Warranty(2)

With the residential limited warranty, you receive peace-of-mind knowing you will receive replacement parts protection for up to 10 years. This standard offering covers all components incorporated into the heat pump system at the time of manufacture. All other components or parts that are purchased from Bosch and installed in the field have a 1-year parts warranty.

(2) Please go to boschheatingandcooling.com for full limited warranty details

Dependable and Multi-Positional Cased Coils

The Inverter Ducted Split Evaporator Coil, when paired with a furnace or a Bosch hydronic air handler along with an IDS outdoor condensing section, will deliver some of the best comfort levels and efficiency on the market today. Bosch offers a complete range of cased evaporator coils to fit your needs.

Cased evaporator coil

Cased evaporator coil displaying dual drain pan

Slide-out for uncased coil application

1. Bosch offers a complete range of 10 evaporator coil models from 2 through 5 ton sizes in all orientations including upflow, downflow and horizontal to fit all duct sizes and meet your needs. Bosch cased coils can be easily installed for retrofit using simple slide-out feature or new construction applications.

2. The cased evaporator coils are constructed with heavy duty commercial grade powder-coated steel for durability.

3. The cased evaporator coils include easy-to-clean foil-back insulation which helps to ensure against energy loss through the cabinet as well as keeping the unit quiet.

4. All-Aluminum fins with aluminum tubing help to prevent formicary corrosion while maintaining the high heat transfer efficiency thereby increasing longevity and cost savings of the unit.

5. The A-Coil is a specifically designed evaporator coil shape that allows for low static pressure drop and high efficiency heat transfer capabilities along with optimum latent (water) removal. The units come standard with a thermal expansion valve (TXV) to ensure proper refrigerant flow during all conditions in order to optimize the unit's process to the highest efficiency possible.

6. Bosch's cased coil includes bottom and side drain pans so the unit can be mounted horizontally or vertically. The pans help reduce the build-up of mold, bacteria and airborne pollutants no matter the orientation. The pans are made of a strong recognized rated 94-5V (QMFZ2) plastic, and poly-vinyl chloride (PVC) for strength and durability. For your protection, both drain pans have also been tested to resist UVC light.

Technical Information

Product – Simply Smart

- 18 SEER / 9.5 HSPF
- Fully-modulating inverter drive
- Sound levels as low as 56 dBA
- 4 Air handlers – 2, 3, 4, 5 Ton
- 2 Condensing units – 3 and 5 Ton
- No special thermostat needed
- Operates down to 5º F
- Bosch quality

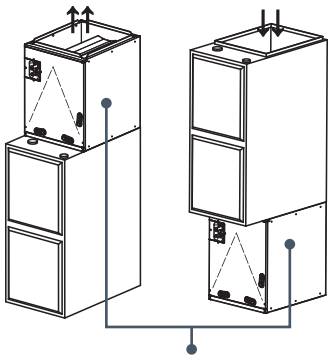
Field Friendly – Adaptive Technology

- Simple to install
- Simple to setup
- Simple controls
- Simple to understand
- Simple to support
- Field installed electric heater kits

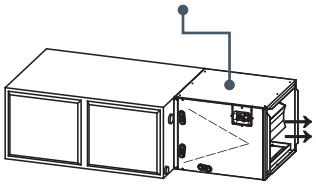
Bosch Advantages

- 10-year residential limited warranty

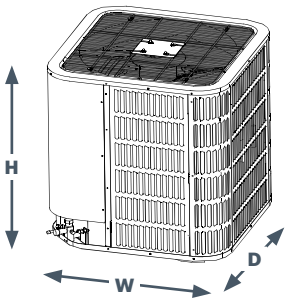
Bosch hydronic air handler paired with IDS cased evaporator coil and Greentherm 9000 water heater

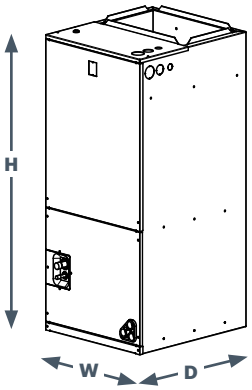


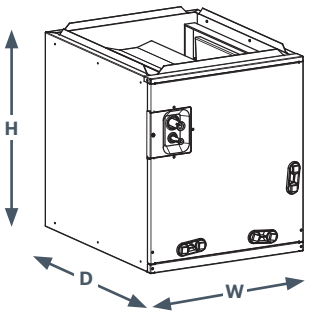
Upflow and downflow cased coil orientation with furnace

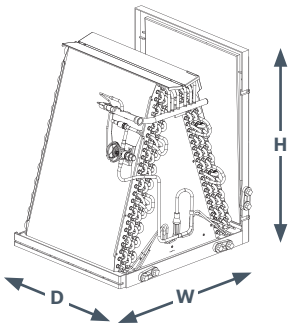


Horizontal cased coil orientation with furnace









AIR HANDLER DIMENSIONS (IN INCHES)			
MODEL SIZE	WIDTH (W)	HEIGHT (H)	DEPTH (D)
024	19.625	46.5	21.625
036	19.625	46.5	21.625
048	22.0	54.5	24.0
060	22.0	54.5	24.0
CONDENSING SECTION DIMENSIONS (IN INCHES)			
MODEL SIZE	WIDTH (W)	HEIGHT (H)	DEPTH (D)
036	29.125	24.9375	29.125
060	29.125	33.1875	29.125

CASED COIL DIMENSIONS (IN INCHES)			
MODEL NUMBER	WIDTH (W)	HEIGHT (H)	DEPTH (D)
BMAC2430ANTD	14.5	20.0	21.0
BMAC2430BNTD	17.5	20.0	21.0
BMAC3036ANTD	14.5	20.0	21.0
BMAC3036BNTD	17.5	20.0	21.0
BMAC3036CNTD	21.0	20.0	21.0
BMAC4248BNTF	17.5	30.0	21.0
BMAC4248CNTF	21.0	30.0	21.0
BMAC4248DNTF	24.5	30.0	21.0
BMAC4860CNTF	21.0	30.0	21.0
BMAC4860DNTF	24.5	30.0	21.0

Performance Information

INVERTER DUCTED SPLIT AHRI 210/240 PERFORMANCE DATA								
MODEL SIZE	INDOOR UNIT	COOLING CAPACITY (BTU/H)			HEATING CAPACITY			CFM
	COILS/AIR HANDLERS	TOTAL	SEER(3)	EER(4)	HI	HSPF(5)	LOW	
036 CS	024 AHU	24000	18.5	13.0	24000	9.5	19000	800
036 CS	036 AHU	34600	17.5	11.4	34200	9.0	24000	1120
060 CS	048 AHU	47000	18.5	12.5	46500	9.5	35000	1560
060 CS	060 AHU	57000	17.5	11.2	55000	9.5	40000	1700

INVERTER DUCTED SPLIT ORDER INFORMATION	
PART NUMBER	DESCRIPTION
7739832068	ODU, 36kBTU, Inverter Condensing Unit
7739832070	ODU, 60kBTU, Inverter Condensing Unit
7739832071	IDU, 24kBTU, Air Handler Unit
7738005278	IDU, 36kBTU, Air Handler Unit
7739832073	IDU, 48kBTU, Air Handler Unit
7739832074	IDU, 60kBTU, Air Handler Unit
7739832075	Electrical Heater EHK-05A
7739832076	Electrical Heater EHK-08A
7739832077	Electrical Heater EHK-10A
7739832078	Electrical Heater EHK-15A
7739832079	Electrical Heater EHK-20A

	CASED COIL AHRI 210/240 PERFORMANCE DATA									
MODEL NUMBER	PART NUMBER	PAIRING BOSCH ODU MODEL NUMBER	PAIRING FURNACES	COOLING CAPACITY (BTU/H)			HEATING CAPACITY			CFM
				TOTAL	SEER(3)	EER(4)	HI	HSPF(5)	LOW	
BMAC2430ANTD	8733947947	BOVA-36 (2Ton)	14-1/2" Wide Furnaces	23400	15.0	11.5	24000	9.0	17200	700
BMAC2430BNTD	8733947948	BOVA-36 (2Ton)	17-1/2" Wide Furnaces	23400	15.0	11.5	24000	9.0	17200	700
BMAC3036ANTD	8733947950	BOVA-36 (3Ton)	14-1/2" Wide Furnaces	32000	14.5	10.0	35000	9.0	22000	900
BMAC3036BNTD	8733947951	BOVA-36 (3Ton)	17-1/2" Wide Furnaces	32400	14.5	10.0	35000	9.0	23000	1000
BMAC3036CNTD	8733947952	BOVA-36 (3Ton)	21" Wide Furnaces	32400	14.5	10.0	35000	9.0	23000	1000
BMAC4248BNTF	8733947953	BOVA-60 (4Ton)	17-1/2" Wide Furnaces	44500	16	11.0	45500	9.5	31000	1150
BMAC4248CNTF	8733947954	BOVA-60 (4Ton)	21" Wide Furnaces	46000	16	11.0	47000	9.5	32000	1300
BMAC4248DNTF	8733947955	BOVA-60 (4Ton)	24-1/2" Wide Furnaces	46000	16	11.0	48000	9.5	32000	1400
BMAC4860CNTF	8733947956	BOVA-60 (5Ton)	21" Wide Furnaces	54000	16	10.5	55500	9.5	32000	1300
BMAC4860DNTF	8733947957	BOVA-60 (5Ton)	24-1/2" Wide Furnaces	55000	16	10.5	56000	9.5	39000	1500

(3) Seasonal Energy Efficiency Ratio; Certified per AHRI 210/240
(4) Energy Efficiency Ratio; Certified per AHRI 210/240
(5) HSPF = Heating Seasonal Performance Factor; Certified per AHRI 210/240

- Always check the rating plate for electrical data on the unit being installed.
- The listed data is for reference only. Please consult boschheatingandcooling.com for further details.

Bosch Thermotechnology Corp.
Londonderry, NH • Fort Lauderdale, FL • Williston, VT
Inquiries and support: 1-800-283-3787
boschheatingandcooling.com

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