



Comfort-Cire®

Heating & Air Conditioning Products

AITONS EQUIPMENT

1-888-744-2911 WWW.aitons.com

A **MPS** Company

Table of Contents

The Source

Room Air Products

Ductless Mini-Split Systems

Split System Residential

Residential Package

Gas & Oil Furnaces

Geothermal & Water Source Heat Pumps

2013

PRODUCT GUIDE



Comfort-Cure®

TABLE OF CONTENTS

This guide shows the full range of Comfort-Aire products for residential and commercial use. For more details on specific products, see our web site, www.century-hvac.com, or talk to your Comfort-Aire representative.

Condensers	1
Heat Pumps.....	2
Air Handlers.....	3-4
Cased and Uncased Coils.....	4
Gas Furnaces.....	4-5
Oil Furnaces	6
Residential Package Units.....	6
Room Air Products.....	7-8
Ductless Mini-Splits	9
Geothermal and Water Source.....	10-12



All cooling products in this catalog are charged with or compatible with environmentally friendly R-410A except as noted in description.

All product voltages are single phase except as noted in description.

Design, specifications, and performance data are subject to change without notice as part of our ongoing product improvement process.

All products meet applicable regulatory standards including AHRI certification and ASHRAE standards where applicable. Details are shown in product brochures on our web site.

To qualify for ENERGY STAR, a product model shall meet the ENERGY STAR specification in effect on the date of manufacture. The date of manufacture is specific to each unit and is the date on which a unit is considered to be completely assembled.

Future Specification Revisions: EPA reserves the right to change the specification should technological and/or market changes affect its usefulness to consumers, industry, or the environment. In keeping with current policy, revisions to the specification are arrived at through industry discussions. In the event of a specification revision, please note that the ENERGY STAR qualification is not automatically granted for the life of a product model.

Incentive and rebate programs have precise requirements as to product performance and certification through such organizations as ENERGY STAR and AHRI. It is the responsibility of the consumer to determine whether a specific model qualifies for these incentive/rebate programs.

Comfort-Aire®

RSG16 Condensing Units

16 SEER

16 SEER Model	Nom. BTUH	Dimensions (in.) W x D x H
RSG1624S1E	24,000	22¾ x 22¾ x 35½
RSG1630S1E	30,000	30¾ x 30¾ x 27½
RSG1636S1E	36,000	30¾ x 30¾ x 39½
RSG1642S1E	42,000	30¾ x 30¾ x 43½
RSG1648S1E	48,000	30¾ x 30¾ x 43½
RSG1660S1E	60,000	30¾ x 30¾ x 43½

2 to 5 Tons

208/230V-1-60

AHRI matched to CMG/MMG/VMG coils and HCG Series air handlers.

Micro-channel coils are efficient and highly corrosion resistant (1660 has copper tube/aluminum fin coil). Heavy duty scroll compressor adds efficiency and long life. Cabinet is steel with durable polyester urethane finish and heavy duty top grille assembly. Features full metal jacket, quiet operation, composite base pan and waterproof control box. Can be slab- or rooftop-mounted.



RSG Condensing Units

Scroll compressor for efficiency and long life. Features full metal jacket to protect the coil, quiet operation, easy access control box and all aluminum micro-channel coils (except RSG1460). PSC motor is permanently lubricated, needs no maintenance. SEER ratings/capacities vary depending on air handler or coil used.

13-14 SEER Model	Nom. BTUH	14-15 SEER Model
RSG1318S1E	18,000	RSG1418S1E
RSG1324S1E	24,000	RSG1424S1E
RSG1330S1E	30,000	RSG1430S1E
RSG1336S1E	36,000	RSG1436S1E
RSG1342S1E	42,000	RSG1442S1E
RSG1348S1E	48,000	RSG1448S1E
RSG1360S1E	60,000	RSG1460S1E



1½ to 5 Tons

208/230V-1-60

13-14 SEER Model	BTUH* Cooling	Dimensions (in.) W x D x H
RSG1318R1E	17,400	22¾ x 22¾ x 23½
RSG1324R1E	22,800	22¾ x 22¾ x 27½
RSG1330R1E	28,800	22¾ x 22¾ x 27½
RSG1336R1E	35,400	22¾ x 22¾ x 35½

* Shown with Heat Controller CCG/MCG/VCG coils or HMG air handler.; minimum 13 SEER. SEER ratings and capacities vary depending on air handler or coil used.

Builders Series Condensing Units

Built with rotary compressors and PSC motors for reliability. Features include metal jacket, micro-channel all-aluminum coil to resist corrosion. Top grille assembly for easy access to components.

208/230V-1-60

1½ to 3 Tons



Dry R-22 Condensers

Designed as a replacement for existing R-22 systems. Units come with dry nitrogen charge that's exhausted before charging with R-22. Features scroll compressor and full metal jacket. SEER ratings/capacities vary depending on air handler or coil used.

1½ to 5 Tons

208/230V-1-60

13-14 SEER Model	Nom. BTUH	Dimensions (in.) W x D x H
RSN1318S1E	18,000	22¾ x 22¾ x 23
RSN1324S1E	24,000	22¾ x 22¾ x 23
RSN1330S1E	30,000	22¾ x 22¾ x 27
RSN1336S1E	36,000	22¾ x 22¾ x 27
RSN1342S1E	42,000	30¾ x 30¾ x 31
RSN1348S1E	48,000	30¾ x 30¾ x 31
RSN1360S1E	60,000	30¾ x 30¾ x 31

13-14 SEER Model	BTUH Cooling*	BTUH Heating*	HSPF*
HRG1318S1E	18,000	19,000	8.0
HRG1324S1E	23,000	24,800	8.0
HRG1330S1E	28,800	30,800	8.0
HRG1336S1E	34,800	36,800	8.0
HRG1342S1E	40,000	42,000	7.8
HRG1348S1E	47,500	47,500	8.0
HRG1360S1E	57,500	60,500	8.0
14-15 SEER Model	BTUH Cooling**	BTUH Heating**	HSPF**
HRG1418S1E	19,200	18,800	8.5
HRG1424S1E	23,400	24,600	8.5
HRG1430S1E	28,400	29,400	8.5
HRG1436S1E	34,800	33,600	8.5
HRG1442S1E	39,500	38,000	8.5
HRG1448S1E	45,500	44,000	8.2
HRG1460S1E	59,000	52,500	8.2

HRG13: Minimum SEER 13; HRG14: Minimum SEER 14

HRG Heat Pumps

High efficiency heat pumps available in 13 and 14 SEER models. Built with scroll compressors for efficiency and reliability. Long life copper coils with aluminum fins optimize heat transfer. Time/temperature defrost. PSC motor is permanently lubricated. Full metal jacket is galvanized steel with polyester urethane coating for durability, corrosion resistance.



208/230V-1-60

1½ to 5 Tons

* Capacities shown with HMG air handlers; capacities will vary slightly with other air handlers or coils.

**Capacities shown with HCG variable speed air handlers; capacities will vary slightly with other air handlers or coils.



1½ to 5 Tons

Dry R-22 Heat Pumps

Designed as replacements for existing R-22 systems, features scroll compressor for efficiency and full metal jacket for durability. Time/temperature defrost offers a variety of settings. SEER ratings/capacities will vary slightly depending on air handler or coil used.

208/230V-1-60

13-14 SEER Model	Nom. BTUH Cool & Heat	Dimensions (in.) W x D x H
HRN1318S1E	18,000	30¾ x 30¾ x 27
HRN1324S1E	24,000	30¾ x 30¾ x 27
HRN1330S1E	30,000	30¾ x 30¾ x 39
HRN1336S1E	36,000	30¾ x 30¾ x 43
HRN1342S1E	42,000	30¾ x 30¾ x 39
HRN1348S1E	48,000	30¾ x 30¾ x 43
HRN1360S1E	60,000	30¾ x 30¾ x 43

HRG16 Heat Pumps

16 SEER

16 SEER Model	Nom. BTUH	Dimensions (in.) W x D x H
HRG1624S1E	24,000	31 x 31 x 43½
HRG1636S1E	36,000	31 x 31 x 43½
HRG1648S1E	48,000	31 x 31 x 43½
HRG1660S1E	60,000	31 x 31 x 43½

2 to 5 Tons

208/230V-1-60

Common suction service port saves time by allowing the contractor to read suction pressures in all operational modes without removing access panels.

Copper tube/aluminum fin coil are designed for maximum heat transfer. Copeland scroll compressor has two stages of heating/cooling capacities. Cabinet is steel with durable poly urethane finish and heavy duty top grille assembly. Full metal jacket protects the coil. Composite base pan is corrosion resistant and waterproof control box. Can be slab- or rooftop-mounted.



Comfort-Aire

FMG Wall Mount Air Handler



1 1/2 to 3 Tons

Two models available: FMG-F1E with PSC blower motor and flowrator, rated at 13 SEER; and FMG-X1E with ECM blower motor and TXV, rated up to 15 SEER (with Comfort-Aire matched units). Fully insulated cabinet, front and/or bottom return air. Offset hanging bracket included. Optional decorative louvered panel is available.

208/230V-1-60

Model	Cap. Tons	Matched Condensers	SEER	Matched Heat Pumps
FMG18--F1E	1.5	RSG1318S1E	13.0	HRG1318S1E
FMG24--F1E	2.0	RSG1324S1E, RSG1324R1E	13.0	HRG1324S1E
FMG30--F1E	2.5	RSG1330S1E, RSG1330R1E	13.0	HRG1330S1E
FMG36--F1E	3.0	RSG1336S1E, RSG1336R1E	13.0	HRG1336S1E
FMG18--X1E	1.5	RSG1418S1E	15.0	HRG1418S1E
FMG24--X1E	2.0	RSG1424S1E	15.0	HRG1424S1E
FMG30--X1E	2.5	RSG1430S1E	15.0	HRG1430S1E
FMG36--X1E	3.0	RSG1436S1E	15.0	HRG1436S1E

Dashes in the part numbers are for digits indicating factory installed heater kit, 05, 08, 10 kW; example: FMG1808F1E.



HMG Air Handler

Multi-position (upflow, downflow, horizontal or vertical, and multi-speed). Optional plug-in electric heater kits available in 5 to 30 kW. Micro-channel A-coil for efficiency and corrosion resistance. Durable cabinet has polyester urethane finish, and blower cabinet is insulated.

13 SEER

Model	Cap. Tons	Matched Units		
HMG24F1E	1.5, 2.0	RSG1318S1E, RSG1324S1E	RSG1318R1E, RSG1324R1E	HRG1318S1E, HRG1324S1E
HMG30F1E	2.5	RSG1330S1E	RSG1330R1E	HRG1330S1E
HMG36F1E	3.0	RSG1336S1E		HRG1336S1E
HMG42F1E	3.5	RSG1342S1E	RSG1336R1E	HRG1342S1E
HMG48F1E	4.0	RSG1348S1E		HRG1348S1E
HMG60F1E	5.0	RSG1360S1E		HRG1360S1E

1 1/2 to 5 Tons

208/230V-1-60

Model	Cap. Tons	Matched Condensers	Matched Heat Pumps
HCG24V1E	1.5, 2.0	RSG1318S1E, RSG1324S1E, RSG1418S1E, RSG1424S1E	HRG1318S1E, HRG1324S1E, HRG1418S1E, HRG1424S1E
HCG30V1E	2.5	RSG1330S1E, RSG1430S1E	HRG1330S1E, HRG1430S1E
HCG36V1E	3.0	RSG1336S1E, RSG1436S1E	HRG1336S1E, HRG1436S1E
HCG42V1E	3.5	RSG1342S1E, RSG1442S1E	HRG1342S1E, HRG1442S1E
HCG48V1E	4.0	RSG1342S1E, RSG1442S1E, RSG1348S1E, RSG1448S1E	HRG1342S1E, HRG1442S1E, HRG1348S1E, HRG1448S1E
HCG60V1E	5.0	RSG1360S1E, RSG1460S1E	HRG1360S1E, HRG1460S1E

*RSG13- and HRG13- models rated at 13.5 to 14 SEER.
RSG14- and HRG14- models rated at 14 to 15 SEER.*

208/240V-1-60

HCG Variable Speed Air Handler

ECM blower motor for high efficiency. Multi-position (upflow, downflow, horizontal or vertical). Optional plug-in electric heater kits available in 5 to 30 kW. A-coil is coated for corrosion protection. Cabinet has polyester urethane finish, blower cabinet is insulated.



1 1/2 to 5 Tons

All cooling products in this catalog are charged with or compatible with environmentally friendly R-410A except as noted in description.

All product voltages are single phase except as noted in description.



All products on pages 1- 4 of this catalog have been assembled in the U.S.A.



Models w/ PSC Motor	Nom. Cap. (BTUH)	Cabinet Width (in.)	Max. Aux. Heat kW
HMB24AA1E	24,000	14¼	10
HMB36AA1E	36,000	14¼	15
HMB36AB1E	36,000	17½	20
HMB48AC1E	48,000	21	20
HMB60AC1E	60,000	21	20
Models with ECM Variable Speed Motor			
HMB36VA1E	36,000	14¼	15
HMB48VB1E	48,000	17½	20



HMB Modular Air Handler

Flexible option when space is an issue. Install with a cased coil for customized two-piece air handler. Multi-position design delivers installation flexibility. With 1/2" cabinet insulation for quiet operation. Optional plug-in heat kits, 5 to 20 kW.

1½ to 5 Tons
208/240V-1-60

Minimum 13 SEER; actual SEER rating depends on coil matched with air handler.

Model	Nom. Cooling Cap. Tons	Nom. Heating BTUH	Nom. Airflow CFM
AHGV24-OE	1.5 - 2.0	41,200	600 / 800
AHGV36-OE	2.5 - 3.0	62,500-82,000	1,000 / 1200
AHGV48-OE	3.5 - 4.0	107,000	1400 / 1600
AHGV60-OE	5.0	125,000	1800
AHG24-OE	1.5 - 2.0	41,200	800
AHG36-OE	2.5 - 3.0	82,000	1330
AHG48-OE	3.5 - 4.0	107,000	1740
AHG60-OE	5.0	125,000	2000

Hydronic Air Handlers for Boiler Loops

Multi-position, freeze protection in both cooling and heating. Slide-out blower assembly, blower time delay and low voltage terminal strip. Non-corrosive drain pans.

AHGV Series

Super efficient variable speed with ECM blower motor.

AHG Series

Reliable PSC blower motor.



115V-1-60

1½ to 5 Tons

Full range of coils for split system installations



CMG Series—Uncased coils

VMG Series—Cased coils, upflow/counterflow

MMG Series—Cased, multi-position

AHRI matched to RSG16 condensing units. Horizontal installation requires a horizontal drain pan kit.



For use with split system air conditioners and heat pumps. Right or left hand connections offer installation flexibility. Drain pan is non-corrosive. Cased coil cabinet is insulated for quiet operation.

CMG/VMG/MMG feature micro-channel all aluminum coils, with piston. Available in 2 to 5 ton capacities.

CCG/VCG/MCG coils feature rifled copper tubing with aluminum fins. With TXV. Comes in 1½ to 5 ton capacities.



CCG Series—Uncased coils

VCG Series—Cased coils, upflow/counterflow

MCG Series—Cased, multi-position



Minimum 13 SEER with RSG13 & HRG13 units, 14 SEER with RSG14 & HRG14 units; AHRI matched to these models.



95% Two Stage Gas Furnace

ECM variable speed blower motor provides even temperatures and improved indoor air quality. Two stage design operates at low speed most of the time to save energy, automatically ramps up to second stage when there's demand. All units A/C ready. Upflow model only.



All GUH/GDD gas furnaces can be converted from natural gas to LP

Model	Hi Fire Input	Lo Fire Input	AFUE
GUH95T060B4	60,000	39,000	95.1%
GUH95T080C5	80,000	52,000	95.1%
GUH95T100C5	100,000	65,000	95.1%
GUH95T120D5	120,000	78,000	95.1%

**Energy Star® rated*

115V-1-60

Upflow/Horiz	Input BTUH	Down	Input BTUH
GUH95A038B4	38,000	GDD95A054B4	54,000
GUH95A054B4	54,000	GDD95A072C5	72,000
GUH95A072C5	72,000	GDD95A090C5	90,000
GUH95A090C5	90,000	GDD95A118D5	118,000
GUH95A108D5	108,000		
GUH95A120D5	120,000		

A = 14 1/2" cabinet width
 B = 17 1/2" cabinet width
 C = 21" cabinet width
 D = 24 1/2" cabinet width
 Last digit = nom. tons cooling

95% Single Stage Gas Furnace

Two heat exchangers for efficiency, hot surface igniter, integrated furnace control with on-board diagnostics, and multi-speed blower motor. Low profile cabinet is ideal for replacements. All units are A/C ready. **95.0% AFUE** **115V-1-60**



Down/Horiz = Downflow/Horizontal Configuration



Upflow/Horiz	Input BTUH	Down	Input BTUH
GUH92A038A3	38,000	GDD92A054B4	54,000
GUH92A054B4	54,000	GDD92A072B4	72,000
GUH92A072B4	72,000	GDD92A090C5	90,000
GUH92A072C5	72,000	GDD92A120D5	120,000
GUH92A090C5	90,000		
GUH92A108D5	108,000		
GUH92A120D5	120,000		

A = 14 1/2" cabinet width
 B = 17 1/2" cabinet width
 C = 21" cabinet width
 D = 24 1/2" cabinet width
 Last digit = nom. tons cooling

92% Single Stage Gas Furnace

Features two heat exchangers, hot surface igniter for reliability, integrated furnace control with on-board diagnostics, and easy-to-change filter. Three speed high efficiency blower has no belts or pulleys to wear out. Low profile cabinet is ideal for replacements. **92.1% AFUE** **115V-1-60**

Down/Horiz = Downflow/Horizontal Configuration



80% Gas Furnace

Our non-condensing gas furnace features hot surface igniter, in-shot burner and tubular heat exchanger. Multi-speed direct drive blower delivers warm air quietly. Low profile cabinet fits in even tight spaces. Integrated control board includes diagnostic lights. LP conversion kits are available.

80% AFUE **115V-1-60**

Upflow/Horiz.	Input BTUH	Downflow	Input BTUH
GUH80A045A3	45,000	GDD80A054A3	54,000
GUH80A054A3	54,000	GDD80A072B4	72,000
GUH80A072B4	72,000	GDD80A090B4	90,000
GUH80A072C5	72,000	GDD80A108C5	108,000
GUH80A090B4	90,000	GDD80A126D5	126,000
GUH80A090C5	90,000		
GUH80A108C5	108,000		
GUH80A126D5	126,000		

A = 14 1/2" cabinet width
 B = 17 1/2" cabinet width
 C = 21" cabinet width
 D = 24 1/2" cabinet width
 Last digit = nominal tons cooling

Model	Input BTUH	Blower Speed/ CFM	Blower Motor HP
MGD60-E3B	60,000	3 Speed, 1200	1/3
MGD70-E3B	70,000	3 Speed, 1200	1/3
MGD77-E3B	77,000	3 Speed, 1200	1/3
MGD90-E3B	90,000	3 Speed, 1200	1/3
MGD60-E5B	60,000	4 Speed, 1600	3/4
MGD70-E5B	70,000	4 Speed, 1600	3/4
MGD77-E5B	77,000	4 Speed, 1600	3/4
MGD90-E5B	90,000	4 Speed, 1600	3/4



Gas Furnaces for Manufactured Homes

Specifically designed for installation in manufactured housing: sealed combustion system is safe and efficient. Cabinet is fully insulated for quiet operation. Features solid state integrated control board, combustion blower, hot surface ignition system and attractive appearance.

115V-1-60

80% AFUE

Highboy	Output BTUH	AFUE	Lowboy	Output BTUH	AFUE
OUIB75-D3	57-72,000	84.0%	OLFB95-D4	85-95,000	83.0%
OUIB95-D4	84-95,000	83.0%	OLRB95-D4	85-95,000	83.0%
OUIB125-D5	113-126,000	83.0%	OLFB125-D5	113-127,000	83.0%
Down/Horiz	Output	AFUE	OLRB125-D5	113-127,000	83.0%
ODFB95-D3	85-95,000	83.0%	OLRA170-D5	140-168,000	80.0%
ODRB95-D3	85-95,000	83.0%	Belt Drive	Output	AFUE
ODFB125-D5	113-126,000	84.0%	OLRA200-BH	196,000	80.0%

OLFB, OUIB and ODFB=front flue; OLRA, OLRB and ODRB=rear flue
Shipped with high fire nozzle installed; nozzle change adjusts firing rate.

Highboy and lowboy models with Beckett AFG oil burner, new advanced burner control, multi-speed direct drive blower, and foil-faced insulation.



Oil Furnaces
115V-1-60



Industrial Oil Furnace 225,000 - 450,000 BTUH

Large capacity makes these ideal for churches, schools and commercial buildings. Can be installed either vertically or horizontally. Twin blowers are mounted on rails to be serviced from either side. Rated at 81% steady state efficiency.

Model	Firing Rate GPH	BTUH Output	Nozzle Size	Motor
LG14-225/275B40	2.0	225,000	2.0 70°B	1.5
	2.5	275,000	2.5 60°B	HP
LG14-350/450B60	3.0	350,000	3.0 70°B	2.0
	4.0	450,000	4.0 60°B	HP

Model	Oil Burner
LG14-225/275B40	A501-1
LG14-350/450B60	A502-1

Oil burners must be ordered separately.

All models 230V-1-60

Package Gas Heat/Electric Cooling

Model	Cooling BTUH	Heat Input BTUH	Model	Cooling BTUH	Heat Input BTUH
TGRG24451E	23,600	45,000	TGRG36721E	35,800	72,000
TGRG24721E	23,600	72,000	TGRG36961E	35,800	96,000
TGRG30451E	29,000	45,000	TGRG42961E	42,000	96,000
TGRG30721E	29,000	72,000	TGRG48961E	46,000	96,000
			TGRG601201E	57,000	120,000

208/230-1-60

Micro-channel coils optimize heat transfer; features one piece top for water management and scroll compressor for efficiency. Self-contained units require only ductwork and a thermostat. Convertible air delivery—horizontal or downflow. Can be rooftop- or slab-mounted. **13 SEER, 80% AFUE**



Compact cabinet has full perimeter base rails and durable poly urethane finish. Mesh hail guard protects the coil.



Features include compact footprint, durable cabinet with poly urethane finish, permanently lubricated PSC motor, mesh hail guard.

208/230-1-60 13 SEER, 7.7 HSPF

Residential Package Units 2 to 5 Tons

Cooling Only Model	Cooling BTUH	Heat Pump Model	Cooling BTUH	Heating BTUH
TARG24001E	23,800	TPRG24001E	24,000	24,000
TARG30001E	28,600	TPRG30001E	28,400	28,400
TARG36001E	36,000	TPRG36001E	34,600	34,600
TARG42001E	40,500	TPRG42001E	40,500	40,500
TARG48001E	47,000	TPRG48001E	46,000	44,500
TARG60001E	56,000	TPRG60001E	56,000	54,500

Dedicated horizontal flow in cooling only or heat pump models. Ideal wherever a self-contained unit is needed. Mount on slab, or side discharge can be field modified for rooftop applications. Optional field-installed electric heater and other accessories are available.

ROOM AIR PRODUCTS

Model	Nom. Cooling BTUH	Energy Star rated	Remote	Power
RG-51	5,000	No	No	115V
RADS-51	5,200	Yes	Yes	115V
RADS-61	6,000	Yes	Yes	115V
RADS-81	8,000	Yes	Yes	115V
RADS-101	10,000	Yes	Yes	115V
RADS-121	12,000	Yes	Yes	115V
RAD-123	11,800/12,000	No	Yes	208/230V
RADS-151	15,000	Yes	Yes	115V
RADS-183	18,200/18,500	Yes	Yes	208/230V
RADS-253	24,700/25,000	Yes	Yes	208/230V
RAD-283	28,000/28,800	No	Yes	208/230V

Air Conditioners 5,000 to 28,000 BTUH

RG-51

All units come with a window mounting system. Galvanized steel, painted cabinets are lightweight and finished in attractive neutral color. All have electronic controls and wireless remote, timer and energy saver mode except RG-51. Slide-out filter is washable.



Other models



Appearance may vary slightly from images shown.



For supplemental electric heat only.

Air Conditioning with Electric Heat

Features 3-speed fan, 24-hour on/off timer, auto restart, and energy saver mode. One degree temperature adjustment and four way air direction. Includes full feature remote control.

Model	Cooling BTUH	Heating BTUH	Power
REG-81	8,000	3,500	115V
REG-123	11,600/12,000	8,500/11,000	208/230V
REG-183	18,200/18,500	13,000/16,000	208/230V
REG-183-20A*	18,200/18,500	9,100/11,200	208/230V
REG-253	24,700/25,000	13,000/16,000	208/230V

REG-183 is 30A maximum fuse/circuit breaker size; REG-183-20A is 20A maximum fuse/circuit breaker size.



For supplemental heat. Includes window mounting kit and support brackets.

Room Air Heat Pumps

Perfect for any room needing heating and cooling. Units change over to supplemental electric heat automatically at 40° F outside temperature. Features electronic controls and wireless remote.

Model	Cooling BTUH	HP Heat BTUH	Air Delivery
RAH-123	11,200/11,600	8,500/10,700	253 CFM
RAH-183	17,400/17,800	9,000/11,000	570 CFM



208/230V-1-60



* Indicates model is Energy Star® compliant

Thru-the-Wall Series

Sized to fit standard wall sleeve, includes interior trim kit. Four way air deflection and multiple fan speeds for comfort, plus 24-hour on-off timer and energy saver mode. Also auto operation and sleep modes. All model feature electronic controls and wireless remote.

Model	Cooling BTUH	Heating BTUH	Power
BG-81*	8,000	—	115V
BG-101*	10,000	—	115V
BG-103*	9,800/10,000	—	208/230V
BG-121*	12,000	—	115V
BG-123*	11,700/12,000	—	208/230V
BG-143	13,600/14,000	—	208/230V
BGE-103	9,800/10,000	8,600/10,600	208/230V
BGE-123	11,700/12,000	8,600/10,600	208/230V
BGE-143	13,600/14,000	8,600/10,600	208/230V



Casement/Slide Air Conditioner

Solves the problem of mounting a window A/C unit in a horizontal sliding or casement window. Features three fan speeds, easy-access filter, adjustable air deflection, and wireless remote. With energy saver mode, 24-hour on/off timer.

Model	Cooling BTUH	Air Delivery	Power
CD-101	10,000	339 CFM	115V
CD-121	12,000	339 CFM	115V

For windows 20⁵/₁₆" to 39⁷/₁₆" high and starting at 15¹/₂" wide. Includes adjustable window mounting kit.

Model	Cooling BTUH	Design Type	EER
PS-81A	8,100	Single Hose	8.9
PS-101A	10,000	Single Hose	8.9
PS-121A	12,000	Single Hose	8.9
Heat/Cool	Cooling BTUH	Design Type	Heat BTUH
PSH-141A	14,000	Single Hose	11,000

PSH Model EER: 8.9, COP 2.6

Appearance varies depending on model.

Portable A/C

Ideal for any room where temporary cooling is needed (and heat with PSH-141A). Heavy duty casters and built-in handles make it easy to move unit. Built-in condensate management, electronic controls, 24 hour timer, and auto louver swing for gentle, breeze-like effect. Includes sliding adapters for windows.



115V-1-60

Cooling Models	Nom. Cooling BTUH	Heat Pumps	Nom. Cooling BTUH	Heating Capacity BTUH
EKTC07-1G	7,000	EKTH07-1G	7,000	6,300
EKTC09-1G	9,000	EKTH09-1G	9,000	8,100
EKTC12-1G	12,000	EKTH12-1G	12,000	10,700
EKTC15-1G	15,000	EKTH15-1G	15,000	13,800

2, 3, or 5 kW electric heat determined by power cord selection. Power cord must be ordered with unit.

Package Terminal Units

Includes electronic digital controls and temperature limiting for guest comfort and efficiency. All models include electric heat as standard. With built-in condensate and freeze protection.



208/230V-1-60 Also available in 265V model



Portable Dehumidifiers

Easy to use with top mounted controls. Unit automatically shuts off when bucket is full. Features auto defrost and auto restart. Slide-out filter is easily removed for washing and reusing. Low temp operation to 41° F.

115V-1-60

Model	Capacity per Day	Bucket Capacity	Shipping Weight
BHD-301-H	30 pints	6.3 pints	30.9 lbs.
BHD-501-H	50 pints	12.7 pints	38.6 lbs.
BHD-651-H	70 pints	12.7 pints	41.9 lbs.

Condensate bucket is accessed from the front, has handy handholds on each side and an interior handle; unit can be adapted to direct drain.



Sleek, Wall-Mounted Room Air Heat Pump

Elegant heat pump combines sleek design with cooling, heating, and air circulation. Includes two built-in electric heaters located on each end of the unit. Easy installation with plug-in power. Unit mounts on an interior wall with exterior outlets for air intake/exhaust and condensate drain.

Cooling Capacity	Heating Capacity	Electric Heat Capacity	EER	Dimensions H x W x D (inches)
9,300 BTUH	9,300 BTUH	6,800 BTUH	9.99	23 ⁷ / ₈ x 43 ¹ / ₈ x 9 ¹¹ / ₁₆

208/230V-1-60

16,100 BTUH integrated heat



RPHE-093G

Ductless Mini-Split Heat Pumps with Inverter Technology 208/230V-1-60



*VMH09, -12, and -18 models are Energy Star® compliant



Includes wireless remote

Model	Specifications
VMH09SC-1*	9,000 cool/10,000 heat BTUH, 19.0 SEER
VMH12SC-1*	12,000 cool/12,500 heat BTUH, 20.0 SEER
VMH18SC-1*	17,500 cool/18,000 heat BTUH, 17.0 SEER
VMH24SC-1	23,000 cool/24,000 heat BTUH, 17.0 SEER
VMH30SC-1	30,000 cool/30,000 heat BTUH, 16.0 SEER
VMH36SC-1	36,000 cool/36,000 heat BTUH, 14.5 SEER

Super efficient heat pump mini-splits with variable speed compressors save up to 40% in energy consumption over standard models. With built-in low ambient operation.



Includes wireless remote

Ductless Mini-Splits Single Zone 15 SEER

Available in cooling only and heat pump models. Efficient, economical comfort with cooling, heating (heat pump models), fan only, dehumidify and sleep modes. Built with 24-hour timer and auto temperature compensation.

Model	Specifications (BTUH), 15 SEER
DMC09SD-0	9,000 BTUH; cooling only, 115V, EER 9.0
DMC12SD-0	12,000 BTUH; cooling only, 115V, EER 9.0
DMC18SD-1	18,000 BTUH; cooling only, 208/230V, EER 9.0
DMC24SD-1	22,000 BTUH; cooling only, 208/230V, EER 9.0
DVH09SD-0	9,000 cool/9,000 heat; HP, EER 9.0, HSPF 8.2
DVH12SD-0	12,000 cool/12,000 heat; HP, EER 9.0, HSPF 8.2
DVH18SD-1	18,000 cool/18,000 heat, HP, EER 9.0, HSPF 8.2
DVH24SD-1	22,000 cool/22,000 heat, HP, EER 9.0, HSPF 8.2

Heat pumps: 9K and 12K: 115V; 18K and 24K: 208/230V

Multi-Zone Mini-Split Heat Pumps with Inverter Technology

Cool and heat one to four separate rooms or areas. Each zone has an independently controlled air handler with remote. With triple filtration (most models), multiple modes, and low temp operation. Indoor units can be mixed to best meet individual room load requirements (combined BTUH cannot exceed system maximum).



Outdoor Unit	Zones	Indoor Units*	Total BTUH
A-VMH18DC-1	Single	9K or 12K or 18K	9,000 to 18,000
	Dual	9K + 9K	18,000
A-VMH27TC-1	Single	9K or 12K or 18K	9,000 to 18,000
	Dual	9K + 12K	21,000
	Dual	12k + 12K	24,000
	Dual	9K + 18K	27,000
	Tri	9K + 9K + 9K	27,000
A-VMH36QC-1	Single	9K or 12K or 18K	9,000 to 18,000
	Dual	12k + 18K	30,000
	Dual	18k + 18K	36,000
	Tri	9K + 9K + 12K	30,000
	Tri	9K + 12K + 12K	33,000
	Tri	12K + 12K + 12K	36,000
	Tri	9K + 9K + 18K	36,000
	Quad	9K + 9K + 9K = 9K	36,000



Mix & match to maximum capacity of outdoor condensers!

Outdoor Unit	System Capacity BTUH	208/230V-1-60
A-VMH18DC-1	18,000 cool, 19,000 heat, SEER 16.0, HSPF 8.0	
A-VMH27TC-1	25,400 cool, 25,400 heat, SEER 16.0, HSPF 8.0	
A-VMH36QC-1	34,400 cool, 38,000 heat, SEER 14.5, HSPF 8.0	
High Wall Mount Indoor	Nominal Capacity BTUH (per zone)	
B-VMH09FC-1	9,000 cooling, 9,000 heating, 335 max. CFM	
B-VMH12FC-1	12,000 cooling, 12,000 heating, 412 max. CFM	
B-VMH18FC-1	18,000 cooling, 18,000 heating, 471 max. CFM	

Advantages of Inverter Technology

Variable speed compressor to precisely match power output with load requirements for ☒ ultra-quiet operation ☒ precise temperature control ☒ extra heating capacity even at low ambient temperatures ☒ energy savings

GEOHERMAL/WATER SOURCE EQUIPMENT

Model	Capacity Modulation	Specs for Ground Water Installation	EER/COP
HTV/HTD/HTH024	Full Part	BTUH: 28,500 cooling/24,600 heating BTUH: 21,800 cooling/17,500 heating	19.7/3.9 27.8/4.5
HTV/HTD/HTH036	Full Part	BTUH: 43,100 cooling/37,000 heating BTUH: 31,100 cooling/25,900 heating	20.1/4.3 29.4/4.7
HTV/HTD/HTH048	Full Part	BTUH: 55,600 cooling/48,200 heating BTUH: 41,800 cooling/34,800 heating	19.1/3.9 27.7/4.3
HTV/HTD/HTH060	Full Part	BTUH: 71,300 cooling/63,000 heating BTUH: 52,900 cooling/43,800 heating	18.6/3.8 26.5/4.3
HTV/HTD/HTH070	Full Part	BTUH: 77,500 cooling/71,200 heating BTUH: 60,600 cooling/53,000 heating	16.7/3.6 23.0/3.8

BTUH Ratings: Cooling at 59°F entering water temp; heating at 50°F entering water temperature.

208/230-1-60
2 to 6 Tons



GeoLogix™ Plus Two Stage Geothermal Heat Pump

Exceptional efficiency with variable speed ECM blower motor and two-stage scroll compressor. Features micro-processor controls and performance monitoring system.



HTV upflow right;
HTD downflow center;
HTH horizontal left.



Model	Capacity Modulation	Specs for Ground Water Installation	EER/COP
HTS024	Full Part	BTUH: 29,000 cooling/24,900 heating BTUH: 22,500 cooling/18,700 heating	23.2/4.6 31.5/5.3
HTS036	Full Part	BTUH: 41,300 cooling/36,700 heating BTUH: 30,100 cooling/26,000 heating	22.2/4.7 29.6/5.0
HTS048	Full Part	BTUH: 52,100 cooling/48,400 heating BTUH: 39,900 cooling/35,900 heating	21.3/4.7 26.5/5.2
HTS060	Full Part	BTUH: 63,900 cooling/59,900 heating BTUH: 51,000 cooling/42,600 heating	20.1/4.1 26.9/4.3

BTUH Ratings: Cooling at 59°F entering water temperature; heating at 50°F entering water temperature. Ratings above with WDG air handler matches; ratings vary with MWG coils.

208/230-1-60
2 to 5 Tons

GeoLogix™ Plus Two Stage Geothermal Heat Pump (Split)

Exceptional efficiency with full/part load shifting and two-stage scroll compressor. Features micro-processor controls, quiet operation and performance monitoring system.



Match with MWG multi-position coils or WDG air handlers.

Model	Capacity Modulation	Specs for Ground Water Installation	EER/COP
HEV/HEH 024	Full Part	BTUH: 24,900 cooling/22,900 heating BTUH: 18,600 cooling/16,200 heating	20.2/4.2 24.0/4.3
HEV/HEH 030	Full Part	BTUH: 32,100 cooling/29,800 heating BTUH: 24,700 cooling/21,800 heating	20.5/4.1 24.6/4.2
HEV/HEH 036	Full Part	BTUH: 37,200 cooling/34,700 heating BTUH: 27,700 cooling/24,500 heating	19.6/4.1 25.0/4.4
HEV/HEH 042	Full Part	BTUH: 46,100 cooling/42,100 heating BTUH: 35,000 cooling/30,300 heating	21.1/4.0 26.2/4.2
HEV/HEH 048	Full Part	BTUH: 51,600 cooling/44,800 heating BTUH: 39,000 cooling/32,400 heating	20.7/4.3 26.6/4.5
HEV/HEH 060	Full Part	BTUH: 63,800 cooling/58,000 heating BTUH: 48,900 cooling/42,100 heating	20.4/4.0 25.9/4.2

GeoLogix™ HEV Series Heat Pump

Efficient, compact two stage heat pump with ECM blower motor, integrated digital communication controls, and scroll compressor. Large filter improves indoor air quality. Available in vertical or horizontal cabinet



208/230-1-60

BTUH Ratings: Cooling at 59°F entering water temperature; heating at 50°F entering water temperature.

HWW Series Water-to-Water Systems

For a wide range of residential and industrial applications including radiant floors, ice melting, potable hot water, etc. Capable of ground water, ground loop and water loop applications, with microprocessor controls, scroll compressor, performance monitoring system.



*BTUH Ratings:
cooling at 86°F
entering water
temperature;
heating at 68°F
entering water
temperature.*

Model	Specs for Water Loop Installation	EER/COP
HWW036A	BTUH: 33,000 cooling/44,000 heating	14.6/5.0
HWW060B	BTUH: 52,800 cooling/72,700 heating	14.3/4.7
HWW120B	BTUH: 105,600 cooling/145,400 heating	14.1/4.6

Commercial Water Source Heat Pumps



Compact units are both energy and space efficient. Ideal for replacements. For boiler/cooling tower applications; multiple units are connected by a water loop with independent control of each zone. Features performance monitoring system and quiet operation.

208/230V-1, 208/230V-3, 460V, 575V, 265V offered, but all voltages are not available in all models.



Model	Specs for Water Loop Installation	EER/COP
HBH/HBV006	BTUH: 5,800 cooling/7,500 heating	13.2/4.7
HBH/HBV009	BTUH: 8,800 cooling/11,600 heating	13.4/4.2
HBH/HBV012	BTUH: 11,700 cooling/15,200 heating	13.5/4.3
HBH/HBV015	BTUH: 14,500 cooling/17,300 heating	15.4/5.0
HBH/HBV018	BTUH: 17,300 cooling/21,500 heating	14.3/5.0
HBH/HBV024	BTUH: 23,700 cooling/28,500 heating	13.4/4.7
HBH/HBV030	BTUH: 28,100 cooling/35,100 heating	13.4/4.6
HBH/HBV036	BTUH: 34,500 cooling/45,200 heating	13.5/4.4
HBH/HBV042	BTUH: 40,100 cooling/52,700 heating	13.1/4.3
HBH/HBV048	BTUH: 47,700 cooling/55,900 heating	13.3/4.7
HBH/HBV060	BTUH: 59,400 cooling/77,000 heating	13.4/4.3

Water Loop installation: Cooling at 86°F entering water temperature, heating at 68°F entering water temperature.

Model	Specs for Water Loop Installation	EER/COP
HKV084A	BTUH: 82,000 cooling/101,000 heating	15.2/4.8
HKV096A	BTUH: 94,000 cooling/118,000 heating	15.0/4.7
HKV120A	BTUH: 118,000 cooling/144,000 heating	15.0/5.0
HKV150A	BTUH: 150,000 cooling/186,000 heating	14.0/4.7
HKV168A	BTUH: 166,000 cooling/204,000 heating	15.5/4.9
HKV192A	BTUH: 190,000 cooling/238,360 heating	15.3/4.8
HKV240A	BTUH: 238,500 cooling/291,000 heating	15.3/5.1
HKV300A	BTUH: 300,000 cooling/372,000 heating	14.0/4.7

*Specifications for HKV and HBH Large Capacity:
Water Loop installation: Cooling at 86°F entering water temperature, heating at 68°F entering water temperature.
208/230V-3-60, 460V-3-60, 575V-3-60 available.*

Model	Specs for Water Loop Installation	EER/COP
HBH072A	BTUH: 69,000 cooling/92,500 heating	13.3/5.0
HBH096A	BTUH: 95,000 cooling/123,000 heating	13.7/5.0
HBH120A	BTUH: 119,000 cooling/160,000 heating	13.3/4.6

Large Capacity Commercial Water Source Heat Pumps

Ideal for large spaces such as gyms, cafeterias, commons areas. HKV units feature microprocessor controls, performance monitoring system and dual circuits in the four largest models. Available in front or back return, and a variety of discharge locations and voltages.



Large capacity horizontal units feature heavy duty scroll compressors. Available in left or right return, and a variety of discharge locations—can be field converted.



LoopLogix® Geothermal Design Software—Everything the contractor/installer needs to design loop fields, compare different types of heating and cooling systems, and prepare presentations for homeowners. Even helps contractors compile a bill of materials once the system is selected.

Go to www.arbboroaks/HeatController/LoopLogixInstall.exe to try it for yourself! LoopLogix® software can be downloaded FREE!



Geothermal Accessories—See brochure HCI-GTA-B for all accessories

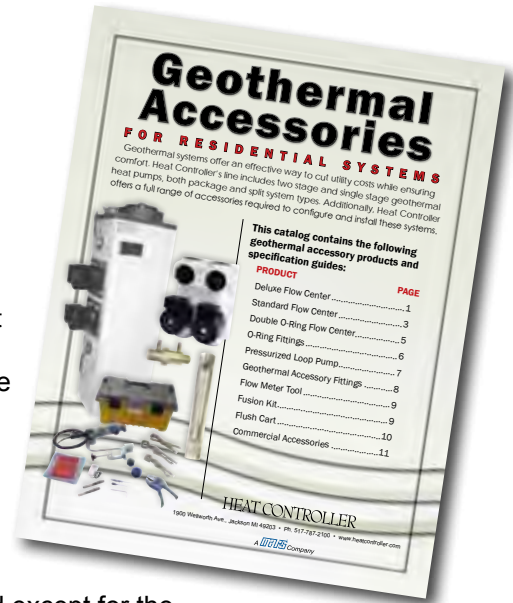
Comfort-aire offers a complete line of accessories for geothermal installations. These include.... (list). all the **specifications and details are contained in** our Accessories brochure.

TYPES OF GEOTHERMAL SYSTEMS

GROUND LOOP—Polyethylene tubing that serves as the heat exchanger is buried in the earth or submerged in a pond or lake. A solution of water and antifreeze is circulated through the tubing, giving up heat to the water or ground in summer and absorbing heat during cold weather.

GROUND WATER—Water is removed from an aquifer and circulated through the heat pump, with heat carried to the heat pump in winter, and heat from the home extracted in summer. The water is discharged into another well, unchanged except for the temperature.

COMMERCIAL SYSTEMS—Comfort-aire offers a wide range of water source heat pumps for commercial applications including models ideal for boiler/cooling tower installations that allow heating and cooling in separate zones at the same time. Also, large packaged units that use water source loops for areas such as gymnasiums, cafeterias and other large spaces. Water-to-water system are especially suited to radiant floor installations.



All our geothermal and water source heat pumps are so efficient they qualify for Federal tax credits up to 30% of the total installation cost with no dollar cap.

We help you sell Comfort-Aire products...

When you buy Comfort-Aire products, you're purchasing the peace of mind that comes from dealing with a company that has a long track record of success. We have a well-deserved reputation not only for quality products, but also for standing behind these products with excellent warranty and support programs. Experienced technicians are available to handle telephone inquiries about operation, installation and maintenance. Our web site is another resource: owners' manuals, technical information and service manuals can be accessed 24/7.

Warranty Coverage

Comfort-Aire stands behind its products with some of the strongest warranties in the industry. The warranty cards for our products are shown on the web site with the specific product series. Just click on "Warranty" to read the details.

Consumer Financing Program

We want to help consumers purchase the comfort products they need and want, whether for new construction, a replacement, or simply to upgrade to more efficient equipment. Our ComfortPlus® Financing Program offers the credit needed for a system, with no long wait and no credit hassle. Talk to your Comfort-Aire representative about the advantages of this financing program.

Extended Service Agreements

We stand behind our products with exceptionally strong warranties, but as with any product containing mechanical and electronic components, service is sometimes needed. Our AssurancePlus® program gives an extra measure of protection that extends beyond the standard warranty coverage. It protects against unexpected problems that require service and/or replacement parts. AssurancePlus® extended service agreements allow the consumer to extend coverage beyond the original warranty, and there is a variety of plans to choose from, offering parts and labor coverage, parts only or labor only. Your Comfort-Aire representative has all the details on AssurancePlus®.

The logo for Comfort-Aire, featuring the brand name in a stylized, cursive blue font. A small registered trademark symbol (®) is located at the end of the word "Aire".

There are many reasons Comfort-Aire has become known throughout the industry as **THE SOURCE** for heating and cooling equipment. First, we're a one-stop shop for nearly every application—our line runs the gamut from window-mount room air conditioners...to residential split and packaged systems...to commercial equipment with capacities up to 25 tons. Among our fastest growing product groups are geothermal and water source heat pumps. Their extraordinary efficiency combined with available tax credits make them popular for both home installations and commercial/industrial applications.

Secondly, we make it easy for you to do business with us. No minimum order quantities are required and we ship freight prepaid on orders of 30 units or more (drop ship charges may apply). Twice a year we offer stocking programs with great discounts and dating terms, allowing you to plan ahead for the equipment and parts needed for the upcoming heating or cooling season. And to help customers purchase new systems, you can offer our ComfortPlus™ consumer financing program with attractive rates; another value-added component is AssurancePlus®, our extended service agreement program.

We're also known for in-season availability. That means if, in the heat of the summer, you run out of condensers or mini-splits, for instance, there's a good chance we'll have what you need in our warehouse and in many cases we'll be able to ship the next day. All of which makes it easy for you to control your inventory while meeting customer needs.

Additionally, we back our products with outstanding warranties and after-sales support—details of warranties are shown with each product on our web site. Experienced technicians can help diagnose and solve installation, operation and service issues over the phone, and they're backed up by sales representatives throughout the country who are knowledgeable about our products and their applications. Our web site is another resource with owners' manuals and other technical documentation available for download at any time of the day or night.

Most importantly, the entire Comfort-Aire team is dedicated to being **THE SOURCE** by exceeding the expectations of our distributors, dealers and consumers.

DUE TO ONGOING PRODUCT IMPROVEMENT, DESIGN, MATERIALS, SPECIFICATIONS
AND APPEARANCE ARE SUBJECT TO CHANGE WITHOUT NOTICE.

Comfort-Aire®
HEAT CONTROLLER

1900 Wellworth Ave., Jackson MI 49203 • Ph. 517-787-2100 • www.comfort-aire.com

A **MARSH** Company



Room Air Products

This section contains:

Room Air Catalog

Dehumidifiers

Portable A/Cs

Wall Mount Heat Pump

PTACs

Infrared Heaters

2013

ROOM AIR

PRODUCT CATALOG



COMFORT, ROOM BY ROOM

Comfort-Caire®
HEAT CONTROLLER

Table of Contents

The full range of Comfort-Aire products for the Room Air market is presented in this catalog. Products are grouped into categories for your convenience and each section is color-coded, as shown below.

This catalog represents the latest information available at time of publication; however, because of on-going product improvements, we reserve the right to change design, specifications, performance data and materials without notice.

Room Air Cooling.....	1-4
Cooling with Electric Heat.....	5-6
Thru-the-Wall Cooling & Heat/Cool.....	7-9
Heat Pumps.....	10
Casement Cooling.....	11
Guide to Window Installation.....	12
Portable Cooling.....	12-14
Wall-Mount Heat Pump.....	14
PTACs, Dehumidifiers and Mini-Splits.....	15-16
Specification Chart.....	17-18



All Comfort-Aire room air products are listed with UL for application in the United States and Canada. See the model rating plate for specific certifications.



Visit us online at
www.comfort-aire.com

Cooling

5,000 BTUH



RG-51K 5,000 BTUH

FEATURES

- Electro-mechanical seven-position control for easy temperature selection
- Adjustable thermostat from minimal cooling to maximum cooling
- Easy to access, slide-out filter is washable
- Adjustable air direction
- Compact, lightweight cabinet with attractive decorator front grille

SPECIFICATIONS

Cooling Capacity BTUH	5,000
Approx. Sq. Ft. Cooling	100-150
EER	9.7
Heating Capacity BTUH (electric)	N/A
Power Supply	115V 60Hz
Humidity Removal Pts/Hr	1.27
Ventilation Control	No
Fan Only	Yes
Fan Speeds Cool/Fan	2/2
Air Delivery Max. CFM	124
dB Level (hi/low)	54/50
Amps Cooling	4.5
Amps Heating	N/A
Maximum Fuse Size	15A
Power Cord	15A Parallel NEMA 5-15P
Slide-Out Chassis	No
Window Mounting Kit	Yes
Remote Control	No
In-Home Service	No
Shipping Weight (lbs.)	40
Dimensions (in.) Height	12 ¹ / ₁₆
Width	16
Depth	13 ¹ / ₄



RADS-51K 5,200 BTUH

FEATURES

- Electronic controls with remote
- Two-way adjustable air direction
- Easy-access, slide-out, washable filter
- One degree temperature adjustment
- 24-hour on/off timer and auto restart, energy saver function; auto, dehumidification and sleep modes



SPECIFICATIONS

Cooling Capacity BTUH	5,200
Approx. Sq. Ft. Cooling	100-150
EER	10.7
Heating Capacity BTUH (electric)	N/A
Power Supply	115V 60Hz
Humidity Removal Pts/Hr	1.27
Ventilation Control	No
Fan Only	Yes
Fan Speeds Cool/Fan	2/2
Air Delivery Max. CFM	146
dB Level (hi/med/low)	56/52
Amps Cooling	4.5
Amps Heating	N/A
Maximum Fuse Size	15A
Power Cord	15A Parallel NEMA 5-15P
Slide-Out Chassis	No
Window Mounting Kit	Yes
Remote Control	Yes
In-Home Service	Yes
Shipping Weight (lbs.)	44
Dimensions (in.) Height	12 ¹ / ₁₆
Width	16
Depth	15 ³ / ₈



RADS-61J 6,000 BTUH
Nominal

FEATURES

- Electronic controls with full feature remote
- Adjustable air direction
- Easy-access, slide-out, washable filter
- One degree temperature adjustment
- 24-hour on/off timer and auto restart, energy saver function; auto, dehumidification and sleep modes



SPECIFICATIONS

Cooling Capacity BTUH	6,000
Approx. Sq. Ft. Cooling	150-250
EER	10.7
Heating Capacity BTUH (electric)	N/A
Power Supply	115V 60Hz
Humidity Removal Pts/Hr	1.48
Ventilation Control	No
Fan Only	Yes
Fan Speeds Cool/Fan	3/3
Air Delivery Max. CFM	146
dB Level (hi/med/low)	56/52/49
Amps Cooling	4.9
Amps Heating	N/A
Maximum Fuse Size	15A
Power Cord	15A Parallel NEMA 5-15P
Slide-Out Chassis	No
Window Mounting Kit	Yes
Remote Control	Yes
In-Home Service	Yes
Shipping Weight (lbs.)	44
Dimensions (in.) Height	12 ¹ / ₁₆
Width	16
Depth	15 ³ / ₈



RADS-81J 8,000 BTUH
Nominal

FEATURES

- Electronic controls with full feature remote and auto restart
- Four-way adjustable air direction
- Easy-access, slide-out, washable filter
- One degree temperature adjustment
- 24-hour on/off timer and auto restart, energy saver function; auto, dehumidification and sleep modes



SPECIFICATIONS

Cooling Capacity BTUH	8,000
Approx. Sq. Ft. Cooling	300-350
EER	10.8
Heating Capacity BTUH (electric)	N/A
Power Supply	115V 60Hz
Humidity Removal Pts/Hr	1.90
Ventilation Control	No
Fan Only	Yes
Fan Speeds Cool/Fan	3/3
Air Delivery Max. CFM	218
dB Level (hi/med/low)	61/57/53
Amps Cooling	6.4
Amps Heating	N/A
Maximum Fuse Size	15A
Power Cord	15A Parallel NEMA 5-15P
Slide-Out Chassis	No
Window Mounting Kit	Yes
Remote Control	Yes
In-Home Service	Yes
Shipping Weight (lbs.)	54
Dimensions (in.) Height	13 ⁷ / ₁₆
Width	18 ⁹ / ₁₆
Depth	15 ³ / ₄



RADS-101J 10,000 BTUH
Nominal

FEATURES

- Electronic controls with full feature remote and auto restart
- Four-way adjustable air direction
- Easy-access, slide-out, washable filter
- One degree temperature adjustment
- 24-hour on/off timer and auto restart, energy saver function; auto, dehumidification and sleep modes



SPECIFICATIONS

Cooling Capacity BTUH	10,000
Approx. Sq. Ft. Cooling	400-450
EER	10.8
Heating Capacity BTUH (electric)	N/A
Power Supply	115V 60Hz
Humidity Removal Pts/Hr	2.32
Ventilation Control	Yes
Fan Only	Yes
Fan Speeds Cool/Fan	3/3
Air Delivery Max. CFM	290
dB Level (hi/med/low)	58/57/54
Amps Cooling	8.8
Amps Heating	N/A
Maximum Fuse Size	15A
Power Cord	15A Parallel NEMA 5-15P
Slide-Out Chassis	No
Window Mounting Kit	Yes
Remote Control	Yes
In-Home Service	Yes
Shipping Weight (lbs.)	68
Dimensions (in.) Height	14 ¹¹ / ₁₆
Width	19
Depth	21 ¹ / ₂



RADS-121J 12,000 BTUH
Nominal

FEATURES

- Electronic controls with full feature remote and auto restart
- Four-way adjustable air direction
- Easy-access, slide-out, washable filter
- One degree temperature adjustment
- Energy saver mode, 24-hour on/off timer, dehumidification and auto modes



SPECIFICATIONS

Cooling Capacity BTUH	12,000
Approx. Sq. Ft. Cooling	450-550
EER	10.8
Heating Capacity BTUH (electric)	N/A
Power Supply	115V 60Hz
Humidity Removal Pts/Hr	2.54
Ventilation Control	Yes
Fan Only	Yes
Fan Speeds Cool/Fan	3/3
Air Delivery Max. CFM	265
dB Level (hi/med/low)	60/57/52
Amps Cooling	10.2
Amps Heating	N/A
Maximum Fuse Size	15A
Power Cord	15A Parallel NEMA 5-15P
Slide-Out Chassis	No
Window Mounting Kit	Yes
Remote Control	Yes
In-Home Service	Yes
Shipping Weight (lbs.)	78
Dimensions (in.) Height	14 ¹¹ / ₁₆
Width	19
Depth	21 ¹ / ₂



RAD-123J 12,000 BTUH
Nominal

FEATURES

- Electronic controls with full feature remote and auto restart
- Four-way adjustable air direction
- Easy-access, slide-out, washable filter
- One degree temperature adjustment
- Energy saver mode, 24-hour on/off timer, dehumidification and auto modes

SPECIFICATIONS

Cooling Capacity BTUH	11,800/12,000
Approx. Sq. Ft. Cooling	450-550
EER	9.8
Heating Capacity BTUH (electric)	N/A
Power Supply	208/230V 60Hz
Humidity Removal Pts/Hr	2.54
Ventilation Control	Yes
Fan Only	Yes
Fan Speeds Cool/Fan	3/3
Air Delivery Max. CFM	265
dB Level (hi/med/low)	60/57/52
Amps Cooling	6.2/5.7
Amps Heating	N/A
Maximum Fuse Size	15A
Power Cord	15A Tandem NEMA 6-15P
Slide-Out Chassis	No
Window Mounting Kit	Yes
Remote Control	Yes
In-Home Service	Yes
Shipping Weight (lbs.)	73
Dimensions (in.) Height	14 ¹¹ / ₁₆
Width	19
Depth	21 ¹ / ₂



RADS-151J 15,000 BTUH
Nominal

FEATURES

- Electronic controls with full feature remote and auto restart
- Four-way adjustable air direction
- Easy-access, slide-out, washable filter
- One degree temperature adjustment
- Energy saver mode, 24-hour on/off timer, dehumidification and auto modes



SPECIFICATIONS

Cooling Capacity BTUH	15,000
Approx. Sq. Ft. Cooling	600-700
EER	10.7
Heating Capacity BTUH (electric)	N/A
Power Supply	115V 60Hz
Humidity Removal Pts/Hr	3.17
Ventilation Control	Yes
Fan Only	Yes
Fan Speeds Cool/Fan	3/3
Air Delivery Max. CFM	418
dB Level (hi/med/low)	59/56/52
Amps Cooling	12.1
Amps Heating	N/A
Maximum Fuse Size	15A
Power Cord	15A Parallel NEMA 5-15P
Slide-Out Chassis	Yes
Window Mounting Kit	Yes
Remote Control	Yes
In-Home Service	Yes
Shipping Weight (lbs.)	112
Dimensions (in.) Height	17 ¹⁵ / ₁₆
Width	23 ⁵ / ₈
Depth	25 ⁷ / ₁₆



RADS-183J 18,000 BTUH
Nominal

FEATURES

- Electronic controls with full feature remote and auto restart
- Four-way adjustable air direction
- Easy-access, slide-out, washable filter
- One degree temperature adjustment
- Energy saver function, 24-hour on/off timer, dehumidification and auto modes



SPECIFICATIONS

Cooling Capacity BTUH	18,200/18,500
Approx. Sq. Ft. Cooling	700-1000
EER	10.7
Heating Capacity BTUH (electric)	N/A
Power Supply	208/230V 60Hz
Humidity Removal Pts/Hr	3.80
Ventilation Control	Yes
Fan Only	Yes
Fan Speeds Cool/Fan	3/3
Air Delivery Max. CFM	447
dB Level (hi/med/low)	60/57/53
Amps Cooling	8.3/7.7
Amps Heating	N/A
Maximum Fuse Size	15A
Power Cord	15A Tandem NEMA 6-15P
Slide-Out Chassis	Yes
Window Mounting Kit	Yes
Remote Control	Yes
In-Home Service	Yes
Shipping Weight (lbs.)	128
Dimensions (in.) Height	17 ¹⁵ / ₁₆
Width	23 ⁵ / ₈
Depth	25 ⁷ / ₁₆



RADS-253J 25,000 BTUH
Nominal

FEATURES

- Electronic controls with full feature remote and auto restart
- Four-way adjustable air direction
- Easy-access, slide-out, washable filter
- One degree temperature adjustment
- Energy saver function, 24-hour on/off timer, dehumidification and auto modes



SPECIFICATIONS

Cooling Capacity BTUH	24,700/25,000
Approx. Sq. Ft. Cooling	1400-1500
EER	9.4
Heating Capacity BTUH (electric)	N/A
Power Supply	208/230V 60Hz
Humidity Removal Pts/Hr	5.71
Ventilation Control	Yes
Fan Only	Yes
Fan Speeds Cool/Fan	3/3
Air Delivery Max. CFM	541
dB Level (hi/med/low)	62/59/56
Amps Cooling	12.8/12.0
Amps Heating	N/A
Maximum Fuse Size	20A
Power Cord	20A Tee NEMA 6-20P
Slide-Out Chassis	Yes
Window Mounting Kit	Yes
Remote Control	Yes
In-Home Service	Yes
Shipping Weight (lbs.)	137
Dimensions (in.) Height	18 ⁵ / ₈
Width	26 ¹ / ₂
Depth	25 ¹ / ₂



RAD-283J 28,000 BTUH
Nominal

FEATURES

- Large capacity cooling for residential or commercial applications
- Electronic controls with full feature remote and auto restart
- Four-way adjustable air direction
- Easy-access, slide-out, washable filter
- Energy saver function, 24-hour on/off timer, dehumidification and auto modes

SPECIFICATIONS

Cooling Capacity BTUH	28,000/28,500
Approx. Sq. Ft. Cooling	1500-1700
EER	8.5/8.5
Heating Capacity BTUH (electric)	N/A
Power Supply	208/230V 60Hz
Humidity Removal Pts/Hr	6.34
Ventilation Control	Yes
Fan Only	Yes
Fan Speeds Cool/Fan	3/3
Air Delivery Max. CFM	541
dB Level (hi/med/low)	63/60/56
Amps Cooling	16.0 /14.8
Amps Heating	N/A
Maximum Fuse Size	30A
Power Cord	30A Tandem NEMA 6-30P
Slide-Out Chassis	Yes
Window Mounting Kit	Yes
Remote Control	Yes
In-Home Service	Yes
Shipping Weight (lbs.)	151
Dimensions (in.) Height	18 ⁵ / ₈
Width	26 ¹ / ₂
Depth	25 ¹ / ₂

REG-81J 8,000 BTUH
Nominal**FEATURES**

- Electronic controls with full feature remote, 24-hour on/off timer
- Energy saver mode, auto restart
- Four way adjustable air direction
- One degree temperature adjustment
- Designed for supplemental electric heat only, thermostat cycles heating element on and off

SPECIFICATIONS

Cooling Capacity BTUH	8,000
Approx. Sq. Ft. Cooling	300-350
EER	9.8
Heating Capacity BTUH (electric)	3,500
Power Supply	115V 60Hz
Humidity Removal Pts/Hr	1.48
Ventilation Control	No
Fan Only	Yes
Fan Speeds Cool/Heat/Fan	3/3/3
Air Delivery Max. CFM	278
dB Level (hi/med/low)	58/55/50
Amps Cooling	7.4
Amps Heating	11.6
Maximum Fuse Size	15A
Power Cord	15A Parallel NEMA 5-15P
Slide-Out Chassis	Yes
Window Mounting Kit	Yes
Remote Control	Yes
In-Home Service	Yes
Shipping Weight (lbs.)	80
Dimensions (in.) Height	15 ⁹ / ₁₆
Width	23 ¹ / ₁₆
Depth	23 ⁷ / ₁₆

REG-123J 12,000 BTUH
Nominal**FEATURES**

- Electronic controls with full feature remote, 24-hour on/off timer
- Energy saver mode, auto restart
- Four way adjustable air direction
- One degree temperature adjustment
- Designed for supplemental electric heat only, thermostat cycles heating element on and off

SPECIFICATIONS

Cooling Capacity BTUH	11,600/12,000
Approx. Sq. Ft. Cooling	450-550
EER	9.8
Heating Capacity BTUH (electric)	8,500/11,000
Power Supply	208/230V 60Hz
Humidity Removal Pts/Hr	3.6
Ventilation Control	Yes
Fan Only	Yes
Fan Speeds Cool/Heat/Fan	3/3/3
Air Delivery Max. CFM	266
dB Level (hi/med/low)	58/56/53
Amps Cooling	5.5/5.5
Amps Heating	15.0/13.5
Maximum Fuse Size	20A
Power Cord	20A Tee NEMA 6-20P
Slide-Out Chassis	Yes
Window Mounting Kit	Yes
Remote Control	Yes
In-Home Service	Yes
Shipping Weight (lbs.)	88
Dimensions (in.) Height	15 ⁹ / ₁₆
Width	23 ¹ / ₁₆
Depth	23 ⁷ / ₁₆

REG-183J 18,000 BTUH
Nominal**FEATURES**

- Electronic controls with full feature remote, 24-hour on/off timer
- Energy saver mode, auto restart
- Four-way adjustable air direction
- One degree temperature adjustment
- Designed for supplemental electric heat only, thermostat cycles heating element on and off

SPECIFICATIONS

Cooling Capacity BTUH	18,200/18,500
Approx. Sq. Ft. Cooling	700-1000
EER	9.7
Heating Capacity BTUH (electric)	13,000/16,000
Power Supply	208/230V 60Hz
Humidity Removal Pts/Hr	3.8
Ventilation Control	Yes
Fan Only	Yes
Fan Speeds Cool/Heat/Fan	3/3/3
Air Delivery Max. CFM	459
dB Level (hi/med/low)	61/58/55
Amps Cooling	9.1/8.4
Amps Heating	22.0/20.0
Maximum Fuse Size	30A
Power Cord	30A Tandem NEMA 6-30P
Slide-Out Chassis	Yes
Window Mounting Kit	Yes
Remote Control	Yes
In-Home Service	Yes
Shipping Weight (lbs.)	127
Dimensions (in.) Height	17 ¹⁵ / ₁₆
Width	23 ⁵ / ₈
Depth	25 ⁷ / ₁₆

18,000 to 25,000 BTUH

Cooling/Electric Heat

Room Air Accessories



REG-183J-20A 18,000
Nominal BTUH

FEATURES

- Electronic controls with full feature remote, 24-hour on/off timer
- Energy saver mode, auto restart
- Four-way adjustable air direction
- One degree temperature adjustment
- Designed for supplemental electric heat only, thermostat cycles heating element on and off

SPECIFICATIONS

Cooling Capacity BTUH	18,200/18,500
Approx. Sq. Ft. Cooling	700-1000
EER	9.7
Heating Capacity BTUH (electric)	9,100/11,200
Power Supply	208/230V 60Hz
Humidity Removal Pts/Hr	3.8
Ventilation Control	Yes
Fan Only	Yes
Fan Speeds Cool/Heat/Fan	3/3/3
Air Delivery Max. CFM	459
dB Level (hi/med/low)	61/58/55
Amps Cooling	9.1/8.4
Amps Heating	16.0/14.8
Maximum Fuse Size	20A
Power Cord	20A Tee NEMA 6-20P
Slide-Out Chassis	Yes
Window Mounting Kit	Yes
Remote Control	Yes
In-Home Service	Yes
Shipping Weight (lbs.)	127
Dimensions (in.) Height	17 ¹⁵ / ₁₆
Width	23 ⁵ / ₈
Depth	25 ⁷ / ₁₆



REG-253J 25,000 BTUH
Nominal

FEATURES

- Electronic controls with full feature remote, 24-hour on/off timer
- Energy saver mode, auto restart
- Four-way adjustable air direction
- One degree temperature adjustment
- Designed for supplemental electric heat only, thermostat cycles heating element on and off

SPECIFICATIONS

Cooling Capacity BTUH	24,700/25,000
Approx. Sq. Ft. Cooling	1400-1500
EER	9.4
Heating Capacity BTUH (electric)	13,000/16,000
Power Supply	208/230V 60Hz
Humidity Removal Pts/Hr	5.7
Ventilation Control	Yes
Fan Only	Yes
Fan Speeds Cool/Heat/Fan	3/3/3
Air Delivery Max. CFM	541
dB Level (hi/med/low)	63/61/59
Amps Cooling	12.8/12.0
Amps Heating	22.5/20.0
Maximum Fuse Size	30A
Power Cord	30A Tandem NEMA 6-30P
Slide-Out Chassis	Yes
Window Mounting Kit	Yes
Remote Control	Yes
In-Home Service	Yes
Shipping Weight (lbs.)	142
Dimensions (in.) Height	18 ⁵ / ₈
Width	26 ¹ / ₂
Depth	25 ¹ / ₂



AS080 & AS160

Window Support Brackets

Easy-to-install brackets add a full measure of safety to window-mounted air conditioners. Manufactured from heavy gauge steel with a durable baked-on epoxy finish, the brackets have stainless steel hardware to resist weather damage. Unique bubble level helps ensure proper installation angle.

AS080—For room air conditioners up to 80 pounds

AS160—For room air conditioners up to 160 pounds

EA448F Wall Sleeve

For BG and BGE Series

Sleeve is manufactured of G-90 steel and powder coated for durability and corrosion resistance; color matches unit color. The sleeve utilizes the aluminum back grille of the BG/BGE units, and front gaskets eliminate air see page.

IMPORTANT: Always wait to cut a hole in structure until unit arrives and dimensions can be verified.

EA448F—Wall Sleeve (inches)
15¹⁷/₃₂" H x 25⁷/₈" W x 16²³/₃₂" D



BG-81J 8,000 BTUH
Nominal

FEATURES

- Electronic controls with full feature remote and auto restart
- Four-way adjustable air direction
- Energy saver function and 24-hour on/off timer
- Auto and sleep modes
- Interior trim kit included
- Fits standard wall sleeves



SPECIFICATIONS

Cooling Capacity BTUH	8,000
Approx. Sq. Ft. Cooling	300-350
EER	9.4
Heating Capacity BTUH (electric)	N/A
Power Supply	115V 60Hz
Humidity Removal Pts/Hr	1.9
Ventilation Control	No
Fan Only	Yes
Fan Speeds Cool/Fan	3/3
Air Delivery Max. CFM	283
dB Level (hi/med/low)	58/54/50
Amps Cooling	8.0
Amps Heating	N/A
Maximum Fuse Size	15A
Power Cord	15A Parallel NEMA 5-15P
Slide-Out Chassis	No
Interior Trim Kit	Yes
Remote Control	Yes
In-Home Service	Yes
Shipping Weight (lbs.)	68
Dimensions (in.) Height	14 ⁹ / ₁₆
Width	24 ¹ / ₄
Depth	20 ⁵ / ₁₆



BG-101J 10,000 BTUH
Nominal

FEATURES

- Electronic controls with full feature remote and auto restart
- Four-way adjustable air direction
- Energy saver function and 24-hour on/off timer
- Interior trim kit included
- Fits standard wall sleeves
- Auto and sleep modes



SPECIFICATIONS

Cooling Capacity BTUH	10,000
Approx. Sq. Ft. Cooling	400-450
EER	9.4
Heating Capacity BTUH (electric)	N/A
Power Supply	115V 60Hz
Humidity Removal Pts/Hr	2.32
Ventilation Control	No
Fan Only	Yes
Fan Speeds Cool/Fan	3/3
Air Delivery Max. CFM	282
dB Level (hi/med/low)	58/54/52
Amps Cooling	9.6
Amps Heating	N/A
Maximum Fuse Size	15A
Power Cord	15A Parallel NEMA 5-15P
Slide-Out Chassis	No
Interior Trim Kit	Yes
Remote Control	Yes
In-Home Service	Yes
Shipping Weight (lbs.)	68
Dimensions (in.) Height	14 ⁹ / ₁₆
Width	24 ¹ / ₄
Depth	20 ⁵ / ₁₆



BG-103J 10,000 BTUH
Nominal

FEATURES

- Electronic controls with full feature remote and auto restart
- Four-way adjustable air direction
- Energy saver function and 24-hour on/off timer
- Interior trim kit included
- Fits standard wall sleeves
- Auto and sleep modes



SPECIFICATIONS

Cooling Capacity BTUH	9,800/10,000
Approx. Sq. Ft. Cooling	400-450
EER	9.4
Heating Capacity BTUH (electric)	N/A
Power Supply	208/230V 60Hz
Humidity Removal Pts/Hr	2.32
Ventilation Control	No
Fan Only	Yes
Fan Speeds Cool/Fan	3/3
Air Delivery Max. CFM	297
dB Level (hi/med/low)	59/57/56
Amps Cooling	5.3/5.1
Amps Heating	N/A
Maximum Fuse Size	15A
Power Cord	15A Tandem NEMA 6-15P
Slide-Out Chassis	No
Interior Trim Kit	Yes
Remote Control	Yes
In-Home Service	Yes
Shipping Weight (lbs.)	68
Dimensions (in.) Height	14 ⁹ / ₁₆
Width	24 ¹ / ₄
Depth	20 ⁵ / ₁₆



BG-121G 12,000 BTUH
Nominal

FEATURES

- Electronic controls with full feature remote and auto restart
- Four-way adjustable air direction
- Energy saver function and 24-hour on/off timer
- Interior trim kit included
- Fits standard wall sleeves
- Auto and sleep modes



SPECIFICATIONS

Cooling Capacity BTUH	12,000
Approx. Sq. Ft. Cooling	450-550
EER	9.4
Heating Capacity BTUH (electric)	N/A
Power Supply	115V 60Hz
Humidity Removal Pts/Hr	2.54
Ventilation Control	No
Fan Only	Yes
Fan Speeds Cool/Fan	3/3
Air Delivery Max. CFM	306
dB Level (hi/med/low)	61/59/57
Amps Cooling	11.5
Amps Heating	N/A
Maximum Fuse Size	15A
Power Cord	15A Parallel NEMA 5-15P
Slide-Out Chassis	No
Interior Trim Kit	Yes
Remote Control	Yes
In-Home Service	Yes
Shipping Weight (lbs.)	78
Dimensions (in.) Height	14 ⁹ / ₁₆
Width	24 ¹ / ₄
Depth	20 ⁵ / ₁₆



BG-123J 12,000 BTUH
Nominal

FEATURES

- Electronic controls with full feature remote and auto restart
- Four-way adjustable air direction
- Energy saver function and 24-hour on/off timer
- Interior trim kit included
- Fits standard wall sleeves
- Auto and sleep modes



SPECIFICATIONS

Cooling Capacity BTUH	11,700/12,000
Approx. Sq. Ft. Cooling	450-550
EER	9.4
Heating Capacity BTUH (electric)	N/A
Power Supply	208/230V 60Hz
Humidity Removal Pts/Hr	2.54
Ventilation Control	No
Fan Only	Yes
Fan Speeds Cool/Fan	3/3
Air Delivery Max. CFM	296
dB Level (hi/med/low)	61/59/57
Amps Cooling	6.9/6.3
Amps Heating	N/A
Maximum Fuse Size	15A
Power Cord	15A Tandem NEMA 6-15P
Slide-Out Chassis	No
Interior Trim Kit	Yes
Remote Control	Yes
In-Home Service	Yes
Shipping Weight (lbs.)	76
Dimensions (in.) Height	14 ⁹ / ₁₆
Width	24 ¹ / ₄
Depth	20 ⁵ / ₁₆



BG-143K 14,000 BTUH
Nominal

FEATURES

- Electronic controls with full feature remote, auto restart
- Four-way adjustable air direction
- 24-hour on/off timer, auto cool and sleep mode
- Interior trim kit included
- Fits standard wall sleeves
- Auto cool, auto mode, dehum only

SPECIFICATIONS

Cooling Capacity BTUH	13,600/14,000
Approx. Sq. Ft. Cooling	550-700
EER	8.5
Heating Capacity BTUH (electric)	N/A
Power Supply	208/230V 60Hz
Humidity Removal Pts/Hr	2.96
Ventilation Control	No
Fan Only	Yes
Fan Speeds Cool/Fan	3/3
Air Delivery Max. CFM	318
dB Level (hi/med/low)	61/60/58
Amps Cooling	8.3/7.4
Amps Heating	N/A
Maximum Fuse Size	15A
Power Cord	15A Tandem NEMA 6-15P
Slide-Out Chassis	No
Interior Trim Kit	Yes
Remote Control	Yes
In-Home Service	Yes
Shipping Weight (lbs.)	79
Dimensions (in.) Height	14 ⁹ / ₁₆
Width	24 ¹ / ₄
Depth	20 ⁵ / ₁₆



BGE-103J 10,000 BTUH
Nominal

FEATURES

- Electronic controls with full feature remote
- Four-way adjustable air direction
- Energy saver function, 24-hour on/off timer, auto cool and auto restart
- Interior trim kit included
- Fits standard wall sleeves
- Includes electric heat

SPECIFICATIONS

Cooling Capacity BTUH	9,800/10,000
Approx. Sq. Ft. Cooling	400-450
EER	9.4
Heating Capacity BTUH (electric)	8,600/10,600
Power Supply	208/230V 60Hz
Humidity Removal Pts/Hr	2.32
Ventilation Control	No
Fan Only	Yes
Fan Speeds Cool/Heat/Fan	3/3/3
Air Delivery Max. CFM	295
dB Level (hi/med/low)	60/58/56
Amps Cooling	5.3/5.1
Amps Heating	15.0/13.5
Maximum Fuse Size	15A
Power Cord	15A Tandem NEMA 6-20P
Slide-Out Chassis	No
Interior Trim Kit	Yes
Remote Control	Yes
In-Home Service	Yes
Shipping Weight (lbs.)	76
Dimensions (in.) Height	14 ⁹ / ₁₆
Width	24 ¹ / ₄
Depth	20 ⁵ / ₁₆



BGE-123J 12,000 BTUH
Nominal

FEATURES

- Electronic controls with full feature remote
- Four-way adjustable air direction
- Energy saver function, 24-hour on/off timer, auto cool and auto restart
- Interior trim kit included
- Fits standard wall sleeves
- Includes electric heat

SPECIFICATIONS

Cooling Capacity BTUH	11,700/12,000
Approx. Sq. Ft. Cooling	450-550
EER	9.0
Heating Capacity BTUH (electric)	8,600/10,600
Power Supply	208/230V 60Hz
Humidity Removal Pts/Hr	2.54
Ventilation Control	No
Fan Only	Yes
Fan Speeds Cool/Heat/Fan	3/3/3
Air Delivery Max. CFM	286
dB Level (hi/med/low)	60/58/55
Amps Cooling	6.6/6.0
Amps Heating	15.0/13.5
Maximum Fuse Size	15A
Power Cord	15A Tandem NEMA 6-20P
Slide-Out Chassis	No
Interior Trim Kit	Yes
Remote Control	Yes
In-Home Service	Yes
Shipping Weight (lbs.)	79
Dimensions (in.) Height	14 ⁹ / ₁₆
Width	24 ¹ / ₄
Depth	20 ⁵ / ₁₆



BGE-143K 14,000 BTUH
Nominal

FEATURES

- Electronic controls with full feature remote
- Four-way adjustable air direction
- Energy saver function, 24-hour on/off timer, auto cool and auto restart
- Interior trim kit included
- Fits standard wall sleeves
- Includes electric heat

SPECIFICATIONS

Cooling Capacity BTUH	13,600/14,000
Approx. Sq. Ft. Cooling	550-700
EER	8.5
Heating Capacity BTUH (electric)	8,600/10,600
Power Supply	208/230V 60Hz
Humidity Removal Pts/Hr	2.96
Ventilation Control	No
Fan Only	Yes
Fan Speeds Cool/Heat/Fan	3/3/3
Air Delivery Max. CFM	313
dB Level (hi/med/low)	60/58/56
Amps Cooling	8.3/7.4
Amps Heating	15.0/13.5
Maximum Fuse Size	15A
Power Cord	15A Tandem NEMA 6-20P
Slide-Out Chassis	No
Interior Trim Kit	Yes
Remote Control	Yes
In-Home Service	Yes
Shipping Weight (lbs.)	84
Dimensions (in.) Height	14 ⁹ / ₁₆
Width	24 ¹ / ₄
Depth	20 ⁵ / ₁₆

Tips for SIZING

Room air units are an economical and practical means of adding comfort to a home, commercial space, warehouse office, or other area. For best results, the air conditioner or room heat pump should be correctly sized for the space. The specifications in this catalog show the approximate square footage which each unit effectively cools. However, other factors should be considered in selecting model size—it would be a good idea to choose the next size up if there are multiple doors and windows in the space, if ceilings are exceptionally high, if heat-generating equipment is used, or if several people occupy the space.

Use the chart below as a quick reference in determining which unit(s) will fit your needs.

Square Feet to be conditioned	Square Meters to be conditioned	Capacity Needed (BTUH)
100 - 150	9.3 - 13.9	5,000
150 - 250	13.9 - 23.2	6,000
250 - 300	23.2 - 27.9	7,000
300 - 350	27.9 - 32.5	8,000
350 - 400	32.5 - 37.2	9,000
400 - 450	37.2 - 41.8	10,000
450 - 550	41.8 - 51.1	12,000
550 - 700	51.1 - 65.1	14,000
700 - 1,000	65.1 - 92.9	18,000
1,000 - 1,200	92.9 - 111.5	21,000
1,200 - 1,400	111.5 - 130.1	23,000
1,400 - 1,500	130.1 - 139.4	25,000
1,500 - 2,000	139.4 - 185.8	30,000

Guidelines from www.energystar.gov

Energy Star recommends increasing capacity by 10% for a sunny room, decreasing by 10% for shaded room.

If used in a kitchen, add 4,000 BTUHs to the total.

If more than two people regularly use the room, add 600 BTUH for each additional person.

Heat Pumps

12,000 to 18,000 BTUH



RAH-123G 12,000 BTUH
Nominal

FEATURES

- Electronic controls, wireless remote
- Automatic louver swing
- Thru-the-wall or window mount with support bracket included
- Cooling, heating, fan only and auto operation, energy saver mode
- Switches to supplemental electric heat at 40°F outside temperature

SPECIFICATIONS

Cooling Capacity BTUH	11,200/11,600
Approx. Sq. Ft. Cooling	450-550
EER	9.5
Power Supply	208/230V 60Hz
Amps Cooling	5.9/5.5
Electric Heat Cap. BTUH	8,500/10,700
Electric Heat Amps	16.0/14.6
HP Heat Cap. BTUH	10,000/10,300
Heat Pump Amps	5.6/5.1
Heat Pump COP	2.7
Humidity Removal Pts/Hr	5.3
Fan Speeds Cool/Heat/Fan	3/3/3
dB Level (hi/med/low)	72/70/68
Ventilation Control	No
Fan Only	Yes
Air Delivery Max. CFM	253
Maximum Fuse Size	20A
Power Cord	20A Tee NEMA 6-20P
Slide-Out Chassis	Yes
Window Mounting Kit	Yes
In-Home Service	Yes
Shipping Weight (lbs.)	115
Dimensions (in.) Height	15 ⁵ / ₁₆
Width	22 ⁵ / ₈
Depth	23 ⁵ / ₈



RAH-183G 18,000 BTUH
Nominal

FEATURES

- Electronic controls, wireless remote
- Automatic louver swing
- Thru-the-wall or window mount with support bracket included
- Cooling, heating, fan only and auto operation, energy saver mode
- Switches to supplemental electric heat at 40°F outside temperature

SPECIFICATIONS

Cooling Capacity BTUH	17,400/17,800
Approx. Sq. Ft. Cooling	700-1000
EER	9.0
Power Supply	208/230V 60Hz
Amps Cooling	9.0/8.5
Electric Heat Cap. BTUH	9,000/11,000
Electric Heat Amps	16.0/15.6
HP Heat Cap. BTUH	15,700/16,000
Heat Pump Amps	8.8/8.3
Heat Pump COP	2.64
Humidity Removal Pts/Hr	4.1
Fan Speeds Cool/Heat/Fan	3/3/3
dB Level (hi/med/low)	72/70/68
Ventilation Control	Yes
Fan Only	Yes
Air Delivery Max. CFM	570
Maximum Fuse Size	20A
Power Cord	20A Tee NEMA 6-20P
Slide-Out Chassis	Yes
Window Mounting Kit	Yes
In-Home Service	Yes
Shipping Weight (lbs.)	161
Dimensions (in.) Height	16 ⁷ / ₈
Width	26
Depth	27 ³ / ₄

Casement/Slider

10,000 to 12,000 BTUH

Installation Tips



CD-101J 10,000 BTUH
Nominal

FEATURES

- For horizontal sliding or casement windows, fits opening 20⁵/₁₆" to 39⁷/₁₆" high, starting at 15¹/₂" wide
- Electronic controls and remote
- Four-way adjustable air direction
- Energy saver mode and 24-hour on/off timer, auto restart

SPECIFICATIONS

Cooling Capacity BTUH	10,000
Approx. Sq. Ft. Cooling	400-450
EER	9.5
Heating Capacity BTUH (electric)	N/A
Power Supply	115V 60Hz
Humidity Removal Pts/Hr	2.32
Ventilation Control	Yes
Fan Only	Yes
Fan Speeds Cool/Fan	3/3
Air Delivery Max. CFM	339
dB Level (hi/med/low)	59/56/53
Amps Cooling	10.0
Amps Heating	N/A
Maximum Fuse Size	15A
Power Cord	15A Parallel NEMA 5-15P
Slide-Out Chassis	No
Window Mounting Kit	Yes
Remote Control	Yes
In-Home Service	Yes
Shipping Weight (lbs.)	80.5
Dimensions (in.) Height	20 ⁷ / ₈
Width	14 ⁵ / ₈
Depth	23 ¹ / ₂



CD-121J 12,000 BTUH
Nominal

FEATURES

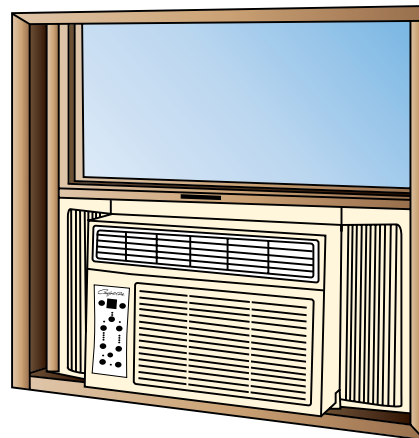
- For horizontal sliding or casement windows, fits opening 20⁵/₁₆" to 39⁷/₁₆" high, starting at 15¹/₂" wide
- Electronic controls and remote
- Four-way adjustable air direction
- Energy saver mode and 24-hour on/off timer, auto restart

SPECIFICATIONS

Cooling Capacity BTUH	12,000
Approx. Sq. Ft. Cooling	450-550
EER	9.5
Heating Capacity BTUH (electric)	N/A
Power Supply	115V 60Hz
Humidity Removal Pts/Hr	2.54
Ventilation Control	Yes
Fan Only	Yes
Fan Speeds Cool/Fan	3/3
Air Delivery Max. CFM	339
dB Level (hi/med/low)	59/56/53
Amps Cooling	11.6
Amps Heating	N/A
Maximum Fuse Size	15A
Power Cord	15A Parallel NEMA 5-15P
Slide-Out Chassis	No
Window Mounting Kit	Yes
Remote Control	Yes
In-Home Service	Yes
Shipping Weight (lbs.)	88
Dimensions (in.) Height	20 ⁷ / ₈
Width	14 ⁵ / ₈
Depth	23 ¹ / ₂

When you look at your window-mount air conditioner, you will see louvers on the sides and/or top. These are designed to bring in fresh air that is then directed across the coils inside the unit. It is important that the air conditioner be correctly installed, especially leaving the side louvers and back grille unobstructed.

The chart on the last pages of this catalog shows the maximum thickness of the wall through which the air conditioner should be installed. These widths assure that the side or top louvers will be unobstructed so that adequate fresh air is available for heat transfer to occur.



Double Hung Window

Each carton shows the minimum and maximum size of the window in which that specific unit will fit.

Measure the width of the window opening and the maximum height when the window is open to determine if the unit you've chosen will fit the available window, in addition to checking the wall thickness.

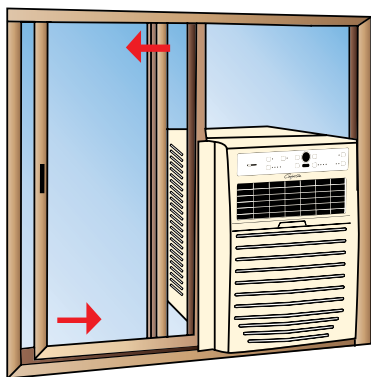
Window-mount air conditioners come with adjustable side panels that slide open to completely fill the window opening; allow 3 to 4 inches of width for the accordion-type side panels to open. The window sash closes onto the bracket located on the top of the air conditioner.

IMPORTANT: Because so much of the weight of the air conditioner is on the outside, it is necessary to have a support bracket installed for safety. See page 6 for details on our two sizes of support brackets.

Installation Tips

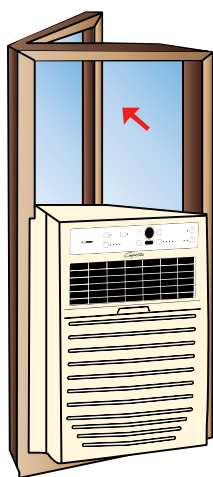
Casement/Slider Windows

These windows which slide open to the side or open outward require a different type of window air conditioner. Our CD models are ideal for casement or slider windows. The window can close onto the sides of the unit, and a support platform is included. A plastic window filler panel is included with the unit—it can be cut to size and fits into an adjustable window panel frame. For a casement window, the window crank must be removed.



Slider Window

Filler panel fits into frame that is installed above the unit.



Casement Window

Window opens outward or the exterior pane may be removed. Crank mechanism is removed.

Always follow the installation instructions included with the unit.

Portable Cooling



PS-81A

8,000 BTUH

Nominal

FEATURES

- Cool a room without any ductwork or any special wiring, and move the unit from room to room as needed
- Ideal wherever temporary cooling is needed or where a window A/C isn't an option
- Built-in condensate disposal
- 48" single hose for fast installation
- Automatic louver swing
- Washable filter is easily accessed
- 24-hour on/off timer, auto restart
- ASHRAE Standard 128-2001

SPECIFICATIONS

Cooling Capacity BTUH	8,100
Approx. Sq. Ft. Cooling	300-350
EER	8.9
Refrigerant	R-410A
Power Supply	115V 60Hz
Humidity Removal Pts/Hr.	1.9
Fan Only	Yes
Fan Speeds Cool/Fan	3/3
Air Delivery Max. CFM	218
Amps Cooling	8.2
dB Level (hi/low)	49/46/43
Maximum Fuse Size	15A
Power Cord	15A Parallel NEMA 5-15P
Slide-Out Chassis	N/A
Window Mounting Kit	Yes
Remote Control	Yes
In-Home Service	No
Shipping Weight (lbs.)	63
Dimensions (in.) Height	27 ¹³ / ₁₆
Width	16 ¹⁵ / ₁₆
Depth	13 ⁵ / ₁₆

8,000 to 9,000 BTUH



PS-91B

9,000 BTUH

Nominal

FEATURES

- Cool a room without any ductwork or any special wiring, and move the unit from room to room as needed
- Ideal wherever temporary cooling is needed or where a window A/C isn't an option
- Built-in condensate disposal
- Single hose with sliding window adapter for fast installation
- Washable filter is easily accessed
- 24-hour on/off timer, auto restart
- ASHRAE Standard 128-2001

SPECIFICATIONS

Cooling Capacity BTUH	9,000
Approx. Sq. Ft. Cooling	400
EER	8.98
Refrigerant	R-410A
Power Supply	115V 60Hz
Humidity Removal Pts/Hr.	3.4
Fan Only	Yes
Fan Speeds Cool/Fan	3/3
Air Delivery Max. CFM	194
Amps Cooling	9.5
dB Level (hi/low)	53/51
Maximum Fuse Size	15A
Power Cord	15A Parallel NEMA 5-15P
Slide-Out Chassis	N/A
Window Mounting Kit	Yes
Remote Control	Yes
In-Home Service	No
Shipping Weight (lbs.)	75
Dimensions (in.) Height	30 ¹ / ₈
Width	18 ¹ / ₂
Depth	15 ¹⁵ / ₁₆

Portable Cooling



PS-101A 10,000 BTUH
Nominal

FEATURES

- Cool a room without any ductwork or any special wiring, and move the unit from room to room as needed
- Ideal wherever temporary cooling is needed or where a window A/C isn't an option
- Built-in condensate disposal
- 48" single hose for fast installation
- Automatic louver swing
- Washable filter is easily accessed
- 24-hour on/off timer, auto restart
- ASHRAE Standard 128-2001

SPECIFICATIONS

Cooling Capacity BTUH	10,000
Approx. Sq. Ft. Cooling	400-450
EER	8.9
Refrigerant	R-410A
Power Supply	115V 60Hz
Humidity Removal Pts/Hr.	1.9
Fan Only	Yes
Fan Speeds Cool/Fan	3/3
Air Delivery Max. CFM	359
Amps Cooling	10.0
dB Level (hi/low)	56/53/50
Maximum Fuse Size	15A
Power Cord	15A Parallel NEMA 5-15P
Slide-Out Chassis	N/A
Window Mounting Kit	Yes
Remote Control	Yes
In-Home Service	No
Shipping Weight (lbs.)	72
Dimensions (in.) Height	27 ¹³ / ₁₆
Width	16 ¹⁵ / ₁₆
Depth	13 ⁵ / ₁₆



PS-121A 12,000 BTUH
Nominal

FEATURES

- Cool a room without any ductwork or any special wiring, and move the unit from room to room as needed
- Ideal wherever temporary cooling is needed or where a window A/C isn't an option
- Built-in condensate disposal
- 48" single hose for fast installation
- Automatic louver swing
- Washable filter is easily accessed
- 24-hour on/off timer, auto restart
- ASHRAE Standard 128-2001

SPECIFICATIONS

Cooling Capacity BTUH	12,000
Approx. Sq. Ft. Cooling	450-550
EER	8.9
Refrigerant	R-410A
Power Supply	115V 60Hz
Humidity Removal Pts/Hr.	2.54
Fan Only	Yes
Fan Speeds Cool/Fan	3/3
Air Delivery Max. CFM	241
Amps Cooling	11.9
dB Level (hi/low)	53/50/47
Maximum Fuse Size	15A
Power Cord	15A Parallel NEMA 5-15P
Slide-Out Chassis	N/A
Window Mounting Kit	Yes
Remote Control	Yes
In-Home Service	No
Shipping Weight (lbs.)	72
Dimensions (in.) Height	27 ¹³ / ₁₆
Width	16 ¹⁵ / ₁₆
Depth	13 ⁵ / ₁₆



PD-121B 12,000 BTUH
Nominal

FEATURES

- Cool a room without any ductwork or any special wiring, and move the unit from room to room as needed
- Ideal wherever temporary cooling is needed or where a window A/C isn't an option
- Built-in condensate disposal
- Dual hoses with sliding window adapter for fast installation
- Washable filter is easily accessed
- 24-hour on/off timer, auto restart
- ASHRAE Standard 128-2001

SPECIFICATIONS

Cooling Capacity BTUH	12,000
Approx. Sq. Ft. Cooling	450-550
EER	8.7
Refrigerant	R-410A
Power Supply	115V 60Hz
Humidity Removal Pts/Hr.	4.2
Fan Only	Yes
Fan Speeds Cool/Fan	3/3
Air Delivery Max. CFM	261
Amps Cooling	10.5
dB Level (hi/low)	53/52
Maximum Fuse Size	15A
Power Cord	15A Parallel NEMA 5-15P
Slide-Out Chassis	N/A
Window Mounting Kit	Yes
Remote Control	Yes
In-Home Service	No
Shipping Weight (lbs.)	92.5
Dimensions (in.) Height	33 ⁷ / ₈
Width	19 ¹¹ / ₁₆
Depth	18 ¹ / ₂

14,000 BTUH



PSH-141A 14,000 BTUH
Nominal

FEATURES

- Cool or heat a room without duct-work or special wiring, and move from room to room as needed
- Ideal wherever temporary cooling or heating is needed
- Built-in condensate disposal
- Automatic louver swing
- 48" single hose for fast installation
- Washable filter is easily accessed
- 24-hour on/off timer, auto restart
- ASHRAE Standard 128-2001

SPECIFICATIONS

Cooling Capacity BTUH	14,000
Approx. Sq. Ft. Cooling	550-700
EER	8.9
Heating Capacity BTUH	11,000
COP	2.6
Power Supply	115V 60Hz
Humidity Removal Pts/Hr.	2.96
Fan Only	Yes
Fan Speeds Cool/Heat/Fan	3/3
Air Delivery Max. CFM	297
Amps Cooling	13.8
Amps Heating	10.8
dB Level (hi/low)	55/54/53
Maximum Fuse Size	15A
Power Cord	15A Parallel NEMA 5-15P
Window Mounting Kit	Yes
Remote Control	Yes
In-Home Service	No
Shipping Weight (lbs.)	83
Dimensions (in.) Height	30 ¹ / ₈
Width	18 ⁷ / ₁₆
Depth	15 ⁵ / ₈

Wall Mount Heat Pump



Sleek wall-mounted room air heat pump

RPHE-093G

**Up to
16,100 BTUH of
integrated heat**

FEATURES

- Flexible condensate drainage solutions—Indoor/outdoor drainage connections
- Low ambient heating operation 5°F to 125.6°F
- Variable speed ECM blower motor for efficiency and reliability
- Hot-gas bypass uses electronic expansion valve for heating performance during defrost cycle
- Simple installation is done from inside the building and everything needed (except tools) is included
- Ideal for historic homes, apartment complexes, residential and commercial installations

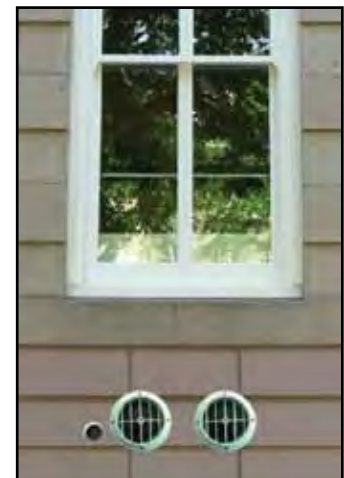
This elegant heat pump combines sleek design with cooling, heating, air filtration, and air circulation capabilities. Heat pump capacity is rated at 9,300 BTUH. Two electric heaters are built in to the sides of the unit and each is rated at 3,400 BTUH.

Installation is fast and simple: no refrigerant lines, charging or brazing is required. Install intake and outlet grilles plus condensate drain, plug into 208/230 outlet and the unit is ready for operation.

SPECIFICATIONS

Airflow (H/M/L)	266/233/206 CFM
Cooling Capacity	9,300 BTUH
Total Heating Cap.	9,300 BTUH*
Electric Heat Cap.	6,800 BTUH
EER	9.99
COP	3.53
Dehumidification	1.74 pints per hour
Operating Current	Cooling 4.2A Heating 3.95A Electric Heat 9.1A
Width (in.)	42 ¹ / ₈ **
Height (in.)	22 ²⁷ / ₃₂
Depth (in.)	9 ²¹ / ₃₂
Weight	114.6 lbs.

All capacities based on:
COOLING: indoor 80.6°F DB, 67°F WB; outdoor 90°F DB, 75° WB
HEATING: indoor 68°F DB, outdoor 47°F DB, 43°F WB
* Temperature dependent
**Including electric heater



The only components visible from the outside are the intake and exhaust grilles and a condensate drain, plus optional fresh air intake.



PTACs—A/C and Heat Pump

Our popular EKTC/EKTH Series has been redesigned to offer even greater versatility for a wide variety of application needs. Each unit is set up for 2kW, 3kW and 5kW of heat based on the power cord selected by the customers. Power cords are available in 15, 20 and 30 amps.

This design improvement enhances the unit's ability to provide comfort room by room. The EKTC/EKTH series is ideal for such applications as hotels, motels, apartment buildings, schools and nursing homes. Designed for quick installation and to fit standard wall sleeves, they can be used for new construction as well as for replacements.

The line combines a clean-line, attractive appearance with state-of-the-art technology to



minimize energy usage while ensuring guest comfort. Operation is exceptionally quiet. Both cooling only and heat pump models come with electric heat as standard, and capacities range from 7,000 to 15,000 BTUH. **208/230V-1-60**

Feature	EKTC07-1G	EKTC09-1G	EKTC12-1G	EKTC15-1G	EKTH07-1G	EKTH09-1G	EKTH12-1G	EKTH15-1G
Cooling BTUH	6,800/7,700	8,800/9,000	11,800/12,000	14,600/15,000	6,800/7,700	8,800/9,000	11,800/12,000	14,600/15,000
EER	12.2/12.0	11.4/11.3	10.5/10.7	9.7/9.8	12.2/12.0	11.4/11.3	10.5/10.7	9.7/9.8
Heating BTUH	—	—	—	—	6,100/6,300	7,900/8,100	10,500/10,700	13,600/13,800
C.O.P.	—	—	—	—	3.4/3.4	3.3/3.3	3.1/3.1	2.9/2.9
Cooling Amps	3.0/2.8	3.9/3.7	5.3/5.1	7.5/6.7	3.0/2.8	3.9/3.7	5.3/5.1	7.5/6.7
HP Amps	—	—	—	—	2.5/2.4	3.6/3.4	4.7/4.5	6.6/6.0
Airflow CFM	312/294/277	312/294/277	341/324/306	341/324/306	312/294/277	312/294/277	341/324/306	341/324/306
Heating CFM	—	—	—	—	320	320	365	365
Cooling Watts	620/640	770/800	1120/1120	1510/1530	620/640	770/800	1120/1120	1510/1530
HP Watts	—	—	—	—	530/540	700/720	990/1010	1370/1390
Dehum.	1 pt/hr	1.71 pts/hr	3.49 pts/hr	4.65 pts/hr	1 pt/hr	1.71 pts/hr	3.49 pts/hr	4.65 pts/hr
Net Wt/Ship Wt	111/131	111/131	116/136	119/139	111/131	111/131	118/138	121/141

Same size models also available in 265V. See trade price guide for more information.

Portable Dehumidifiers



30 to 70 pints per day capacity Comfort-Aire dehumidifiers quietly, efficiently and effectively remove excess moisture from indoor air. Proper humidity contributes to greater comfort, alleviates damage that moisture can cause to carpets, furnishings and equipment and can even help control allergies. The Comfort-Aire line includes three units to fit a wide range of requirements and room sizes.



SPECIFICATIONS

	BHD-301-H	BHD-501-H	BHD-701-H
Capacity Pts/Day	30	50	70
Input Amps	3.0	4.7	6.9
Bucket Capacity	6.3 pts	12.7 pts	12.7 pts
Airflow CFM (hi/low)	144/124	188/165	188/165
Sound Level (dBA) (hi/low)	56/54	58.5/56.5	58.5/56.5
Dimensions (in.)			
Height	20 1/8	23 1/4	23 1/4
Width	14 3/4	15 3/8	15 3/8
Depth	9 7/8	10 13/16	10 13/16
Shipping Weight (lbs.)	30.9	38.6	41.9

FEATURES

- **Automatic Water Level Shut-Off**—When the drain bucket is full, the unit automatically shuts off, then displays a "Full" light
- **Drain Options**—Condensed water can be collected in the removable bucket that has a convenient handle, or continuously drained using the adapter kit that's included
- **Easy to Use Controls**—All controls are located on the top of the unit so they're easy to see and adjust; actual room humidity/relative humidity set point is displayed
- **Auto Restart**—All models automatically resume operation after a power outage, ideal for second homes or offices, as well as primary residences
- **Slide-Out Filter**—Filter is easily removed from unit so it can be cleaned and reused; check filter light is a reminder to clean the filter
- **Leak Detector**—Signals if there is a leak in the dehumidifier refrigerant system

Ductless Mini-Split Systems



D Series 15 SEER

*Single Zone Cooling only
and Heat Pumps*

9,000 - 22,000 BTUH

Cooling only	DMC09SD-0	DMC12SD-0	DMC18SD-1	DMC24SD-1
BTUH	9,000	12,000	18,000	22,000
Heat Pump	DVH09SD-0	DVH12SD-0	DVH18SD-1	DVH24SD-1
BTUH clg/htg	9,000/9,000	12,000/12,000	18,000/18,000	22,000/22,000



+ Models are
Energy Star®
compliant

V Series

*Single Zone Heat Pumps
9,000 - 36,000 BTUH
Inverter Technology*



VMH09SC+	VMH12SC+	VMH18SC+	VMH24SC	VMH30SC	VMH36SC
9,000/10,000*	12,000/ 12,500*	17,500/ 18,000*	23,000/ 24,000*	30,000/ 30,000*	36,000/ 36,000*

*BTUH Cooling/Heating



V Series

*InverterFlex® Multi-Zone
Heat Pumps*

*Single, Dual, Tri & Quad Zone
9,000 - 36,000 BTUH*

Mix and match high wall mount indoor units

Outdoor Multi-Zone Units

A-VMH18DC	18,000 nom. total BTUH
A-VMH27TC	27,000 nom. total BTUH
A-VMH36QC	36,000 nom. total BTUH

Indoor High Wall Mount Units

B-VMH09FC	9,000 BTUH
B-VMH12FC	12,000 BTUH
B-VMH18FC	18,000 BTUH

Mini-splits are the ideal solution for areas where adding ductwork is too expensive or impractical, such as older homes, additions, sunrooms, warehouse office spaces, computer rooms, sports arena skyboxes, and more. Comfort-Aire offers a complete line of ductless mini-splits, including high efficiency inverter models and multi-zone units that allow each room to be individually controlled to meet specific requirements and save energy when the room isn't being used:

- **Single Zone**—9,000 to 22,000 BTUH, one outdoor unit and one indoor air handler, one remote control. Available in cooling only and heat pump models.
- **Single Zone Inverter**—9,000 to 36,000 BTUH, one outdoor unit and one indoor air handler, one remote control; inverter technology saves 40% or more on energy consumption and provides precise temperature control, exceptionally quiet operation. Heat pump only.

- **Multi-Zone Inverter**—Mix and match indoor units to condition 2, 3 or 4 zones; 18,000 to 36,000 BTUH. Inverter technology means exceptional energy efficiency and savings. Available in heat pump only.



*Operation is
controlled by a
fully featured
wireless remote
that makes it easy
to program and
select the mode.*

Specifications

POWER CORD Configurations



15 AMP 115V
PARALLEL
A
5-15P



15 AMP 230V
TANDEM
B
6-15P



20 AMP 230V
TEE
C
6-20P



30 AMP 230V
TANDEM
D
6-30P



Products marked
with * are Energy
Star compliant

Future Specification Revisions: EPA reserves the right to change the specification should technological and/or market changes affect its usefulness to consumers, industry, or the environment. In keeping with current policy, revisions to the specification are arrived at through industry discussions. In the event of a specification revision, please note that the ENERGY STAR qualification is not automatically granted for the life of a product model.

To qualify for ENERGY STAR, a product model shall meet the ENERGY STAR specification in effect on the date of manufacture. The date of manufacture is specific to each unit and is the date on which a unit is considered to be completely assembled."

IMPORTANT!

Always wait to cut an opening until the unit arrives and dimensions can be verified.

LIMITED WARRANTY

All Comfort-Aire products are covered by outstanding warranties. For details on each model's coverage, see the warranty card packed with the unit or visit our web site and click on "Room Air," then select the model. Some limitations apply to warranties.

**Design, specifications,
performance data and
material subject to
change without notice.**



Model	Cooling Capacity BTU/Hr	Approx. Sq. Ft. Cooling	EER	Heating Capacity BTUH (electric)	Electric (Volts)	Humidity Removal Pints/Hr	Remote Control
COOLING 5,000 to 10,000 BTUH							
RG-51K	5,000	100-150	9.7	N/A	115	1.27	No
RADS-51K*	5,200	100-150	10.7	N/A	115	1.27	Yes
RADS-61J*	6,000	150-250	10.7	N/A	115	1.48	Yes
RADS-81J*	8,000	300-350	10.8	N/A	115	1.90	Yes
RADS-101J*	10,000	400-450	10.8	N/A	115	2.32	Yes
COOLING 12,000 to 36,600 BTUH							
RADS-121J*	12,000	450-550	10.8	N/A	115	2.54	Yes
RAD-123J	11,800/12,000	450-550	9.8	N/A	208/230	2.54	Yes
RADS-151J*	15,000	600-700	10.7	N/A	115	3.17	Yes
RADS-183J*	18,200/18,500	700-1000	10.7	N/A	208/230	3.80	Yes
RADS-253J*	24,700/25,000	1400-1500	9.4	N/A	208/230	5.71	Yes
RAD-283J	28,000/28,500	1500-1700	8.5/8.5	N/A	208/230	6.34	Yes
COOLING WITH ELECTRIC HEAT							
REG-81J	8,000	300-350	9.8	3,500	115	1.48	Yes
REG-123J	11,600/12,000	450-550	9.8	8,500/11,000	208/230	3.6	Yes
REG-183J	18,200/18,500	700-1000	9.7	13,000/16,000	208/230	3.8	Yes
REG-183J-20A	18,200/18,500	700-1000	9.7	9,100/11,200	208/230	3.8	Yes
REG-253J	24,700/25,000	1400-1500	9.4	13,000/16,000	208/230	5.7	Yes
THRU-THE-WALL SERIES							
BG-81J*	8,000	300-350	9.4	N/A	115	1.9	Yes
BG-101J*	10,000	400-450	9.4	N/A	115	2.3	Yes
BG-103J*	9,800/10,000	400-450	9.4	N/A	208/230	2.3	Yes
BG-121G*	12,000	450-550	9.4	N/A	115	2.54	Yes
BG-123J*	11,700/12,000	450-550	9.4	N/A	208/230	2.54	Yes
BG-143K	13,600/14,000	550-700	8.5	N/A	208/230	2.96	Yes
BGE-103J	9,800/10,000	400-450	9.4	8,600/10,600	208/230	2.32	Yes
BGE-123J	11,700/12,000	450-550	9.0	8,600/10,600	208/230	2.54	Yes
BGE-143K	13,600/14,000	550-700	8.5	8,600/10,600	208/230	2.96	Yes
HEAT PUMPS							
RAH-123G	11,200/11,600	450-550	9.5	10,000/10,300**	208/230	5.3	Yes
RAH-183G	17,400/17,800	700-1000	9.0	15,700/16,000**	208/230	4.1	Yes
CASEMENT SERIES							
CD-101J	10,000	400-450	9.5	N/A	115	2.32	Yes
CD-121J	12,000	450-550	9.5	N/A	115	2.54	Yes
PORTABLE A/C							
PS-81A	8,100	300-350	8.9	N/A	115	1.9	Yes
PS-91B	9,000	400	8.98	N/A	115	3.4	Yes
PS-101A	10,000	400-450	8.9	N/A	115	1.9	Yes
PS-121A	12,000	450-550	8.9	N/A	115	2.54	Yes
PD-121B	12,000	450-550	8.7	N/A	115	4.2	Yes
PSH-141A	14,000	550-700	8.9	N/A	115	2.96	Yes

** Heat pump capacity

Specifications

Model Number	Ventilation Control	Fan Only Speeds	Air Delivery Max. CFM	Fan Motor Speeds	Amps Cooling	Amps Heating	dB Level (hi/med/low)	Maximum Fuse Size.	Slide-Out Chassis	Window Mounting Kit (Standard)	Power Cord Plug	Approx. Max-Wall Thickness (in.)	Ship Weight (lbs.)	Dimensions H x W x D (with base and front in inches)
COOLING 5,000 to 10,000 BTUH														
RG-51K	No	2	124	2	4.5	N/A	54/50	15	No	Yes	A	2 ¹ / ₈	40	12 ¹ / ₁₆ x 16 x 13 ¹ / ₄
RADS-51K*	No	2	146	2	4.5	N/A	56/52	15	No	Yes	A	3 ⁵ / ₁₆	44	12 ¹ / ₁₆ x 16 x 15 ³ / ₈
RADS-61J*	No	3	146	3	4.9	N/A	56/52/49	15	No	Yes	A	3 ⁵ / ₁₆	44	12 ¹ / ₁₆ x 16 x 15 ³ / ₈
RADS-81J*	No	3	218	3	6.4	N/A	61/57/53	15	No	Yes	A	5	54	13 ⁷ / ₁₆ x 18 ⁹ / ₁₆ x 15 ³ / ₄
RADS-101J*	Yes	3	290	3	8.8	N/A	58/57/54	15	No	Yes	A	7 ⁵ / ₁₆	68	14 ¹¹ / ₁₆ x 19 x 21 ¹ / ₂
COOLING 12,000 to 36,600 BTUH														
RADS-121J*	Yes	3	265	3	10.2	N/A	60/57/52	15	No	Yes	A	7 ⁵ / ₁₆	78	14 ¹¹ / ₁₆ x 19 x 21 ¹ / ₂
RAD-123J	Yes	3	266	3	6.2/5.7	N/A	60/57/52	15	No	Yes	B	7 ⁵ / ₁₆	73	14 ¹¹ / ₁₆ x 19 x 21 ¹ / ₂
RADS-151J*	Yes	3	418	3	12.1	N/A	59/56/52	15	Yes	Yes	A	8	112	17 ¹⁵ / ₁₆ x 23 ⁵ / ₈ x 25 ⁷ / ₁₆
RADS-183J*	Yes	3	447	3	8.3/7.7	N/A	60/57/53	15	Yes	Yes	B	8	128	17 ¹⁵ / ₁₆ x 23 ⁵ / ₈ x 25 ⁷ / ₁₆
RADS-253J*	Yes	3	541	3	12.8/12.0	N/A	62/59/56	20	Yes	Yes	C	10	137	18 ⁵ / ₈ x 26 ¹ / ₂ x 25 ¹ / ₂
RAD-283J	Yes	3	541	3	16.0/14.8	N/A	63/60/56	30	Yes	Yes	D	10	151	18 ⁵ / ₈ x 26 ¹ / ₂ x 25 ¹ / ₂
COOLING WITH ELECTRIC HEAT														
REG-81J	No	3	278	3	7.4	11.6	58/55/50	15	Yes	Yes	A	6 ¹ / ₈	80	15 ⁹ / ₁₆ x 23 ¹ / ₁₆ x 23 ⁷ / ₁₆
REG-123J	Yes	3	267	3	5.5/5.5	15.0/13.5	58/56/53	20	Yes	Yes	C	6 ¹ / ₈	88	15 ⁹ / ₁₆ x 23 ¹ / ₁₆ x 23 ⁷ / ₁₆
REG-183J	Yes	3	459	3	9.1/8.4	22.0/20.0	61/58/55	30	Yes	Yes	D	8	127	17 ¹⁵ / ₁₆ x 23 ⁵ / ₈ x 25 ⁷ / ₁₆
REG-183J-20A	Yes	3	459	3	9.1/8.4	16.0/14.8	61/58/55	20	Yes	Yes	C	8	127	17 ¹⁵ / ₁₆ x 23 ⁵ / ₈ x 25 ⁷ / ₁₆
REG-253J	Yes	3	541	3	12.8/12.0	22.5/20.0	63/61/59	30	Yes	Yes	D	10	142	18 ⁵ / ₈ x 26 ¹ / ₂ x 25 ¹ / ₂
THRU-THE-WALL SERIES														
BG-81J*	No	3	283	3	8.0	N/A	58/54/50	15	No	Yes [▲]	A	18	68	14 ⁹ / ₁₆ x 24 ¹ / ₄ x 20 ⁵ / ₁₆
BG-101J*	No	3	282	3	9.6	N/A	58/54/52	15	No	Yes [▲]	A	18	68	14 ⁹ / ₁₆ x 24 ¹ / ₄ x 20 ⁵ / ₁₆
BG-103J*	No	3	297	3	5.3/5.1	N/A	59/57/56	15	No	Yes [▲]	B	18	68	14 ⁹ / ₁₆ x 24 ¹ / ₄ x 20 ⁵ / ₁₆
BG-121G*	No	3	306	3	11.5	N/A	61/59/57	15	No	Yes [▲]	A	18	78	14 ⁹ / ₁₆ x 24 ¹ / ₄ x 20 ⁵ / ₁₆
BG-123J*	No	3	296	3	6.9/6.3	N/A	61/59/57	15	No	Yes [▲]	B	18	76	14 ⁹ / ₁₆ x 24 ¹ / ₄ x 20 ⁵ / ₁₆
BG-143K	No	3	318	3	8.3/7.4	N/A	61/60/58	15	No	Yes [▲]	B	18	79	14 ⁹ / ₁₆ x 24 ¹ / ₄ x 20 ⁵ / ₁₆
BGE-103J	No	3	295	3	5.3/5.1	15.0/13.5	60/58/56	15	No	Yes [▲]	B	18	76	14 ⁹ / ₁₆ x 24 ¹ / ₄ x 20 ⁵ / ₁₆
BGE-123J	No	3	286	3	6.6/6.0	15.0/13.5	60/58/55	15	No	Yes [▲]	B	18	79	14 ⁹ / ₁₆ x 24 ¹ / ₄ x 20 ⁵ / ₁₆
BGE-143K	No	3	313	3	8.3/7.4	15.0/13.5	60/58/56	15	No	Yes [▲]	B	18	84	14 ⁹ / ₁₆ x 24 ¹ / ₄ x 20 ⁵ / ₁₆
HEAT PUMPS														
RAH-123G	No	3	253	3	5.9/5.5	5.6/5.1	72/70/68	20	Yes	Yes	C	9	115	15 ⁵ / ₁₆ x 22 ⁵ / ₈ x 23 ⁵ / ₈
RAH-183G	Yes	3	570	3	9.0/8.5	8.8/8.3	72/70/68	20	Yes	Yes	C	8 ¹ / ₂	161	16 ⁷ / ₈ x 26 x 27 ³ / ₄
CASEMENT SERIES														
CD-101J	Yes	3	339	3	10.0	N/A	59/56/53	15	No	Yes	A	8 ¹ / ₂	80.5	20 ⁷ / ₈ x 14 ⁵ / ₈ x 23 ¹ / ₂
CD-121J	Yes	3	339	3	11.6	N/A	59/56/53	15	No	Yes	A	8 ¹ / ₂	88	20 ⁷ / ₈ x 14 ⁵ / ₈ x 23 ¹ / ₂
PORTABLE A/C														
PS-81A	Yes	3	218	3	8.2	N/A	49/46/43	15	N/A	Yes	A	N/A	63	27 ¹³ / ₁₆ x 16 ¹⁵ / ₁₆ x 13 ⁵ / ₁₆
PS-91B	Yes	3	194	3	9.5	N/A	53/-/52	15	N/A	Yes	A	N/A	75	30 ¹ / ₈ x 18 ¹ / ₂ x 15 ¹⁵ / ₁₆
PS-101A	Yes	3	359	3	10.0	N/A	56/53/50	15	N/A	Yes	A	N/A	72	27 ¹³ / ₁₆ x 16 ¹⁵ / ₁₆ x 13 ⁵ / ₁₆
PS-121A	Yes	3	241	3	11.9	N/A	53/50/47	15	N/A	Yes	A	N/A	72	27 ¹³ / ₁₆ x 16 ¹⁵ / ₁₆ x 13 ⁵ / ₁₆
PD-121B	Yes	3	261	3	10.5	N/A	53/-/52	15	N/A	Yes	A	N/A	92.5	33 ⁷ / ₈ x 19 ¹¹ / ₁₆ x 18 ¹ / ₂
PSH-141A	Yes	3	297	3	13.8	10.8	55/54/53	15	N/A	Yes	A	N/A	83	30 ¹ / ₈ x 18 ⁷ / ₁₆ x 15 ⁵ / ₈

▲ Interior trim kit for BG, BGE Series: Models use wall sleeve

The Quality Leader in Conditioning Air

For three-quarters of a century Heat Controller, has provided quality products for conditioning air. Founded in 1933, the company can trace its roots to the Wingert Furnace Co. which began building coal, gas and oil furnaces in Montpelier, Ohio, in 1907. In 1955 the company moved to a new facility in Jackson, Michigan, and a new focus was placed on room air conditioners and dehumidifiers under the Comfort-Aire® brand name.

Heat Controller is known throughout the industry for efficient, reliable products and in-season availability. Whether for heating or cooling, these products meet or exceed industry standards for energy efficiency. Added to that, the line is constantly being updated to add the features and new technology customers demand.

Future Specification Revisions: EPA reserves the right to change the specification should technological and/or market changes affect its usefulness to consumers, industry, or the environment. In keeping with current policy, revisions to the specification are arrived at through industry discussions. In the event of a specification revision, please note that the ENERGY STAR qualification is not automatically granted for the life of a product model.

To qualify for ENERGY STAR, a product model shall meet the ENERGY STAR specification in effect on the date of manufacture. The date of manufacture is specific to each unit and is the date on which a unit is considered to be completely assembled.

Incentive and rebate programs have precise requirements as to product performance and certification through such organizations as ENERGY STAR and AHRI. It is the responsibility of the consumer to determine whether a specific model qualifies for these incentive/rebate programs.

DUE TO ONGOING PRODUCT IMPROVEMENT, DESIGN, MATERIALS, SPECIFICATIONS AND APPEARANCE ARE SUBJECT TO CHANGE WITHOUT NOTICE.

Comfort-Aire®
HEAT CONTROLLER

1900 Wellworth Ave., Jackson MI 49203 • Ph. 517-787-2100 • www.comfort-aire.com

A **WALSH** Company

REST ASSURED: VALUE-ADDED PROGRAMS

When you buy Comfort-Aire products, you're purchasing the peace of mind that comes from dealing with a company that's been in business for over 75 years. We have a well-deserved reputation not only for quality products, but also for standing behind those products with excellent warranty and support programs.

Comfort-Aire backs all its products with some of the strongest warranties in the industry. Our products are built to exacting standards, but should you experience a problem, you can rely on our nationwide network of service providers.

Our room air products are accompanied by detailed, comprehensive installation and operating manuals and these, along with other technical data, are also available on our website.

VISIT US ON THE WEB AT:
www.comfort-aire.com

Comfort-Aire®

Dehumidifiers



BHD-301-H



BHD-501-H



BHD-701-H

All models are Energy Star® compliant
Low temperature operation down to 41°F (5°C)

Controlling humidity makes your home feel more comfortable, prevents damage from excess moisture, and can even help control allergies

Humidity is a key factor in your overall comfort. When the air is less humid, you feel more comfortable. And that comfort level occurs at a higher temperature, which means you can set your air conditioner thermostat higher and save on energy costs.

A dehumidifier also helps prevent damage to walls and foundations from excess moisture. Wood furniture, fabrics and carpets will last longer and smell better with proper humidity. Many electronic devices operate best

in a controlled environment. And finally, maintaining proper humidity helps reduce allergens.

Comfort-Aire dehumidifiers are designed to efficiently and quietly remove moisture from the air—and to look good doing it. Compact, sleek cabinets are stone white in color and roll easily from room to room on durable casters.

Comfort-Aire dehumidifiers come in sizes to effectively handle a variety of conditions and a wide range of space requirements.

Here's how a dehumidifier works...

An internal fan pulls warm/humid room air across cold evaporator coils. The moisture in the air condenses on the coils and drips into the condensate bucket. The humidistat set point governs the amount of moisture removed from the air.

Model BHD-301-H

Capacity 30 pints/day

Bucket Capacity:

6.3 pints

Model BHD-501-H

Capacity 50 pints/day

Bucket Capacity:

12.7 pints

Model BHD-701-H

Capacity 70 pints/day

Bucket Capacity:

12.7 pints



Relative Humidity Range
35% to 85%

FEATURES

Automatic Water Level Shut-Off—When the drain bucket is full, the unit automatically shuts off, then displays a “Full” light

Drain Options—Condensed water can be collected in the removable bucket that has a convenient handle, or continuously drained using the adapter kit that's included

Easy to Use Controls—All controls are located on the top of the unit so they're easy to see and adjust; actual room humidity/relative humidity set point is displayed

Auto Restart—All models automatically resume operation after a power outage, ideal for second homes or offices, as well as primary residences

Slide-Out Filter—Filter is easily removed from unit so it can be cleaned and reused; check filter light is a reminder to clean the filter

Leak Detector—Signals if there is a leak in the dehumidifier refrigerant system



Easy-View
Sightglass



Optional Direct
Drain Connection



Convenient
Drain Bucket

Design, specifications and materials
subject to change without notice.

HOW TO CHOOSE A DEHUMIDIFIER

Dehumidifier capacity is rated in pints per day (24 hour period). The table below is a guideline for the capacity necessary to dehumidify areas of various sizes and conditions.

Many variables can affect the amount of dehumidification required, including:

- Climate—hot, sticky conditions require extra capacity
- Number of people living in the space—the more people, the more capacity you'll need
- Number of doors and windows—lots of openings let in more moisture

- Operation of laundry equipment—washers and dryers add moisture to the air, and the more loads done each day, the greater the amount of moisture in the air

To use the table, decide which condition best describes the home or space, then find the size of the area to be dehumidified.

If there's any question about size, always choose the larger model. Remember—a unit can only remove moisture to its rated level. For dehumidification, oversizing is better than undersizing.

CONDITION WITHOUT DEHUMIDIFICATION (During warm and humid outdoor conditions)	AREA—SQ. FEET				
	200	1000	1500	2000	2500
Moderately Damp —Space feels damp and has a musty smell only during humid weather	30 pt.	30 pt.	30 pt.	30 - 50 pt.	30 - 50 pt.
Very Damp —Space always feels damp and has a musty odor; damp spots show on walls and floor	30 pt.	30 pt.	30 - 50 pt.	30 - 50 pt.	50 - 70 pt.
Wet —Space feels and smells wet; walls and floors sweat or seepage is present	30 pt.	30 - 50 pt.	30 - 50 pt.	50 - 70 pt.	50 - 70 pt.
Extremely Wet —Floor is wet, humidity builds up when laundry is drying or under other high load conditions	30 pt.	30 - 70 pt.	50 - 70 pt.	70 pt.	70 pt.

Capacity needed is shown in pints per day

SPECIFICATIONS			
FEATURES	BHD-301	BHD-501	BHD-701
Capacity (pts per day)	30	50	70
Voltage	115V	115V	115V
Energy Factor L/kWH	1.85	1.85	1.85
Input Watts/Amps	310/3.0	520/4.7	720/6.9
24 Hour On/Off Timer	Yes	Yes	Yes
Electronic Controls	Yes	Yes	Yes
Fan Speeds	2	2	2
Sound Level (dBA)	56	58.5	58.5
Low Temp Operation	Yes	Yes	Yes
Set/Room Humidity Display	Yes	Yes	Yes
Full Bucket/Auto Shut-Off	Yes	Yes	Yes
Auto Restart	Yes	Yes	Yes
Auto Defrost Control	Yes	Yes	Yes
Bucket Capacity	6.3 pints	12.7 pints	12.7 pints
Dimensions (inches) W x D x H	14 ³ / ₄ x 9 ⁷ / ₈ x 20 ¹ / ₈	15 ³ / ₈ x 10 ¹³ / ₁₆ x 23 ³ / ₄	15 ³ / ₈ x 10 ¹³ / ₁₆ x 23 ³ / ₄
Net Weight (lbs.)	28.7	36.4	39.7
Shipping Weight (lbs.)	30.9	38.6	41.9

WARRANTY: One year on unit, five years on sealed system.
(Some limitations apply, see warranty on website for details.)

HEAT CONTROLLER

1900 Wellworth Ave., Jackson MI 49203 • Ph. 517-787-2100 • www.heatcontroller.com

A **WATS** Company

Portable Room Air

comfort, room by room



*All portable units meet ASHRAE
Standard 128-2001*

FEATURES

Cool a room without any ductwork or special wiring—and move the unit from room to room as needed! Our portable units are ideal for any area where temporary cooling or heating is needed, or in situations where a window air conditioner isn't an option.

Residential applications include apartments, bedrooms, cottages, sunrooms and workshops. Portables are also suited to classrooms and certain types of offices, as well as historical buildings where maintaining the exterior appearance is important.

Units include cooling, dehumidification only and air circulation modes—the PSH-141A model also has a heating mode. Flexible hoses are 48 inches long; hose hook-up is not needed for air circulation (fan only mode).

All models are 115V-1-60.

- Condensate management system disposes of its own condensate under most conditions—there's no bucket to empty; auto stop protects against overflow as a safeguard
- Easy-access air filter is washable and reusable
- Louvers can be adjusted for comfortable air flow, some models have automatic louver swing for a gentle breeze-like effect
- Electronic controls have soft-touch keypad; wireless remote is included
- 24-Hour on/off timer can be used to save on energy consumption when residents are not home
- Auto restart reverts to the last setting following a power outage and has a three minute time delay to protect the compressor
- Sliding adapters that fit a variety of window sizes (double-hung and casement) and some patio doors make installation fast and easy

Comfort-Aire®
www.comfort-aire.com

Six models, four cabinet styles give you a variety of choices...

PS- 81A,
PS-101A,
and PS-121A



- 8,100, 10,000 or 12,000 BTUH cooling only models
- Auto operation and sleep mode
- Two air filters
- 48" single hose
- Automatic louver swing

PS-91B



- 9,000 BTUH cooling only model
- 48" single hose for heat exchange
- Displays temperature setpoint and room temperature
- Adjustable airflow direction

PD-121B



- 12,000 BTUH cooling only model
- 48" dual hoses for air intake and exhaust
- Displays temperature setpoint and room temperature
- Adjustable airflow direction

PSH-141A



- Cooling and heating in a single unit
- 14,000 BTUH cooling, 11,000 BTUH heating
- Auto operation and sleep mode
- Two air filters
- 48" single hose
- Auto louver swing

Portable Air Conditioner

Power 115-1-60

Model	Cooling (Heating) BTUH	Approx. Sq. Ft. Cooling	EER (COP)	Humidity Removal Pts/Hr.	Sound Level dBA	Max. CFM	Amps Cooling (Heating)	Cooling Fan Speeds	Dimensions H x W x D (inches)	Shipping weight (lbs)
PS-81A	8,100	300-350	8.9	1.9	49/46/43	218	8.2	3/3	27 ¹³ / ₁₆ X 16 ¹⁵ / ₁₆ X 13 ⁵ / ₁₆	63
PS-91B	9,000	400	8.98	3.4	53/-/51	194	9.5	3/3	30 ¹ / ₈ X 18 ¹ / ₂ X 15 ¹⁵ / ₁₆	75
PS-101A	10,000	400-450	8.9	1.9	56/53/50	359	10.0	3/3	27 ¹³ / ₁₆ X 16 ¹⁵ / ₁₆ X 13 ⁵ / ₁₆	72
PS-121A	12,000	450-550	8.9	2.54	53/50/47	241	11.9	3/3	27 ¹³ / ₁₆ X 16 ¹⁵ / ₁₆ X 13 ⁵ / ₁₆	72
PD-121B	12,000	450-550	8.7	4.2	53/-/52	261	10.5	3/3	33 ⁷ / ₈ X 19 ¹¹ / ₁₆ X 18 ¹ / ₂	92.5
Heat and Cool Model										
PSH-141A	14,000 (11,000)	550-700	8.9 (2.6)	2.96	55/54/53	297	13.8 (10.8)	3/3	30 ¹ / ₈ X 18 ⁷ / ₁₆ X 15 ⁵ / ₈	83

HEAT CONTROLLER

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A **TRIS** Company

Design, specifications and materials subject to change without notice.

HEAT CONTROLLER

Wall-mounted room air heat pump

RPHE-093G

This elegant heat pump combines sleek design with cooling, heating, air filtration, and air circulation capabilities. Heat pump capacity is rated at 9,300 BTUH. Two electric heaters for supplemental heat are built in to the sides of the unit and each is rated at 3,400 BTUH for 16,100 BTUH of integrated heat.

Installation is fast and simple: no refrigerant lines, charging or brazing is required. Install as below, plug in to 208/230 outlet and the unit is ready for operation.



APPLICATIONS

- High end residential & commercial
- Hotels and motels
- Historic buildings
- Government housing
- Apartment complexes
- Any facility with restrictions on outdoor units and/or refrigerant piping distance



**Rated at
9,300 BTUH cooling
and 9,300 BTUH heating**

THREE STEP INSTALLATION

- Use template to drill holes in outer wall of building for intake, exhaust
- Install flexible grilles, intake/exhaust hoses, and condensate drain line—all from the building interior
- Hang unit using mounting bracket (included), plug unit into power source and turn on the heat pump

FEATURES

- No outside unit—just grilles for air intake and exhaust, and condensate drain, appear on the structure exterior
- Low ambient heating operation 5°F to 125.6°F
- Flexible condensate drainage options
- ECM blower motor for energy efficiency and reliability
- Hot-gas bypass uses electronic expansion valve for improved heating performance during defrost cycle
- Multiple units can be connected to a data network for guest room control
- Simple installation is done from inside the building and everything needed (except tools) is included

SPECIFICATIONS

Airflow (H/M/L)	266/233/206 CFM
Cooling Capacity	9,300 BTUH
Heat Pump Heating Cap.	9,300 BTUH**
Electric Heat Capacity	6,800 BTUH (supplemental heat)
Integrated Heat Capacity	16,100 BTUH
EER	9.99
Dehumidification	1.74 pints per hour
Operating Current	Cooling 4.2A, Heating 3.95A Electric Heat 9.1A
Dimensions HxWxD (in.)	22 ²⁷ / ₃₂ x 43 ¹ / ₈ x 9 ²¹ / ₃₂
Weight	114.6 lbs.

*Including electric heaters

**Temperature dependent



The only components visible from the outside are the intake and exhaust grilles and a condensate drain, plus optional fresh air intake.



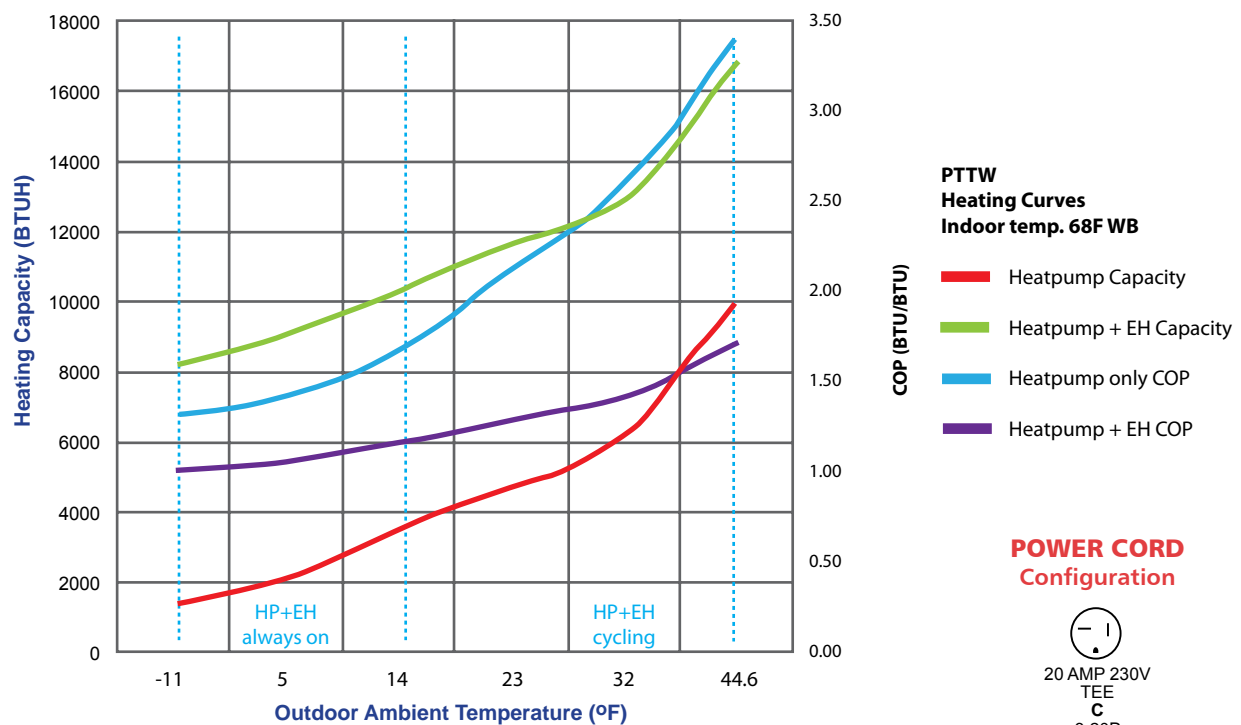
RPHE model comes charged with R-410A, an environmentally friendly refrigerant.

Tested to ASHRAE 90.1-1999



Functions including the timer, sleep mode, temperature settings, and fan speeds are controlled by a wireless remote or on-board touchpad. A drawer in the cabinet top left keeps the remote handy; the unit control pad is located on the top right.

Cold Weather Operation



NOTE: All capacities based on: COOLING: indoor 80°F DB, 67°F WB; outdoor 90°F DB, 75°F WB; HEATING: indoor 68°F DB, outdoor 47°F DB, 43°F WB

Due to ongoing product improvements, design, specifications, materials and performance data are subject to change without notice.

HEAT CONTROLLER

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A **MPS** Company



PACKAGED TERMINAL AIR CONDITIONERS & HEAT PUMPS



**Energy efficiency
combined with state-of-the art
controls—all in an attractive package!**

Comfort-Caire®
HEAT CONTROLLER

Packed with features that save money

Our packaged terminal air conditioners and heat pumps provide year 'round comfort, room by room, for hotels, motels, apartments, office buildings, schools, nursing homes and more. Designed for quick installation in a standard 16" x 42" wall sleeve, they're great for new construction as well as replacements.

Combining attractive appearance with state-of-the-art technology, these units minimize energy usage while ensuring guest comfort. Available in cooling only and heat pump versions, all models include electric heat as standard.

Features

Energy Efficient—Exceptionally high energy efficiency ratios (EERs); allows for owner-programmed setback during periods of inactivity and in-room temperature limitations.

Room Freeze Protection—When the unit senses temperatures 40°F or lower, it automatically activates the fan motor and electric heater.

Versatile Configuration—The unit can be optimized to a specific application through the use of dipswitches and the digital keypad; selections include setpoint limiting, front desk control, wall thermostat control, and more.

Quiet Operation—Indoor sound reduction is achieved through the unit's two fan motors and a tangential blower wheel design that provides uniform air discharge.

Fresh Air Control Arm—Allows outdoor air into room through vent filter; 70 CFM fresh air ventilation.

Easy to Service—On-board computer utilizes real-time diagnostics to prolong the life of the unit and simplify service; LED indicator flashes error code and in many cases the unit will automatically clear the fault condition.

Louvered front panel removes easily and is made of durable high impact polystyrene

Polycarbonate discharge grille is reversible for 40° or 80° discharge angle

Intake air grille is designed with architectural slotted louvers

Control panel door lifts easily and holds in place when open

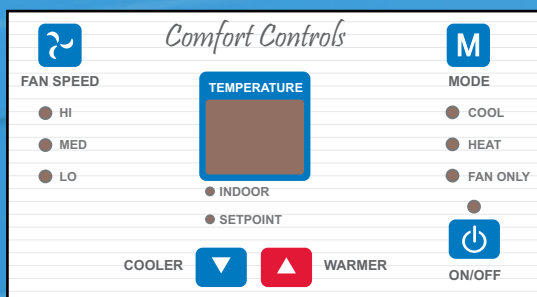
Attractive cabinet styling complements any decor
Insulated, reinforced steel wall sleeve (optional) with leak proof one-piece basepan comes in matching color

Unit extends just 7 5/8" into the room and can be mounted flush to the floor, if desired

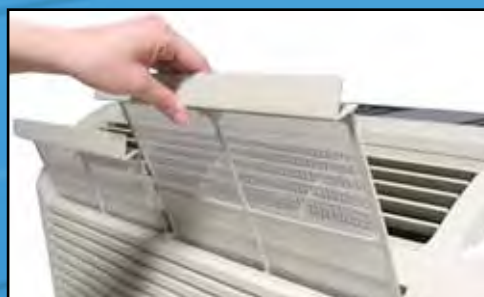


2.0, 3.0, 5.0 kW electric heat determined by power cord selection—see charts on back page

Options: A full range of options is available including...

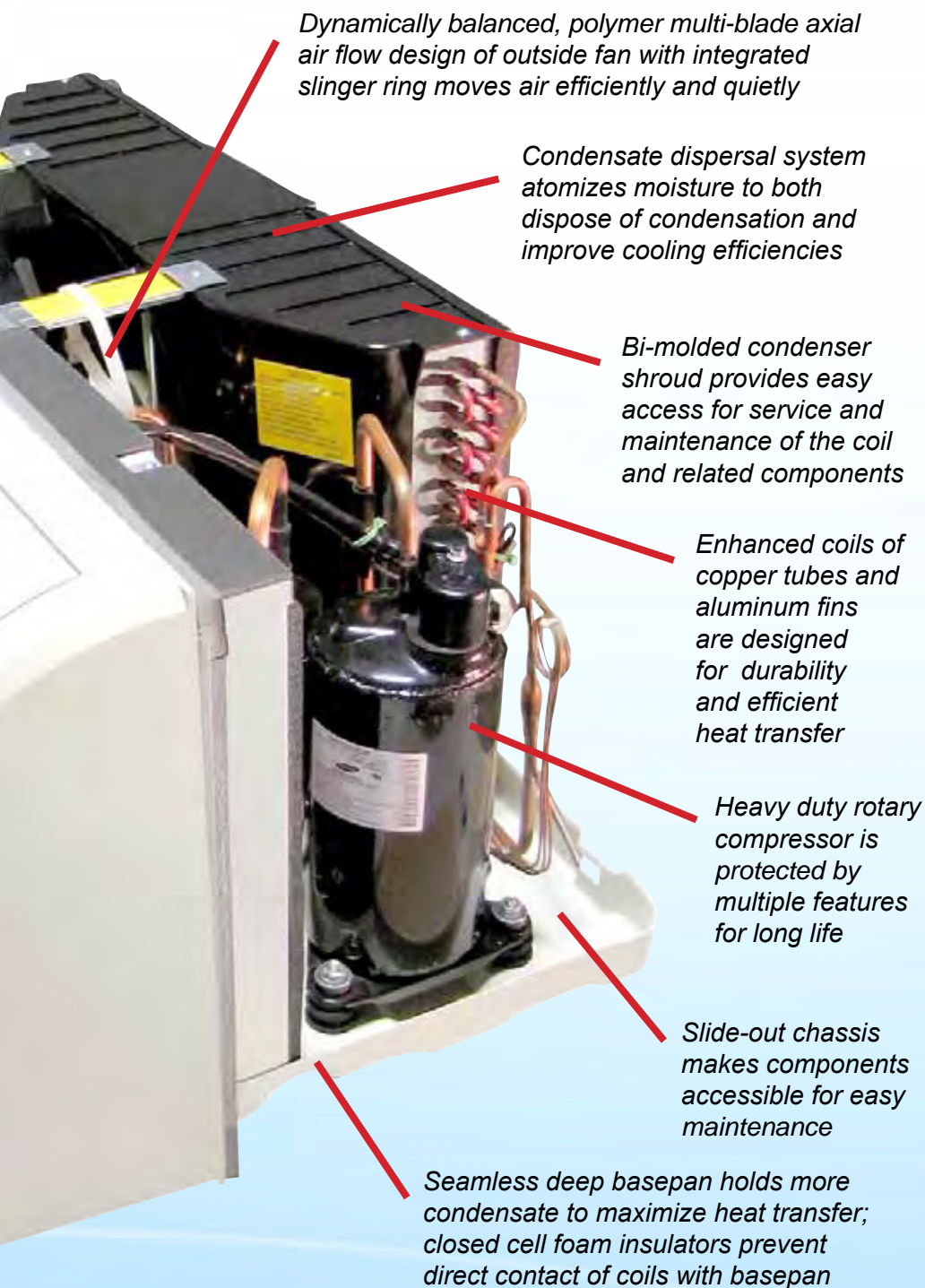


LED display and touchpad buttons are simple to understand and easy to use.



The two-piece filter design provides improved air filtration and can be removed easily for cleaning.

oney and keep guests comfortable!



...e of options and accessories
...ing wall sleeves and grilles.

Reliability

Random Restart—Prevents all units from restarting at once following a power outage; random restart occurs in 2:45 to 3:15 minutes; each unit starts up in the mode it was in when power was lost.

Condensate Dispersion—Highly efficient system atomizes condensate and utilizes a slinger ring on the outdoor fan, dispersing condensate onto the condenser coil for evaporation.

Anti-Short Cycle—Random start-up delay of 3 minutes and minimum run time of 3 minutes help prolong compressor life, allowing refrigerant pressures to equalize before restarting.

Defrost Protection (Heat Pump Models)—When unit can no longer effectively heat with the compressor (about 35°F outdoor ambient), unit automatically switches to electric heat until outdoor temperature warms up.

Controls

Front Desk Control*—Comes with low voltage Energy Management interface so unit can be centrally controlled, if desired; interface is easy to connect, and is compatible with 24 VAC central desk control systems.

Thermostat Options*—Unit is designed to be controlled either by on-board control panel or wired remote thermostat.

Fan Configuration—Used to select continuous fan operation or cycle the fan on and off according to thermostat requirements.

Electronic Temperature Limiter—In-room temperature settings can be programmed for both heating and cooling ranges to prevent a guest from over-heating or over-cooling the room.

**See Installation and Operation manual for details.*



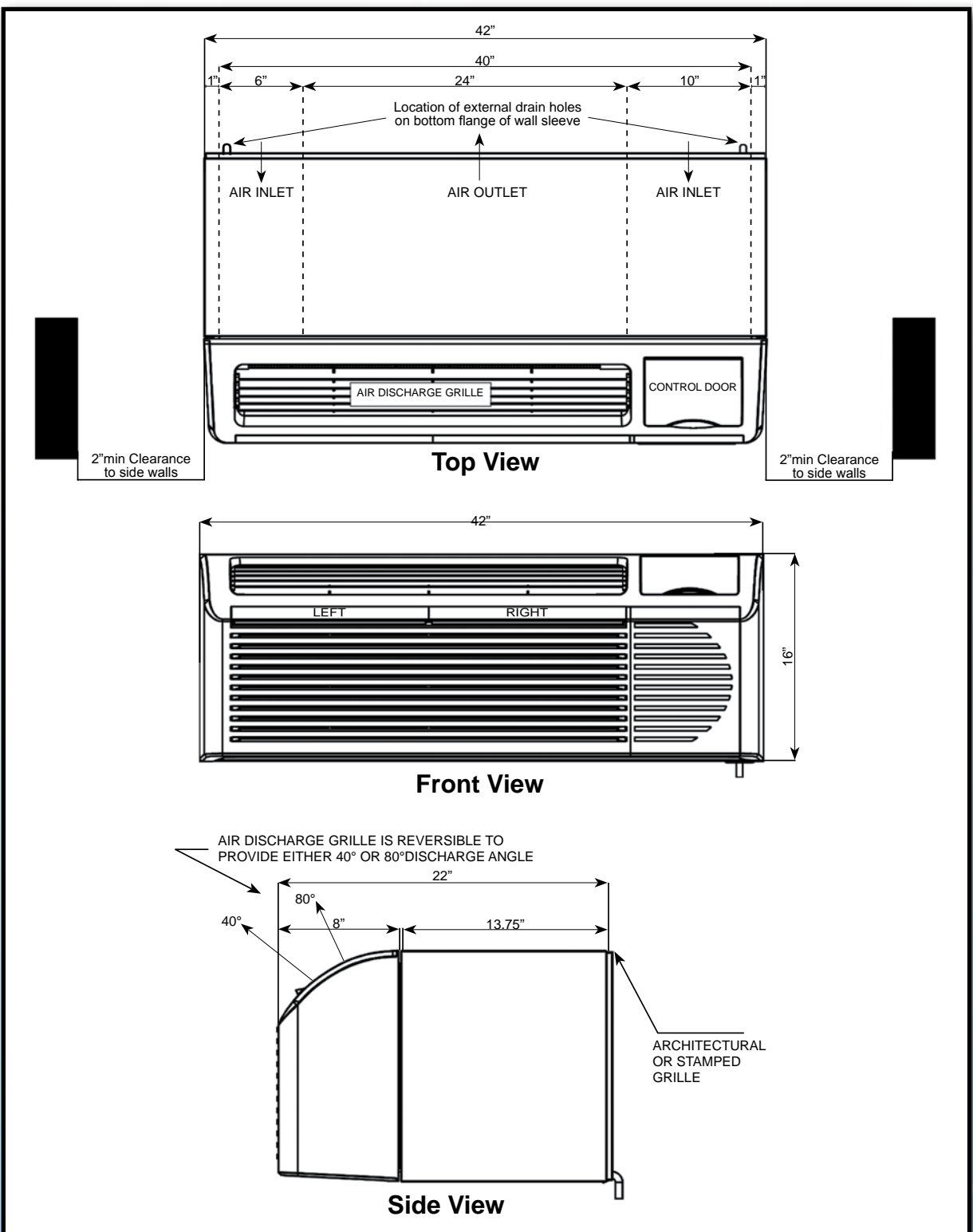
Closing the adjustable vent door allows the inside room air to be circulated and filtered.



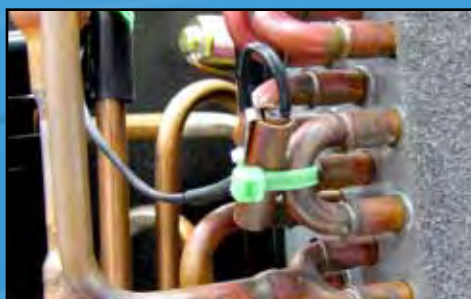
Units can be optimized to a specific application by using the dipswitches, accessible when the front panel is removed.



DIMENSIONS



The indoor temperature sensor will signal the unit if the room temp drops below 40°F, which enables the freeze protection mode.



A sensor placed on the outdoor coil will stop the compressor operation if excessive refrigerant temperatures are detected, prolonging the compressor life.

PERFORMANCE AND ELECTRICAL DATA

208/230 Volt Units

Feature	EKTC07-1G	EKTC09-1G	EKTC12-1G	EKTC15-1G	EKTH07-1G	EKTH09-1G	EKTH12-1G	EKTH15-1G
Power Supply	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60
Cooling BTUH	6,800/7,700	8,800/9,000	11,800/12,000	14,600/15,000	6,800/7,700	8,800/9,000	11,800/12,000	14,600/15,000
EER	12.2/12.0	11.4/11.3	10.5/10.7	9.7/9.8	12.2/12.0	11.4/11.3	10.5/10.7	9.7/9.8
Cooling Amps	3.0/2.8	3.9/3.7	5.3/5.1	7.5/6.7	3.0/2.8	3.9/3.7	5.3/5.1	7.5/6.7
Min. Circuit A	4.2	5.0	8.1	10.5	4.2	5.6	8.1	10.5
Cooling Watts	620/640	770/800	1120/1120	1510/1530	620/640	770/800	1120/1120	1510/1530
Heating BTUH	—	—	—	—	6,100/6,300	7,900/8,100	10,500/10,700	13,600/13,800
C.O.P.	—	—	—	—	3.4/3.4	3.3/3.3	3.1/3.1	2.9/2.9
HP Amps	—	—	—	—	2.5/2.4	3.6/3.4	4.7/4.5	6.6/6.0
HP Watts	—	—	—	—	530/540	700/720	990/1010	1370/1390
Dehum.	1 pt/hr	1.71 pts/hr	3.49 pts/hr	4.65 pts/hr	1 pt/hr	1.71 pts/hr	3.49 pts/hr	4.65 pts/hr
Airflow CFM	312/294/277	312/294/277	341/324/306	341/324/306	312/294/277	312/294/277	341/324/306	341/324/306
Heating CFM	—	—	—	—	320	320	365	365
Ind. Sound Max	48dB	51dB	53dB	53dB	48dB	51dB	53dB	53dB
Out. Sound Max.	61dB	62dB	65dB	65dB	61dB	62dB	65dB	65dB
Net Wt/Ship Wt	111/131	111/131	116/136	119/139	111/131	111/131	118/138	121/141

POWER CONNECTIONS

	POWER SUPPLY KIT		
MODEL	15A (2.0 kW) 208/230V	20A (3.0 kW) 2208/230V	30A (5.0 kW) 208/230V
EKTC07, -09	7602-515A-230	7602-520A-230	N/A*
EKTC12, -15	7602-515A-230	7602-520A-230	7602-530A-230
EKTH07, -09	7602-515A-230	7602-520A-230	N/A*
EKTH12, -15	7602-515A-230	7602-520A-230	7602-530A-230

*Using 30A on these units could result in damage to the equipment.

ELECTRIC HEAT SPECIFICATIONS

	2.0 kW	3.0 kW	5.0 kW
Elec. Heat	2000 W	3000 W	5000 W
Heating BTUH	5581/6824	8372/10,236	13,953/17,060
Total Watts	1636/2000	2454/3000	4090/5000
Total Amps	7.9/8.9	12.2/13.2	20.5/21.5
Min. Circuit Amp.	13.7	13.7	22.0
MOP (Amps)*	15	20	30
Power Cord	7602-515A-230	7602-520A-230	7602-530A-230

* Maximum Overcurrent Protection

265 Volt Units

Feature	EKTC07-2G	EKTC09-2G	EKTC12-2G	EKTC15-2G	EKTH07-2G	EKTH09-2G	EKTH12-2G	EKTH15-2G
Power Supply	265-1-60	265-1-60	265-1-60	265-1-60	265-1-60	265-1-60	265-1-60	265-1-60
Cooling BTUH	7,700	9,000	12,000	15,000	7,700	9,000	12,000	15,000
EER	12.0	11.3	10.7	9.8	12.0	11.3	10.7	9.8
Cooling Amps	2.4	3.7	4.8	5.77	2.4	3.7	4.8	5.77
Min. Circuit A	3	4.12	7.87	7.31	3	3.91	5.52	7.31
Cooling Watts	640	800	1120	1530	640	800	1120	1530
Heating BTUH	—	—	—	—	6,300	8,100	10,700	13,800
C.O.P.	—	—	—	—	3.3	3.3	3.1	2.9
HP Amps	—	—	—	—	2.1	3.4	4.5	5.25
HP Watts	—	—	—	—	540	720	1010	1390
Dehum.	1.4 pt/hr	1.76 pts/hr	2.29 pts/hr	2.64 pts/hr	1.4 pt/hr	1.76 pts/hr	2.29 pts/hr	2.64 pts/hr
Airflow CFM	294/277/259	312/294/277	312/294/277	341/324/306	294/277/259	312/294/277	312/294/277	341/324/306
Heating CFM	—	—	—	—	302	320	320	365
Ind. Sound Max	48dB	51dB	53dB	53dB	48dB	51dB	53dB	53dB
Out. Sound Max.	61dB	62dB	65dB	65dB	61dB	62dB	65dB	65dB
Net Wt/Ship Wt	112/132	112/132	117/137	119/139	112/132	112/132	117/137	119/139

POWER CONNECTIONS

	POWER SUPPLY KIT		
MODEL	15A (2.0 kW) 265V	20A (3.0 kW) 265V	30A (5.0 kW) 265V
EKTC07, -09	7602-515A-265	7602-520A-265	N/A*
EKTC12, -15	7602-515A-265	7602-520A-265	7602-530A-265
EKTH07, -09	7602-515A-265	7602-520A-265	N/A*
EKTH12, -15	7602-515A-265	7602-520A-265	7602-530A-265

*Using 30A on these units could result in damage to the equipment.

ELECTRIC HEAT SPECIFICATIONS

	2.0 kW	3.0 kW	5.0 kW
Elec. Heat	2000 W	3000 W	5000 W
Heating BTUH	6825	10,236	17,060
Total Watts	2000	3000	5000
Total Amps	8.9	13.2	21.5
Min. Circuit Amp.	13.7	13.7	22.0
MOP (Amps)*	15	20	30
Power Cord	7602-515A-265	7602-520A-265	7602-530A-265

* Maximum Overcurrent Protection

Ready to buy? Here are some things to consider:

When you buy Comfort-Aire products, you're purchasing the peace of mind that comes from dealing with a company that's been in business for 75 years. We have a well-deserved reputation not only for quality products, but also for standing behind those products with excellent warranty and support programs. We have technicians available to handle telephone inquiries about operation, installation and maintenance. Our web site, www.comfort-aire.com, is another resource: owner's manuals can be downloaded and your installer can access technical information and service manuals at any time.

Warranty Coverage

Comfort-Aire stands behind its packaged terminal air conditioners and heat pumps with some of the strongest warranties in the industry. All our PTAC/PTHP systems are covered by a five year warranty on the sealed system and one year on other parts and labor (some restrictions apply, consult your Comfort-Aire representative or visit our web site for full warranty details).

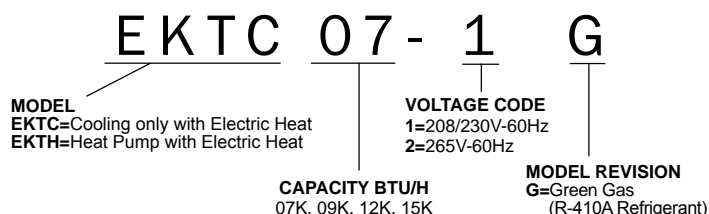
gives you an extra measure of protection that extends beyond the standard warranty coverage. It protects you against unexpected problems that require service and/or replacement parts. AssurancePlus® extended service agreements allow you to extend coverage beyond the original warranty, and there are a variety of plans to choose from, offering parts and labor coverage, parts only or labor only. Your Comfort-Aire dealer can explain the AssurancePlus® plans and pricing.

Extended Service Agreements

We stand behind our products with exceptionally strong warranties, but as with any product containing mechanical and electronic components, service is sometimes needed. Our AssurancePlus® program

Talk to your Comfort-Aire dealer about the advantages of PTAC/PTHP systems and if one is right for your location and situation. He should also make an on-site inspection to measure and evaluate the space so that your system is sized correctly.

MODEL NOMENCLATURE



A full range of options and accessories is available including wall sleeves and grilles. Design, material, performance data and components subject to change without notice.

Comfort-Aire®
HEAT CONTROLLER

1900 Wellworth Ave., Jackson MI 49203 • Ph. 517-787-2100 • www.comfort-aire.com

A **MARS** Company

ACCESSORIES GUIDE

PACKAGED TERMINAL AIR CONDITIONERS & HEAT PUMPS



42" Wall Sleeve

▶▶ [Part No. 7602-500](#)

Our 42" wall sleeve is constructed from galvanized steel and powder coated for durability and aesthetic appeal. The wall sleeve comes factory assembled by spot welding to minimize breaches in the cabinet surface. It contains four chassis mounting holes, four grille mounting holes and two drain holes for optional drain kit.

Dimensions W x H x D (inches)

42 x 16 x 13³/₄

42" Main Duct Kit

▶▶ [Part No. 7602-502](#)

The accessory duct kit for our 42" PTAC unit is used to supply air to an adjacent room. Additional ducting (sold separately) for either the right or left side is necessary. The duct kit is constructed from galvanized steel and powder coated for corrosion resistance and aesthetic appeal. Mounting brackets and a foam seal provide a tight bond to the PTAC unit. The interior is insulated using mold resistant poly insulation. The unit ships with an air volume baffle which provides a 35/65 split between the primary and adjacent rooms. Each duct kit contains: Duct adapter, adapter collar, mounting brackets, end cover, grille, hardware and instructions.

Dimensions W x H x D (inches)

42¹/₄ x 7¹/₄* x 7¹/₂

*from top of PTAC

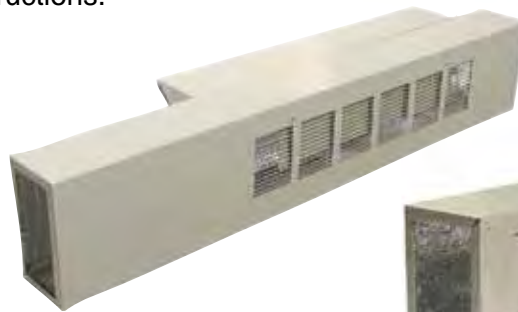
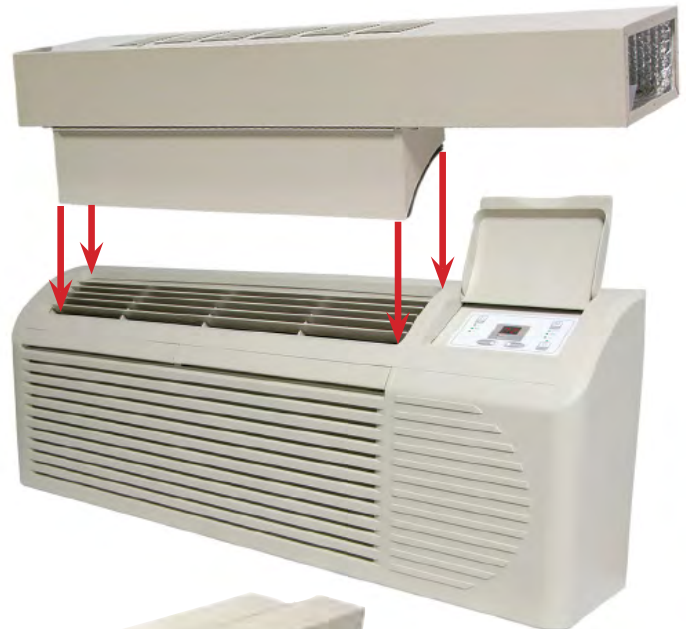
Also Available:

Duct Termination Kit

▶▶ [Part No. 7602-503](#)

Duct Extension Kit

▶▶ [Part No. 7602-504](#)



HEAT CONTROLLER



42" Stamped Grille

►► [Part No. 7602-501](#)

Our stamped grille is made from durable, light weight aluminium and made to fit a standard 42" wall sleeve.

Dimensions W x H (inches)

42 x 16

42" Architectural Grille

►► [Part No. 7602-505](#)

Our architectural grille fits a standard 42" wall sleeve. It's formed from durable aluminium for weight reduction and weather resistance and powder coated for greater durability. Louvers are connected with high tensile rods. The grille comes factory assembled and includes four attachment points and two discharge air shaping deflectors.



Dimensions W x H x D (inches)

42 x 15³/₄ x 1³/₈



* Electrical receptacle is not included

42" Sub-Base

►► [Part No. 7602-509](#)

Made from galvanized steel and powder coated, our sub-base has only two pieces, plus the skirting, for faster and more economical installation. Each kit contains: Sub-base main body, front cover, left and right side skirt, adjusting feet, hardware and installation instructions..

Dimensions W x H x D (inches)

42 x 3 x 3⁷/₈

90° Drain Kit

►► [Part No. 7602-506](#)

The drain kit, available with a 90° drain tube or 180° drain tube, can be used for either an internal or external drain and can be attached to one of two available outlets on the wall sleeve. The mounting plates are made from galvanized steel and powder coated to match the wall sleeve.

180° Drain Kit

►► [Part No. 7602-507](#)



* image of 90° drain kit

Design, material, performance data and components subject to change without notice

HEAT CONTROLLER

1900 Wellworth Ave., Jackson MI 49203 • Ph. 517-787-2100 • www.heatcontroller.com

A **WATS** Company

Comfort-Cire®

INFRARED OUTDOOR HEATERS



Wall or ceiling mount heat source, for commercial or residential use

Ideal for patio, balcony, gazebo, terrace, screened porch or other outdoor space. Heaters add comfort on cool days with warm ambient glow. Advanced technology uses medium wave infrared for maximum heat output with minimal glare from the lamp.

Three sizes are available to warm spaces from 64 square feet to 168 square feet. Units can be mounted on the wall or ceiling, and may plug into an outlet or be hard wired, depending on model.

Using the heater is simple with a single on/off switch or the control box on two larger models. Heating is instant with no warm-up time required.



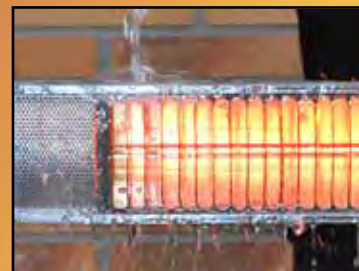
The heater casing and protective cover are constructed of durable anodized aircraft aluminum, and minimal maintenance is required.



The heater emits a warm ambient glow that makes outdoor spaces comfortable during cool, windy weather.



IP65
CERTIFIED



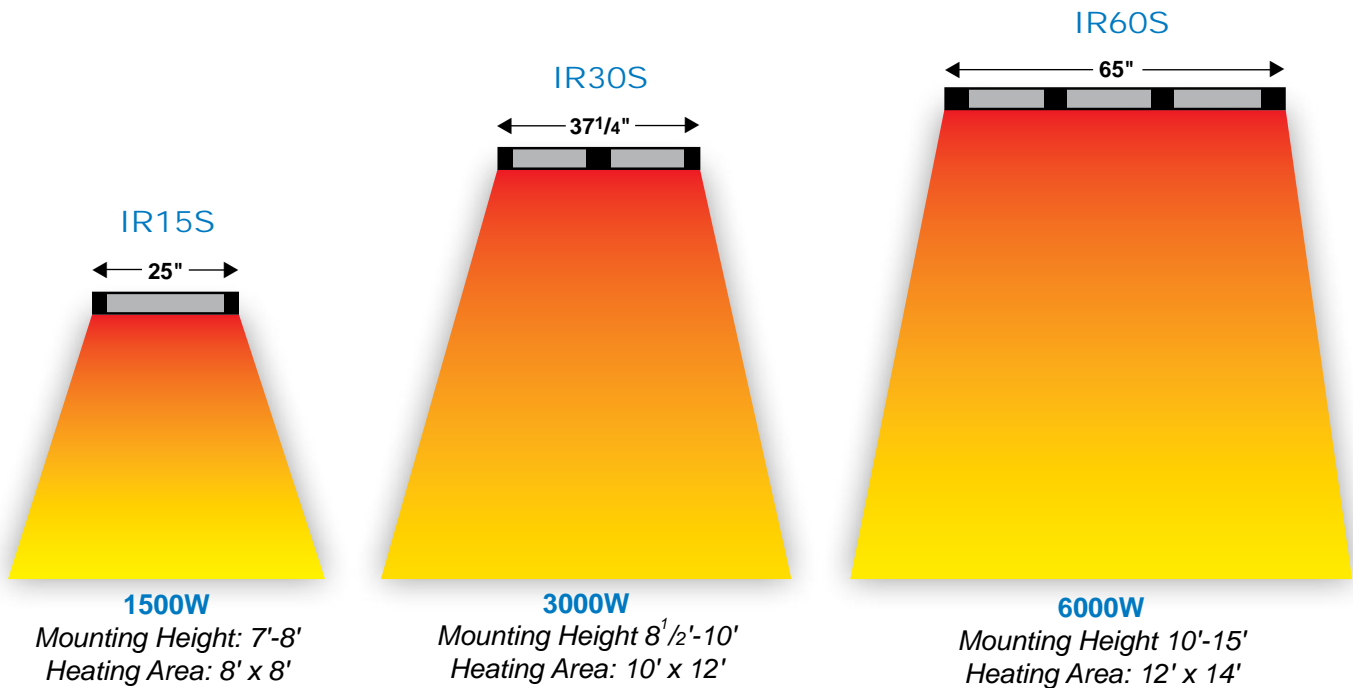
Operation is silent and odorless, no combustion or chemicals are involved.

Heaters are IP65 rated for use in wet environments.



INFRARED OUTDOOR HEATERS

Three sizes to fit a variety of installation requirements



FEATURES	IR15S	IR30S	IR60S
Power	120-1-60	208/240-1-60	208/240-1-60
Power Supply	Wall outlet*	Hard wired**	Hard wired**
Watts / Amps	1500W / 12.5A	3000W / 12.5A	6000W / 25A
No. of Emitters	1	2	3
Power Cable	15' with wall plug	6' per emitter	6' per emitter
Material	Anodized aircraft aluminum		
Height x Depth	3 13/16" x 3"	3 13/16" x 4 13/16"	3 13/16" x 4 13/16"

* Approved ground fault interrupter (GFI) must be used for outdoor installation in wet environments.

**Unit must be installed by a certified electrician to local, state and Federal electrical codes.

Due to ongoing product improvements, design, specifications and materials subject to change without notice.

Comfort-Aire®
HEAT CONTROLLER

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A **TRUS** Company

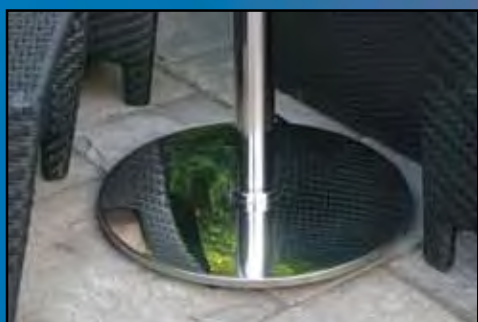
Comfort-Aire®

INFRARED PATIO HEATER

Radiant, infrared directional heat

Advanced medium wave infrared technology warms people and objects within a 64 square feet area—without heating the air. This means the radiated warmth is virtually unaffected by wind, plus operation is more cost effective than a propane heater.

Using the portable heater is simple with a single on/off switch. An integrated tip-over switch turns the unit off if it should accidentally fall or be knocked over, and the tip guard on the lamp adds an extra measure of safety. Operation is silent and odorless with no combustion and no chemicals involved.



The heater lamp is mounted on a strong mast with a heavy duty base for stability.

Observe all safety warnings in the operating manual. Approved ground fault interrupter (GFI) must be used for outdoor installation in wet environments. Not for indoor use. Some assembly required.

Constructed of durable stainless steel anodized aircraft aluminum, the heater is ideal for patio, deck or other outdoor spaces. It can be moved from place to place, and plugs into a standard 120V grounded outlet. The heater is safe to use in all seasons and all weather conditions.



Comfort-Aire®

HEAT CONTROLLER

1900 Wellworth Ave., Jackson MI 49203 • Ph. 517-787-2100 • www.comfort-aire.com

A **WALSH** Company

MODEL IRPH15SS FEATURES	
Material	Stainless steel, anodized 6061 aircraft aluminum
Watts/Amps	1500W / 12.5A
Power	120V AC (grounded outlet)
Power Cord	15 feet long
Dimensions	Heater section: 20" W x 24" D
	Base: 18" in diameter
	Assembled height: 82"
Warranty	One year on all parts

Comfort-Aire®

GLASS PANEL HEATER

Comfort-Aire's glass panel heater uses advanced X-grid convection heating power to deliver quiet, comfortable warmth to just about any room in the home. Simply set the desired temperature and the heater warms to that setting with a low level radiant heating effect providing even heat distribution.

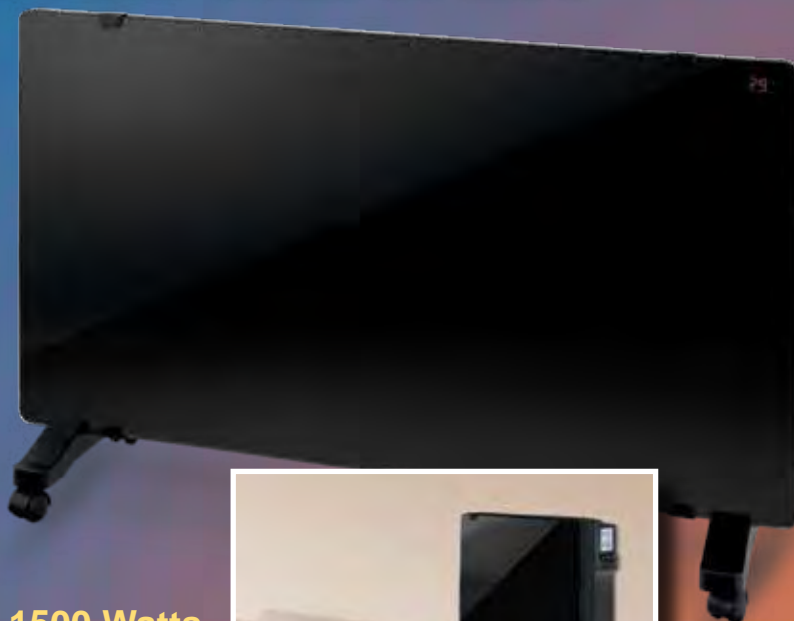
Safety features include a thermal cut-out switch that protects against overheating, and a tip-over switch shuts off the power to the heating elements if the unit should be accidentally knocked over.



Timer ON and timer OFF buttons allow the homeowner to set the time of operation in one to 24 hour increments. An on-board thermostat controls the heating output.

Sleek cabinet design with tough glass panel front complements any décor.

Observe all safety information in the operating manual. For residential indoor use only. Not for use in wet environments such as bathrooms, laundry rooms or damp basements. Some assembly required.



1500 Watts
120V-1-60



MODEL IRGPH15B



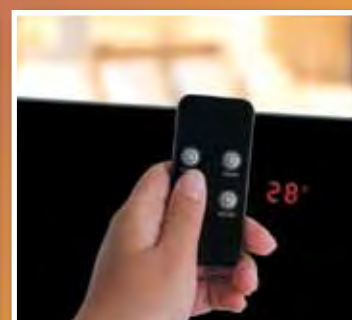
Includes caster kit for room to room portability.



Heavy duty brackets for wall mounting are included.



LED temperature and mode display is easy to read.



Can be operated using unit's control board or handy remote.

Comfort-Aire®

HEAT CONTROLLER

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A **WELPS** Company

MODEL IRGPH15B DIMENSIONS

Heater	Width 32 ⁵ / ₁₆ " (820 mm)
	Depth 3 ⁵ / ₈ " (90 mm)
	Height: 17 ¹³ / ₁₆ " (450 mm)
Heater with caster kit	Depth 9 ¹⁵ / ₁₆ " (250 mm)
	Height 20 ¹ / ₈ " (510 mm)
Warranty	One year on all parts

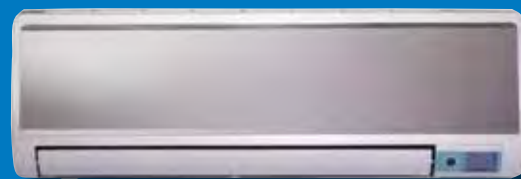
Ductless Mini-Split Systems

This section contains:

Ductless Mini-Split Catalog

Comfort. . .

*where you need it,
when you need it*



DUCTLESS MINI-SPLIT SYSTEMS



Comfort-Cure®
HEAT CONTROLLER

Comfort. . . *it's what we're all about*

At Comfort-Aire, we're in the business of making you comfortable, whether at home, work, school, or at play. We offer a broad product selection for both residential and commercial use—products that are efficient, effective and designed to add value.

We've been in the comfort business since our founding in 1933, and our roots go back even further. We can trace our beginnings to the Wingert Furnace Co. which began building coal, gas and oil furnaces in 1907. We moved to our new headquarters in Jackson, Michigan, in 1955, and this facility has been expanded several times—most recently in 2006—to accommodate our growth.

Comfort-Aire is known throughout the heating and air conditioning industry for efficient, reliable products and in-season availability. Whether for heating or cooling, these products meet or exceed industry standards for energy efficiency. The line is constantly being updated to add the features and new technology that customers demand.

Ductless mini-split systems are one of our fastest growing product groups, and there are many reasons for this increasing popularity—but overall, the key is flexibility. They allow air conditioning (and heating with heat pump models) to be added quickly, conveniently and economically—often in locations where installing such comfort systems didn't seem possible or practical.

Read on to find out how a ductless mini-split system can make you comfortable, and do it efficiently and economically.



Comfort-Aire®

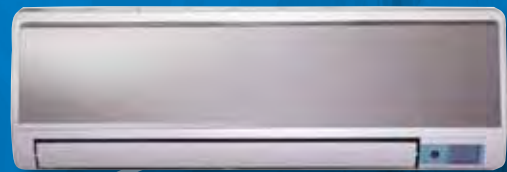


TABLE OF CONTENTS

This guide to ductless mini-splits is designed to explain how units work, the advantages they bring, and to show you the entire Comfort-Aire line. With single zone, multi-zone, and ceiling cassette models, there's a mini-split in the size and type you need to add comfort to just about any location!

Where can you use a mini-split?	2
Advantages of mini-splits	3
Mini-splits and indoor air quality	3
How does a mini-split work?	4
Inverter technology	5
Multi-zone flexibility	6
Energy efficiency explained	7
Advantages of new refrigerant type	7
Quick reference guide to models	8
Features of mini-split line	9
Model specifications	
"DV" Series Single Zone	10
"V" Series Inverter Single Zone	12
"V" Series InverterFlex Multi-Zone	14
Ready to buy? Things to consider	17

Ductless Mini-Splits

The Comfort Solution



Ductless mini-split systems are a great solution to a wide variety of installation challenges, giving contractors the ability to put air conditioning (and heat with heat pump models) in locations that previously seemed impossible. They're ideal when installing ductwork is difficult, prohibitively expensive, or simply impractical. Both residential and commercial structures, new construction and existing buildings, are candidates for mini-splits.

Basically a mini-split does away with the need for ductwork. Like a regular split system A/C or heat pump, the condenser is located outdoors; one or more air handlers are placed indoors. The two are connected by electrical, refrigerant, and condensate drain lines that run through a small hole in an exterior wall, generally 3" in diameter or less.

In addition to eliminating the need for ducting, one of the other big advantages of mini-split systems is true zone control.

The air handler is dedicated to the room being conditioned and is controlled by a wireless remote. That room can be kept at a temperature and humidity level different from the rest of the house or building.

Multi-zone systems for up to four rooms (or one large space) feature a single condenser that handles one, two, three or four air handlers. Each air handler is independently controlled, with its own remote and electronics-based climate controls to regulate temperature and humidity levels, as well as air flow. Units in a bedroom and a home office, for instance, can be programmed for different hours of operation with the 24-hour timer, or two classrooms situated side by side can be set at different temperatures. (although units cannot operate in heating and cooling modes simultaneously).

Mini-split systems have the flexibility to fit virtually anywhere and with SEER ratings up to 19.3, they're also economical to operate.



Where can you use a mini-split? *Common applications include:*

- Historic homes (*the aesthetics of the exterior are maintained*)
- Homes with hydronic heat
- Residential additions such as a sunroom or bedroom
- Vacation homes and cabins
- Schools (*individual classroom control*)
- Church sanctuaries and fellowship halls
- Nursing homes and hospitals
- Restaurants
- Remote offices such as those inside a warehouse or factory
- Utility transfer stations
- Arena sky boxes
- ATMs and office lobbies



There's more to comfort than just temperature. . .

Advantages of a ductless mini-split system

Quiet Operation—The operational sound of the compressor and fan is kept outside with the condensing unit, and the indoor air handler is designed to be exceptionally quiet with balanced airflow

Easy Installation—All it takes to connect the outdoor condenser and the indoor air handler is a hole about 3" in diameter to run refrigerant lines, condensate drain and electrical wires between the two components

Efficiency—Units are designed to be energy efficient with high SEER ratings that meet or exceed government mandated standards; and only the room or area being used is conditioned, potentially decreasing electricity usage when compared to traditional systems

Attractive Appearance—High wall models feature a low profile indoor unit in a neutral color that blends with any décor; ceiling cassettes panels come in a neutral color that virtually disappears in ceiling installations

Security—With a room air conditioner, there's always the worry that access to the home can be gained through the window where the unit is mounted; that worry is eliminated with a ductless system

Consistent Comfort—Electronic climate controls regulate operation to maintain a preset temperature level; random swing airflow (on most units) continually adjusts the fan speed and air direction for a gentle, breeze-like effect preferred by most people

Simple Operation—One fully featured remote is included for each indoor air handler, making it simple to select the mode, set the temperature and the timer, and change the airflow direction

Mini-Splits and Indoor Air Quality

According to the EPA, the air inside our homes is often more polluted than outside air. What's needed to protect yourself from airborne contaminants is a high quality filtration system, and that's just what you get with all ductless mini-splits from Comfort-Aire.

In fact, our "V" Series inverter high wall mount units are equipped with triple filtration:

- Ionizer—removes microscopic particles from the air
- Active carbon and dust filter—removes dust, smoke, and pollen
- Air freshening filter—helps freshen the air

Additionally, the units can be operated in the dehumidification mode without cooling or heating. This removes excess humidity from the indoor air, one of the keys to preventing the growth of mold, mildew and other contaminants.

How does a mini-split work?

Cooling without Ductwork

A ductless mini-split air conditioner works the same way central air conditioning does with one big difference—there's no ductwork.

Both the central system and the mini-split can be classified as split systems because they consist of an outdoor condensing unit and an indoor air handler. With a central A/C system, the indoor components include a cooling coil and an air handler (the furnace's blower or a separate air handler) that circulate the conditioned air throughout the structure by way of the ductwork.

The mini-split indoor unit functions as both the indoor coil and the air handler, delivering conditioned air directly into a single room without sending it through any ductwork.

Heat Pump Models

A heat pump mini-split operates in basically the same manner, but adds heating capability. In the summer it transfers heat from inside the home to the outdoors. A reversing valve makes it possible for the unit to reverse this procedure during cold weather, absorbing heat from the outdoors and transferring it indoors (yes, there is warm air outside, even when it's below freezing).

Heat Gain/Loss

One of the advantages this "ductless" operation provides is efficiency. In a central system, the cooled air absorbs heat as it travels through the ductwork. The longer the duct run, the greater the temperature gain. In winter, heat can also be lost as the conditioned air travels through the ducts.

Don't forget that it takes air pressure to move the conditioned air through the ducting system and that involves some noise from the fan and the actual movement of air. A mini-split system, however, is ultra-quiet because it doesn't have to push the air through many feet of ductwork.



Indoor Air Handler



Outdoor Condenser



This diagram shows a typical single zone installation:

- The condensing unit is installed outdoors while the air handler is mounted inside on an exterior wall. A hole approximately 3" in diameter is drilled through the wall. The lines that carry refrigerant from the air handler to the condensing unit and back run through this hole.
- A communication wire runs between the two components: power is supplied by the outdoor unit so there are no cords and plugs visible on the interior. A bracket mounted to the wall supports the high wall mount air handler.
- A drain line runs from the air handler to the outside to carry condensate away.

Inverter Technology:

Taking comfort and efficiency to the next level

Comfort-Aire's "V" Series heat pumps use inverter technology to maximize comfort by reducing temperature fluctuations while saving an estimated 40% or more on energy consumption, compared with traditional mini-split systems.

An inverter is an electrical device that varies the frequency of the power going to the compressor. This allows the compressor to adapt its power output to precisely match the load requirement.

You might say it's like the cruise control on a vehicle. The inverter-driven compressor automatically adjusts its speed to quickly reach and then maintain the set point. When maximum capacity is not needed, the compressor speed decreases—and with it, the power output also decreases, resulting in improved energy efficiency.

Indoors one or more air handlers are equipped with temperature sensing devices. The inverter reacts to both indoor and outdoor temperature fluctuations, constantly adjusting the compressor speed to match the demand for cooling or heat. When the outdoor condenser fan runs, its speed matches the need for heat rejection.

Highly accurate sensors also allow one compressor to meet the demands of multiple indoor zones. The inverter-driven compressor will operate at the speed necessary to maintain the set temperatures of up to four zones.

Once the set point is reached, the system "cruises along," keeping the temperature constant, but responding if the demand changes.

Compare this to a conventional mini-split which cools or heats by running the compressor until the setpoint is reached and then turns off, turning on again when the temperature falls below the setting. This on-off cycling results in temperature fluctuations that affect comfort, and also adds to wear and tear of the components.

Temperature isn't the only contributor to comfort: humidity is critical. Dehumidification, especially during hot, muggy weather, is an integral component of cooling. When the compressor in a conventional system cycles off, dehumidification also stops. With an inverter system, excess moisture in the air is removed all the time because the unit runs constantly, even when it's running at "economy" speed.

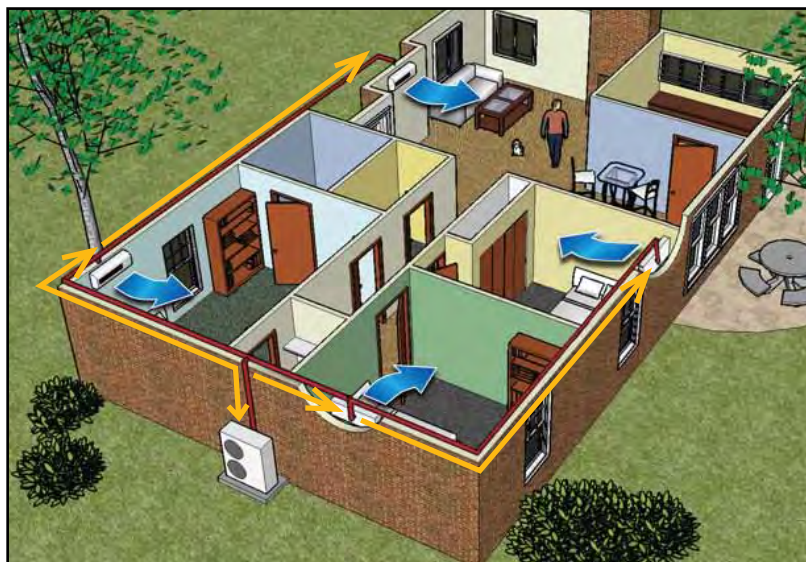


Advantages of Inverter Technology

- Reaches the desired temperature quickly
- Provides precise temperature control and continuous dehumidification (cooling mode)
- Extends component life by eliminating on-off cycling
- Operates exceptionally quietly because the DC compressor runs mostly at low speed, which also reduces any vibration and associated noise
- Saves energy by matching the compressor speed to the demand; rated at up to 19.3 SEER
- Delivers extra heating capacity even at low ambient temperatures

Ductless mini-splits can save you money when it comes to adding on to your house. If your current HVAC system is correctly sized to your existing structure, it may not have the capacity to handle the new square footage. Rather than replacing the entire system, you can cool and heat your new space with a mini-split—and save the cost of installing ductwork.

Multi-Zone Flexibility



You can see how one outdoor condenser is used in conjunction with multiple indoor air handlers in a single structure. Air handlers can be installed up to 82' (depending on model) from the condenser, so you can place the condenser in the best location for your landscaping.

When you need to condition more than one space, it's not necessary to install separate systems. You can choose multi-zone models that let you cool and heat multiple rooms, and with our InverterFlex models, you can mix and match 1 to 4 air handlers to best match your room requirements. Each system uses one outdoor condensing unit tied to multiple indoor units, and each of the indoor units is independently controlled to meet specific comfort requirements.

InverterFlex units make zoning practical and economical. No complicated systems and controls are required to cool and heat individual rooms. Setting the desired comfort level is a snap, using the wireless remote that comes with each indoor air handler.

This makes mini-splits ideal not just for residential use, but also for nursing homes, classrooms, anywhere individual comfort

control is preferred. Also, high wall mount and ceiling cassette air handlers can be mixed for installation flexibility.

The multi-zone design is also ideal for large spaces. One or more InverterFlex systems can be effective (and quiet) for a church sanctuary or fellowship hall, school commons area, even a warehouse setting, for example. As with all mini-splits, there's minimal disruption for installation and the sleek indoor units blend into the décor.

As for operating costs, the units use inverter technology for efficiency, but you may choose to heat/cool only the room or space being used, saving even more on utility bills.

Capacities for InverterFlex models range from 9,000 BTUH to 36,000 BTUH, with indoor air handlers sized from 9,000 to 18,000 BTUH per zone.

A ductless mini-split can contribute to a better night's rest by making your bedroom more comfortable. You can control the temperature and humidity levels separately from the rest of the home and select Sleep Mode, if you choose. For most people, body temperature drops as they sleep so the room setting that was comfortable at bedtime is too cool by early morning. The Sleep Mode automatically adjusts the temperature during the night so you don't wake up looking for a blanket or have to get up to change the thermostat.



Energy efficient and environmentally sound

All Comfort-Aire ductless mini-splits come charged with R-410A, an environmentally friendly refrigerant.

Why is this important? Because R-410A doesn't contribute to depletion of the earth's vital ozone layer.



The ozone layer is located in the stratosphere, providing a protective barrier against the sun's harmful ultraviolet rays which can cause skin cancer and cataracts in people. UV rays can also affect animals and crop yields.

In the past, most refrigerants were compounds that contained chlorine—chlorofluorocarbons or hydrochlorofluorocarbons. You don't have to remember these long names, but you should be aware that when these kinds of refrigerants are released to the atmosphere, the chlorine molecule combines with one of the ozone's oxygen molecules, destroying ozone at a faster rate than it can be replenished.

Soon all CFC and HCF refrigerants used around the world will be replaced by non-ozone depleting types such as the R-410A that's already in use in all our mini-split models.

What do we mean by 'Energy Efficient'?

In recent years, heating and cooling manufacturers have made significant advances in the efficiency of their systems in terms of energy usage. This is an especially important purchase consideration as fuel prices continue to rise.

Cooling efficiency is measured by a Seasonal Energy Efficiency Ratio (SEER) rating. The higher the number, the more efficient the equipment. All Comfort-Aire systems meet or exceed the federally mandated 13.0 SEER rating, and the 'V' Series Inverters are rated as high as 19.3!

For heat pump models, efficiency is shown by a Heating Season Performance Factor (HSPF). This is an estimate calculated by dividing the seasonal heating output by the seasonal power consumption in watts. The federal minimum is 7.7; the most efficient heat pumps have an HSPF between 8 and 10. Our units are rated as high as 9.6 in the 'V' series.

All heating and cooling equipment comes with an Energy Guide label which shows the estimated energy usage—you can use these labels to compare equipment efficiency. Your dealer can help you determine which system is best for you, taking into account a number of factors including the average number of yearly cooling and heating days in your area of the country, in addition to your individual needs.

Comfort-Aire®

Mini-Split Systems

See complete descriptions and specifications beginning on page 10.



V Series

Single Zone Heat Pumps
9,000 - 36,000 BTUH
Inverter Technology



DV Series

Single Zone
Cooling only and Heat Pumps
9,000 - 24,000 BTUH




V Series

InverterFlex Multi-Zone®
Heat Pumps
Single, Dual, Tri and
Quad Zone
9,000 - 36,000 BTUH
Mix and match high
wall mount

Quick Reference Guide

Use this handy guide to check on the features of each type of unit. You can find more detail on the product pages that follow.

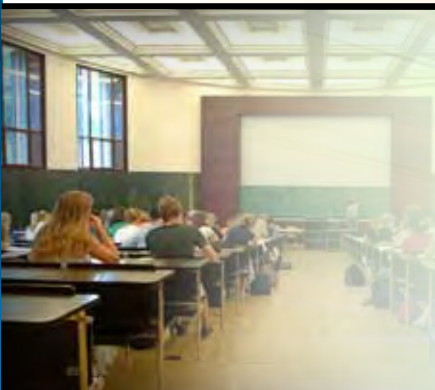
		SEER	EER	HSPF	Auto Operation	Turbo Mode	Sleep Mode	24 Hour Timer	Auto Louver Swing	Louver Setting	Multi-Stage Filtration	Auto Restart	Low Ambient Op.	Wireless Remote	Self Diagnostics	Ionizer
"DV" Series Single Zone	DVC09SD-0	15.00	9.00	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-
	DVC12SD-0	15.00	9.00	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-
	DVC18SD-1	15.00	9.00	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-
	DVC24SD-1	15.00	9.00	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-
	DVH09SD-0	15.00	9.00	8.20	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-
	DVH12SD-0	15.00	9.00	8.20	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-
	DVH18SD-1	15.00	9.00	8.20	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-
	DVH24SD-1	15.00	9.00	8.20	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-
"V" Series Single-Zone with Inverter Technology  (VMH09, 12, 18)	VMH09SC-1*	18.30	13.00	8.60	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	VMH12SC-1*	19.30	12.00	8.90	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	VMH18SC-1*	17.00	12.00	9.00	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	VMH24SC-1	17.00	10.00	8.40	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	VMH30SC-1	16.00	10.00	9.60	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	VMH36SC-1	14.50	8.80	9.00	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
"V" Series Multi-Zone with Inverter Technology	VMH18DC-1 ¹	16.00	10.00	8.00	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	VMH27TC-1 ¹	16.00	9.50	8.00	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	VMH36QC-1 ¹	14.50	9.00	8.00	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

¹ All ratings are based on using 9K indoor air handlers only

* Energy Star models

Both high wall mounts and ceiling cassettes can be matched with InverterFlex outdoor units.

Design, specifications and performance data subject to change without notice.



Classrooms in schools and churches are ideal candidates for ductless mini-splits, especially multi-zone models. They allow each room to be individually controlled to meet specific requirements and the units can be turned off when the room is not in use for additional energy savings

Mini-Splits are packed with comfort features

Ultra-Quiet Operation

High tech multi-speed fan provides balanced air flow that's so quiet, you may not realize the unit is turned on

Attractive Appearance

The low profile of wall mount indoor units, along with sleek grille design, results in an attractive, unobtrusive installation; outdoor units can be installed close to the building to preserve landscaping and exterior appearance

Random Swing

The unit randomly changes the louver direction for a natural breeze-like effect that is preferred by most people; this feature can be selected in most modes

Airflow Direction Control

The vertical louvers can be set for desired airflow direction

Multi-Stage Filtration

Triple filtration in our "V" Series high wall mounts helps improve indoor air quality: an active carbon and dust filter removes pollen, dust and smoke; an ionizer removes microscopic particles from the air, and a freshening filter helps freshen the air

Auto Restart

The unit resumes operation when power is restored after a temporary outage, reverting to the last-used setting

24-Hour Timer

Turns the unit on and off during the day for comfort when you're home and energy savings when you're away

Low Ambient Operation

All high wall mini-splits can operate when the outside temperature is as low as 5°F without installing a separate low ambient kit

Environmentally Friendly Refrigerant

All Comfort-Aire mini-split systems use R-410A which does not contribute to depletion of the earth's vital ozone layer

Self-Diagnostics

Makes it easy to identify any operational problems

All features not available on all models: see reference guide or individual series for specific features

You can operate Comfort-Aire mini-splits in a variety of modes to suit your needs and your personal comfort level:

■ Auto Operation—

Climate controls sense the temperature in the room and adjust the fan speed and operation as needed to maintain the desired temperature

■ Cooling Mode—Choose this mode when cooling is needed

■ Turbo Mode—To quickly bring the room to the desired temperature, the fan operates at super high speed until the setting is reached

■ Heat Mode—For heat pumps, the condenser extracts heat from outside air for economical comfort

■ Dehumidification Mode—The unit automatically adjusts the air flow and temperature setting according to current room conditions for comfort even in the most humid conditions

■ Auto Sleep Mode—Because our body temperature cools down as we sleep, the unit automatically adjusts the setting for all-night comfort

■ Air Circulation—The fan circulates air without heating or cooling and can be set at low, medium or high speed

Operation is controlled by a fully featured wireless remote. Intuitive design makes it easy to select the operational mode. For multi-zone units, one remote is included for each indoor unit.



Comfort-Aire®

'DV' Series

*Single zone cooling only
and heat pump models
with inverter technology*

Our "DV" Series, rated at 15 SEER, offers economical zone control because only the room or area being used is conditioned and inverter technology matches the compressor speed to the room's changing temperature requirements.

A wireless remote makes it easy to select both temperature and mode, and a handy holder comes with the remote. With the "Follow Me" feature activated, the remote detects the temperature at its location and the unit adjusts operation to reach the set point wherever the remote is located in the room.

The indoor air handler features a sleek design that extends just 7 $\frac{1}{8}$ " to 8 $\frac{5}{8}$ " into the room, depending on the model. And the air handler has a self-cleaning evaporator coil with gold fin anti-corrosive coating which prevents bacteria from breeding and spreading.

Not only is the air handler visually unobtrusive, it's also so quiet you'll forget it's even there. Fan speed and mode can be selected so the air flow provides the comfort needed without being disruptive. All models feature three fan speeds.

Built with quality components, the system includes a three minute delay at start-up to protect the compressor from short cycling and, for heat pump models, to prevent cold air blow.

Ambient operating temperature:
cooling 5° to 122° F, heating 5° to 86° F.



Indoor Unit

9,000 to
24,000
BTUH



Includes a fully featured
wireless remote Outdoor Unit

Features

- **Super Efficient**—rated at 15 SEER for cooling operation
- **Whisper Quiet**—High tech fan in the indoor unit delivers balanced air flow
- **Temperature Compensation**—Indoor unit adjusts automatically as needed to eliminate stratification between ceiling and floor temps
- **Auto Swing**—Continually adjusts air flow direction for a gentle, breeze-like effect
- **Multiple Modes**—Cooling, dehumidification only, air circulation (heating in heat pump models) plus:
 - Sleep mode
 - 24-hour timer
 - Turbo mode
- **Auto Operation**—Automatically adjusts to maintain a constant temperature/humidity level
- **Superior Filtration**—Nano silver air filter releases silver ions that eliminate bacteria in the air while gold fin evaporator coating prevents the breeding and spreading of bacteria
- **Leak Detection**—Signals if unit begins losing refrigerant charge
- **Auto Restart**—Reverts to the last setting following a power failure
- **Defrost**—On heat pump models; also sump and crankcase heater

Owners of historic homes will appreciate the comfort and convenience of ductless mini-splits. Adding air conditioning to older homes can be expensive and difficult, while window units destroy the exterior appearance of the home. But with a mini-split, the outdoor condenser can be located where it doesn't detract from the curb appeal, and simple conduit containing refrigerant and electrical lines is inconspicuous. Remodelers and renovators will appreciate these same qualities.

‘DV’ Series

15 SEER Single Zone Ductless Mini-Splits Systems

	Cooling Only				Heat Pump Models			
FEATURES	DVC09SD-0	DVC12SD-0	DVC18SD-1	DVC24SD-1	DVH09SD-0	DVH12SD-0	DVH18SD-1	DVH24SD-1
Power Supply	115-1-60	115-1-60	208/230-1-60	208/230-1-60	115-1-60	115-1-60	208/230-1-60	208/230-1-60
Cooling Capacity (BTUH)	9,000	12,000	18,000	22,000	9,000	12,000	18,000	22,000
EER	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
HSPF/COP	-	-	-	-	8.2/3.2	8.2/3.2	8.2/3.0	8.2/3.0
Cooling Amps	8.7	11.7	8.7	10.7	8.7	11.7	8.7	10.7
Dehumidification (Pts/Hr.)	2.11	2.54	3.80	5.07	2.11	2.54	3.80	5.07
Heating Capacity (BTUH)	-	-	-	-	9,000	12,000	18,000	22,000
Heating Amps	-	-	-	-	7.4	9.6	7.6	9.3
-INDOOR UNIT								
Air flow (CFM)	282/247/188	341/294/235	735/647/470	705/647/529	282/247/188	341/294/235	735/647/470	705/647/529
Fan Speeds (Cool/Heat/Fan)	3/ - /3	3/ - /3	3/ - /3	3/ - /3	3/3/3	3/3/3	3/3/3	3/3/3
Sound Level (dBA) H-M-L	39/35/28	39/35/29	42/39/31	47/45/39	39/35/29	39/35/29	42/39/31	49/45/39
AIR DIRECTION								
Vertical Adjustment	Remote	Remote	Remote	Remote	Remote	Remote	Remote	Remote
Horizontal (left/right)	Manual	Manual	Manual	Manual	Manual	Manual	Manual	Manual
Auto Swing Up and Down	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
INDICATOR LAMPS								
ON/OFF	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
24 Hr. Timer/Sleep Mode	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Defrost	N/A	N/A	N/A	N/A	Standard	Standard	Standard	Standard
Temperature Setting	Remote Temperature Set Range: 62°F to 86°F				Remote Temperature Set Range: 62°F to 86°F			
INDOOR UNIT DIMENSIONS								
Width (inches)	26 ³ / ₄	30 ⁵ / ₁₆	35 ¹¹ / ₁₆	40 ⁹ / ₁₆	26 ³ / ₄	30 ⁵ / ₁₆	35 ¹¹ / ₁₆	40 ⁹ / ₁₆
Height (inches)	10 ¹ / ₈	10 ¹ / ₈	10 ⁷ / ₈	12 ⁷ / ₁₆	10 ¹ / ₈	10 ¹ / ₈	10 ⁷ / ₈	12 ⁷ / ₁₆
Depth (inches)	7 ¹ / ₈	7 ⁷ / ₁₆	7 ¹³ / ₁₆	8 ⁵ / ₈	7 ¹ / ₈	7 ⁷ / ₁₆	7 ¹³ / ₁₆	8 ⁵ / ₈
Net Wt/Shipping Wt (lbs.)	15.4/17.6	16.5/20.9	19.8/25.4	26.46/33.1	15.4/17.6	16.5/20.9	19.8/25.4	26.46/33.1
OUTDOOR UNIT DIMENSIONS								
Width (inches)	26	26	29 ¹⁵ / ₁₆	33 ⁵ / ₁₆	26	26	29 ¹⁵ / ₁₆	33 ⁵ / ₁₆
Height (inches)	21 ⁹ / ₃₂	21 ⁹ / ₃₂	23 ¹ / ₄	27 ⁹ / ₁₆	21 ⁹ / ₃₂	21 ⁹ / ₃₂	23 ¹ / ₄	27 ⁹ / ₁₆
Depth (inches)	10 ⁷ / ₁₆	10 ⁷ / ₁₆	11 ¹ / ₄	12 ⁵ / ₈	10 ⁷ / ₁₆	10 ⁷ / ₁₆	11 ¹ / ₄	12 ⁵ / ₈
Net Wt/Shipping Wt (lbs.)	62.8/69.5	65/71.7	76/81.6	98.1/105.8	63.9/70.6	66.1/70.6	82.7/88.2	103.6/111.3
ELECTRICAL DATA OUTDOOR UNIT*								
Main Power Connection	Outdoor Unit	Outdoor Unit	Outdoor Unit	Outdoor Unit	Outdoor Unit	Outdoor Unit	Outdoor Unit	Outdoor Unit
Min. Circuit Ampacity	19.0	20.0	14.0	16.0	19.0	20.0	14.0	16.0
Max. Fuse/HACR Circuit Breaker	30A	30A	20A	25A	30A	30A	20A	25A
Recommended Indoor/ Outdoor Connecting Cable Type*	14 AWG / 4 conductor 600V THHN unshielded bare copper				14 AWG / 4 conductor 600V THHN unshielded bare copper			
LINE SETS O.D. (inch)								
Liquid Connection (flare) (inch)	1/4	1/4	1/4	3/8	1/4	1/4	1/4	3/8
Suction Connection (flare) (inch)	3/8	1/2	1/2	5/8	3/8	1/2	1/2	5/8
Maximum Line Set Length ¹	65.5 feet	65.5 feet	82 feet	82 feet	65.5 feet	65.5 feet	82 feet	82 feet
Maximum Elevation (outdoor) ²	26 feet	26 feet	32 feet	32 feet	26 feet	26 feet	32 feet	32 feet

* Always follow local, state and national electrical codes.

¹ Min. 10 ft. line set recommended.

² Oil traps should be installed every 16.5 to 23 feet (5-7m) when the outdoor unit is installed above the indoor unit.

Design, specifications and performance data subject to change without notice.

Warranty—5 years on compressor, 1 years on parts
(Some limitations apply; see printed warranty for details.)



Energy Verified
Rendement
Énergétique Vérifié



'V' Series

Inverter technology in a wide range of capacities

Comfort and energy efficiency combine in these attractive wall mount mini-splits. Rated as high as 19.3 SEER, they include all the advantages of advanced inverter technology.

You'll find that your room reaches the preset temperature quickly and that the temperature is constant, without the variations that occur in other types due to on-off cycling. Because the units run at low frequency most of the time, energy usage is kept to a minimum. However, during weather extremes (or when you have a room full of people), the compressor ramps up automatically to reach the set point and maintain the comfort level.

"V" Series units are exceptionally quiet. Heavy duty compressors in the condensers are not just efficient, but they also reduce noise and vibration. Inside, the balanced fan circulates large volumes of air at minimal noise levels.

Applications

Single zone models are especially suited to one room residential installations such as bedrooms, sunrooms, additions and workshops. For large spaces up to 1550 square feet such as offices, conference rooms, common areas, etc., the 30,000-36,000 BTUH models deliver big capacity with exceptional efficiency. The inverter technology automatically matches the power delivered with the load requirements for precise temperature control.

Low Ambient Operation

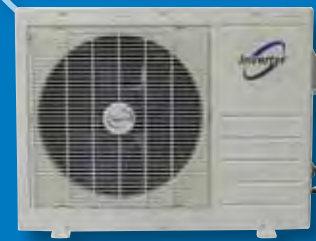
The low ambient feature allows cooling when outdoor temperature falls below freezing—great for temperature/humidity sensitive environments. Additionally, a factory installed crankcase heater keeps compressor oil warm and reduces heat loss to ambient air.

Low Ambient Operation: cooling 5° – 122° F, heating 5° – 93.2° F.

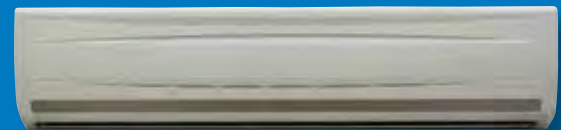


Indoor Unit

208-230V
9,000 to
24,000
BTUH

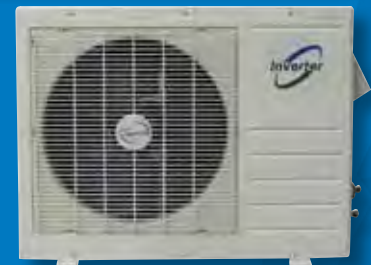


Outdoor Unit



Indoor Unit

208-230V
30,000 to
36,000
BTUH



Outdoor Unit

Features

- **Attractive Cabinet**—Indoor units feature a slim profile with rounded corners and sleek grilles in a subtle silver metallic color; 30-36K models are light beige color
- **Multiple Modes**—Cooling, dehumidification only, and heating
 - Sleep mode
 - Turbo mode
 - 24-hour timer
 - Auto mode
- **Random Swing**—Continually adjusts fan speed and air direction for a gentle, breeze-like effect that's preferred by most people
- **Remote Control**—Makes it easy to program and operate the unit
- **Multi-Stage Filtration**—Includes ionizer to remove microscope particles, active carbon and dust filter, and freshening filter for improved indoor air quality
- **Defrost Control**—Automatically removes any frost accumulation on the coil as needed
- **Auto Restart**—Reverts to the last setting following a power failure



'V' Series

Single Zone Ductless Mini-Split Systems with Inverter Technology

	Heat Pump Models					
FEATURES	VMH09SC-I**	VMH12SC-I**	VMH18SC-I**	VMH24SC-I	VMH30SC-I	VMH36SC-I
Power Supply	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60
Cooling Capacity (BTUH)	9,000	12,000	17,500	23,000	30,000	36,000
SEER	18.30	19.30	17.00	17.00	16.00	14.50
EER	13.00	12.00	12.00	10.00	10.00	8.80
HSPF	8.60	8.90	9.00	8.40	9.60	9.00
Cooling Amps	3.5	4.7	6.7	9.7	14	15.7
Dehumidification (Pts/Hr.)	2.3	2.5	3.6	4.7	6.3	8.0
High Heating Cap. (BTUH) @ 47°F	10,000	12,500	18,000	24,000	30,000	36,000
Low Heating Cap. (BTUH) @ 17°F	5,300	7,100	9,400	16,900	17,800	21,200
Heating Amps	3.8	5.4	6.3	9.5	11.0	14.0
INDOOR UNIT						
Air flow (CFM)	400/318/288	430/341/312	624/589/506	736/677/589	971/842/736	971/842/736
Fan Speeds (Hi/Med/Lo)	3	3	3	3	3	3
Sound Level (dBA) H-M-L	39/34/29	39/35/31	48/45/42	48/45/42	50/47/43	50/46/42
AIR DIRECTION						
Vertical Adjustment	Remote	Remote	Remote	Remote	Remote	Remote
Horizontal (left/right)	Manual	Manual	Manual	Manual	Manual	Manual
Random Swing	Standard	Standard	Standard	Standard	Standard	Standard
INDICATOR LAMPS						
ON/OFF	Yes	Yes	Yes	Yes	Yes	Yes
24 Hr. Timer/Sleep Mode	Yes	Yes	Yes	Yes	Yes	Yes
Defrost or Hot Start	Yes	Yes	Yes	Yes	Yes	Yes
Temperature Setting	On Remote: 62°F - 86°F temperature setting range			On Remote: 62°F - 86°F temperature setting range		
INDOOR UNIT DIMENSIONS						
Width (inches)	33 ¹ / ₄	33 ¹ / ₄	42 ⁵ / ₈	42 ⁵ / ₈	56 ⁷ / ₈	56 ⁷ / ₈
Height (inches)	11 ¹ / ₄	11 ¹ / ₄	12 ⁵ / ₈	12 ⁵ / ₈	13 ³ / ₈	13 ³ / ₈
Depth (inches)	6 ¹ / ₂	6 ¹ / ₂	8 ³ / ₁₆	8 ³ / ₁₆	10 ⁷ / ₈	10 ⁷ / ₈
Net Wt/Shipping Wt (lbs.)	19.8/24.3	19.8/24.3	32/44.0	32/44.0	53/70.6	53/70.6
OUTDOOR UNIT DIMENSIONS						
Width (inches)	29 ¹⁵ / ₁₆	29 ¹⁵ / ₁₆	33 ¹ / ₄	35 ⁷ / ₁₆	35 ⁷ / ₁₆	39
Height (inches)	23 ¹ / ₄	23 ¹ / ₄	27 ⁹ / ₁₆	33 ⁷ / ₈	33 ⁷ / ₈	38
Depth (inches)	11 ¹ / ₄	11 ¹ / ₄	12 ⁵ / ₈	12 ⁷ / ₁₆	12 ⁷ / ₁₆	13 ⁹ / ₁₆
Net Wt/Shipping Wt (lbs.)	84.9/90.4	87/92.6	110.2/119.0	136.7/147.7	156.5/165.4	180.8/189.6
ELECTRICAL DATA OUTDOOR UNIT*						
Main Power Connection	Outdoor Unit	Outdoor Unit	Outdoor Unit	Outdoor Unit	Outdoor Unit	Outdoor Unit
Min. Circuit Ampacity	15	15	15	15	16	20
Max. Fuse/HACR Circuit Breaker	20A	20A	20A	20A	25A	30A
Recommended Indoor/Outdoor Connecting Cable Type	14 AWG / 4 conductor 600V THHN unshielded stranded bare copper			14 AWG / 4 conductor 600V THHN unshielded stranded bare copper		
LINE SETS O.D. (inch)						
Liquid Connection (flare) (inch)	1/4	1/4	1/4	3/8	3/8	3/8
Suction Connection (flare) (inch)	3/8	1/2	1/2	5/8	5/8	5/8
Maximum Line Set Length ¹	66 feet	66 feet	82 feet	82 feet	82 feet	82 feet
Maximum Elevation (outdoor) ²	26 feet	26 feet	33 feet	33 feet	33 feet	33 feet

* Always follow local, state and national electrical codes.
Main power connection is 208-230V.

** Energy Star compliant models.

¹ Min. 10 ft. line set recommended.

² Oil traps should be installed every 16.5 to 23 feet (5-7m) when the outdoor unit is installed above the indoor unit.

Design, specifications and performance data subject to change without notice.

Warranty—6 years on compressor, 2 years on parts
(Some limitations apply; see printed warranty for details.)



‘V’ Series

InverterFlex® Systems

Our InverterFlex multi-zone units let you condition one to four rooms with just one outdoor unit. The contractor can design a system that best meets the load requirements of each room being conditioned because indoor air handlers can be mixed and matched—including high wall mount units and ceiling cassettes in the same installation.

A single outdoor condenser is sized for multiple indoor air handlers. These 9,000, 12,000 and 18,000 BTUH indoor units can be mixed, up to the point that their combined capacity reaches the total system capacity—see the chart on the following page. All units must operate in the same mode except fan only can always be selected. Indoor units are a subtle silver-gray color; ceiling cassettes have an off-white panel.

InverterFlex models incorporate all the advantages of inverter technology. The compressor speed is variable, depending on the load demand. Most of the time the unit runs at low frequency, saving energy while maintaining comfort, but ramping up to higher frequency when needed. Temperature fluctuations and compressor on/off cycling are eliminated, and indoor air quality is enhanced because air is constantly being pulled through the filters and dehumidified.

True zone control is possible because each air handler operates independently. InverterFlex systems are also great for larger spaces such as fellowship halls and commons areas: install one or more units for quiet, efficient, easily controlled comfort.



Includes a fully featured wireless remote per indoor unit.



Dual Zone 18,000 to 36,000 BTUH



Cool and heat two rooms or separate areas. Includes two indoor air handlers and two wireless remotes, one for each air handler.

Tri/Quad-Zone 27,000 to 36,000 BTUH



Cool and heat three or four rooms/separate areas. Includes three or four air handlers and one wireless remote for each air handler.

Features

- **Zone Control**—Each air handler is independently controlled, can be set for individual preferences or turned off when the room isn't being used
- **Random Swing**—Continually adjusts air direction for a gentle, breeze-like effect preferred by most people
- **Multiple Modes**—Cooling, heating, fan only, dehumidification only, plus: sleep mode / 24-hour timer / turbo mode
- **Low Ambient Operation**—cooling 5° – 122° F, heating 5° – 93.2° F
- **Auto Operation**—Automatically selects the mode required to maintain a constant temperature/humidity level
- **Multi-Stage Filtration**—Includes ionizer to remove microscope particles, active carbon and dust filter, and freshening filter for improved indoor air quality (high wall mount)
- **Auto Restart**—Reverts to the last setting following a power failure



Mix and match indoor units up to the maximum BTUHs for each system. Order outdoor and indoor units separately: "A" indicates outdoor unit and "B" indicates indoor units.

For instance, to order a 33,000 BTUH tri-zone, specify one A-VMH36 QC, two B-VMH12FC-1 and one B-VMH09FC. Chart at right shows possible matches.

OUTDOOR UNITS			
FEATURES	A-VMH18DC-1	A-VMH27TC-1	A-VMH36QC-1
Power Supply	208/230-1-60	208/230-1-60	208/230-1-60
System Cooling Capacity (BTUH)	18,000	25,400	34,400
SEER	16.00	16.00	14.50
EER	10.00	9.50	9.00
HSPF	8.00	8.00	8.00
Cooling Amps	7.5	11.0	15.0
High Heating Cap. (BTUH) @ 47°F	19,000	25,400	38,000
Low Heating Cap. (BTUH) @ 17°F	8,200	13,800	19,100
Heating Amps	7.6	11.2	15.0
OUTDOOR UNIT DIMENSIONS			
Width (inches)	33 ¹ / ₄	33 ¹ / ₄	39
Height (inches)	27 ³ / ₈	27 ³ / ₈	37
Depth (inches)	13 ³ / ₁₆	13 ³ / ₁₆	13
Net Wt/Shipping Wt (lbs.)	117.9/125.7	125.7/133.4	189.6/198.4
ELECTRICAL DATA OUTDOOR UNIT*			
Main Power Connection	Outdoor Unit	Outdoor Unit	Outdoor Unit
Min. Circuit Ampacity	11.0	15.0	23.0
Max. Fuse/HACR Circuit Breaker	15	20	35
Recommended Indoor/Outdoor Connecting Cable (SJOW)	14 AWG / 4 conductor 600V THHN unshielded stranded bare copper		
LINE SETS O.D. (inch) / REFRIGERANT			
Refrigerant	R-410A	R-410A	R-410A
Liquid (flare) (inch)	1/4	1/4	1/4
Suction (flare) (inch)	3/8	3/8	3/8
Max/ Line Set Length ¹	50 feet per each indoor unit		
Maximum Elevation (outdoor) ²	33 feet	33 feet	33 feet

* Always follow local, state and national electrical codes. Main power connection is 208-230V.

¹ Min. 10 ft. line set length recommended. Max. is total length of all indoor section line sets combined.

² Oil traps should be installed every 16.5 to 23 feet (5-7m) when the outdoor unit is installed above the indoor unit.

Ambient Operating Temperature: 5° - 122° F (cooling); 5° - 93.2° F (heating)

Design, specifications & performance data subject to change without notice.

Warranty—6 years on compressor, 2 years on parts
(Some limitations apply; see printed warranty for details.)



'V' Series InverterFlex

Multi-Zone Ductless Mini-Split Heat Pumps

InverterFlex Outdoor/Indoor Combinations			
OUTDOOR UNIT	ZONES	INDOOR UNITS	NOM. BTUH
A-VMH18DC-1	Single	9K or 12K or 18K	9,000 to 18,000
	Dual	9K + 9K	18,000
A-VMH27TC-1	Single	9K or 12K or 18K	9,000 to 18,000
	Dual	9K + 12K	21,000
	Dual	12k + 12K	24,000
	Dual	9K + 18K	27,000
	Tri	9K + 9K + 9K	27,000
A-VMH36QC-1	Single	9K or 12K or 18K	9,000 to 18,000
	Dual	12k + 18K	30,000
	Dual	18k + 18K	36,000
	Tri	9K + 9K + 12K	30,000
	Tri	9K + 12K + 12K	33,000
	Tri	12K + 12K + 12K	36,000
	Tri	9K + 9K + 18K	36,000
	Quad	9K + 9K + 9K + 9K	36,000

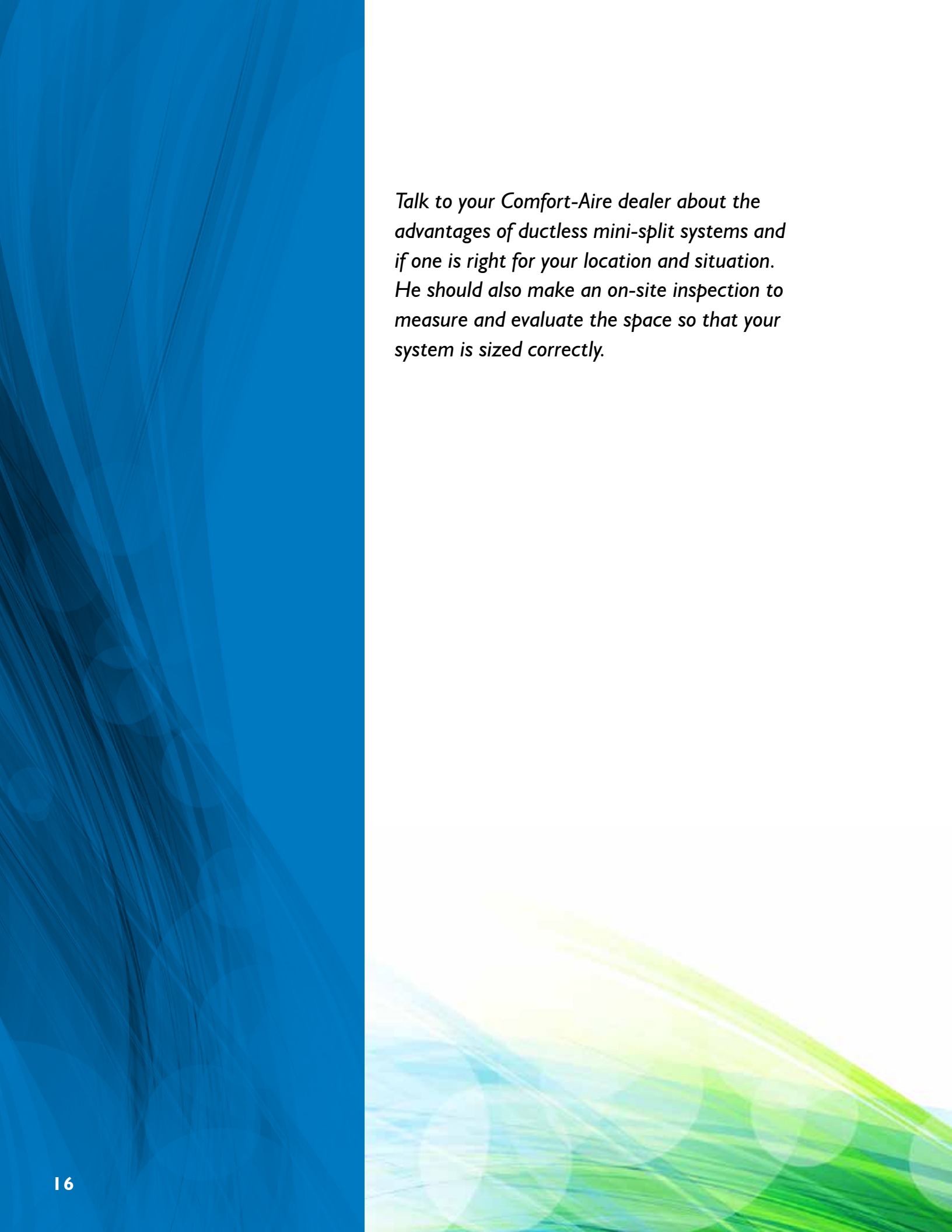
9K = Model B-VMH09FC (wall mount)

12K = Model B-VMH12FC (wall mount)

18K = Model B-VMH18FC (wall mount)

HIGH WALL MOUNT INDOOR UNITS			
FEATURES	B-VMH09FC-1	B-VMH12FC-1	B-VMH18FC-1
Nom. Capacity BTUH	9,000	12,000	18,000
Air flow (CFM)	335/283/206	412/306/247	471/412/353
Dehumidification (Pts/Hr)	2.3	2.5	3.09
Fan Speeds	3	3	3
Sound Level (dBa)	37/34/27	40/35/28	42/37/33
AIR DIRECTION			
Vertical Adjustment	Manual	Manual	Manual
Horizontal Modulating	Yes	Yes	Yes
Random Swing	Yes	Yes	Yes
INDICATOR LAMPS			
ON/OFF	Yes	Yes	Yes
24 Hr. Timer/Sleep Mode	Yes	Yes	Yes
Defrost	Yes	Yes	Yes
Temperature Setting	On Remote: 62°F - 88°F		
INDOOR UNIT DIMENSIONS			
Width (inches)	31 ⁵ / ₁₆	33 ¹ / ₄	39 ³ / ₄
Height (inches)	10 ⁵ / ₈	11 ¹ / ₄	11 ⁵ / ₈
Depth (inches)	6 ¹ / ₄	6 ¹ / ₄	7 ⁵ / ₈
Net Wt/Shipping Wt (lbs)	22/26.5	22/26.5	27.56/34.17
Liquid (flare) (inch)	1/4	1/4	1/4
Suction (flare) (inch)	3/8	1/2*	1/2*

*Flare nut adapter 3/8" FFL to 1/2" MFL included with indoor section.



Talk to your Comfort-Aire dealer about the advantages of ductless mini-split systems and if one is right for your location and situation. He should also make an on-site inspection to measure and evaluate the space so that your system is sized correctly.

Ready to buy?

Here are some things to consider:

When you buy Comfort-Aire products, you're purchasing the peace of mind that comes from dealing with a company that has a long track record of success. We have a well-deserved reputation not only for quality products, but also for standing behind these products with excellent warranty and support programs. Experienced technicians are available to handle telephone inquiries about operation, installation and maintenance. Our web site is another resource: owners' manuals can be downloaded and your installer can access technical information and service manuals.

Warranty Coverage

Comfort-Aire stands behind its mini-splits with some of the strongest warranties in the industry. All our ductless mini-split systems are covered by a limited five year warranty on the compressor and one year on other parts, and our "V" Series is covered by a 6 year compressor, 2 year parts limited warranty. (Some limitations apply, see our web site for full warranty details).

Consumer Financing Program

Your Comfort-Aire dealer makes it easy for you to purchase a ductless mini-split system for residential use. Our ComfortPlus™ Financing Program gives you the credit you need for a system, installation and any related equipment—with no long wait and no credit hassle. Program Representatives are available by phone seven days a week and, in most cases, they can give you an answer within minutes. There's no annual fee and a variety of payment options is available. Talk to your Comfort-Aire dealer about the advantages of ComfortPlus™ financing.

Extended Service Agreements

We stand behind our products with exceptionally strong warranties, but as with any product containing mechanical and electronic components, service is sometimes needed. Our AssurancePlus® program gives you an extra measure of protection that extends beyond the standard warranty coverage. It protects you against unexpected problems that require service and/or replacement parts. AssurancePlus® extended service agreements allow you to extend coverage beyond the original warranty, and there is a variety of plans to choose from, offering parts and labor coverage, parts only or labor only. Your Comfort-Aire dealer has all the details on the AssurancePlus® program.

Talk to your Comfort-Aire dealer about the advantages of ductless mini-split systems and if one is right for your location and situation. He should also make an on-site inspection to measure and evaluate the space so that your system is sized correctly.



Comfort-Aire®

Comfort-Aire offers a full line of ductless mini-split systems that are quality constructed and energy efficient to keep your family comfortable throughout the year. With single zone, multi-zone, and ceiling cassette models, there's a system in the size and type you need to add comfort to just about any location. All our mini-splits are backed by strong warranty coverage and after-sales support. Your dealer can give you recommendations on which models best suit your needs and lifestyle.



Comfort-Aire®
HEAT CONTROLLER

1900 Wellworth Ave., Jackson MI 49203 • Ph. 517-787-2100 • www.comfort-aire.com

A *MARS* Company

Split System Residential

This section contains:

Condensers & Heat Pumps

16 -13 SEER Condensers for R-410A

13 SEER Dry Condensers for R-22

16 -13 SEER Heat Pumps for R-410A

13 SEER Dry Heat Pump for R-22

Air Handlers

Coils

enjoy THE COMFORTS OF HOME



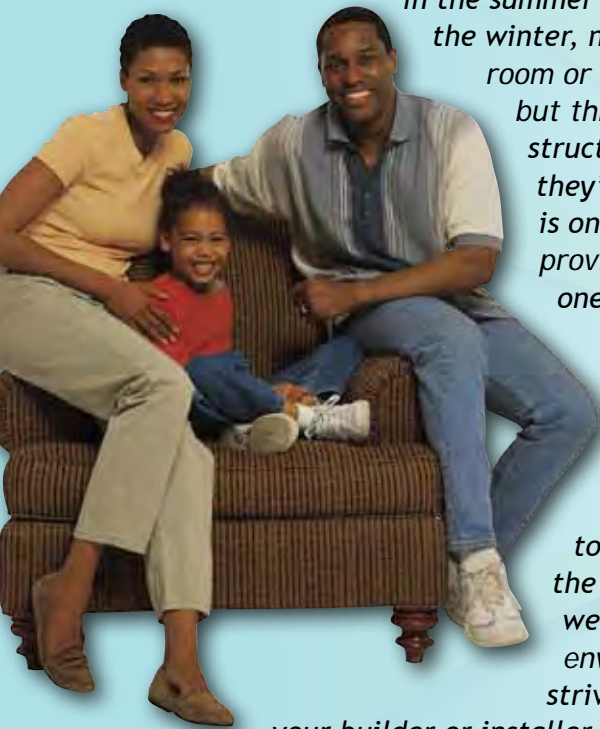
...with one of today's energy efficient,
reliable heating and cooling systems

Comfort-Cure®

invest IN COMFORT

If you're like most people, your home is probably your biggest investment, but in reality it means more to you than just a dollar figure. It's a haven. A place where you can relax, share time with family and friends, and express your personality and interests.

To get the most enjoyment from your home, physical comfort is a primary concern. You want it to be cool in the summer and warm in the winter, not just in one room or on one level, but throughout the structure. Making sure they're comfortable is one of the ways you provide for your loved ones.



A Comfort-Aire air conditioning and heating system can go a long way toward establishing the comfortable, welcoming environment you strive for. You and

your builder or installer can select from several types and many sizes of equipment to meet your home's specific requirements and your individual preferences. All the equipment has been tested and proven reliable, and is certified by recognized agencies.

In addition, you can take comfort from the fact that your new Comfort-Aire system rates high marks for efficiency, saving on utility bills and helping to protect the environment.

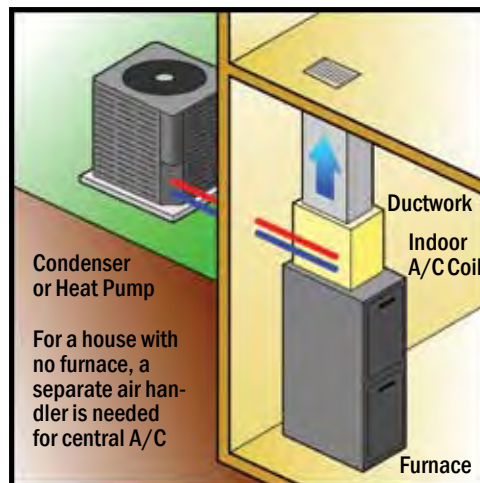
Whether you need a replacement unit or a whole system, your Comfort-Aire dealer can evaluate your home and determine which products are best suited to your climate and your specific needs. A heating/cooling load calculation will assure that your system is sized for comfort in every season.

At Comfort-Aire, we're in the business of making you comfortable. We've been in the comfort business since our founding in 1933 and today Comfort-Aire is known throughout the heating and air conditioning industry for efficient, reliable products. Whether for heating or cooling, these products meet or exceed industry standards for energy efficiency.

Our central air conditioners, heat pumps, furnaces and related products are designed to make your home more comfortable, and do it efficiently and economically.

Components of a residential cooling/heating split system

The same basic components are required for installation of central heating and cooling in your home, although the final choices will vary depending on a number of factors, including yearly heating and cooling days in your specific area.



Comfort-Aire®

Heat transfer is the key to efficient heating, cooling

Comfort-Aire heat pumps are built with the same great features as our condensing units, with the addition of a reversing valve that allows the unit to switch from cooling to heating.

Solid Steel Cabinets

Heavy gauge, galvanized steel has a tough powder coat finish for maximum strength and corrosion resistance

Top Discharge Fan Assembly

Allows easy access to the fan motor and other components if service is needed; also provides maximum heat exhaust and quiet operation

Wrap-Around Coil

The condenser coil wraps around the compressor, fan motor and other components to deliver maximum surface area for heat exchange

Full Metal Jacket

Designed to allow heat exchange to occur while protecting the coil—and enhancing the overall equipment appearance

Handy Connections

Connections including high and low side service valves are located just below the control box for easy access

Demand Defrost

Improves efficiency by defrosting only when necessary



HRG SERIES Heat Pumps - 1½ to 5 Ton 16 - 14 - 13 SEER Models

16 SEER Model	Nom. BTUH Cooling	Nom. BTUH Heating
HRG1624S1E	18,000	18,000
HRG1636S1E	36,000	36,000
HRG1648S1E	48,000	48,000
HRG1660S1E	60,000	60,000
14-15 SEER Model	BTUH Cooling*	BTUH Heating*
HRG1418S1E	19,200	18,800
HRG1424S1E	23,400	24,600
HRG1430S1E	28,400	29,400
HRG1436S1E	34,800	33,600
HRG1442S1E	39,500	38,000
HRG1448S1E	45,500	44,000
HRG1460S1E	59,000	52,500
13-14 SEER Model	BTUH Cooling*	BTUH Heating*
HRG1318S1E	18,000	18,000
HRG1324S1E	24,000	23,200
HRG1330S1E	29,600	39,600
HRG1336S1E	35,800	37,800
HRG1342S1E	41,500	41,500
HRG1348S1E	48,000	47,500
HRG1360S1E	59,500	57,500

How a heat pump works...

A heat pump is basically a device for transferring heat into and out of the house. In summer, it operates like a traditional split system air conditioner, with the refrigerant in the coils absorbing heat from indoor air to cool it, then pumping the heat outside. In winter, the reversing valve allows the heat pump to pull heat out of the atmosphere and transfer it indoors.

Heat pumps work best in moderate temperatures. In locations with extreme winters, an additional heat source will be needed to provide adequate heat, either an air handler or gas furnace.

*Capacities shown with HCG air handlers; capacities will vary slightly with air handler or coil used.

Heating capacity at 47° F.

Outstanding Warranty Coverage: 12 years compressor and parts

With registration within 90 days by original owner; other limitations apply: see printed warranty for details.

Advanced design makes today's central air conditioning units quieter, cleaner and more efficient than ever before



Top Discharge Fan Assembly
Designed for easy access to working components, also provides optimum heat exhaust and quiet operation

Quiet Operation

The heavy duty grille protects components and reduces vibration, while the scroll compressor is designed for quiet operation

Solid Steel Cabinets

Corrosion-resistant epoxy finish over heavy gauge galvanized steel combines an attractive appearance with durability

Wrap-Around Coil

Enhanced aluminum fins have maximum surface area for heat exchange



Control Box

All controls are housed in a waterproof compartment to protect them from the elements and speed access

Full Metal Jacket

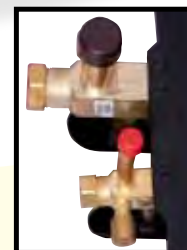
Protects the coil from yard hazards, which helps maintain operating efficiency; corrosion-resistant finish is durable and attractive

RSG SERIES

A/C Condensers - 1½ to 5 Ton 16 - 14 - 13 SEER Models

State-of-the-Art Scroll Compressors

The compressor is key to condenser operation and scroll compressors feature advanced technology for excellent efficiency and long life; quiet operation is inherent in the design of scroll compressors



Handy Connections

Service ports are located just below the control box, readily accessed for maintenance and service

16 SEER Model	Nom. BTUH Cooling
RSG1624S1E	24,000
RSG1636S1E	36,000
RSG1648S1E	48,000
RSG1660S1E	60,000
14-15 SEER Model	BTUH Cooling*
RSG1418S1E	19,200
RSG1424S1E	23,400
RSG1430S1E	28,400
RSG1436S1E	34,800
RSG1442S1E	39,500
RSG1448S1E	45,500
RSG1460S1E	59,000
13-14 SEER Model	BTUH Cooling**
RSG1318S1E	17,400
RSG1324S1E	23,000
RSG1330S1E	28,400
RSG1336S1E	35,000
RSG1342S1E	40,000
RSG1348S1E	47,500
RSG1360S1E	57,500

*BTUH shown with Comfort-Aire HMG air handler. BTUH capacities and SEER ratings will vary slightly with air handler or coil.

**BTUH shown with Comfort-Aire HCG air handler. BTUH capacities and SEER ratings will vary slightly with air handler or coil used.

Outstanding Warranty Coverage: 12 years parts, 12 years compressor

With registration within 90 days by original owner; other limitations apply: see printed warranty for details.



what DO WE MEAN BY 'ENERGY EFFICIENT'?

In recent years, the HVAC industry has made significant advances in the energy efficiency of heating and cooling systems. You can judge efficiencies yourself by comparing established industry standards.

Cooling Efficiency—Measured by Seasonal Energy Efficiency Ratio (SEER), this shows the total cooling capacity in relationship to energy output. The higher the number, the more efficient the equipment. Just a few years ago, 10 SEER was standard; now the minimum is 13 SEER and we offer A/C systems that reach as high as 16 SEER.

Heating Efficiency—Annual Fuel Utilization Efficiency ratings (AFUE) are your guide for comparing gas furnace efficiencies. The ratings are expressed in percent of fuel that is actually

combusted to produce warm air for your home. A 95% rating, for instance, means that almost every cubic foot of natural or LP gas is used to heat your home—not lost up the chimney.

To determine which level of efficiency will provide you with the greatest return on investment, you need to consider how long it will take for energy savings to pay for the cost of higher efficiency equipment. For instance, in northern areas where only a few weeks of cooling are required, the payback period on a super-efficient air conditioner will be lengthy, while in the South it may quickly pay for itself in fuel savings. Your installer can help you determine which models make sense for your location and your specific needs.



SPACE, SAVING, ENERGY *saving* GAS FURNACES



80% Gas Furnace

If your furnace is over 10 years old, there's a good chance you can save money by installing a new, high performance model. While the federally mandated minimum is 78% AFUE, today you can choose furnaces rated up to 95% AFUE in single stage and two stage designs.

A two stage furnace maximizes comfort by maintaining a constant temperature: it runs in the low stage most of the time, but ramps up instantly when more heat is needed. An ECM blower motor automatically adjusts to deliver constant airflow, eliminating temperature stratification and on/off cycling.

At just 34½" high, Comfort-Aire furnaces will fit in virtually any space—basement, attic, crawl space, or closet, and they're pre-wired for fast installation. Features include electronic ignition, quiet operation, and easy-to-change filters. Integrated control boards make it simple to add comfort options such as central air conditioning and air cleaners.



**95% Gas Furnace
Two Stage**

**OUR FURNACES ARE COVERED
BY INDUSTRY-LEADING
WARRANTIES.**



**92% and 95%
Gas Furnace Single Stage**

A *full* LINE FOR HEATING & COOLING



Heat Pumps
13-16 SEER
1½ to 5 Tons



Gas Furnaces
95%, 92%, 80% AFUE
45,000-150,000 BTUH



Evaporator Coils
13-16 SEER
1½ to 5 Tons



A/C Condensers
13-16 SEER
1½ to 5 Tons



Air Handlers
Includes A/C Coil
1½ to 5 Tons

Comfort-Aire offers a full line of products for residential heating and cooling. All are quality constructed and energy efficient to keep you comfortable throughout the year. The compact size of our condensers, furnaces and air handlers makes them ideal for individual replacements; for a full system, units are matched to each other by capacity and certified as a system by the Air-Conditioning, Heating and Refrigeration Institute (AHRI). And of course, all units are backed by our exceptional warranty coverage and after-sales support.

With this broad product range, Comfort-Aire has the models and accessories to suit your location, your home's requirements, and your lifestyle.



All our cooling equipment is charged with or designed to work with the environmentally friendly refrigerant, R-410A.

Due to ongoing product improvements, design, specifications, materials and appearance subject to change without notice.

Comfort-Aire®
HEAT CONTROLLER

1900 Wellworth Ave., Jackson MI 49203 • Ph. 517-787-2100 • www.comfort-aire.com

A **TRIS** Company



16 SEER CONDENSERS FOR R-410A

- **Micro-channel coils** are highly corrosion resistant, easier to clean and stronger than tube and fin coils (RSG1660 model has copper tube with aluminum fin coils)
- **Louvered metal jacket** of galvanized steel with a polyester urethane finish protects the coil while adding to the attractive appearance, vertical slots add stability and strength
- **High pressure switch** protects against excessively high system pressures, include auto reset feature to prevent “nuisance” service calls
- **Liquid line filter-drier** is included for field installation
- **Restart time delay** eliminates common causes of compressor failures
- **Composite base pan** is stronger and lighter than steel, resists corrosion and absorbs sound
- **Heavy duty scroll compressors** are designed for long life and efficiency, with virtually silent operation; RSG1660 has a two stage compressor for optimum comfort
- **Heavy duty grille assembly** makes it easy to access components from top for service without disconnecting fan motor, designed for maximum air flow and quiet operation
- **Compressor and control access** is conveniently located on the side of the unit to speed installation and service



RSG16
SERIES
2 to 5 Tons



The RSG Series of high efficiency A/C condensers comes charged with R-410A, an environmentally friendly refrigerant.

Can be slab- or rooftop-mounted

Outstanding Limited Warranty Coverage—12 years compressor, 12 years other parts!
With registration within 90 days by original owner; other limitations apply: see printed warranty for details.

HEAT CONTROLLER

PERFORMANCE DATA-AHRI STANDARD CONDITIONS

INDOOR/OUTDOOR MATCHES			COOLING PERFORMANCE			NOM. AIR FLOW SCFM
INDOOR TYPE	OUTDOOR MODEL	INDOOR COIL MODEL	CAPACITY (BTUH)	EFFICIENCY		
			TOTAL	SEER	EER	
VARIABLE SPEED ELECTRIC HEAT AIR HANDLER	RSG1624S1E	HCG24V1E	24,000	16.0	13.0	800
	RSG1630S1E	HCG30V1E	30,000	16.0	13.0	1000
	RSG1636S1E	HCG36V1E	35,600	16.0	13.0	1200
	RSG1642S1E	HCG42V1E	42,000 Nom.	TBD	TBD	1400
	RSG1648S1E	HCG48V1E	48,000 Nom.	TBD	TBD	1600
	RSG1660S1E	HCG60V1E	60,000 Nom.	TBD	TBD	2000
UPFLOW CASED COIL	RSG1624S1E	VMG24FAE, -24FBE	24,000	14.0	12.2	800
	RSG1630S1E	VMG30FCE, VMG36FAE, -36FBE	27,800	14.0	12.2	1000
	RSG1636S1E	VMG36FBE, -36FCE	35,000	14.0	12.2	1200
		VMG42FCE	35,000	14.0	12.2	1200
	RSG1642S1E	VMG42FBE, -42FCE, -42FDE	42,000 Nom.	TBD	TBD	1400
	RSG1648S1E	VMG48FCE, -48FDE	48,000 Nom.	TBD	TBD	1600
RSG1660S1E	VMG60FCE, -60FDE	60,000 Nom.	TBD	TBD	2000	
MULTI-POSITION CASED COIL	RSG1624S1E	MMG24FAE, -24FBE	24,000	14.0	12.2	800
	RSG1630S1E	MMG30FCE, MMG36FAE, -36FBE	27,800	14.0	12.2	1000
	RSG1636S1E	MMG36FBE, -36FCE	35,000	14.0	12.2	1200
		MMG42FCE	35,000	14.0	12.2	1200
	RSG1642S1E	MMG42FBE, -42FCE, -42FDE	42,000 Nom.	TBD	TBD	1400
	RSG1648S1E	MMG48FCE, -48FDE	48,000 Nom.	TBD	TBD	1600
RSG1660S1E	MMG60FCE, -60FDE	60,000 Nom.	TBD	TBD	2000	
UPFLOW/ DOWNFLOW UNCASED COIL	RSG1624S1E	CMG24FAE, -24FBE	24,000	14.0	12.2	800
	RSG1630S1E	CMG30FCE, CMG36FAE, -36FBE	27,800	14.0	12.2	1000
	RSG1636S1E	CMG36FBE, -36FCE	35,000	14.0	12.2	1200
		CMG42FCE	35,000	14.0	12.2	1200
	RSG1642S1E	CMG42FBE, -42FCE, -42FDE	42,000 Nom.	TBD	TBD	1400
	RSG1648S1E	CMG48FCE, -48FDE	48,000 Nom.	TBD	TBD	1600
RSG1660S1E	CMG60FCE, -60FDE	60,000 Nom.	TBD	TBD	2000	

See the current AHRI Directory for all certified combinations and ratings: www.ahridirectory.org

Some matches may require an additional orifice or TXV. See technical documentation for details.

Coil Model	Cased Coil	Uncased Coil
XCGXXTA	14 ¹ / ₄ " width	12 ³ / ₄ " width
XCGXXTB	17 ¹ / ₂ " width	16" width
XCGXXTC	21" width	19 ¹ / ₂ " width
XCGXXTD	24 ¹ / ₂ " width	23" width

MODEL NOMENCLATURE

R	S	G	16	24	S	1	E
Residential Condenser	Split System	'Green' Gas R-410A	Minimum SEER	Capacity BTUH x 1000	S = Scroll Compressor	Power 1 = 208/230-1-60	Series/ Revision

LINE SIZES and COMPRESSOR

MODEL	CONNECTION SIZE (inch ODA Female)		STANDARD LINE SIZE (in. OD)			COMPRESSOR TYPE
	LIQUID	SUCTION	LIQUID	SUCTION		
				15' to 24'	25' to 75'	
RSG1624S1E	3/8	3/4	3/8	3/4	3/4	Scroll, single stage
RSG1630S1E	3/8	3/4	3/8	3/4	3/4	Scroll, single stage
RSG1636S1E	3/8	3/4	3/8	3/4	7/8*	Scroll, single stage
RSG1642S1E	3/8	7/8	3/8	7/8	7/8	Scroll, single stage
RSG1648S1E	3/8	7/8	3/8	7/8	7/8	Scroll, single stage
RSG1660S1E	3/8	7/8	3/8	7/8	1-1/8**	Scroll, two stage

* Requires 7/8" to 3/4" reducer from line to unit.

** Requires 7/8" to 1-7/8" reducer from line to unit.

ELECTRICAL AND PHYSICAL DATA

MODEL	RSG1624	RSG1630	RSG1636	RSG1642	RSG1648	RSG1660
Power Supply	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60
Total Amps	14.1	13.7	15.1	19.4	22.4	
Delay Fuse Max.*	30	25	30	40	45	
Min. Circ. Ampacity	17.5	16.9	18.6	23.9	27.4	
Coil Area Sq. Ft.	13.3	15.2	22.8	25.3	25.3	
Coil Rows-FPI	1-23	1-18	1-18	1-23	1-23	
Coil Tube Dia. OD	Micro-Channel					
Fan Motor Type	PSC	PSC	PSC	PSC	BLDC	BLDC
Fan Motor Amps	0.7	0.9	1.0	1.5	2.6	2.6
Fan HP	0.10	0.13	0.20	0.25	0.33	0.33
Compressor RLA	13.4	12.8	14.1	17.9	19.8	28.8
Compressor LRA	58.3	64.0	77.0	112.0	85	152.9
Refrig. Charge (oz.)**	64	67	78	104	85	117

*HACR type circuit breaker may be used.

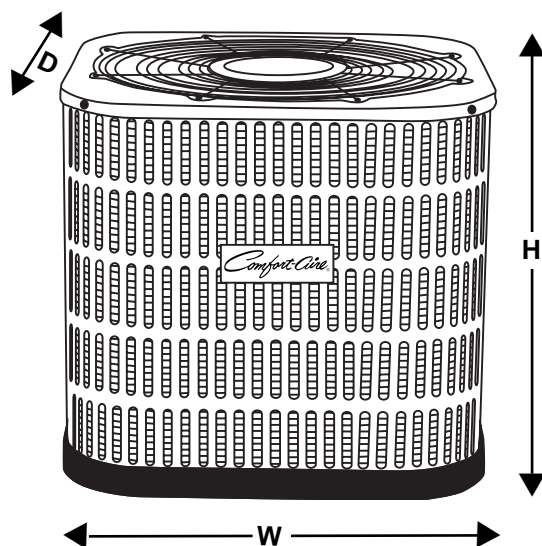
**Factory charged for 15' line set. Extra refrigerant needed for line sets over 15 feet, as well as different suction line sizes (see IOM).

ACCESSORIES

PART NO.	DESCRIPTION
912933	Start Assist Kit—for extra starting torque when operating in low line voltage or high operating temperatures
920900	Extreme Wind Mounting Kit

UNIT DIMENSIONS (inches)

DIMENSION	RSG1624S1E	RSG1630S1E	RSG1636S1E	RSG1642S1E	RSG1648S1E	RSG1660S1E
HEIGHT	25½	27½	39½	43½	43½	43½
WIDTH	22¾	30¾	30¾	30¾	30¾	30¾
DEPTH	22¾	30¾	30¾	30¾	30¾	30¾
WEIGHT (lbs) NET/SHIPPING	123/128	136/144	203/212	208/217	218/227	224/233



Design, specifications, performance data and materials subject to change without notice.

HEAT CONTROLLER

1900 Wellworth Ave., Jackson MI 49203 • Ph. 517-787-2100 • www.heatcontroller.com

A **WALSH** Company



14 SEER CONDENSERS FOR R-410A

- **Micro-channel coils** are highly corrosion resistant, easier to clean and stronger than tube and fin coils (RSG1460 model has copper tube with aluminum fin coils)
- **Louvered metal jacket** of galvanized steel with a polyester urethane finish protects the coil while adding to the attractive appearance
- **Permanently lubricated PSC motor** is quiet and reliable, requires no maintenance
- **High pressure switch** protects against excessively high system pressures
- **Liquid line filter-drier** is included for field installation
- **Restart time delay** eliminates common causes of compressor failures
- **Composite base pan** is stronger and lighter than steel, resists corrosion and absorbs sound
- **Heavy duty scroll compressors** are designed for long life and efficiency
- **Heavy duty grille assembly** makes it easy to access components from top for service without disconnecting fan motor, designed for maximum air flow and quiet operation
- **Compressor and control access** is conveniently located on the side of the unit to speed installation and service



RSG14
SERIES
1.5 to 5 Tons



The RSG Series of high efficiency A/C condensers comes charged with R-410A, an environmentally friendly refrigerant.

Can be slab- or rooftop-mounted

Outstanding Limited Warranty Coverage—12 years compressor, 12 years other parts!
With registration within 90 days by original owner; other limitations apply: see printed warranty for details.

HEAT CONTROLLER

PERFORMANCE DATA-AHRI STANDARD CONDITIONS

INDOOR/OUTDOOR MATCHES			COOLING PERFORMANCE			NOM. AIR FLOW SCFM
INDOOR TYPE	OUTDOOR MODEL	INDOOR COIL MODEL	CAPACITY (BTUH)	EFFICIENCY		
			TOTAL	SEER	EER	
VARIABLE SPEED ELECTRIC HEAT AIR HANDLER	RSG1418S1E	HCG24V1E*	18,000	15.0	12.5	600
	RSG1424S1E	HCG24V1E*	24,000	15.0	12.5	800
	RSG1430S1E	HCG30V1E*	30,000	15.0	12.5	1000
	RSG1436S1E	HCG36V1E*	35,600	15.0	12.5	1200
	RSG1442S1E	HCG42V1E*	41,000	15.0	12.5	1400
		HCG48V1E*	41,500	15.0	12.5	1400
	RSG1448S1E	HCG48V1E*	46,500	15.0	12.0	1600
	RSG1460S1E	HCG60V1E	60,000	15.0	12.5	2000
AIR HANDLER ELECTRIC HEAT OPTION	RSG1418S1E	HMG24V1E*	18,000	15.0	12.5	600
	RSG1424S1E	HMG24V1E*	24,000	15.0	12.5	800
	RSG1430S1E	HMG30V1E*	30,000	15.0	12.5	1000
	RSG1436S1E	HMG36V1E*	35,000	15.0	12.5	1200
	RSG1442S1E	HMG42V1E*	41,000	15.0	12.5	1400
	RSG1448S1E	HMG48V1E*	46,000	15.0	12.0	1600
	RSG1460S1E	HMG60V1E	57,500	15.0	12.5	2000
WALL MOUNT AIR HANDLER ELEC. HEAT	RSG1418S1E	FMG1805X1E, -1808X1E	17,900	15.0	12.5	600
	RSG1424S1E	FMG2405X1E, -2408X1E, -2410X1E	23,600	15.0	12.5	800
	RSG1430S1E	FMG3005X1E, -3008X1E, -3010X1E	28,800	15.0	12.0	1000
	RSG1436S1E	FMG3605X1E, -3608X1E, -3610X1E	33,600	15.0	12.5	1200
UPFLOW CASED COIL	RSG1418S1E	VCG24TA1E, -TB1E	18,000	14.0	12.8	600
	RSG1424S1E	VCG24TA1E, -TB1E	22,800	14.0	12.0	800
	RSG1430S1E	VCG36TA1E, -36TB1E, -36TC1E	29,400	14.0	12.0	1000
	RSG1436S1E	VCG36TA1E, -36TB1E, -36TC1E	32,600	14.0	11.8	1200
	RSG1442S1E	VCG48TB1E, -48TC1E, -48TD1E	41,000	14.0	12.0	1400
	RSG1448S1E	VCG48TB1E, -48TC1E, -48TD1E	44,500	14.0	12.1	1600
MULTI-POSITION CASED COIL	RSG1418S1E	MCG24TA1E, -TB1E	18,000	14.0	12.8	600
	RSG1424S1E	MCG24TA1E, -TB1E	22,800	14.0	12.0	800
	RSG1430S1E	MCG36TA1E, -36TB1E, -36TC1E	29,400	14.0	12.0	1000
	RSG1436S1E	MCG36TA1E, -36TB1E, -36TC1E	32,600	14.0	11.8	1200
	RSG1442S1E	MCG48TB1E, -48TC1E, -48TD1E	41,000	14.0	12.0	1400
	RSG1448S1E	MCG48TB1E, -48TC1E, -48TD1E	44,500	14.0	12.1	1600
UPFLOW/ DOWNFLOW UNCASED COIL	RSG1418S1E	CCG24TA1E, -TB1E	18,000	14.0	12.8	600
	RSG1424S1E	CCG24TA1E, -TB1E	22,800	14.0	12.0	800
	RSG1430S1E	CCG36TA1E, -36TB1E, -36TC1E	29,400	14.0	12.0	1000
	RSG1436S1E	CCG36TA1E, -36TB1E, -36TC1E	32,600	14.0	11.8	1200
	RSG1442S1E	CCG48TB1E, -48TC1E, -48TD1E	41,000	14.0	12.0	1400
	RSG1448S1E	CCG48TB1E, -48TC1E, -48TD1E	44,500	14.0	12.1	1600



* Indicates unit is
Energy Star® rated

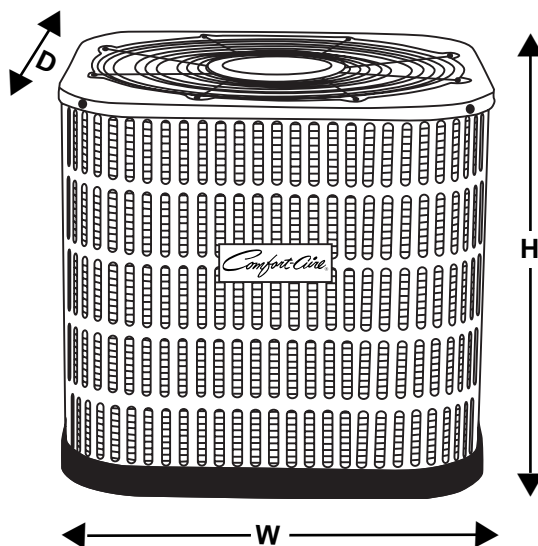
Coil Model	Cased Coil	Uncased Coil
XCGXXT A	14" width	13" width
XCGXXT B	17 ¹ / ₂ " width	16" width
XCGXXT C	21" width	19 ¹ / ₂ " width
XCGXXT D	24 ¹ / ₂ " width	23" width

NOTE: These combinations of indoor and outdoor units are certified by AHRI; see the current AHRI Directory for all certified combinations and ratings:
www.ahridirectory.com

ELECTRICAL AND PHYSICAL DATA							
MODEL	RSG1418	RSG1424	RSG1430	RSG1436	RSG1442	RSG1448	RSG1460
Power Supply	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60
Total Amps	9.9	14.4	15	15.1	19.3	21.2	27.6
Delay Fuse Max. *	20	30	30	30	40	45	60
Min. Circ. Ampacity	12.1	17.7	18.5	18.6	23.8	26.2	34.2
Coil Area Sq. Ft.	17.5	17.5	20.3	22.8	25.4	25.4	25.4
Coil Rows-FPI	1-22	1-22	1-22	1-22	1-22	2-16	2-16
Coil Tube Dia. OD	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Fan Motor Type	PSC	PSC	PSC	PSC	PSC	PSC	PSC
Fan Motor Amps	0.9	0.9	0.9	1	1.4	1.4	1.4
Fan HP	0.13	0.13	0.13	0.25	0.25	0.25	0.25
Fan SCFM	3000	3000	3200	3300	3600	3800	3800
Compressor RLA	9	13.4	14.1	14.1	17.9	19.5	26.2
Compressor LRA	48	58.3	73	77	112	109	134
Refrig. Charge (oz.)	109	112	118	136	157	234	234
NOTE: Factory charged for 15' line set. Extra refrigerant needed for line sets over 15 feet (see IOM). *HACR type circuit breaker may be used.							
LINE SIZES and COMPRESSOR							
MODEL	CONNECTION SIZE (inch ODA Female)		STANDARD LINE SIZE (in. OD)			COMPRESSOR TYPE	
	LIQUID	SUCTION	LIQUID	SUCTION			
				15' to 24'	25' to 75'		
RSG1418S1E	3/8	3/4	3/8	3/4	3/4	Scroll	
RSG1424S1E	3/8	3/4	3/8	3/4	3/4	Scroll	
RSG1430S1E	3/8	3/4	3/8	3/4	3/4	Scroll	
RSG1436S1E	3/8	3/4	3/8	3/4	7/8*	Scroll	
RSG1442S1E	3/8	7/8	3/8	7/8	7/8	Scroll	
RSG1448S1E	3/8	7/8	3/8	7/8	7/8	Scroll	
RSG1460S1E	3/8	7/8	3/8	7/8	1-1/8**	Scroll	
* Requires 7/8" to 3/4" reducer from line to unit. **Requires 1-1/8" to 7/8" reducer from line to unit.							
MODEL NOMENCLATURE							
R	S	G	14	24	S	1	E
Residential Condenser	Split System	'Green' Gas R-410A	Minimum SEER	Capacity BTUH x 1000	S = Scroll Compressor	Power 1 = 208/230-1-60	Series/ Revision

UNIT DIMENSIONS (inches)

DIMENSION	RSG1418S1E	RSG1424S1E	RSG1430S1E	RSG1436S1E	RSG1442S1E	RSG1448S1E	RSG1460S1E
HEIGHT	31	31	35	39	43	43	43
WIDTH	30 ¾	30 ¾	30 ¾	30 ¾	30 ¾	30 ¾	30 ¾
DEPTH	30 ¾	30 ¾	30 ¾	30 ¾	30 ¾	30 ¾	30 ¾
WEIGHT (lbs) NET/SHIPPING	162/171	166/175	171/180	176/185	181/190	220/232	223/235



ACCESSORIES

PART NO.	DESCRIPTION
912933	Start Assist Kit—for extra starting torque when operating in low line voltage or high operating temperatures
920900	Extreme Wind Mounting Kit

Design, specifications, performance data and materials subject to change without notice.

HEAT CONTROLLER

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A **WATS** Company



13 SEER CONDENSERS FOR R-410A



RSG13
SERIES
1.5 to 5 Tons



The RSG Series of high efficiency A/C condensers comes charged with R-410A, an environmentally friendly refrigerant.

Can be slab- or rooftop-mounted

- **Micro-channel coils** are all aluminum for exceptional corrosion resistance
- **Louvered metal jacket** of galvanized steel with a polyester urethane finish protects the coil while adding to the attractive appearance
- **Permanently lubricated PSC motor** is quiet and reliable, requires no maintenance, and is protected from the elements
- **High pressure switch** protects against excessively high system pressures
- **Liquid line filter-drier** is included for field installation
- **Restart time delay** eliminates common causes of compressor failures
- **Composite base pan** is stronger and lighter than steel, resists corrosion and absorbs sound
- **Heavy duty scroll compressors** are designed for long life and efficiency
- **Heavy duty grille assembly** makes it easy to access components from top for service without disconnecting fan motor, designed for maximum air flow and quiet operation
- **Compressor and control access** is conveniently located on the side of the unit to speed installation and service
- **Three service ports** are conveniently located to simplify service

Outstanding Limited Warranty Coverage—12 years compressor, 12 years other parts!
With registration within 90 days by original owner; other limitations apply: see printed warranty for details.

HEAT CONTROLLER

PERFORMANCE DATA-AHRI STANDARD CONDITIONS

INDOOR/OUTDOOR MATCHES			COOLING PERFORMANCE			NOM. AIR FLOW SCFM
INDOOR TYPE	OUTDOOR MODEL	INDOOR MODEL	CAPACITY (BTUH)	EFFICIENCY		
			TOTAL	SEER	EER	
ELECTRIC HEAT AIR HANDLER	RSG1318S1E	HMG24F1E	17,400	13.0	11.0	555
	RSG1324S1E	HMG24F1E	23,000	13.0	11.0	700
	RSG1330S1E	HMG30F1E	28,400	13.0	11.0	920
	RSG1336S1E	HMG36F1E	35,000	13.0	10.9	1160
	RSG1342S1E	HMG42F1E	40,000	13.0	11.0	1370
	RSG1348S1E	HMG48F1E	47,500	13.0	11.0	1630
	RSG1360S1E	HMG60F1E	57,500	13.0	11.0	1950
VARIABLE SPEED ELECTRIC HEAT AIR HANDLER	RSG1318S1E	HCG24V1E	18,200	13.5	12.0	600
	RSG1324S1E	HCG24V1E	24,200	13.5	12.0	800
	RSG1330S1E	HCG30V1E	29,800	13.5	12.0	1000
	RSG1336S1E	HCG36V1E	36,600	14.0	12.2	1200
	RSG1342S1E	HCG42V1E, HCG48V1E	41,000	14.0	12.0	1400
	RSG1348S1E	HCG48V1E	48,000	14.0	12.0	1600
	RSG1360S1E	HCG60V1E	55,500	13.5	11.0	2000
WALL MOUNT AIR HANDLER ELEC. HEAT	RSG1318S1E	FMG1805F1E, -1808F1E	17,200	13.0	11.0	600
	RSG1324S1E	FMG2405F1E, -2408F1E, -2410F1E	22,800	13.0	11.0	800
	RSG1330S1E	FMG3005F1E, -3008F1E, -3010F1E	27,600	13.0	11.0	1000
	RSG1336S1E	FMG3605F1E, -3608F1E, -3610F1E	34,200	13.0	11.0	1200

NOTE: These combinations of indoor and outdoor units are certified by AHRI; see the current AHRI Directory for all certified combinations and ratings: www.ahridirectory.com

MODEL NOMENCLATURE

R	S	G	13	24	S	1	E
Residential Condenser	Split System	'Green' Gas R-410A	Minimum SEER	Capacity BTUH x 1000	S = Scroll Compressor	Power 0 = 115-1-60 1 = 208/230-1-60 2 = 208/230-3-60	Series/ Revision

ACCESSORY

PART NO.	DESCRIPTION
912933	Start Assist Kit—for extra starting torque when operating in low line voltage or high operating temperatures

PERFORMANCE DATA-AHRI STANDARD CONDITIONS

INDOOR/OUTDOOR MATCHES			COOLING PERFORMANCE				AIR FLOW SCFM
INDOOR TYPE	OUTDOOR MODEL	INDOOR COIL MODEL	CAPACITY (BTUH)		EFFICIENCY		
			TOTAL	SENS.	SEER	EER	
UPFLOW CASED COIL	RSG1318S1E	VCG24TA1E, -TB1E	17,100	14,074	13.0	11.1	600
	RSG1324S1E	VCG24TA1E, -TB1E	22,800	18,478	13.0	11.0	800
	RSG1330S1E	VCG36TA1E, -36TB1E, -36TC1E	28,000	22,457	13.0	10.9	1000
	RSG1336S1E	VCG36TA1E, -36TB1E, -36TC1E	34,000	26,846	13.0	11.4	1200
	RSG1342S1E	VCG48TB1E, -48TC1E, -48TD1E	39,500	31,366	13.0	10.8	1400
	RSG1348S1E	VCG48TB1E, -48TC1E, -48TD1E	44,500	35,308	13.0	10.0	1600
MULTI-POSITION CASED COIL	RSG1318S1E	MCG24TA1E, -TB1E	17,100	14,074	13.0	11.1	600
	RSG1324S1E	MCG24TA1E, -TB1E	22,800	18,478	13.0	11.0	800
	RSG1330S1E	MCG36TA1E, -36TB1E, -36TC1E	28,000	22,457	13.0	10.9	1000
	RSG1336S1E	MCG36TA1E, -36TB1E, -36TC1E	34,000	26,846	13.0	11.4	1200
	RSG1342S1E	MCG48TB1E, -48TC1E, -48TD1E	39,500	31,366	13.0	10.8	1400
	RSG1348S1E	MCG48TB1E, -48TC1E, -48TD1E	44,500	35,308	13.0	10.0	1600
UPFLOW/ DOWNFLOW UNCASED COIL	RSG1318S1E	CCG24TA1E, -TB1E	17,100	14,074	13.0	11.1	600
	RSG1324S1E	CCG24TA1E, -TB1E	22,800	18,478	13.0	11.0	800
	RSG1330S1E	CCG36TA1E, -36TB1E, -36TC1E	28,000	22,457	13.0	10.9	1000
	RSG1336S1E	CCG36TA1E, -36TB1E, -36TC1E	34,000	26,846	13.0	11.4	1200
	RSG1342S1E	CCG48TB1E, -48TC1E, -48TD1E	39,500	31,366	13.0	10.8	1400
	RSG1348S1E	CCG48TB1E, -48TC1E, -48TD1E	44,500	35,308	13.0	10.0	1600

Coil Model	Cased Coil	Uncased Coil
XCGXXT A	14" width	13" width
XCGXXT B	17 ¹ / ₂ " width	16" width
XCGXXT C	21" width	19 ¹ / ₂ " width
XCGXXT D	24 ¹ / ₂ " width	23" width

NOTE: These combinations of indoor and outdoor units are certified by AHRI; see the current AHRI Directory for all certified combinations and ratings: www.ahridirectory.com

ELECTRICAL AND PHYSICAL DATA

MODEL	RSG1318	RSG1324	RSG1330	RSG1336	RSG1342	RSG1348	RSG1360
Power	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60
Total Amps	9.3	13.5	14.8	18.0	19.4	23.2	27.8
Delay Fuse Max. *	20	25	30	35	40	50	60
Min. Circ. Ampacity	11.6	16.7	18.3	22.2	23.9	28.7	34.4
Coil Area Sq. Ft.	8.3	8.3	10.0	10.0	15.3	15.3	17.9
Coil Rows-FPI	1-18	1-18	1-18	1-18	1-18	1-18	1-18
Coil Tube Dia.	Micro-Channel	Micro-Channel	Micro-Channel	Micro-Channel	Micro-Channel	Micro-Channel	Micro-Channel
Fan Motor Type	PSC	PSC	PSC	PSC	PSC	PSC	PSC
Fan Motor Amps	0.35	0.7	0.7	1.4	1.5	1.5	1.5
Fan HP	0.05	0.1	0.1	0.25	0.25	0.25	0.25
Fan SCFM	2600	2800	3000	3000	3500	3500	3800
Compressor RLA	9.0	12.8	14.1	16.6	17.9	21.8	26.4
Compressor LRA	48	58.3	73	79	112	117	134

*HACR type circuit breaker may be used.

LINE SIZES and COMPRESSOR

MODEL	CONNECTION SIZE (inch ODA Female)		STANDARD LINE SIZE (inch OD)			COMPRESSOR TYPE
	LIQUID	SUCTION	LIQUID	SUCTION		
				24' & under	over 24'	
RSG1318S1E	3/8	3/4	3/8	3/4	3/4	Scroll
RSG1324S1E	3/8	3/4	3/8	3/4	3/4	Scroll
RSG1330S1E	3/8	3/4	3/8	3/4	3/4	Scroll
RSG1336S1E	3/8	3/4	3/8	3/4	7/8*	Scroll
RSG1342S1E	3/8	7/8	3/8	7/8	7/8	Scroll
RSG1348S1E	3/8	7/8	3/8	7/8	7/8	Scroll
RSG1360S1E	3/8	7/8	3/8	7/8	1-1/8 **	Scroll

* Requires 7/8" to 3/4" reducer from line to unit.

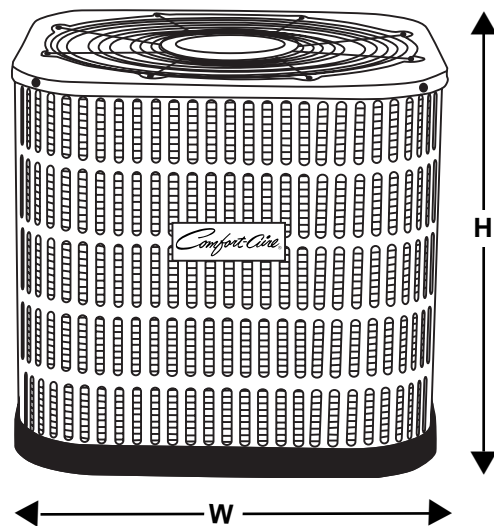
**Requires 1-1/8" to 7/8" reducer from line to unit.

NOTE: Factory charged for 15' line set. Extra refrigerant needed for line sets over 15 feet (see IOM).

UNIT DIMENSIONS (in.)

DIMENSION	RSG1318S1E	RSG1324S1E	RSG1330S1E	RSG1336S1E	RSG1342S1E	RSG1348S1E	RSG1360S1E
HEIGHT	23 1/2	23 1/2	27 1/2	27 1/2	27 1/2	27 1/2	31 1/2
WIDTH	22 3/4	22 3/4	22 3/4	22 3/4	30 3/4	30 3/4	30 3/4
DEPTH	22 3/4	22 3/4	22 3/4	22 3/4	30 3/4	30 3/4	30 3/4
WEIGHT (lbs) NET/SHIPPING	109/114	125/130	138/144	140/146	179/187	179/187	188/197

Design, specifications, performance data and materials subject to change without notice.



Design, specifications, performance data and materials subject to change without notice.

HEAT CONTROLLER

1900 Wellworth Ave., Jackson MI 49203 • Ph. 517-787-2100 • www.heatcontroller.com

A **MTS** Company



13 SEER CONDENSERS FOR R-22



RSN13 DRY R-22 SERIES 1.5 to 5 Tons



Units come with nitrogen charge which must be exhausted prior to charging with R-22

Designed for use as replacement for existing R-22 system, can be slab- or rooftop-mounted

The RSN Series of split system condensers are the perfect replacement for outdoor condensing units of R-22 systems. Shipped with a nitrogen holding charge, they are designed to be charged with R-22 in the field.

- **Louvered metal jacket** of galvanized steel with a polyester urethane finish protects the coil while adding to the attractive appearance
- **Permanently lubricated PSC motor** is quiet and reliable, requires no maintenance, and is protected from the elements
- **Restart time delay** eliminates common causes of compressor failures
- **Composite base pan** is stronger and lighter than steel, resists corrosion and absorbs sound
- **Heavy duty scroll compressors** are designed for long life and efficiency
- **Heavy duty grille assembly** makes it easy to access components from top for service without disconnecting fan motor, designed for maximum air flow and quiet operation
- **Compressor and control access** is located on the side of the unit for convenient installation and service
- **Three service ports** are conveniently located to simplify service

MODEL NOMENCLATURE

R	S	N	13	24	S	1	E
Residential Condenser	Split System	Nitrogen charged	Minimum SEER	Capacity BTUH x 1000	S = Scroll Compressor	Power 1 = 208/230-1-60	Series/ Revision

HEAT CONTROLLER

1900 Wellworth Ave., Jackson MI 49203 • Ph. 517-787-2100 • www.heatcontroller.com

A **WATS** Company

ELECTRICAL AND PHYSICAL DATA

MODEL	RSN1318S1E	RSN1324S1E	RSN1330S1E	RSN1336S1E	RSN1342S1E	RSN1348S1E	RSN1360S1E
Nom. Cooling Capacity (BTUH)	18,000	24,000	30,000	36,000	42,000	48,000	60,000
Power Supply	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60
Total Amps	8.7	11.5	14.1	16.8	16.2	21.3	26.7
Delay Fuse Max.†	15	20	30	35	30	45	50
Min. Circ. Ampacity	10.8	14.1	17.5	20.6	19.9	26.3	33.1
Coil Area Sq. Ft.	8.2	9.9	9.9	9.9	17.7	17.7	25.4
Coil Rows-FPI	1-22	1-18	1-18	1-18	1-22	1-22	1-22
Coil Tube Dia. OD	3/8"	Micro-Channel	Micro-Channel	Micro-Channel	3/8"	3/8"	3/8"
Fan Motor Type	PSC	PSC	PSC	PSC	PSC	PSC	PSC
Fan Motor Amps	0.3	0.7	0.7	1.2	1.4	1.4	1.4
Fan HP	1/20	1/10	1/10	1/4	1/4	1/4	1/4
Fan SCFM	1410	1985	3000	3000	4000	4000	4000
Compressor RLA	8.3	10.8	13.4	15.4	14.7	19.8	25.3
Compressor LRA	40.3	56	68	87	77	104	146
Ref. Liquid Line OD	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Ref. Suction Line 0 to 24'	3/4"	3/4"	3/4"	3/4"	7/8"	7/8"	7/8"
Ref. Suction Line 25' to 39'	3/4"	3/4"	7/8"*	7/8"*	7/8"	7/8"	1-1/8**
Ref. Suction Line 40' to 75'	3/4"	3/4"	7/8"*	7/8"*	1-1/8**	1-1/8**	1-1/8**
Connection Sizes Liquid/Suction	3/8"/3/4"	3/8"/3/4"	3/8"/3/4"	3/8"/3/4"	3/8"/7/8"	3/8"/7/8"	3/8"/7/8"

NOTE: See IOM for charging amounts.

† HACR type circuit breaker may be used.

* Requires 7/8" to 3/4" reducer from line to unit.

**Requires 1-1/8" to 7/8" reducer from line to unit.

UNIT DIMENSIONS (in.)

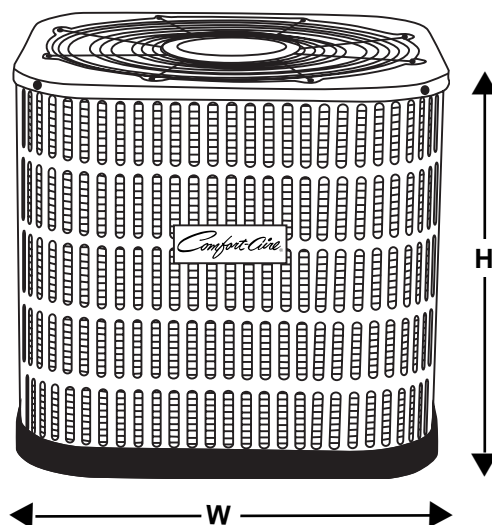
DIMENSION	RSN1318S1E	RSN1324S1E	RSN1330S1E	RSN1336S1E	RSN1342S1E	RSN1348S1E	RSN1360S1E
HEIGHT	23	23	27	27	31	31	43
WIDTH	22 3/4	22 3/4	22 3/4	22 3/4	30 3/4	30 3/4	30 3/4
DEPTH	22 3/4	22 3/4	22 3/4	22 3/4	30 3/4	30 3/4	30 3/4
WEIGHT (lbs) NET/SHIPPING	103/107	112/117	10/109	105/109	176/183	176/183	229/238

ACCESSORIES

PART NO.	DESCRIPTION
912933	Start Assist Kit—for extra starting torque when operating in low line voltage or high operating temperatures
920900	Extreme Wind Condition Mounting Kit

Design, specifications, performance data and materials subject to change without notice.

Comfort-Circ®





BUILDERS SERIES CONDENSERS FOR R-410A



RSG-R SERIES
13 SEER
1 1/2 to 3 Tons



The RSG Series of high efficiency A/C condensers comes charged with R-410A, an environmentally friendly refrigerant.

Can be slab- or rooftop-mounted

- **Micro-channel coils** are all aluminum for exceptional corrosion resistance
- **Louvered metal jacket** of galvanized steel with a polyester urethane finish protects the coil while adding to the attractive appearance
- **Permanently lubricated PSC motor** is quiet and reliable, requires no maintenance, and is protected from the elements
- **High pressure switch** protects against excessively high system pressures
- **Liquid line filter-drier** is included for field installation
- **Restart time delay** eliminates common causes of compressor failures
- **Composite base pan** is stronger and lighter than steel, resists corrosion and absorbs sound
- **Heavy duty rotary compressors** are designed for long life and efficiency
- **Heavy duty grille assembly** makes it easy to access components from top for service without disconnecting fan motor, designed for maximum air flow and quiet operation
- **Compressor and control access** is conveniently located on the side of the unit to speed installation and service
- **Three service ports** are conveniently located to simplify service

Outstanding Limited Warranty Coverage

With registration within 90 days by original owner; other limitations apply: see printed warranty for details.

HEAT CONTROLLER

PERFORMANCE DATA-AHRI STANDARD CONDITIONS

OUTDOOR MODEL	INDOOR MATCHES TO CONDENSERS		COOLING PERFORMANCE			NOM. AIR FLOW SCFM
	INDOOR TYPE	INDOOR MODEL	CAPACITY (BTUH)	EFFICIENCY		
				SEER	EER	
RSG1318R1E	ELEC.HEAT AIR HANDLER	HMG24F1E	18,000	13.0	11.0	605
RSG1324R1E		HMG24F1E	22,800	13.0	11.0	700
RSG1330R1E		HMG30F1E	28,800,	13.0	11.0	915
RSG1336R1E		HMG42F1E	35,400	13.0	10.7	1225
RSG1318R1E	WALL MOUNT AIR HANDLER/ ELEC. HEAT	FMG1805F1E	18,000	13.0	11.0	650
RSG1324R1E		FMG2405F1E, -08F1E, -10F1E	23,400	13.0	11.0	800
RSG1330R1E		FMG3005F1E, -08F1E, -10F1E	27,600	13.0	11.0	1000
RSG1336R1E		FMG3605F1E, -08F1E, -10F1E	33,000	13.0	10.9	1200
RSG1318R1E	UPFLOW CASED COIL	VCG24TA1E, -TB1E	17,100	13.0	10.0	650
RSG1324R1E		VCG24TA1E, -TB1E	22,800	13.0	10.0	800
RSG1330R1E		VCG36TA1E, -36TB1E, -36TC1E	27,800	13.0	10.9	1000
RSG1336R1E		VCG36TA1E, -36TB1E, -36TC1E	34,000	13.0	10.6	1200
RSG1318R1E	MULTI- POSITION CASED COIL	MCG24TA1E, -TB1E	17,100	13.0	10.0	650
RSG1324R1E		MCG24TA1E, -TB1E	22,800	13.0	10.0	800
RSG1330R1E		MCG36TA1E, -36TB1E, -36TC1E	27,800	13.0	10.9	1000
RSG1336R1E		MCG36TA1E, -36TB1E, -36TC1E	34,000	13.0	10.6	1200
RSG1318R1E	UPFLOW/ DOWNFLOW UNCASED COIL	CCG24TA1E, -TB1E	17,100	13.0	10.0	650
RSG1324R1E		CCG24TA1E, -TB1E	22,800	13.0	10.0	800
RSG1330R1E		CCG36TA1E, -36TB1E, -36TC1E	27,800	13.0	10.9	1000
RSG1336R1E		CCG36TA1E, -36TB1E, -36TC1E	34,000	13.0	10.6	1200

Coil Model	Cased Coil	Uncased Coil
XCGXXTA	14" width	13" width
XCGXXTB	17 ¹ / ₂ " width	16" width
XCGXXTC	21" width	19 ¹ / ₂ " width

NOTE: These combinations of indoor and outdoor units are certified by AHRI. See current AHRI directory for certified combinations and ratings: www.ahridirectory.com

MODEL NOMENCLATURE

R	S	G	13	24	R	1	E
Residential Condenser	Split System	'Green' Gas R-410A	Minimum SEER	Capacity BTUH x 1000	R = Rotary Compressor	Power 0 = 115-1-60 1 = 208/230-1-60 2 = 208/230-3-60	Series/ Revision

ACCESSORIES

PART NO.	DESCRIPTION
912933	Start Assist Kit—for extra starting torque when operating in low line voltage or high operating temperature conditions
920900	Extreme Wind Mounting Kit

ELECTRICAL AND PHYSICAL DATA

			FEATURE	RSG1318R1E	RSG1324R1E	RSG1330R1E	RSG1336R1E
			Power Supply	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60
			Total Amps	8.2	10.3	10.8	16.4
			Delay Fuse Max. *	15	20	20	35
			Min. Circuit Ampacity	10.1	12.7	13.3	20.1
			Coil Area Sq. Ft.	10.0	10.0	10.0	13.3
			Coil Rows-FPI	1-23	1-23	1-23	1-23
CONNECTIONS SIZES			Coil Tube	Micro-Channel	Micro-Channel	Micro-Channel	Micro-Channel
MODEL	CONNECTION SIZE (inch ODA Female)		Fan Motor Type	PSC	PSC	PSC	PSC
	LIQUID	SUCTION	Fan Motor Amps	0.35	0.7	0.7	1.4
RSG1318R1E	3/8	3/4	Fan HP	0.05	0.1	0.1	0.25
RSG1324R1E	3/8	3/4	Fan SCFM	2600	2800	3000	3000
RSG1330R1E	3/8	3/4	Compressor RLA	7.8	9.6	10.1	15.0
RSG1336S1E	3/8	3/4	Compressor LRA	45	61	60	88
			Ref. Liquid Line OD	3/8"	3/8"	3/8"	3/8"
			Ref. Suction Line OD 15' to 24'	3/4"	3/4"	3/4"	3/4"
			Ref. Suction Line OD 25' to 75'	3/4"	3/4"	3/4"	7/8**

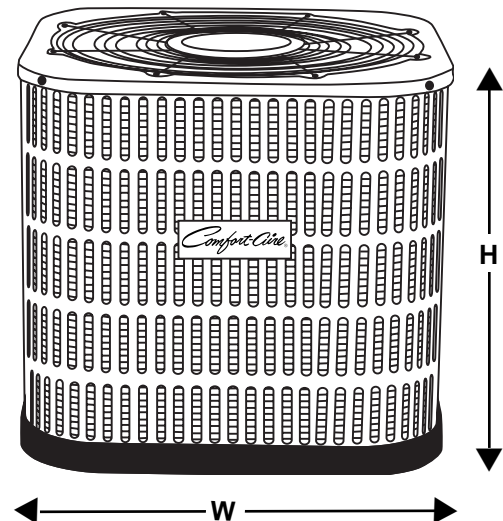
NOTE: Factory charged for 15' line set. Extra refrigerant needed for line sets over 15 feet (see IOM).

*HACR type circuit breaker may be used.

**Requires 7/8" to 3/4" reducer from line to unit.

UNIT DIMENSIONS

DIMENSION	RSG1318R1E	RSG1324R1E	RSG1330R1E	RSG1336R1E
HEIGHT	27½	27½	27½	35½
WIDTH	22¾	22¾	22¾	22¾
DEPTH	22¾	22¾	22¾	22¾
WEIGHT NET/SHIPPING	109/114	113/118	116/121	135/140



A FULL LINE FOR HEATING AND COOLING



Comfort-Aire offers a full line of products for heating and cooling. All are quality constructed and energy efficient for comfort throughout the year. The compact size of our A/C condensers, heat pumps, furnaces, air handlers and coils makes them ideal for replacements; for a complete system, they are matched to each other by capacity and certified as a system by AHRI. And, of course, all units are backed by exceptional warranty coverage and after-sales support.



Design, specifications, performance data and materials subject to change without notice.

HEAT CONTROLLER

1900 Wellworth Ave., Jackson MI 49203 • Ph. 517-787-2100 • www.heatcontroller.com

A **MPS** Company



16 SEER HEAT PUMPS FOR R-410A



HRG16
SERIES
2 to 5 Tons



The HRG Series of high efficiency heat pumps comes charged with R-410A, an environmentally friendly refrigerant

Rated up to 16 SEER and 9 HSPF when matched with a Comfort-Aire air handler—see AHRI Directory

- **Copper tube/aluminum fin coils** are designed for optimal heat transfer while minimizing size and weight
- **Full metal jacket** of galvanized steel with a polyester urethane finish protects the coil while adding to the attractive appearance; vertical slot configuration adds to jacket stability
- **Advanced scroll compressor** has two stages of heating and cooling capacities for optimum comfort with virtually silent operation; designed for reliability and long life
- **Demand defrost** saves energy in heating mode by defrosting only when necessary
- **High pressure switch** protects against excessively high system pressures; low pressure switch protects the compressor
- **Liquid line filter-drier** is included for field installation
- **Restart time delay** eliminates common cause of compressor failures
- **Composite base pan** is stronger and lighter than steel, resists corrosion and absorbs sound
- **Common suction service port** lets contractor read suction pressure without removing any panels
- **Heavy duty grille assembly** makes it easy to access components from top for service without disconnecting fan motor,
- **Compressor and control access** is conveniently located on the side of the unit to speed installation and service

Outstanding Limited Warranty Coverage—12 years compressor, 12 years other parts!
With registration within 90 days by original owner; other limitations apply: see printed warranty for details.

HEAT CONTROLLER

PERFORMANCE DATA-AHRI STANDARD CONDITIONS

INDOOR/OUTDOOR MATCHES			COOLING PERFORMANCE			HEATING CAP. BTUH @ 47° F	HSPF	NOM. AIR FLOW SCFM
INDOOR TYPE	OUTDOOR MODEL	INDOOR COIL MODEL	CAPACITY (BTUH)	EFFICIENCY				
			TOTAL	SEER	EER			
VARIABLE SPEED AIR HANDLER	HRG1636S1E	HCG36V1E	36,000	16.0	12.5	36,000	9.0	1200
	HRG1648S1E	HCG48V1E	48,000	16.0	12.5	46,000	9.0	1600
	HRG1660S1E	HCG60V1E	57,000	16.0	11.65	52,500	8.5	2000
UPFLOW CASED COIL	HRG1624S1E	VCG24TA2E, -24TB2E	23,000	15.5	12.0	23,400	8.8	800
	HRG1636S1E	VCG36TB2E, -36TC2E	35,200	16.0	12.3	36,000	8.6	1200
	HRG1648S1E	VCG48TB2E, -48TC2E, -48TD2E	46,000	15.5	12.4	43,000	8.5	1400
	HRG1660S1E	VCG60TC2E, -60TD2E	57,500	16.5	11.0	52,000	8.6	1600
MULTI- POSITION CASED COIL	HRG1624S1E	MCG24TA2E, -24TB2E	23,000	15.5	12.0	23,400	8.8	800
	HRG1466S1E	MCG36TB2E, -36TC2E	35,200	16.0	12.3	36,000	8.6	1200
	HRG1648S1E	MCG48TB2E, -48TC2E, -48TD2E	46,000	15.5	12.4	43,000	8.5	1400
	HRG1660S1E	MCG60TC2E, -60TD2E	57,500	16.5	11.0	52,000	8.6	1600
UPFLOW/ DOWNFLOW UNCASED COIL	HRG1624S1E	CCG24TA2E, -24TB2E	23,000	15.5	12.0	23,400	8.8	800
	HRG1636S1E	CCG36TB2E, -36TC2E	35,200	16.0	12.3	36,000	8.6	1200
	HRG1648S1E	CCG48TB2E, -48TC2E, -48TD2E	46,000	15.5	12.4	43,000	8.5	1400
	HRG1660S1E	CCG60TC2E, -60TD2E	57,500	16.5	11.0	52,000	8.6	1600

Coil Model	Cased Coil	Uncased Coil
XCGXXT A	14" width	13" width
XCGXXT B	17 ¹ / ₂ " width	16" width
XCGXXT C	21" width	19 ¹ / ₂ " width
XCGXXT D	24 ¹ / ₂ " width	23" width

NOTE: These combinations of indoor and outdoor units are certified by AHRI; see the current AHRI Directory for all certified combinations and ratings: www.ahridirectory.org

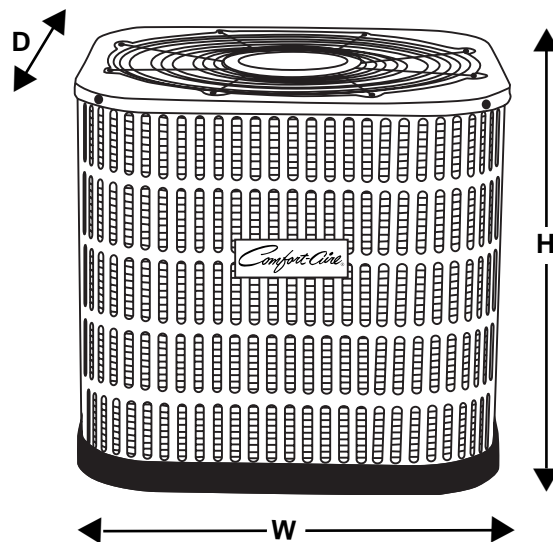
MODEL NOMENCLATURE

H	R	G	16	24	S	1	E
Heat Pump	Residential Split	'Green' Gas R-410A	Minimum SEER	Capacity BTUH x 1000	S = Scroll Compressor	Power 1 = 208/230-1-60	Series/ Revision

ELECTRICAL AND PHYSICAL DATA								
MODEL	HRG1624		HRG1636		HRG1648		HRG1660	
Power Supply	208/230-1-60		208/230-1-60		208/230-1-60		208/230-1-60	
Total Amps	11.4		17.9		24.0		25.9	
Delay Fuse Max.*	20		35		50		50	
Min. Circ. Ampacity	14.0		22.1		29.3		31.7	
Coil Area Sq. Ft.	25.4		25.4		25.4		25.4	
Coil Rows-FPI	1-20		2-18		2-18		2-18	
Coil Tube Diameter OD	3/8"		3/8"		3/8"		3/8"	
Fan Motor Type	PSC		PSC		BLDC		BLDC	
Fan Motor Speeds	2		2		2		2	
Fan Motor Amps	1.3		1.3		2.9		2.9	
Fan HP	1/4		1/4		1/3		1/3	
Fan SCFM	3600		4000		4000		4000	
Compressor RLA	10.3		16.6		21.1		23.0	
Compressor LRA	52		82		96		118	
Sound Ratings dB	70		73		73		75	
*HACR type circuit breaker may be used								
LINE SIZES (in.) and COMPRESSOR								
MODEL	CONNECTION SIZE (inch ODA Female)		STANDARD LINE SIZE (in. OD)				COMPRESSOR TYPE	
	LIQUID	SUCTION	LIQUID	SUCTION				
				0' to 24'	25' to 75'			
HRG1624S1E	3/8	3/4	3/8	3/4	7/8	Scroll, two stage		
HRG1636S1E	3/8	7/8	3/8	7/8**	1-1/8*	Scroll, two stage		
HRG1648S1E	3/8	7/8	3/8	7/8	1-1/8*	Scroll, two stage		
HRG1660S1E	3/8	7/8	3/8	7/8	1-1/8*	Scroll, two stage		
<p>NOTE: Unit comes charged for 15' line set. Additional charge needed for longer line set lengths, as well as suction line size variations, see IOM.</p> <p>*Requires 1-1/8" to 7/8" reducer from line to unit.</p> <p>**Use of 3/4" line set will result in approx. 2% loss in capacity.</p>								
ACCESSORIES								
PART NO.		DESCRIPTION						
912933		Start Assist Kit—provides additional starting torque when operating with lowline voltage or high operating temperatures						
920636		Snow Stand Kit						
920900		Extreme Wind Condition Mounting Kit						

UNIT DIMENSIONS (inches)

DIMENSION	HRG1624S1E	HRG1636S1E	HRG1648S1E	HG1660S1E
HEIGHT (in.)	43 ½	43 ½	43 ½	43 ½
WIDTH (in.)	31	31	31	31
DEPTH (in.)	31	31	31	31
WEIGHT (lbs) NET/SHIPPING	253/265	277/289	277/289	301/313



Some limitations apply to warranty;
see printed warranty or call factory for details.

Design, specifications, performance data and materials subject to change without notice.

HEAT CONTROLLER

1900 Wellworth Ave., Jackson MI 49203 • Ph. 517-787-2100 • www.heatcontroller.com

A **MAPS** Company



14 SEER HEAT PUMPS FOR R-410A



HRG14
SERIES
1.5 to 5 Tons



The HRG Series of high efficiency heat pumps comes charged with R-410A, an environmentally friendly refrigerant

Rated up to 15 SEER and 8.5 HSPF when matched with a Comfort-Aire air handler—see AHRI Directory

- **Long life copper coils** with aluminum fins optimize heat transfer, are designed for durability and reliability
- **Louvered metal jacket** of galvanized steel with a polyester urethane finish protects the coil while adding to the attractive appearance
- **Permanently lubricated PSC motor** is quiet and reliable, requires no maintenance
- **High pressure switch** protects against any excessively high system pressures
- **Liquid line filter-drier** is included for field installation
- **Five minute restart time delay** eliminates common causes of compressor failures
- **Composite base pan** is stronger and lighter than steel, resists corrosion and absorbs sound
- **Hot gas muffler** dampens compressor sound and vibration
- **Heavy duty scroll compressors** are designed for long life and efficiency
- **Heavy duty grille assembly** makes it easy to access components from top for service without disconnecting fan motor, designed for maximum air flow and quiet operation
- **Fixed orifice** is integrated into the liquid line service valve for simple change-out
- **Compressor and control access** is located on the side of the unit to speed installation and service for convenience

Outstanding Limited Warranty Coverage—12 years compressor, 12 years other parts!
With registration within 90 days by original owner; other limitations apply: see printed warranty for details.

HEAT CONTROLLER

PERFORMANCE DATA-AHRI STANDARD CONDITIONS

INDOOR/OUTDOOR MATCHES			COOLING PERFORMANCE			HEATING CAP. BTUH @ 47° F	HSPF	NOM. AIR FLOW SCFM
INDOOR TYPE	OUTDOOR MODEL	INDOOR COIL MODEL	CAPACITY (BTUH)	EFFICIENCY				
			TOTAL	SEER	EER			
VARIABLE SPEED ELECTRIC HEAT AIR HANDLER	HRG1418S1E	HCG24V1E	19,200	15.0	12.5	18,800	8.5	600
	HRG1424S1E	HCG24V1E	23,400	15.0	12.5	24,600	8.5	800
	HRG1430S1E	HCG30V1E	28,400	15.0	12.5	29,400	8.5	1000
	HRG1436S1E	HCG36V1E	34,800	15.0	12.5	33,600	8.5	1200
	HRG1442S1E	HCG42V1E	39,500	14.5	12.0	38,500	8.5	1400
		HCV48V1E	40,000	15.0	12.5	38,000	8.5	1400
	HRG1448S1E	HCG48V1E	45,500	14.0	11.7	44,000	8.2	1600
HRG1460S1E	HCG60V1E	59,000	14.0	10.7	52,500	8.2	2000	
WALL MOUNT AIR HANDLER ELE. HEAT	HRG1418S1E	FMG1805X1E, -1808X1E	17,600	15.0	12.0	17,600	8.2	600
	HRG1424S1E	FMG2405X1E, -2408X1E, -2410X1E	22,800	15.0	12.0	22,600	8.2	800
	HRG1430S1E	FMG3005X1E, -3008X1E, -3010X1E	27,400	15.0	12.0	27,600	8.2	1000
	HRG1436S1E	FMG3605X1E, -3608X1E, -3610X1E	32,600	15.0	12.0	32,000	8.2	1200
UPFLOW CASED COIL	HRG1418S1E	VCG24TA1E, -TB1E	17,100	14.0	11.6	18,900	7.9	600
	HRG1424S1E	VCG24TA1E, -TB1E	22,400	14.0	11.0	23,800	7.8	800
	HRG1430S1E	VCG36TA1E, -36TB1E, -36TC1E	26,600	14.0	11.8	29,000	7.8	1000
	HRG1436S1E	VCG48TB2E, -48TC2E, -48TD2E	34,000	14.5	12.0	34,600	8.3	1200
	HRG1442S1E	VCG48TB2E, -48TC2E, -48TD2E	41,500	14.5	12.0	40,500	8.3	1400
	HRG1448S1E	VCG48TB2E, -48TC2E, -48TD2E	46,000	14.5	12.4	43,000	8.5	1600
MULTI-POSITION CASED COIL	HRG1418S1E	MCG24TA1E, -TB1E	17,100	14.0	11.6	18,900	7.9	600
	HRG1424S1E	MCG24TA1E, -TB1E	22,400	14.0	11.0	23,800	7.8	800
	HRG1430S1E	MCG36TA1E, -36TB1E, -36TC1E	26,600	14.0	11.8	29,000	7.8	1000
	HRG1436S1E	MCG48TB2E, -48TC2E, -48TD2E	34,000	14.5	12.0	34,600	8.3	1200
	HRG1442S1E	MCG48TB2E, -48TC2E, -48TD2E	41,500	14.5	12.0	40,500	8.3	1400
	HRG1448S1E	MCG48TB2E, -48TC2E, -48TD2E	46,000	14.5	12.4	43,000	8.5	1600
UPFLOW/ DOWNFLOW UNCASED COIL	HRG1418S1E	CCG24TA1E, -TB1E	17,100	14.0	11.6	18,900	7.9	600
	HRG1424S1E	CCG24TA1E, -TB1E	22,400	14.0	11.0	23,800	7.8	800
	HRG1430S1E	CCG36TA1E, -36TB1E, -36TC1E	26,600	14.0	11.8	29,000	7.8	1000
	HRG1436S1E	CCG48TB2E, -48TC2E, -48TD2E	34,000	14.5	12.0	34,600	8.3	1200
	HRG1442S1E	CCG48TB2E, -48TC2E, -48TD2E	41,500	14.5	12.0	40,500	8.3	1400
	HRG1448S1E	CCG48TB2E, -48TC2E, -48TD2E	46,000	14.5	12.4	43,000	8.5	1600

Coil Model	Cased Coil	Uncased Coil
XCGXXTA	14" width	13" width
XCGXXTB	17 ¹ / ₂ " width	16" width
XCGXXTC	21" width	19 ¹ / ₂ " width
XCGXXTD	24 ¹ / ₂ " width	23" width

NOTE: These combinations of indoor and outdoor units are certified by AHRI; see the current AHRI Directory for all certified combinations and ratings: www.ahridirectory.com

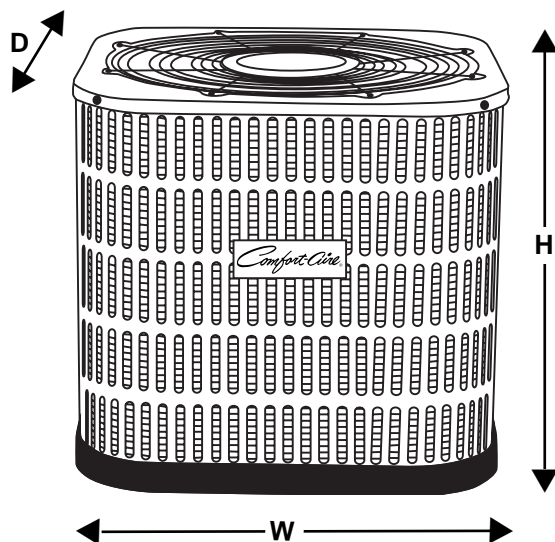
MODEL NOMENCLATURE

H	R	G	14	24	S	1	E
Heat Pump	Residential Split	'Green' Gas R-410A	Minimum SEER	Capacity BTUH x 1000	S = Scroll Compressor	Power 1 = 208/230-1-60	Series/ Revision

ELECTRICAL AND PHYSICAL DATA							
MODEL	HRG1418	HRG1424	HRG1430	HRG1436	HRG1442	HRG1448	HRG1460
Power Supply	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60
Total Amps	11.86	16.34	15.7	16.98	20.82	21.24	27.64
Delay Fuse Max.*	20	30	30	30	40	45	60
Min. Circ. Ampacity	14.1	19.7	18.9	20.5	25.3	26.2	34.2
Coil Area Sq. Ft.	25.4	25.4	25.4	25.4	25.4	25.4	25.4
Coil Rows-FPI	1-20	1-20	1-20	1-20	2-16	2-16	2-16
Coil Tube Dia. OD	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Fan Motor Type	BLDC	BLDC	BLDC	BLDC	BLDC	PSC	PSC
Fan Motor Amps	2.9	2.9	2.9	2.9	2.9	1.4	1.4
Fan HP	1/3	1/3	1/3	1/3	1/3	1/4	1/4
Fan SCFM	2800	2800	2800	3400	4000	4000	4000
Compressor RLA	8.96	13.44	12.8	14.08	17.92	19.84	26.24
Compressor LRA	48	58.3	64	77	112	109	134
Sound Rating db	78	78	78	79	79	79	79
*HACR type circuit breaker may be used							
LINE SIZES (in.) and COMPRESSOR							
MODEL	CONNECTION SIZE (inch ODA Female)		STANDARD LINE SIZE (in. OD)			COMPRESSOR TYPE	
	LIQUID	SUCTION	LIQUID	SUCTION			
				0' to 24'	25' to 75'		
HRG1418S1E	3/8	3/4	3/8	3/4	3/4	Scroll	
HRG1424S1E	3/8	3/4	3/8	3/4	3/4	Scroll	
HRG1430S1E	3/8	3/4	3/8	3/4	3/4	Scroll	
HRG1436S1E	3/8	7/8	3/8	7/8	7/8	Scroll	
HRG1442S1E	3/8	7/8	3/8	7/8	7/8	Scroll	
HRG1448S1E	3/8	7/8	3/8	7/8	1-1/8*	Scroll	
HRG1460S1E	3/8	7/8	3/8	7/8	1-1/8*	Scroll	
<p>NOTE: Unit comes charged for 15' line set. Additional charge needed for longer line set lengths, see IOM.</p> <p>*Requires 1-1/8" to 7/8" reducer from line to unit.</p>							
ACCESSORIES							
PART NO.	DESCRIPTION						
912933	Start Assist Kit—provides additional starting torque when operating with lowline voltage or high operating temperatures						
913235	Outdoor Thermostat—two stage logic can lock out electric strip down to balance point and bring on stages						
920900	Extreme Wind Condition Mounting Kit						

UNIT DIMENSIONS (inches)

DIMENSION	HRG1418S1E	HRG1424S1E	HRG1430S1E	HRG1436S1E	HRG1442S1E	HRG1448S1E	HG1460S1E
HEIGHT	43	43	43	43	43	43	43
WIDTH	30 ¾	30 ¾	30 ¾	30 ¾	30 ¾	30 ¾	30 ¾
DEPTH	30 ¾	30 ¾	30 ¾	30 ¾	30 ¾	30 ¾	30 ¾
WEIGHT (lbs) NET/SHIPPING	179/188	180/189	180/189	182/191	279/294	280/295	290/305



Some limitations apply to warranty;
see printed warranty or call factory for details.

Design, specifications, performance data and materials subject to change without notice.

HEAT CONTROLLER

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13 SEER HEAT PUMPS FOR R-410A

- **Long life copper coils** with aluminum fins optimize heat transfer, are designed for durability and reliability
- **Louvered metal jacket** of galvanized steel with a polyester urethane finish protects the coil while adding to the attractive appearance
- **Permanently lubricated PSC motor** is quiet and reliable, requires no maintenance
- **High pressure switch** protects against any excessively high system pressures
- **Liquid line filter-drier** is included for field installation
- **Five minute restart time delay** eliminates common causes of compressor failures
- **Composite base pan** is stronger and lighter than steel, resists corrosion and absorbs sound
- **Hot gas muffler** dampens compressor sound and vibration
- **Heavy duty scroll compressors** are designed for long life and efficiency
- **Heavy duty grille assembly** makes it easy to access components from top for service without disconnecting fan motor, designed for maximum air flow and quiet operation
- **Fixed orifice** is integrated into the liquid line service valve for simple change-out
- **Compressor and control access** is located on the side of the unit to speed installation and service for convenience



HRG13
SERIES
1.5 to 5 Tons



The HRG Series of high efficiency heat pumps comes charged with R-410A, an environmentally friendly refrigerant.

Can be slab- or rooftop-mounted; up to 14.0 SEER matched with Comfort-Aire variable speed air handler—see AHRI Directory

Outstanding Limited Warranty Coverage—12 years compressor, 12 years other parts!
With registration within 90 days by original owner; other limitations apply: see printed warranty for details.

HEAT CONTROLLER

PERFORMANCE DATA-AHRI STANDARD CONDITIONS

INDOOR/OUTDOOR MATCHES			COOLING PERFORMANCE			HEATING CAP. BTUH @ 47° F	HSPF	NOM. AIR FLOW SCFM
INDOOR TYPE	OUTDOOR MODEL	INDOOR MODEL	CAPACITY (BTUH)	EFFICIENCY				
			TOTAL	SEER	EER			
ELECTRIC HEAT AIR HANDLER	HRG1318S1E	HMG24F1E	18,000	13.0	11.0	19,000	8.0	650
	HRG1324S1E	HMG24F1E	23,000	13.0	11.0	24,800	8.0	850
	HRG1330S1E	HMG30F1E	28,800	13.0	11.0	30,800	8.0	900
	HRG1336S1E	HMG36F1E	34,800	13.0	11.0	36,800	8.0	1170
	HRG1342S1E	HMG42F1E	40,000	13.0	11.0	42,000	7.8	1495
	HRG1348S1E	HMG48F1E	47,500	13.0	11.0	47,500	8.0	1620
	HRG1360S1E	HMG60F1E	57,500	13.0	11.0	60,500	8.0	1660
VARIABLE SPEED ELECTRIC HEAT AIR HANDLER	HRG1318S1E	HCG24V1E	18,000	14.0	11.8	18,000	8.0	600
	HRG1324S1E	HCG24V1E	24,000	14.0	12.2	23,200	8.2	800
	HRG1330S1E	HCG30V1E	29,600	14.0	12.2	29,600	8.2	1000
	HRG1336S1E	HCG36V1E	35,800	14.0	12.2	37,800	8.2	1200
	HRG1342S1E	HCG42V1E, -48V1E	41,500	14.0	12.2	41,500	8.2	1400
	HRG1348S1E	HCG48V1E	48,000	14.0	12.2	47,500	8.2	1600
	HRG1360S1E	HCG60V1E	59,500	13.5	12.0	57,500	8.2	2000
WALL MOUNT AIR HANDLER ELEC. HEAT	HRG1318S1E	FMG2405F1E, -2408F1E	17,400	13.0	11.0	17,400	7.8	600
	HRG1324S1E	FMG2405F1E, -2408F1E, -2410F1E	22,400	13.0	11.0	23,000	8.0	800
	HRG1330S1E	FMG3005F1E, -3008F1E, -3010F1E	28,200	13.0	11.0	29,200	8.0	1000
	HRG1336S1E	FMG3605F1E, -3608F1E, -3610F1E	34,000	13.0	11.0	34,800	8.0	1200

NOTE: These combinations of indoor and outdoor units are certified by AHRI; see the current AHRI Directory for all current certified combinations and ratings: www.ahridirectory.com

LINE SIZES (in.) and COMPRESSOR

MODEL	CONNECTION SIZE (inch OD Female)		STANDARD LINE SIZE (in. OD)			COMPRESSOR TYPE
	LIQUID	SUCTION	LIQUID	SUCTION		
				0' to 24'	25' to 75'	
HRG1318S1E	3/8	3/4	3/8	3/4	3/4	Scroll
HRG1324S1E	3/8	3/4	3/8	3/4	3/4	Scroll
HRG1330S1E	3/8	3/4	3/8	3/4	3/4	Scroll
HEG1336S1E	3/8	7/8	3/8	7/8	7/8	Scroll
HRG1342S1E	3/8	7/8	3/8	7/8	7/8	Scroll
HRG1348S1E	3/8	7/8	3/8	7/8	7/8	Scroll
HRG1360S1E	3/8	7/8	3/8	7/8	1-1/8*	Scroll

*Requires 1-1/8" to 7/8" reducer from line to unit.

NOTE: Factory charged for 15' line set. Additional charge needed for line set over 15'—see IOM.

MODEL NOMENCLATURE

H	R	G	13	24	S	1	E
Heat Pump	Residential Split	'Green' Gas R-410A	Minimum SEER	Capacity BTUH x 1000	S = Scroll Compressor	Power 1 = 208/230-1-60	Series/ Revision

PERFORMANCE DATA-AHRI STANDARD CONDITIONS

INDOOR/OUTDOOR MATCHES			COOLING PERFORMANCE				HEATING CAP BTUH @ 47° F	HSPF	NOM. AIR FLOW SCFM
INDOOR TYPE	OUTDOOR MODEL	INDOOR COIL MODEL	CAPACITY (BTUH)		EFFICIENCY				
			TOTAL	SENS.	SEER	EER			
UPFLOW CASED COIL	HRG1318S1E	VCG24TA1E, -TB1E	17,100	14,022	13.0	11.1	18,100	7.9	600
	HRG1324S1E	VCG24TA1E, -TB1E	22,800	18,468	13.0	11.3	23,400	7.8	800
	HRG1330S1E	VCG36TA1E, -36TB1E, -36TC1E	27,400	22,194	13.0	11.5	28,800	7.8	1000
	HRG1336S1E	VCG36TB2E, -36TC2E, -36TD2E	34,800	27,144	13.0	11.5	36,000	8.0	1200
	HRG1342S1E	VCG48TB2E, -48TC2E, -48TD2E	42,000	32,340	13.5	11.5	42,000	8.1	1400
	HRG1348S1E	VCG48TB2E, -48TC2E, -48TD2E	48,000	36,960	13.5	11.5	46,500	8.1	1600
MULTI-POSITION CASED COIL	HRG1318S1E	MCG24TA1E, -TB1E	17,100	14,022	13.0	11.1	18,100	7.9	600
	HRG1324S1E	MCG24TA1E, -TB1E	22,800	18,468	13.0	11.3	23,400	7.8	800
	HRG1330S1E	MCG36TA1E, -36TB1E, -36TC1E	27,400	22,194	13.0	11.5	28,800	7.8	1000
	HRG1336S1E	MCG36TB2E, -36TC2E, -36TD2E	34,800	27,144	13.0	11.5	36,000	8.0	1200
	HRG1342S1E	MCG48TB2E, -48TC2E, -48TD2E	42,000	32,340	13.5	11.5	42,000	8.1	1400
	HRG1348S1E	MCG48TB2E, -48TC2E, -48TD2E	48,000	36,960	13.5	11.5	46,500	8.1	1600
UPFLOW/ DOWNFLOW UNCASED COIL	HRG1318S1E	CCG24TA1E, -TB1E	17,100	14,022	13.0	11.1	18,100	7.9	600
	HRG1324S1E	CCG24TA1E, -TB1E	22,800	18,468	13.0	11.3	23,400	7.8	800
	HRG1330S1E	CCG36TA1E, -36TB1E, -36TC1E	27,400	22,194	13.0	11.5	28,800	7.8	1000
	HRG1336S1E	CCG36TB2E, -36TC2E, -36TD2E	34,800	27,144	13.0	11.5	36,000	8.0	1200
	HRG1342S1E	CCG48TB2E, -48TC2E, -48TD2E	42,000	32,340	13.5	11.5	42,000	8.1	1400
	HRG1348S1E	CCG48TB2E, -48TC2E, -48TD2E	48,000	36,960	13.5	11.5	46,500	8.1	1600

Coil Model	Cased Coil	Uncased Coil
XCGXXT A	14" width	13" width
XCGXXT B	17 ¹ / ₂ " width	16" width
XCGXXT C	21" width	19 ¹ / ₂ " width
XCGXXT D	24 ¹ / ₂ " width	23" width

NOTE: These combinations of indoor and outdoor units are certified by AHRI; see the current AHRI Directory for all certified combinations and ratings: www.ahridirectory.com

ELECTRICAL AND PHYSICAL DATA

MODEL	HRG1318	HRG1324	HRG1330	HRG1336	HRG1342	HRG1348	HRG1360
Power Supply	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60
Total Amps	10.2	14.6	15.3	17.8	19.4	23.2	27.7
Delay Fuse Max.*	20	30	30	35	40	50	60
Min. Circ. Ampacity	12.4	18.0	18.8	22.0	23.9	28.7	34.3
Coil Area Sq. Ft.	17.7	20.3	22.8	25.3	22.8	25.3	25.3
Coil Rows-FPI	1-18	1-18	1-20	1-20	2-16	2-16	2-16
Coil Tube Dia. OD	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Fan Motor Type	PSC	PSC	PSC	PSC	PSC	PSC	PSC
Fan Motor Amps	1.2	1.2	1.2	1.2	1.46	1.46	1.46
Fan HP	0.2	0.2	0.2	0.2	0.25	0.25	0.25
Fan SCFM	3000	3200	3300	3400	3700	3800	3800
Compressor RLA	9.0	13.4	14.1	16.6	17.9	21.8	26.2
Compressor LRA	48.0	58.3	73.0	79.0	112.0	117.0	134.0

*HACR type circuit breakers may be used.

UNIT DIMENSIONS

DIMENSION	HRG1318S1E	HRG1324S1E	HRG1330S1E	HRG1336S1E	HRG1342S1E	HRG1348S1E	HG1360S1E
HEIGHT	31 ½	35 ½	39 ½	43 ½	39 ½	43 ½	43 ½
WIDTH	30 ¾	30 ¾	30 ¾	30 ¾	30 ¾	30 ¾	30 ¾
DEPTH	30 ¾	30 ¾	30 ¾	30 ¾	30 ¾	30 ¾	30 ¾
WEIGHT (lbs) NET/SHIPPING	166/175	171/180	176/185	181/190	247/260	280/295	290/305



ACCESSORIES

MODEL	DESCRIPTION
912933	Start Assist Kit—provides additional starting torque when operating with lowline voltage or high operating temps
913852	Outdoor Thermostat Kit—two stage logic can lock out electric strip down to balance point and bring on stages
920900	Extreme Wind Condition Mounting Kit

Some limitations apply to warranty;
see printed warranty or call factory for details.

Design, specifications, performance data and materials subject to change without notice.

HEAT CONTROLLER

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A **WATS** Company



13 SEER HEAT PUMPS FOR R-22



HRN13 DRY R-22 SERIES

The HRN series is the ideal replacement for the outdoor heat pump of an R-22 system. They are shipped with a dry nitrogen charge which must be exhausted prior to charging with R-22 in the field



Can be slab- or rooftop-mounted

MODEL NOMENCLATURE

H	R	N	13	24	S	1	E
Heat Pump	Residential Split	Nitrogen charge	Minimum SEER	Capacity BTUH x 1000	S = Scroll Compressor	Power 1 = 208/230-1-60	Series/ Revision

- **Long life copper coils** with aluminum fins optimize heat transfer, are designed for durability and reliability
- **Louvered metal jacket** of galvanized steel with a polyester urethane finish protects the coil while adding to the attractive appearance
- **Permanently lubricated PSC motor** is quiet and reliable, requires no maintenance
- **Hot gas muffler** reduces compressor noise and vibration
- **Time/temperature defrost** offers a variety of time settings to accommodate any climate requirements
- **Five minute restart time delay** eliminates the greatest cause of compressor failure
- **Composite base pan** is stronger and lighter than steel, resists corrosion and absorbs sound
- **Heavy duty scroll compressors** are designed for long life and efficiency
- **Heavy duty grille assembly** makes it easy to access components from top for service without disconnecting fan motor, designed for maximum air flow and quiet operation
- **Common suction port** allows the contractor to read suction pressure in all operating modes without removing panels
- **Compressor and control access** is conveniently located on the side of the unit to speed installation and service
- **Suction accumulator** prevents liquid from flooding back and causing compressor failure

HEAT CONTROLLER

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ELECTRICAL AND PHYSICAL DATA

MODEL	HRN1318	HRN1324	HRN1330	HRN1336	HRN1342	HRN1348	HRN1360
Nom. Cap. BTUH	18,000	24,000	30,000	36,000	42,000	48,000	60,000
Power Supply	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60
Total Amps	9.9	11.8	14.6	15.7	17.5	19.7	26.4
Delay Fuse Max.†	20	25	30	30	35	40	50
Min. Circ. Ampacity	12.1	14.5	18.0	19.4	21.6	24.3	32.6
Coil Area Sq. Ft.	15.17	15.17	22.88	25.42	22.88	25.42	25.42
Coil Rows-FPI	1-18	1-18	1-20	1-20	2-16	2-16	2-16
Coil Tube Dia. OD	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Fan Motor Type	PSC	PSC	PSC	PSC	PSC	PSC	PSC
Fan Motor Amps	0.91	0.91	1.00	1.00	1.00	1.4	1.4
Fan HP	1/8	1/8	1/4	1/4	1/4	1/4	1/4
Fan SCFM	2370	2370	3000	3000	3000	4000	4000
Compressor RLA	8.3	10.8	13.4	15.3	19.2	19.8	25.3
Compressor LRA	40.3	56	68	87	112	105	146
Ref. Liquid Line OD	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Ref. Suction Line 0 to 24'	3/4"	3/4"	3/4"	3/4"	7/8"	7/8"	7/8"
Ref. Suction Line 25' to 39'	3/4"	3/4"	3/4"	7/8"*	7/8"	7/8"	1-1/8"***
Ref. Suction Line 40' to 75'	3/4"	3/4"	7/8"*	7/8"*	7/8"	1-1/8"***	1-1/8"***

NOTE: See IOM for charging amounts.

† HACR type circuit breaker may be used.

* Requires 7/8" to 3/4" reducer from line to unit.

***Requires 1-1/8" to 7/8" reduce from line to unit.

UNIT DIMENSIONS

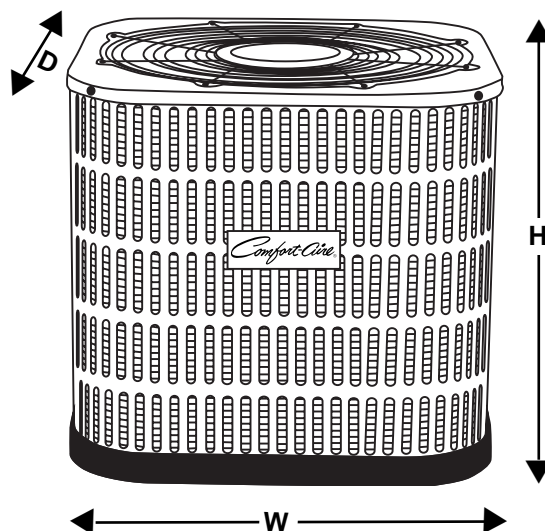
DIMENSION	HRN1318S1E	HRN1324S1E	HRN1330S1E	HRN1336S1E	HRN1342S1E	HRN1348S1E	HRN1360S1E
HEIGHT	27	27	39	43	39	43	43
WIDTH	30 3/4	30 3/4	30 3/4	30 3/4	30 3/4	30 3/4	30 3/4
DEPTH	30 3/4	30 3/4	30 3/4	30 3/4	30 3/4	30 3/4	30 3/4
WEIGHT-NET/ SHIPPING	166/175	171/180	190/200	204/215	252/265	276/290	285/300

ACCESSORIES

MODEL	DESCRIPTION
912933	Start Assist Kit—provides additional starting torque when operating with lowline voltage or high operating temps
913852	Outdoor Thermostat—two stage logic can lock out electric strip down to balance point and bring on stages
920900	Extreme Wind Mounting Kit

Design, specifications, performance data and materials subject to change without notice.

Comfort-Circ®



HEAT CONTROLLER

FMG WALL MOUNT AIR HANDLER WITH ELECTRIC HEAT



FMG Series
208/240V For R-410A
1½ to 3 Tons

Shipped ready for vertical installation, can be mounted directly on a wall or recessed between framing studs; also approved for closet or alcove installation with zero clearance to combustibles.

AHRI Matched to HCI Condensers & Heat Pumps

Durable cabinet is constructed of heavy duty galvanized steel with optional decorative front panel

Micro-channel coils for corrosion resistance

Multi-speed function gives flexibility for installation

Blower control board incorporates blower time delay to allow time for air to be heated or cooled before it's delivered to living spaces

Easy to service with plug-in wire connections and built-in filter rack

Drain pan is heavy duty plastic for corrosion resistance and durability

Heater kits are factory installed, models available in 5 kW, 8kW, and 10 kW

Breaker is accessible from the front of the unit for service convenience

Fully insulated cabinet provides quiet operation

Front and/or bottom return air can be selected for flexibility in locating the air handler

Offset hanging bracket is included

TWO MODELS:

FMG- - - FIE—Reliable PSC Blower Motor with Flowrator (Piston), rated at 13 SEER when matched to Heat Controller 13 SEER condensers or heat pumps; uses an orifice for refrigerant flow control

FMG- - - XIE—ECM Fixed Speed Motor is highly efficient, with 5 field-selectable cooling airflows for flexibility, rated up to 15 SEER with matched outdoor units; uses a TXV for precise refrigerant flow control under varying load conditions



Outstanding Warranty Coverage—

up to 12 years when part of an AHRI-matched system

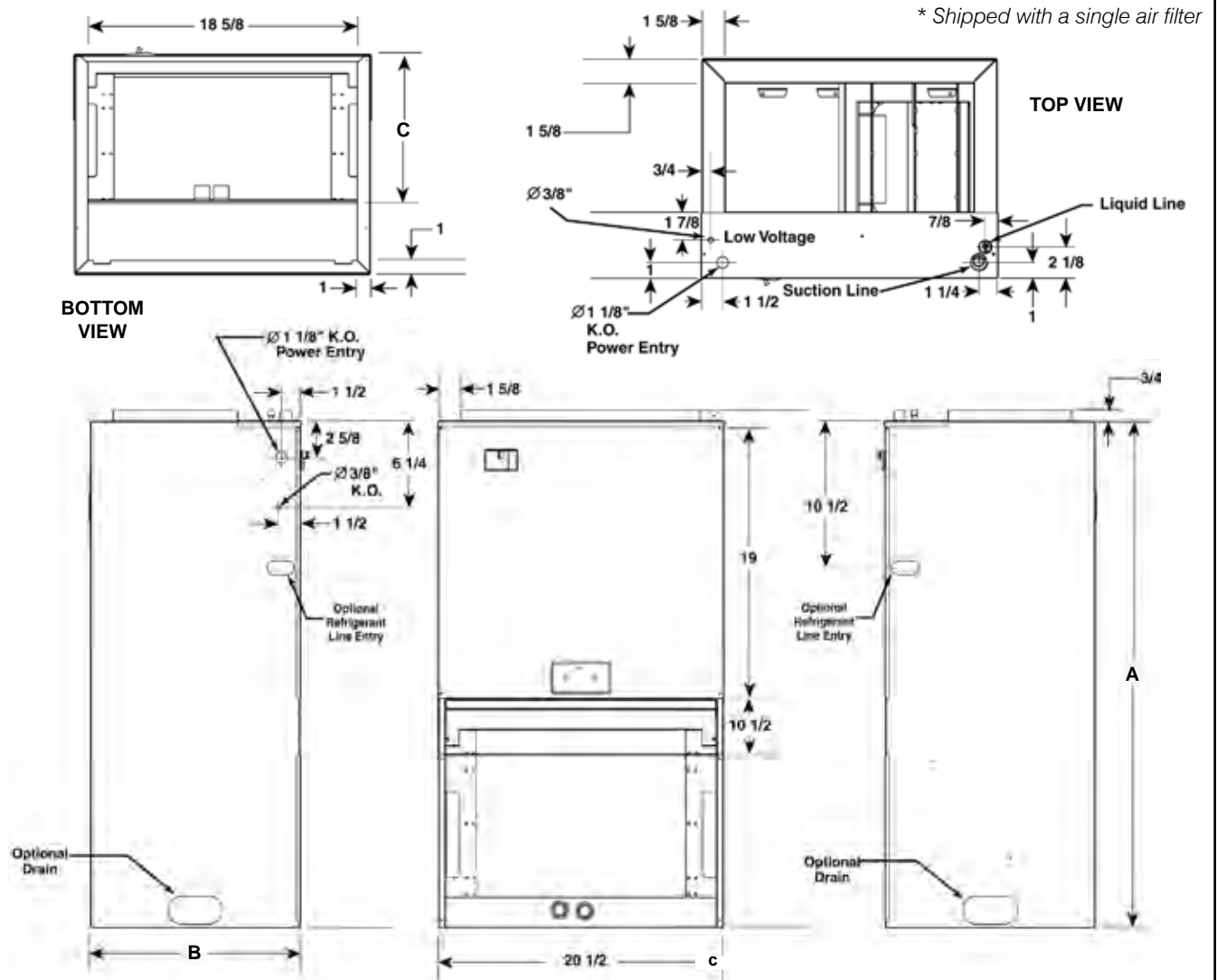
With registration within 90 days of purchase, other limitations apply, see printed warranty for details.

Exact coverage depends on warranty for matched condenser/heat pump.

CONDENSER/AIR HANDLER MATCHES						208/240V-1-60	
CONDENSING UNIT	AIR HANDLER with PSC BLOWER MOTOR	COOLING CAPACITY (BTUH)	SEER	EER	REQUIRED CFM		
RSG1318S1E	FMG1805F1E, -1808F1E	17,200	13.0	11.0	600		
RSG1324S1E	FMG2405F1E, -2408F1E, -2410F1E	22,800	13.0	11.0	800		
RSG1330S1E	FMG3005F1E, -3008F1E, -3010F1E	27,600	13.0	11.0	1000		
RSG1336S1E	FMG3605F1E, -3608F1E, -3610F1E	34,200	13.0	11.0	1200		
RSG1324R1E	FMG2405F1E, -08F1E, -10F1E	23,400	13.0	11.0	800		
RSG1330R1E	FMG3005F1E, -08F1E, -10F1E	27,600	13.0	11.0	1000		
RSG1336R1E	FMG3605F1E, -08F1E, -10F1E	33,000	13.0	10.9	1200		
CONDENSING UNIT	AIR HANDLER with ECM BLOWER MOTOR						
RSG1418S1E	FMG1805X1E, -1808X1E	17,900	15.0	12.5	600		
RSG1424S1E	FMG2405X1E, -2408X1E, -2410X1E	23,600	15.0	12.5	800		
RSG1430S1E	FMG3005X1E, -3008X1E, -3010X1E	28,800	15.0	12.0	1000		
RSG1436S1E	FMG3605X1E, -3608X1E, -3610X1E	33,600	15.0	12.5	1200		
HEAT PUMP/AIR HANDLER MATCHES						208/240V-1-60	
HEAT PUMP	AIR HANDLER with PSC BLOWER MOTOR						
HRG1318S1E	FMG2405F1E, -2408F1E	17,400	13.0	11.0	17,400	7.8	600
HRG1324S1E	FMG2405F1E, -2408F1E, -2410F1E	22,400	13.0	11.0	23,000	8.0	800
HRG1330S1E	FMG3005F1E, -3008F1E, -3010F1E	28,200	13.0	11.0	29,200	8.0	1000
HRG1336S1E	FMG3605F1E, -3608F1E, -3610F1E	34,000	13.0	11.0	34,800	8.0	1200
HEAT PUMP	AIR HANDLER with ECM BLOWER MOTOR	COOLING CAPACITY (BTUH)	SEER	EER	HEATING CAPACITY (BTU/H)	HSPF	REQUIRED CFM
HRG1418S1E	FMG1805X1E, -1808X1E	17,600	15.0	12.0	17,600	8.2	600
HRG1424S1E	FMG2405X1E, -2408X1E, -2410X1E	22,800	15.0	12.0	22,600	8.2	800
HRG1430S1E	FMG3005X1E, -3008X1E, -3010X1E	27,400	15.0	12.0	27,600	8.2	1000
HRG1436S1E	FMG3605X1E, -3608X1E, -3610X1E	32,600	15.0	12.0	32,000	8.2	1200
NOTE: These combinations of indoor and outdoor units are certified by AHRI; see the current AHRI Directory for all certified combinations and ratings: www.ahridirectory.com							
SPECIFICATIONS							
PSC AIR HANDLER	NOM. COOLING CAPACITY BTUH	REFRIGERANT FLOW CONTROL	ORFICE SIZE AS SHIPPED	RATED EXT. STATIC PRESSURE	NOM. BLOWER SIZE DIA x W (in.)	MOTOR HP-SPEEDS-TYPE	REFRIGERANT CONNECTIONS SUCTION LIQUID
FMG18F1E	17,200	Orifice	.048	.30 in. W.C.	10 x 6	1/9-2-PSC	3/4" dia. 3/8" dia.
FMG24F1E	24,000	Orifice	.057	.30 in. W.C.	10 x 6	1/5-2-PSC	3/4" dia. 3/8" dia.
FMG30F1E	27,600	Orifice	.060	.30 in. W.C.	10 x 6	1/4-3-PSC	3/4" dia. 3/8" dia.
FMG36F1E	33,000	Orifice	.069	.30 in. W.C.	10 x 8	1/2-5-PSC	3/4" dia. 3/8" dia.
ECM AIR HANDLER	NOM. COOLING CAPACITY BTUH	REFRIGERANT FLOW CONTROL	RATED EXTERNAL STATIC PRESSURE	NOM. BLOWER SIZE DIA x W (in.)	MOTOR HP-SPEEDS-TYPE	REFRIGERANT CONNECTIONS SUCTION LIQUID	
FMG18X1E	17,200	TXV	.30 in. W.C.	10 x 6	1/2-5-ECM	3/4" dia.	3/8" dia.
FMG24X1E	24,000	TXV	.30 in. W.C.	10 x 6	1/2-5-ECM	3/4" dia.	3/8" dia.
FMG30X1E	27,600	TXV	.30 in. W.C.	10 x 6	1/2-5-ECM	3/4" dia.	3/8" dia.
FMG36X1E	33,000	TXV	.30 in. W.C.	10 x 8	1/2-5-ECM	3/4" dia.	3/8" dia.

DIMENSIONS (inches)

AIR HANDLER WITH PSC BLOWER MOTOR	A HEIGHT	B WIDTH	C BOTTOM VIEW	SUPPLY AIR DUCT DIMENSION	FILTER SIZE	SHIPPING WEIGHT (lbs)
FMG18F1E	36 ³ / ₈ "	15"	9 ¹ / ₂ "	9 x 17 ¹ / ₄ "	16" x 20" x 1"	80
FMG24F1E	36 ³ / ₈ "	15"	9 ¹ / ₂ "	9 x 17 ¹ / ₄ "	16" x 20" x 1"	80
FMG30F1E	43 ¹ / ₂ "	15"	9 ¹ / ₂ "	9 x 17 ¹ / ₄ "	20" x 20" x 1"	88
FMG36F1E	43 ¹ / ₂ "	21"	15 ¹ / ₂ "	15 x 17 ¹ / ₄ "	24" x 20" x 1"	92
AIR HANDLER WITH ECM BLOWER MOTOR	A HEIGHT	B DEPTH	C BOTTOM VIEW	SUPPLY AIR DUCT DIMENSION	FILTER SIZE*	SHIPPING WEIGHT (lbs)
FMG18X1E	36 ³ / ₈ "	15"	9 ¹ / ₂ "	9 x 17 ¹ / ₄ "	16" x 20" x 1"	80
FMG24X1E	36 ³ / ₈ "	15"	9 ¹ / ₂ "	9 x 17 ¹ / ₄ "	16" x 20" x 1"	80
FMG30X1E	43 ¹ / ₂ "	15"	9 ¹ / ₂ "	9 x 17 ¹ / ₄ "	20" x 20" x 1"	88
FMG36X1E	43 ¹ / ₂ "	21"	15 ¹ / ₂ "	15 x 17 ¹ / ₄ "	24" x 20" x 1"	92



ACCESSORIES

903892	Decorative Louvered Panel for 018/024 Cabinets
919583	Decorative Louvered Panel for 030/036 Cabinets

ELECTRICAL DATA

AIR HANDLER WITH PSC BLOWER MOTOR	kW (nominal)	Minimum Circuit Ampacity (MCA) & Maximum Overcurrent Protection (MOP)			
		240V-1-60		208V-1-60	
		MCA	MOP	MCA	MOP
FMG1805F1E	5	26.1	30	22.7	25
FMG1808F1E	8	40.1	45	34.7	40
FMG2405F1E	5	26.5	30	23.1	25
FMG2408F1E	8	40.6	45	35.1	40
FMG2410F1E	10	51.5	55	44.8	45
FMG3005F1E	5	26.6	30	23.2	25
FMG3008F1E	8	40.8	45	35.2	40
FMG3010F1E	10	51.6	55	44.9	45
FMG3605F1E	5	29.2	30	25.9	30
FMG3608F1E	8	43.4	45	37.9	40
FMG3610F1E	10	54.2	60	47.5	50

AIR HANDLER WITH ECM BLOWER MOTOR

FMG1805X1E	5	29.8	30	26.2	30
FMG1808X1E	8	43.3	45	38.8	40
FMG2405X1E	5	29.8	30	26.2	30
FMG2408X1E	8	43.3	45	38.8	40
FMG2410X1E	10	54.8	60	47.8	50
FMG3005X1E	5	29.8	30	26.2	30
FMG3008X1E	8	44.3	45	38.8	40
FMG3010X1E	10	54.8	60	47.8	50
FMG3605X1E	5	29.8	30	26.2	30
FMG3608X1E	8	44.3	45	38.8	40
FMG3610X1E	10	54.8	60	47.8	50

MCA = minimum circuit ampacity, MOP = maximum over-current protection

MODEL NOMENCLATURE

F	M	G	24	M	1	E
Front Return/ Wall Mount	Micro-channel Coil	'Green' Gas R-410A	Capacity BTUH x 1000	M = Flowrator (piston), PSC Drive X = ECM fixed speed blower motor	Power 1 = 208/230-1-60	Series/ Revision

Design, specifications, performance data and materials subject to change without notice.

HEAT CONTROLLER

1900 Wellworth Ave., Jackson MI 49203 • Ph. 517-787-2100 • www.heatcontroller.com

A **TRANE** Company

HEAT CONTROLLER

MODULAR AIR HANDLERS



HMB Series

208/240V For R-410A

PSC Motor: 2 to 5 Tons

ECM Motor: 3 to 5 Tons



For R-410A systems



Indoor blower module gives the contractor real flexibility for installations where available space is an issue. Modules are installed with a cased coil to create a customized, two-piece air handler.

Durable, attractive cabinet of galvanized steel with a polyester urethane finish provides corrosion protection and attractive appearance

Multi-position allows contractor to configure upflow, downflow, and horizontal two-piece air handlers to fit available space limitations

Multi-speed gives flexibility of installation

Easy to service with plug-in wire connections

Plug-in heater kits are available in 5kW - 20kW as options (see part numbers on page 6)

Plastic drain pan is corrosion resistant

Circuit board incorporates a blower time delay relay, low voltage terminal strip, and heat-strip sequencing

Air handler control board controls the time sequencing of heat stages; sequence timing can be selected in the field

Breaker is accessible from the front of the unit when heat is applied, for service convenience

Smooth surfaces with no fasteners on sides facilitates installation, adds to attractive appearance

1/2" cabinet insulation helps assure quiet operation, also prevents cabinet sweating in difficult applications

TWO MODELS:

HMB- -A—Reliable PSC Blower Motor

HMB- -V—ECM Variable Speed Motor automatically adjusts to varying static loads for increased efficiency with reduced temperature stratification for enhanced comfort and indoor air quality; has 16 field-selectable cooling airflows for flexibility, automatically sets heating airflows based on amount of installed heat

SPECIFICATIONS

PSC BLOWER MOTOR MODEL	NOM. COOLING CAPACITY BTUH	MAXIMUM AVAILABLE AUX. HEAT (kW)	NOM. BLOWER SIZE DIA x W (in.)	MOTOR HP-SPEEDS-TYPE	NOMINAL AIRFLOW
HMB24AA1E	24,000	10	10 x 6	1/5-3-PSC	800 CFM
HMB36AA1E	36,000	15	10 x 6	1/2-3-PSC	800 CFM
HMB36AB1E	36,000	20	10 x 8	1/3-3-PSC	1200 CFM
HMB48AC1E	48,000	20	10 x 10	1/2-3-PSC	1600 CFM
HMB60AC1E	60,000	20	11 x 10	3/4-3-PSC	2000 CFM
ECM VARIABLE SPEED BLOWER MOTOR MODEL					
HMB36VA1E	36,000	15	10 x 6	1/2 - ECM	1200 CFM
HMB48VB1E	48,000	20	11 x 8	1/2 - ECM	1600 CFM
HMB60VC1E	60,000	20	11 x 10	3/4 - ECM	2000 CFM

(1) See current AHRI Directory for current certified ratings: www.ahridirectory.org

BLOWER PERFORMANCE—PSC BLOWER MOTOR MODELS

	DRY COIL ESP	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80
HMB24AA1E	Low	685	645	605	565	515	465	405	345
	Corrected ESP ¹		0.07	0.19	0.30	0.42	0.53	0.65	0.76
	Med	860	825	780	735	680	625	565	500
	Corrected ESP ¹			0.11	0.23	0.36	0.48	0.60	0.72
	High	1070	1025	985	920	860	800	730	660
	Corrected ESP ¹				0.14	0.27	0.40	0.53	0.67
HMB36AA1E	Low	850	825	795	755	705	645	580	510
	Corrected ESP ¹		0.04	0.15	.027	0.38	0.50	0.62	0.74
	Med	1120	1085	1045	995	940	875	800	715
	Corrected ESP ¹			0.04	0.17	0.29	0.42	0.55	0.68
	High	1275	1235	1185	1130	1070	1005	935	860
	Corrected ESP ¹				0.10	0.23	0.36	0.49	0.63
HMB36AB1E	Low	995	955	910	845	780	705	610	530
	Corrected ESP ¹		0.08	0.19	0.31	0.42	0.54	0.65	0.76
	Med	1335	1290	1235	1175	1100	1015	925	805
	Corrected ESP ¹			0.10	0.22	0.34	0.46	0.59	0.71
	High	1470	1425	1360	1300	1225	1135	1050	920
	Corrected ESP ¹				0.08	0.22	0.37	0.51	0.65
HMB48AC1E	Low	1035	1005	970	925	875	825	770	710
	Corrected ESP ¹		0.11	0.22	0.33	0.44	0.54	0.65	0.76
	Med	1635	1595	1525	1475	1405	1305	1210	1060
	Corrected ESP ¹			0.08	0.20	0.32	0.44	0.57	0.69
	High	1910	1840	1760	1685	1595	1495	1395	1250
	Corrected ESP ¹				0.14	0.26	0.39	0.52	0.65
HMB60AC1E	Low	1520	1510	1500	1485	1465	1440	1415	1385
	Corrected ESP ¹		0.11	0.21	0.31	0.42	0.52	0.62	0.72
	Med	1900	1885	1860	1830	1790	1740	1680	1620
	Corrected ESP ¹		0.06	0.16	0.27	0.37	0.48	0.59	0.70
	High	2245	2195	2135	2080	2015	1950	1885	1800
	Corrected ESP ¹			0.12	0.23	0.34	0.45	0.56	0.67

Airflow is shown in CFM =/- 5%.

External Static Pressure (ESP) is shown in inches W.C.

See unit installation instructions for maximum recommended external static pressure.

¹ESP estimate with wet coil and filter

AIR FLOW SELECTION-VARIABLE SPEED MODELS

MODEL	COOLING AIR FLOW						HEATING AIR FLOW		
	HEAT SWITCH SETTING A/B	COOL SWITCH SETTING				AIR FLOW (CFM)	HEAT SWITCH SETTING A/B	HEATER KIT INSTALLED (kW)	AIR FLOW (CFM)
		1	2	3	4				
HMB36VA1E 14-1/4" Cabinet	0	0	0	0	0	525	0	0	600
	0	0	0	0	1	560	0	5	800
	0	0	0	1	0	600	0	8	900
	0	0	0	1	1	625	0	10	1000
	0	0	1	0	0	700	0	15	1300
	0	0	1	0	1	750	0	20	N/A
	0	0	1	1	0	800	0 = OFF, 1 = ON		
	0	0	1	1	1	850			
	0	1	0	0	0	875			
	0	1	0	0	1	890			
	0	1	0	1	0	930			
	0	1	0	1	1	950			
	0	1	1	0	0	1000			
	0	1	1	0	1	1050			
	0	1	1	1	0	1125			
	0	1	1	1	1	1200			
HMB48VB1E 17-1/2" Cabinet	1	0	0	0	0	525	HEATING AIR FLOW		
	1	0	0	0	1	560			
	1	0	0	1	0	600	HEAT SWITCH SETTING A/B	HEATER KIT INSTALLED (kW)	AIR FLOW (CFM)
	1	0	0	1	1	650	1	0	700
	1	0	1	0	0	700	1	5	900
	1	0	1	0	1	750	1	8	1000
	1	0	1	1	0	800	1	10	1000
	1	0	1	1	1	850	1	15	1300
	1	1	0	0	0	875	1	20	1500
	1	1	0	0	1	950	0 = OFF, 1 = ON		
	1	1	0	1	0	1050			
	1	1	0	1	1	1150			
	1	1	1	0	0	1250			
	1	1	1	0	1	1350			
	1	1	1	1	0	1400			
	1	1	1	1	1	1600			
HMB60VC1E 21" Cabinet	0 or 1	0	0	0	0	1100	HEATING AIR FLOW		
	0 or 1	0	0	0	1	1200			
	0 or 1	0	0	1	0	1250	HEAT SWITCH SETTING A/B	HEATER KIT INSTALLED (kW)	AIR FLOW (CFM)
	0 or 1	0	0	1	1	1300	0 or 1	0	800
	0 or 1	0	1	0	0	1350	0 or 1	5	1000
	0 or 1	0	1	0	1	1400	0 or 1	8	1100
	0 or 1	0	1	1	0	1450	0 or 1	10	1200
	0 or 1	0	1	1	1	1500	0 or 1	15	1400
	0 or 1	1	0	0	0	1550	0 or 1	20	1600
	0 or 1	1	0	0	1	1600	Airflow values listed for 240V operation. For 208V operation, multiply HMB36 and HMB48 values by .95; multiply HMB60 values by .90. 0 = OFF, 1 = ON		
	0 or 1	1	0	1	0	1650			
	0 or 1	1	0	1	1	1700			
	0 or 1	1	1	0	0	1750			
	0 or 1	1	1	0	1	1800			
	0 or 1	1	1	1	0	1900			
	0 or 1	1	1	1	1	2000			

ELECTRICAL DATA

MODEL	CABINET	CAPACITY	OPTIONAL HEATER KIT MODEL NUMBER H6HK-	VOLTAGE 240								VOLTAGE 208							
				MINIMUM CIRCUIT AMPACITY				MAXIMUM OVER-CURRENT RATING				MINIMUM CIRCUIT AMPACITY				MAXIMUM OVER-CURRENT RATING			
				CIRCUIT A	CIRCUIT B	CIRCUIT C	SINGLE CIRCUIT	CIRCUIT A	CIRCUIT B	CIRCUIT C	SINGLE CIRCUIT	CIRCUIT A	CIRCUIT B	CIRCUIT C	SINGLE CIRCUIT	CIRCUIT A	CIRCUIT B	CIRCUIT C	SINGLE CIRCUIT
HMB PSC BLOWER MOTOR	A	800CFM	None	1.6	-	-	1.6	15.0	-	-	15.0	1.6	-	-	1.6	15.0	-	-	15.0
			005H-11	26.6	-	-	26.6	30.0	-	-	30.0	23.3	-	-	23.3	25.0	-	-	25.0
			008H-11	41.2	-	-	41.2	45.0	-	-	45.0	35.9	-	-	35.9	40.0	-	-	40.0
			010H-11	51.6	-	-	51.6	60.0	-	-	60.0	45.0	-	-	45.0	45.0	-	-	45.0
			015H-21	51.6	25.0	-	76.6	60.0	30.0	-	80.0	45.0	21.7	-	66.6	45.0	25.0	-	70.0
	B	1200CFM	None	2.6	-	-	2.6	15.0	-	-	15.0	2.6	-	-	2.6	15.0	-	-	15.0
			005H-11	27.6	-	-	27.6	30.0	-	-	30.0	24.3	-	-	24.3	25.0	-	-	25.0
			008H-11	42.2	-	-	42.2	45.0	-	-	45.0	36.9	-	-	36.9	40.0	-	-	40.0
			010H-11	52.6	-	-	52.6	60.0	-	-	60.0	46.0	-	-	46.0	50.0	-	-	50.0
			015H-21	52.6	25.0	-	64.7	60.0	30.0	-	80.0	46.0	21.7	-	67.6	50.0	25.0	-	70.0
			020H-21	52.6	50.0	-	102.6	60.0	60.0	-	110.0	46.0	43.3	-	89.3	50.0	45.0	-	90.0
	C	1600CFM	None	3.1	-	-	3.1	15.0	-	-	15.0	3.1	-	-	3.1	15.0	-	-	15.0
			005H-11	28.1	-	-	28.1	30.0	-	-	30.0	24.8	-	-	24.8	25.0	-	-	25.0
			008H-11	42.7	-	-	42.7	45.0	-	-	45.0	37.4	-	-	37.4	40.0	-	-	40.0
			010H-11	53.1	-	-	53.1	60.0	-	-	60.0	46.5	-	-	46.5	50.0	-	-	50.0
			015H-21	53.1	-	-	65.6	60.0	-	-	80.0	46.5	21.7	-	68.1	50.0	25.0	-	70.0
			020H-21	53.1	-	-	103.1	60.0	-	-	110.0	46.5	43.3	-	89.8	50.0	45.0	-	90.0
	C	2000CFM	None	5.0	-	-	5.0	15.0	-	-	15.0	5.0	-	-	5.0	15.0	-	-	15.0
			005H-11	30.0	-	-	30.0	35.0	-	-	35.0	26.7	-	-	26.7	30.0	-	-	30.0
			008H-11	44.6	-	-	44.6	45.0	-	-	45.0	39.3	-	-	39.3	40.0	-	-	40.0
			010H-11	55.0	-	-	55.0	60.0	-	-	60.0	48.3	-	-	48.3	50.0	-	-	50.0
			015H-21	55.0	25.0	-	80.0	60.0	30.0	-	80.0	48.3	21.7	-	70.0	50.0	25.0	-	70.0
			020H-21	55.0	50.0	-	105.0	60.0	60.0	-	110.0	48.3	43.3	-	91.7	50.0	45.0	-	100.0
HMB ECM VARIABLE SPEED BLOWER MOTOR	A	1200CFM	None	4.5	-	-	4.5	15.0	-	-	15.0	4.8	-	-	4.8	15.0	-	-	15.0
			005H-11	29.5	-	-	29.5	30.0	-	-	30.0	26.4	-	-	26.4	30.0	-	-	30.0
			008H-11	44.1	-	-	44.1	45.0	-	-	45.0	39.1	-	-	39.1	40.0	-	-	40.0
			010H-11	54.5	-	-	54.5	60.0	-	-	60.0	48.1	-	-	48.1	50.0	-	-	50.0
			015H-21	54.5	25.0	-	68.1	60.0	30.0	-	80.0	48.1	21.7	-	69.8	50.0	25.0	-	70.0
	B	1600CFM	None	4.5	-	-	4.5	15.0	-	-	15.0	4.8	-	-	4.8	15.0	-	-	15.0
			005H-11	29.5	-	-	29.5	30.0	-	-	30.0	26.4	-	-	26.4	30.0	-	-	30.0
			008H-11	44.1	-	-	44.1	45.0	-	-	45.0	39.1	-	-	39.1	40.0	-	-	40.0
			010H-11	54.5	-	-	54.5	60.0	-	-	60.0	48.1	-	-	48.1	50.0	-	-	50.0
			015H-21	54.5	-	-	68.1	60.0	-	-	80.0	48.1	-	-	69.8	50.0	-	-	70.0
			020H-21	54.5	50.0	-	104.5	60.0	60.0	-	110.0	48.1	43.3	-	91.4	50.0	45.0	-	100.0
	C	2000CFM	None	6.3	-	-	6.3	15.0	-	-	15.0	6.8	-	-	6.8	15.0	-	-	15.0
			005H-11	31.3	-	-	31.3	35.0	-	-	35.0	28.4	-	-	28.4	30.0	-	-	30.0
			008H-11	45.8	-	-	45.8	50.0	-	-	50.0	41.1	-	-	41.1	45.0	-	-	45.0
			010H-11	56.3	-	-	56.3	60.0	-	-	60.0	50.1	-	-	50.1	60.0	-	-	60.0
			015H-21	56.3	-	-	81.3	60.0	-	-	90.0	50.1	-	-	71.8	60.0	-	-	80.0
			020H-21	56.3	-	-	106.3	60.0	-	-	110.0	50.0	-	-	93.4	60.0	-	-	100.0

MINIMUM HEATING AIRFLOW SETTINGS

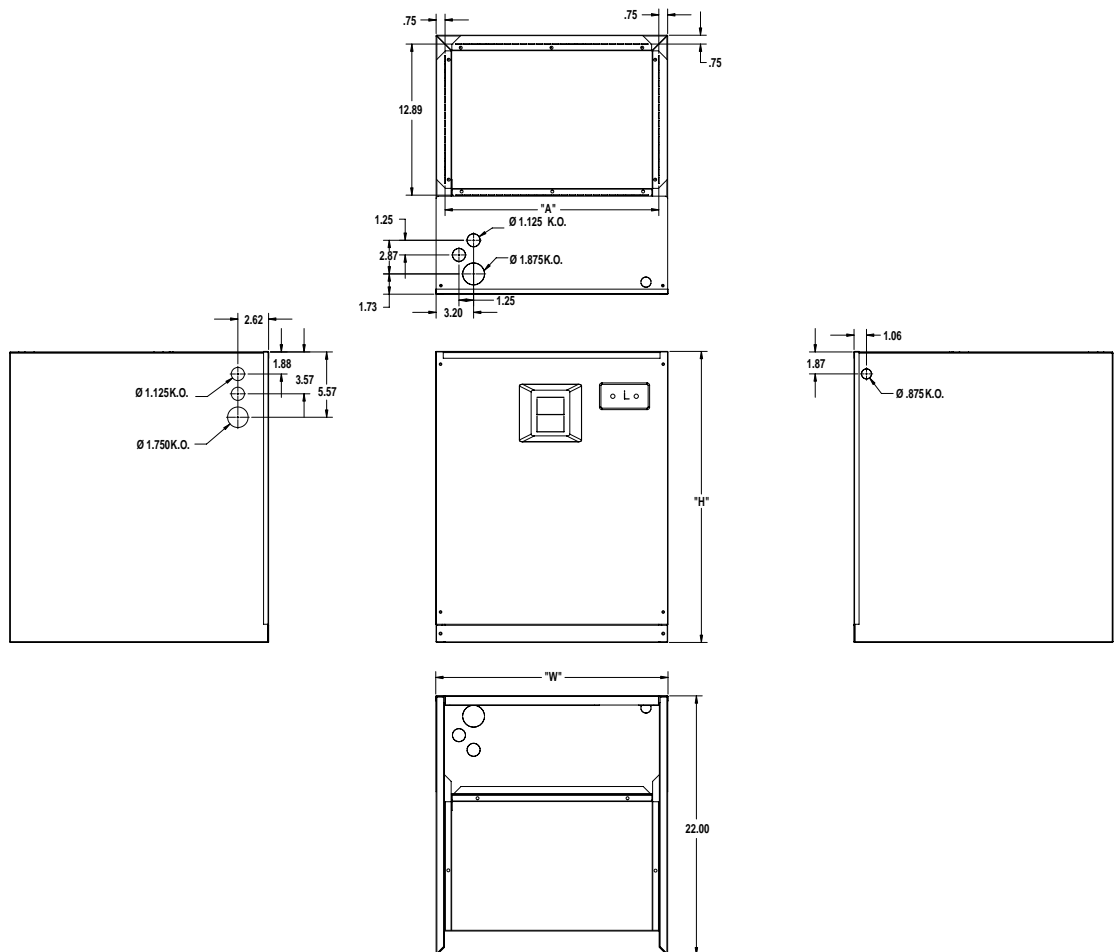
CABINET SIZE	NOMINAL ELECTRIC HEAT kW				
	5	8	10	15	20
A = 14-1/4"	800	900	1000	1300	n/a
B = 17-1/2"	900	1000	1100	1300	1500
C = 21"	1000	1100	1200	1400	1600

MODEL NOMENCLATURE

H	MB	24	A	A	1	E
DX Air Handler	Modular Blower	Capacity@ 400CFM/TON (800 CFM= 2 ton)	Motor A = PSC V = ECM	Cabinet Size A = 14 ¹ / ₄ " width B = 17 ¹ / ₂ " wide C = 21" wide	Power 1 = 208/230-1-60	Series/ Revision

DIMENSIONS (inches)

PSC BLOWER MOTOR MODEL	(A) HEIGHT (inches)	(B) WIDTH (inches)	DEPTH (inches)	SUPPLY AIR OUTLET DIMENSIONS (inches)	SHIPPING WEIGHT (lbs)
HMB24AA1E	24 ³ / ₄	14 ¹ / ₄	22	12 ⁷ / ₈ x 12 ³ / ₄	50
HMB36AA1E	24 ³ / ₄	14 ¹ / ₄	22	12 ⁷ / ₈ x 12 ³ / ₄	50
HMB36AB1E	24 ³ / ₄	17 ¹ / ₂	22	12 ⁷ / ₈ x 12 ³ / ₄	60
HMB48AC1E	27 ¹ / ₂	21	22	12 ⁷ / ₈ x 18 ¹ / ₄	73
HMB60AC1E	27 ¹ / ₂	21	22	12 ⁷ / ₈ x 18 ¹ / ₄	73
ECM VARIABLE SPEED BLOWER MOTOR MODEL					
HMB36VA1E	24 ³ / ₄	14 ¹ / ₄	22	12 ⁷ / ₈ x 12 ³ / ₄	50
HMB48VB1E	24 ³ / ₄	17 ¹ / ₂	22	12 ⁷ / ₈ x 12 ³ / ₄	60
HMB60VC1E	27 ¹ / ₂	21	22	12 ⁷ / ₈ x 18 ¹ / ₄	73



HEATER KITS AND ACCESSORIES

MODEL	DESCRIPTION	kW @ 240V	CIRCUIT BREAKER(S)
H6HK005H-11	Heater Kit for HMB 800 to 2000 CFM	5	1
H6HK008H-11	Heater Kit for HMB 800 to 2000 CFM	8	1
H6HK010H-11	Heater Kit for HMB 800 to 2000 CFM	10	1
H6HK015H-21	Heater Kit for HMB 1200 to 2000 CFM	15	2
H6HK020H-21	Heater Kit for HMB 1200 (B cabinet) to 2000 CFM	20	2
OTHER ACCESSORY			
913874	Single Circuit Adapter for 2 Circuit Breakers		

Outstanding Warranty Coverage— up to 12 years when part of an AHRI-matched system

With registration within 90 days of purchase, other limitations apply, see printed warranty for details.

Exact coverage depends on warranty for matched condenser/heat pump.

Design, specifications, performance data and materials subject to change without notice.

HEAT CONTROLLER

1900 Wellworth Ave., Jackson MI 49203 • Ph. 517-787-2100 • www.heatcontroller.com

A **WATS** Company

HEAT CONTROLLER

HCG VARIABLE SPEED AIR HANDLER, OPTIONAL ELECTRIC HEAT

Matched to HCl Condensers & Heat Pumps

Can reach 13.5 to 15.0 SEER when properly matched to HCl HVAC split system heating and cooling equipment

Multi-Position Design

Can be installed in upflow, downflow, horizontal or vertical position



ECM Motor Speeds

16 speeds for cooling airflow can be selected in the field, heating airflow is automatically set based on the installed heater kit

Drain Pans

Made of non-corrosive material; vertical and horizontal pans shipped with unit; drain pan clips hold horizontal pan securely in place (left or right position)

Factory Installed A-Coil

Units are A/C ready; copper alloy with zinc additive and aluminum fin coils are coated to prevent formicary corrosion

TXV Metering Device

Delivers precise refrigerant control under varying load conditions for efficiency

Advanced Circuit Board

Incorporates blower time delay relay, low voltage terminal strip, and heat strip sequencing

Quiet Operation

1" blower compartment insulation with R-4.2 factor reduces blower motor noise and prevents cabinet sweating under difficult applications

Installation/Maintenance Convenience

Built-in filter rack and plug-in wiring connections save installation and service time; control board bracket is located on side panel for accessibility

Durable Cabinet

Heavy duty galvanized steel has polyurethane finish for maximum corrosion protection, mid-cabinet support adds stiffness and prevents air leakage at door seam

Electric Heat

Plug-in heater kits are available in 5 kW to 30 kW



HCG AIR HANDLER
208/240V 1½ to 5 Tons



The HCG Series uses an ECM (Electronically Commutated Motor) to run the blower. These brushless DC motors with built-in inverters are ultra-high efficiency for lower operating costs. They match the power to load requirements, running at low speed most of the time to reduce temperature stratification while optimizing humidity control and air filtration for improved indoor air quality.



HCG AIR HANDLER MATCHES

208/240V-1-60

CONDENSING UNIT	AIR HANDLER	NOMINAL TONS	SEER	EER	COOLING CAPACITY (BTUH)
RSG1318S1E	HCG24V1E	1.5	13.5	12.00	18,200
RSG1324S1E	HCG24V1E	2.0	13.5	12.00	24,200
RSG1330S1E	HCG30V1E	2.5	13.5	12.00	29,800
RSG1336S1E	HCG36V1E	3.0	14.0	12.20	36,600
RSG1342S1E	HCG42V1E, -48V1E	3.5	14.0	12.00	41,000
RSG1348S1E	HCG48V1E	4.0	14.0	12.00	48,000
RSG1360S1E	HCG60V1E	5.0	13.5	11.00	55,500
RSG1418S1E	HCG24V1E	1.5	15.0	12.50	18,000
RSG1424S1E	HCG24V1E	2.0	15.0	12.50	24,000
RSG1430S1E	HCG30V1E	2.5	15.0	12.50	30,000
RSG1436S1E	HCG36V1E	3.0	15.0	12.50	35,600
RSG1442S1E	HCG42V1E	3.5	15.0	12.50	41,000
	HCV48V1E	3.5	15.0	12.50	41,500
RSG1448S1E	HCG48V1E	4.0	15.0	12.00	46,500
RSG1460S1E	HCG60V1E	5.0	15.0	12.50	60,000

HEAT PUMP	AIR HANDLER	NOMINAL TONS	SEER	EER	COOLING CAPACITY (BTUH)	HEATING CAPACITY (BTUH)	HSPF
HRG1318S1E	HCG24V1E	1.5	14.0	11.80	18,000	18,000	8.00
HRG1324S1E	HCG24V1E	2.0	14.0	12.20	24,000	23,200	8.20
HRG1330S1E	HCG30V1E	2.5	14.0	12.20	29,600	29,600	8.20
HRG1336S1E	HCG36V1E	3.0	14.0	12.20	35,800	37,800	8.20
HRG1342S1E	HCG42V1E, -48V1E	3.5	14.0	12.20	41,500	41,500	8.20
HRG1348S1E	HCG48V1E	4.0	14.0	12.20	48,000	47,500	8.20
HRG1360S1E	HCG60V1E	5.0	13.5	12.00	59,500	57,500	8.20
HRG1418S1E	HCG24V1E	1.5	15.0	12.50	19,200	18,800	8.50
HRG1424S1E	HCG24V1E	2.0	15.0	12.50	23,400	24,600	8.50
HRG1430S1E	HCG30V1E	2.5	15.0	12.50	28,400	29,400	8.50
HRG1436S1E	HCG36V1E	3.0	15.0	12.50	34,800	33,600	8.50
HRG1442S1E	HCG42V1E	3.5	14.5	12.00	39,500	38,500	8.50
	HCG48V1E	3.5	15.0	12.50	40,000	38,000	8.50
HRG1448S1E	HCG48V1E	4.0	14.0	11.70	45,500	44,000	8.20
HRG1460S1E	HCG60V1E	5.0	14.0	10.70	59,000	52,500	8.20

NOTE: These combinations of indoor and outdoor units are certified by AHRI; see the current AHRI Directory for all certified combinations and ratings: www.ahridirectory.com

SPECIFICATIONS

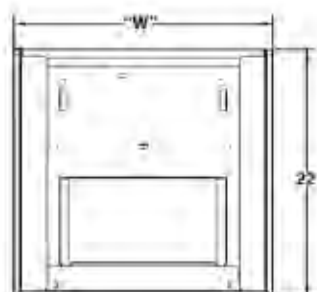
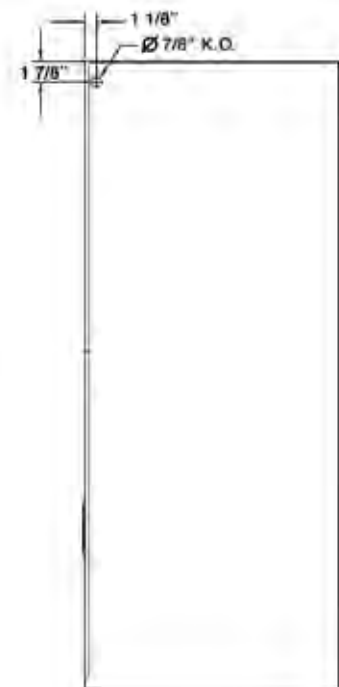
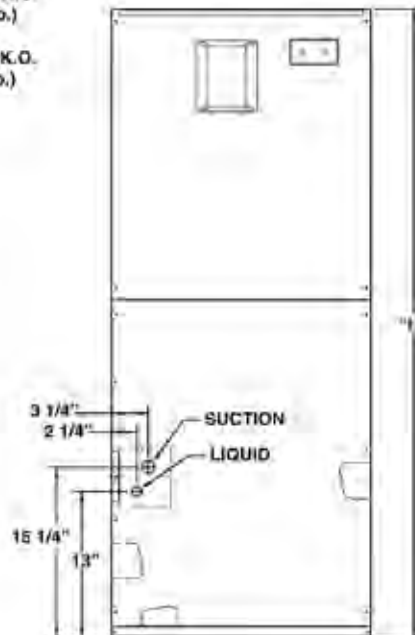
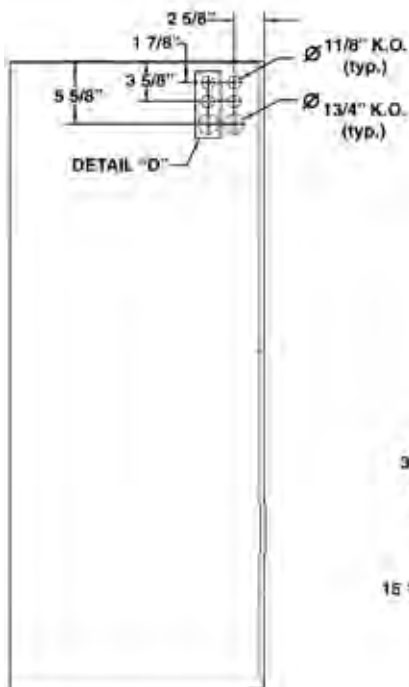
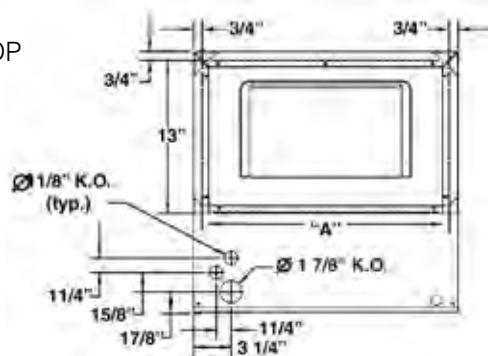
MODEL	MAXIMUM AVAILABLE AUX. HEAT (kW)	NOM. BLOWER SIZE DIA x W (in.)	VARIABLE SPEED MOTOR HP	FILTER SIZE (inches)*	REF. CONN. SUCTION LINE (in. DIA.)	REF. CONN. LIQUID LINE (in. DIA.)	SHIPPING WT. (lbs)
HCG24V1E	15	10 x 6	1/2	12 x 20 x 1	3/4	3/8	91
HCG30V1E	15	10 x 6	1/2	12 x 20 x 1	3/4	3/8	91
HCG36V1E	20	11 x 8	1/2	18 x 20 x 1	7/8	3/8	140
HCG42V1E	20	11 x 8	1/2	18 x 20 x 1	7/8	3/8	140
HCG48V1E	30	11 x 10	3/4	20 x 20 x 1	7/8	3/8	170
HCG60V1E	30	11 x 10	3/4	20 x 20 x 1	7/8	3/8	170

*Filter not supplied with unit

DIMENSIONS (inches)

MODEL	HEIGHT	WIDTH	SUPPLY AIR DUCT DIM. (in.)
HCG24V1E	43 ¹ / ₂	14 ¹ / ₄	12 ⁷ / ₈ x 12 ³ / ₄
HCG30V1E	43 ¹ / ₂	14 ¹ / ₄	12 ⁷ / ₈ x 12 ³ / ₄
HCG36V1E	49 ¹ / ₂	19 ³ / ₄	12 ⁷ / ₈ x 18 ¹ / ₄
HCG42V1E	49 ¹ / ₂	19 ³ / ₄	12 ⁷ / ₈ x 18 ¹ / ₄
HCG48V1E	56	22 ¹ / ₂	12 ⁷ / ₈ x 21
HCG60V1E	56	22 ¹ / ₂	12 ⁷ / ₈ x 21

TOP



BOTTOM

ELECTRIC HEATER KIT SPECIFICATIONS

240V SINGLE PHASE ELECTRIC HEATER KITS

PART NUMBER	NOMINAL kW	MATCHED UNITS					
W/CIRCUIT BREAKERS		HCG -24V1E	HCG -30V1E	HCG -36V1E	HCG -42V1E	HCG -48V1E	HCG -60V1E
H6HK005H-11	5	●	●	●	●	●	●
H6HK008H-11	8	●	●	●	●	●	●
H6HK010H-11	10	●	●	●	●	●	●
H6HK015H-21	15	●	●	●	●	●	●
H6HK020H-21	20	N/A	N/A	●	●	●	●
H6HK024H-31	25	N/A	N/A	N/A	N/A	●	●
H6HK029H-31	30	N/A	N/A	N/A	N/A	●	●

MODEL NOMENCLATURE

H	C	G	24	V	1	E
DX Air Handler	Copper Alloy Coil	'Green' Gas R-410A	Capacity BTUH x 1000	TXV with ECM Drive	Power 1 = 208/230-1-60	Series/ Revision

ACCESSORIES

PART NO.	DESCRIPTION
917342	Downflow Adapter Kit, HCG 24 & 30
919321	Downflow Adapter Kit, HCG 36 & 42
919322	Downflow Adapter Kit, HCG 48 & 60
913874	Single Circuit Adapter for 2 Circuit Breakers
913556	Single Circuit Adapter for 3 Circuit Breakers, for HCG 48 & 60



Outstanding Warranty Coverage— up to 12 years when part of an AHRI-matched system

With registration within 90 days of purchase, other limitations apply,
see printed warranty for details.
Exact coverage depends on warranty for matched condenser/heat pump.

Design, specifications, performance data and materials subject to change without notice.

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A **MTS** Company

HEAT CONTROLLER

HMG AIR HANDLER WITH OPTIONAL ELECTRIC HEAT

Matched to HCI Condensers & Heat Pumps

Rated at 13 SEER when properly matched to HCI HVAC split systems

Multi-Position Design

Can be installed in upflow, downflow, horizontal or vertical position (downflow adapter needed)

Drain Pan

Durable plastic drain pan is corrosion-proof

Micro-Channel A-Coil

Units are A/C ready, coil uses all-aluminum micro-channel technology for corrosion resistance

Multi-Speed

Delivers application flexibility

Advanced Circuit Board

Incorporates blower time delay relay, low voltage terminal strip, and heat strip sequencing

Control Board

Controls the sequencing of heat stages with sequence timing that can be selected in the field

Quiet Operation

1" blower compartment insulation with R-4.2 factor reduces blower motor sound and prevents cabinet sweating under difficult applications

Installation/Maintenance Convenience

Components can be easily accessed; built-in filter rack and plug-in wiring connections save installation and service time; breaker is accessible from the front when heat is applied

Durable Cabinet

Heavy duty galvanized steel cabinet has polyester urethane finish for maximum corrosion protection

Electric Heat

Plug-in heater kits are available in 5 kW to 30 kW

Meets 610.2A.2 Florida Building Code requirements for air leakage



HMG AIR HANDLER
208/240V For R-410A
1½ to 5 Tons



Outstanding Warranty Coverage—up to 12 years when part of an AHRI-matched system

With registration within 90 days of purchase, other limitations apply, see printed warranty for details.

Exact coverage depends on warranty for matched condenser/heat pump.

HMG MATCHES & PERFORMANCE DATA

208/240V-1-60

CONDENSING UNITS	AIR HANDLER	NOMINAL TONS	SEER	EER	COOLING CAPACITY (BTUH)	REQUIRED CFM
RSG1318S1E	HMG24F1E	1.5	13.0	11.00	17,400	565
RSG1324S1E	HMG24F1E	2.0	13.0	11.00	23,000	700
RSG1330S1E	HMG30F1E	2.5	13.0	11.00	28,400	920
RSG1336S1E	HMG36F1E	3.0	13.0	10.90	35,000	1160
RSG1342S1E	HMG42F1E	3.5	13.0	11.00	40,000	1370
RSG1348S1E	HMG48F1E	4.0	13.0	11.00	47,500	1630
RSG1360S1E	HMG60F1E	5.0	13.0	11.00	57,500	1950

CONDENSING UNITS—BUILDERS SERIES

RSG1324R1E	HMG24F1E	2.0	13.0	11.00	22,800	700
RSG1330R1E	HMG30F1E	2.5	13.0	11.00	28,800	915
RSG1336R1E	HMG42F1E	3.0	13.0	10.70	35,400	1225

HEAT PUMP	AIR HANDLER	NOMINAL TONS	SEER	EER	COOLING CAP. (BTUH)	HEATING CAP. (BTUH)	HSPF	REQUIRED CFM
HRG1318S1E	HMG24F1E	1.5	13.0	11.00	18,000	19,000	8.00	650
HRG1324S1E	HMG24F1E	2.0	13.0	11.00	23,000	24,800	8.00	850
HRG1330S1E	HMG30F1E	2.5	13.0	11.00	28,800	30,800	8.00	900
HRG1336S1E	HMG36F1E	3.0	13.0	11.00	34,800	36,800	8.00	1170
HRG1342S1E	HMG42F1E	3.5	13.0	11.00	40,000	42,000	7.80	1495
HRG1348S1E	HMG48F1E	4.0	13.0	11.00	47,500	47,500	8.00	1620
HRG1360S1E	HMG60F1E	5.0	13.0	11.00	57,500	60,500	8.00	1660

NOTE: These combinations of indoor and outdoor units are certified by AHRI; see the current AHRI Directory for all certified combinations and ratings: www.ahridirectory.com

MODEL NOMENCLATURE

H	M	G	24	F	1	E
DX Air Handler	Micro-channel Coil	'Green' Gas R-410A	Capacity BTUH x 1000	Flowrator (piston) with PSC Drive	Power 1 = 208/230-1-60	Series/ Revision

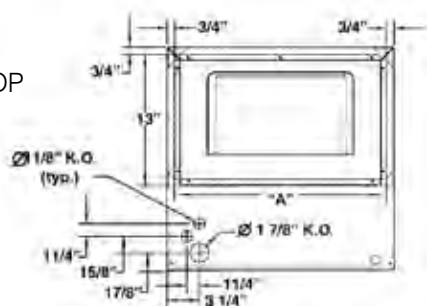
SPECIFICATIONS

MODEL	NOM. COOLING CAPACITY BTUH	MAXIMUM AVAILABLE AUX. HEAT (kW)	NOM. BLOWER SIZE DIA x W (in.)	MOTOR HP-SPEEDS-TYPE	FILTER SIZE (inches)*	REFRIGERANT CONNECTIONS (in.)	
						SUCTION	LIQUID
HMG24F1E	24,000	10	10 x 6	1/5-3-PSC	12 x 20 x 1	3/4	3/8
HMG30F1E	30,000	15	10 x 6	1/3-3-PSC	12 x 20 x 1	3/4	3/8
HMG36F1E	36,000	20	10 x 8	1/3-3-PSC	18 x 20 x 1	3/4	3/8
HMG42F1E	42,000	20	10 x 8	1/3-3-PSC	18 x 20 x 1	7/8	3/8
HMG48F1E	48,000	30	10 x 10	1/2-3-PSC	20 x 20 x 1	7/8	3/8
HMG60F1E	60,000	30	11 x 10	3/4-5-BDC	20 x 20 x 1	7/8	3/8

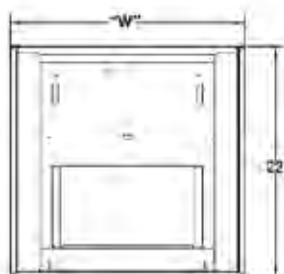
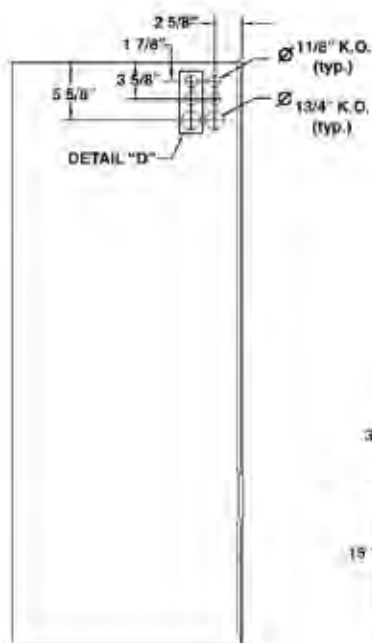
DIMENSIONS (inches)

*Unit comes with internal filter rack; filter not supplied with unit.

TOP



MODEL	HEIGHT	WIDTH	SUPPLY AIR DUCT DIM. (in.)	SHIPPING WT. (lbs)
HMG24F1E	43 ⁵ / ₁₆	14 ³ / ₁₆	12 ⁷ / ₈ x 12 ³ / ₄	80
HMG30F1E	43 ⁵ / ₁₆	14 ³ / ₁₆	12 ⁷ / ₈ x 12 ³ / ₄	82
HMG36F1E	43 ⁵ / ₁₆	19 ¹¹ / ₁₆	12 ⁷ / ₈ x 18 ¹ / ₄	101
HMG42F1E	49 ⁵ / ₁₆	19 ¹¹ / ₁₆	12 ⁷ / ₈ x 18 ¹ / ₄	119
HMG48F1E	55 ¹⁵ / ₁₆	22 ⁷ / ₁₆	12 ⁷ / ₈ x 21	137
HMG60F1E	55 ¹⁵ / ₁₆	22 ⁷ / ₁₆	12 ⁷ / ₈ x 21	142



BOTTOM

BLOWER PERFORMANCE

DRY COIL ESP*	COOLING OR HEATING AIRFLOW CFM: LOW-MEDIUM-HIGH					
	HMG24F1E	HMG30F1E	HMG36F1E	HMG42F1E	HMG48F1E	HMG60F1E
0.10	683-861-1072	849-1118-1277	953-1265-1427	1324-1485-1637	1605-1977-2264	Dependent on switch settings, see Technical Specifications for complete listing
0.20	647-823-1026	825-1087-1233	915-1232-1385	1302-1455-1601	1606-1939-2182	
0.30	607-781-975	793-1046-1184	871-1188-1333	1271-1418-1558	1592-1890-2095	
0.40	563-734-920	753-997-1130	821-1133-1270	1233-1373-1506	1565-1830-2003	
0.50	515-682-860	704-940-1070	764-1067-1196	1187-1320-1447	1524-1758-1906	
0.60	463-625-797	647-874-1005	701-991-1113	1134-1260-1380	1468-1675-1805	
0.70	406-564-730	581-799-935	631-903-1018	1072-1193-1305	1399-1580-1698	
0.80	345-498-659	508-717-860	555-805-913	1003-1118-1223	1316-1474-1586	

Airflow is shown in CFM \pm 5%.

External Static Pressure (ESP) is shown in inches W.C.

See unit installation instructions for maximum recommended external static pressure.

ELECTRIC HEATER KIT SPECIFICATIONS

240V SINGLE PHASE ELECTRIC HEATER KITS

PART NUMBER	NOM. kW	MATCHED UNITS					
W/CIRCUIT BREAKERS		HMG -24F1E	HMG -30F1E	HMG -36F1E	HMG -42F1E	HMG -48F1E	HMG -60F1E
H6HK005H-11	5	●	●	●	●	●	●
H6HK008H-11	8	●	●	●	●	●	●
H6HK010H-11	10	●	●	●	●	●	●
H6HK015H-21	15	N/A	●	●	●	●	●
H6HK020H-21	20	N/A	N/A	●	●	●	●
H6HK024H-31	25	N/A	N/A	N/A	N/A	●	●
H6HK029H-31	30	N/A	N/A	N/A	N/A	●	●

PART NO.	ACCESSORIES
913874	Single Circuit Adapter for 2 Circuit Breakers
913556	Single Circuit Breaker Adapter for 3 Circuit Breakers, for HMG48 and HMG60
DOWNFLOW ADAPTER KITS	
917342	Fits HMG24 and HMG30 Air Handlers
919321	Fits HMG36 and HMG42 Air Handlers
919322	Fits HMG48 and HMG60 Air Handlers

Design, specifications, performance data and materials subject to change without notice.

HEAT CONTROLLER

1900 Wellworth Ave., Jackson MI 49203 • Ph. 517-787-2100 • www.heatcontroller.com

A **WELPS** Company

HEAT CONTROLLER, INC.

CASED AND UNCASED COILS

High quality coils are designed for use with split system air conditioning and heat pumps, and are AHRI matched to Heat Controller models.

Rifled copper tubing with aluminum fins for optimum heat transfer

Installation flexibility with right or left hand connections for refrigerant and plumbing

Factory-installed TX valve for precise refrigerant control

Heavy duty drain pan is made of polypropylene for corrosion resistance (5 ton models have metal drain pan); multi-position coils also have a powder coated galvanized steel horizontal drain pan

Durable, attractive cabinet of embossed, galvanized steel has furnace connections built in (cased models)

Factory tested with immersion test at 500 psi, then nitrogen pressurized and factory sealed

CASED COILS:

Fully insulated cabinet for quiet operation

Split front panel provides easy access for service

Plate kit for field conversion to downflow configuration is included

These coils are AHRI certified for system applications when matched with Heat Controller outdoor units (heat pumps and condensing units).

See applicable condensing unit or heat pump specification sheets for exact matches.



**MCG Series
Multi-Position Cased Coil**

**VCG Series
Upflow/Downflow Cased Coil**



**CCG Series
Uncased Coil**



MULTI-POSITION CASED COIL

COIL MODELS	W = CABINET WIDTH (inches)	D = CABINET DEPTH (inches)	CH = CABINET HEIGHT (inches)	FITS FURNACE WIDTH (inches)	SHIPPING WEIGHT l(bs)
MCG24TA1E	14	20 ¹ / ₂	19	14 ¹ / ₄	39
MCG24TB1E	17 ¹ / ₂	20 ¹ / ₂	19	17 ¹ / ₂	41
MCG36TA1E	14	20 ¹ / ₂	23	14 ¹ / ₄	52
MCG36TB1E	17 ¹ / ₂	20 ¹ / ₂	23	17 ¹ / ₂	54
MCG36TC1E	21	20 ¹ / ₂	23	21	56
MCG48TB1E	17 ¹ / ₂	21	27	17 ¹ / ₂	65
MCG48TC1E	21	21	27	21	68
MCG48TD1E	24 ¹ / ₂	21	27	24 ¹ / ₂	71
MCG60TC1E	21	21	30	21	78
MCG60TD1E	24 ¹ / ₂	21	30	24 ¹ / ₂	81

HIGH EFFICIENCY COIL MODELS

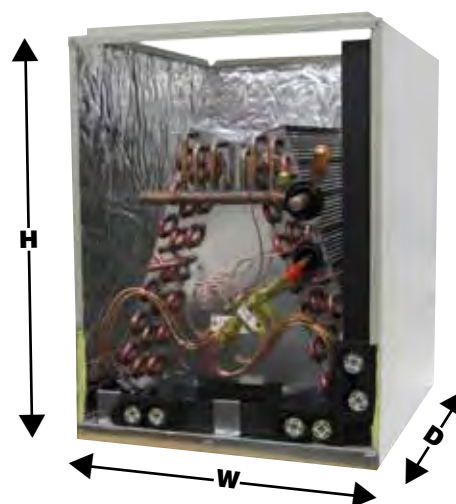
MCG24TA2E	14	20 ¹ / ₂	19	14 ¹ / ₄	54
MCG24TB2E	17 ¹ / ₂	20 ¹ / ₂	19	17 ¹ / ₂	56
MCG36TA2E	14	20 ¹ / ₂	23	14 ¹ / ₄	69
MCG36TB2E	17 ¹ / ₂	20 ¹ / ₂	23	17 ¹ / ₂	71
MCG36TC2E	21	20 ¹ / ₂	23	21	73
MCG48TB2E	17 ¹ / ₂	21	27	17 ¹ / ₂	84
MCG48TC2E	21	21	27	21	87
MCG48TD2E	24 ¹ / ₂	21	27	24 ¹ / ₂	90
MCG60TC2E	21	21	30	21	95
MCG60TD2E	24 ¹ / ₂	21	30	24 ¹ / ₂	99

Liquid line: 3/8" ODS, suction line 3/4" ODS on 2 and 3 ton units, 7/8" ODS on 4 and 5 ton units.

For bottom duct opening dimensions, subtract 3/4" from width or depth.

For top duct opening, subtract 1-1/2" from width or depth.

Do not use coils with polypropylene drain pans on oil furnaces or other applications where outlet temperatures exceed 300° F.



MODEL NOMENCLATURE

C	C	G	24	T	A	1	E
C = Coil Uncased, Upflow/Downflow M = Coil Cased, Multi-Position V = Cased Coil, Upflow/ Downflow	CopperTube, Aluminum Fin	'Green' Gas R-410A	Capacity BTUH x 1000	TXV	Cabinet/Coil Size A = 14" Wide B = 17 ¹ / ₂ " Wide C = 21" Wide D = 24 ¹ / ₂ " Wide	1 = Standard 2 = High Efficiency	Series/ Revision

UPFLOW/DOWNFLOW CASED COIL

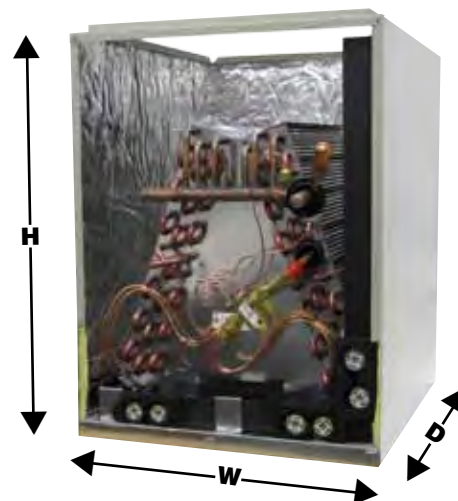
COIL MODELS	W = CABINET WIDTH (nches)	D = CABINET DEPTH (inches)	H = CABINET HEIGHT (inches)	FITS FURNACE WIDTH (inches)	SHIPPING WEIGHT l(bs)
VCG24TA1E	14	20½	16	14¼	37
VCG24TB1E	17½	20½	16	17½	39
VCG36TA1E	14	20½	20	14¼	50
VCG36TB1E	17½	20½	20	17½	52
VCG36TC1E	21	20½	20	21	54
VCG48TB1E	17½	21	24	17½	62
VCG48TC1E	21	21	24	21	65
VCG48TD1E	24½	21	24	24½	68
VCG60TC1E	21	21	28	21	75
VCG60TD1E	24½	21	28	24½	78
HIGH EFFICIENCY COIL MODELS					
VCG24TA2E	14	20½	16	14¼	52
VCG24TB2E	17½	20½	16	17½	54
VCG36TA2E	14	20½	20	14¼	67
VCG36TB2E	17½	20½	20	17½	69
VCG36TC2E	21	20½	20	21	71
VCG48TB2E	17½	21	24	17½	82
VCG48TC2E	21	21	24	21	85
VCG48TD2E	24½	21	24	24½	88
VCG60TC2E	21	21	28	21	91
VCG60TD2E	24½	21	28	24½	95

Liquid line: 3/8" ODS, suction line 3/4" ODS on 2 and 3 ton units, 7/8" ODS on 4 and 5 ton units.

For bottom duct opening dimensions, subtract 3/4" from width or depth.

For top duct opening, subtract 1-1/2" from width or depth.

Do not use coils with polypropylene drain pans on oil furnaces or other applications where outlet temperatures exceed 300° F.



UNCASED COIL

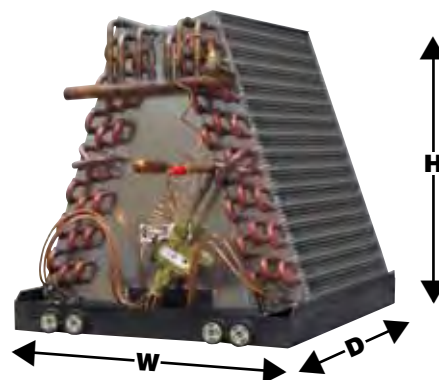
COIL MODELS	W = PAN WIDTH (nches)	D = PAN DEPTH (inches)	H = BARE SLAB HEIGHT (inches)	FITS FURNACE WIDTH (inches)	SHIPPING WEIGHT l(bs)
CCG24TA1E	13	19 ³ / ₈	12	14 ¹ / ₄	27
CCG24TB1E	16	19 ³ / ₈	12	17 ¹ / ₂	29
CCG36TA1E	13	19 ³ / ₈	16	14 ¹ / ₄	36
CCG36TB1E	16	19 ³ / ₈	16	17 ¹ / ₂	38
CCG36TC1E	19 ¹ / ₂	19 ³ / ₈	16	21	40
CCG48TB1E	16	19 ³ / ₈	20	17 ¹ / ₂	45
CCG48TC1E	19 ¹ / ₂	19 ³ / ₈	20	21	48
CCG48TD1E	23	19 ³ / ₈	20	24 ¹ / ₂	51
CCG60TC1E	19 ¹ / ₂	19 ³ / ₈	24	21	54
CCG60TD1E	23	19 ³ / ₈	24	24 ¹ / ₂	57

HIGH EFFICIENCY COIL MODELS

CCG24TA2E	13	19 ³ / ₈	14	14 ¹ / ₄	41
CCG24TB2E	16	19 ³ / ₈	14	17 ¹ / ₂	43
CCG36TA2E	14	19 ³ / ₈	18	14 ¹ / ₄	53
CCG36TB2E	16	19 ³ / ₈	18	17 ¹ / ₂	56
CCG36TC2E	19 ¹ / ₂	19 ³ / ₈	18	21	59
CCG48TB2E	16	19 ³ / ₈	22	17 ¹ / ₂	64
CCG48TC2E	19 ¹ / ₂	19 ³ / ₈	22	21	67
CCG48TD2E	23	19 ³ / ₈	22	24 ¹ / ₂	70
CCG60TC2E	19 ¹ / ₂	21 ³ / ₄	26	21	65
CCG60TD2E	23	21 ³ / ₄	26	24 ¹ / ₂	68

Liquid line: 3/8" ODS, suction line 3/4" ODS on 2 and 3 ton units, 7/8" ODS on 4 and 5 ton units.

Do not use coils with polypropylene drain pans on oil furnaces or other applications where outlet temperatures exceed 300° F.



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HEAT CONTROLLER

1900 Wellworth Ave., Jackson MI 49203 • Ph. 517-787-2100 • www.heatcontroller.com

A **WALSH** Company

HEAT CONTROLLER

MICRO-CHANNEL COILS



**MMG Series
Multi-Position Cased Coil**

**VMG Series
Upflow/Downflow Cased Coil**



**CMG Series
Uncased Coil**

High quality coils are designed for use with split system air conditioning condensers, and are AHRI matched to Heat Controller RSG16 models—see back page for model matches.

Micro-channel coils are all aluminum, lightweight, and highly resistant to formicary corrosion; extruded tubes are brazed to enhanced aluminum fins

Flowator for precise refrigerant control

Heavy duty drain pan is made of polypropylene for corrosion resistance; MMG multi-position coils come with a horizontal drain pan: VMG coils require a drain pan kit for horizontal installation

Durable, attractive cabinet of galvanized steel with a durable finish that matches our line of furnaces; furnace connections built in (cased models)

Factory tested, nitrogen pressurized and factory sealed

CASED COILS:

Fully insulated cabinet for quiet operation

Split front panel provides easy access for service

ADVANTAGES OF MICRO-CHANNEL TECHNOLOGY

The copper alloy used in traditional coils is subject to microscopic pitting called formicary corrosion. This pitting can penetrate the copper and create a leak, and in a relatively short time, given the right conditons. Formicary corrosion is especially prevalent in areas of high humidity and moisture.

Our all aluminum coils not only resist corrosion, but they also provide performance results equal to traditional copper tube/aluminum fin coils.



MULTI-POSITION CASED COIL

COIL MODELS	W = CABINET WIDTH (inches)	D = CABINET DEPTH (inches)	CH = CABINET HEIGHT (inches)	FITS FURNACE WIDTH (inches)	SHIPPING WEIGHT l(bs)
MMG24FAE	14 ¹ / ₄	20 ³ / ₄	26 ³ / ₄	14 ¹ / ₄	45
MMG24FBE	17 ¹ / ₂	20 ³ / ₄	26 ³ / ₄	17 ¹ / ₂	47
MMG30FCE	21	20 ³ / ₄	26 ³ / ₄	21	51
MMG36FAE	14 ¹ / ₄	20 ³ / ₄	26 ³ / ₄	14 ¹ / ₄	44
MMG36FBE	17 ¹ / ₂	20 ³ / ₄	26 ³ / ₄	17 ¹ / ₂	47
MMG42FBE	17 ¹ / ₂	20 ³ / ₄	26 ³ / ₄	17 ¹ / ₂	53
MMG42FCE	21	20 ³ / ₄	26 ³ / ₄	21	57
MMG42FDE	24 ¹ / ₂	20 ³ / ₄	30 ¹ / ₄	24 ¹ / ₂	68
MMG48FCE	21	20 ³ / ₄	30 ¹ / ₄	21	67
MMG48FDE	24 ¹ / ₂	20 ³ / ₄	30 ¹ / ₄	24 ¹ / ₂	70
MMG60FCE	21	20 ³ / ₄	30 ¹ / ₄	21	67
MMG60FDE	24 ¹ / ₂	20 ³ / ₄	30 ¹ / ₄	24 ¹ / ₂	70

UPFLOW/DOWNFLOW CASED COIL

COIL MODELS	W = CABINET WIDTH (inches)	D = CABINET DEPTH (inches)	H = CABINET HEIGHT (inches)	FITS FURNACE WIDTH (inches)	SHIPPING WEIGHT l(bs)
VMG24FAE	14 ¹ / ₄	20 ³ / ₄	20 ³ / ₄	14 ¹ / ₄	34
VMG24FBE	17 ¹ / ₂	20 ³ / ₄	20 ³ / ₄	17 ¹ / ₂	37
VMG30FCE	21	20 ³ / ₄	26 ³ / ₄	21	47
VMG36FAE	14 ¹ / ₄	20 ³ / ₄	20 ³ / ₄	14 ¹ / ₄	35
VMG36FBE	17 ¹ / ₂	20 ³ / ₄	20 ³ / ₄	17 ¹ / ₂	37
VMG42FBE	17 ¹ / ₂	20 ³ / ₄	26 ³ / ₄	17 ¹ / ₂	49
VMG42FCE	21	20 ³ / ₄	26 ³ / ₄	21	52
VMG42FDE	24 ¹ / ₂	20 ³ / ₄	30 ¹ / ₄	24 ¹ / ₂	62
VMG48FCE	21	20 ³ / ₄	30 ¹ / ₄	21	60
VMG48FDE	24 ¹ / ₂	20 ³ / ₄	30 ¹ / ₄	24 ¹ / ₂	64
VMG60FCE	21	20 ³ / ₄	30 ¹ / ₄	21	67
VMG60FDE	24 ¹ / ₂	20 ³ / ₄	30 ¹ / ₄	24 ¹ / ₂	70

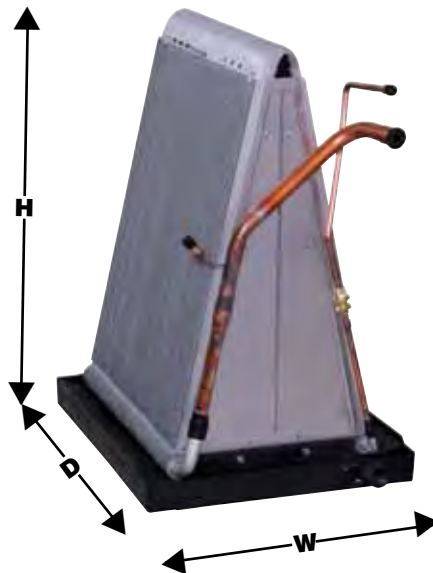


Depending on application, MMG and VMG coils may require an additional field-installed TXV or orifice. See installation instructions for details.

VMG coils in horizontal applications require a drain pan kit to be installed.

UNCASED COIL

COIL MODELS	W = PAN WIDTH (nches)	D = PAN DEPTH (inches)	H = HEIGHT (inches)	FITS FURNACE WIDTH (inches)	SHIPPING WEIGHT l(bs)
CMG24FAE	12 ³ / ₄	19 ¹ / ₂	18 ¹ / ₂	14 ¹ / ₄	20
CMG24FBE	16	19 ¹ / ₂	18	17 ¹ / ₂	22
CMG30FCE	19 ¹ / ₂	19 ¹ / ₂	18	21	25
CMG36FAE	12 ³ / ₄	19 ¹ / ₂	18 ¹ / ₂	14 ¹ / ₄	20
CMG36FBE	16	19 ¹ / ₂	18	17 ¹ / ₂	23
CMG42FBE	16	19 ¹ / ₂	25	17 ¹ / ₂	29
CMG42FCE	19 ¹ / ₂	19 ¹ / ₂	24 ¹ / ₂	21	31
CMG42FDE	23	19 ¹ / ₂	23 ³ / ₄	24 ¹ / ₂	32
CMG48FCE	19 ¹ / ₂	19 ¹ / ₂	28 ¹ / ₂	21	32
CMG48FDE	23	19 ¹ / ₂	27 ³ / ₄	24 ¹ / ₂	33
CMG60FCE	19 ¹ / ₂	19 ¹ / ₂	28 ¹ / ₂	21	67
CMG60FDE	23	19 ¹ / ₂	27 ³ / ₄	24 ¹ / ₂	70



C

M

G

24

F

A

E

C = Coil Uncased,
Upflow/Downflow
M = Coil Cased,
Multi-Position
V = Cased Coil,
Upflow/ Dowflow

Micro-
Channel

'Green' Gas
R-410A

Capacity
BTUH x 1000

Flowrator

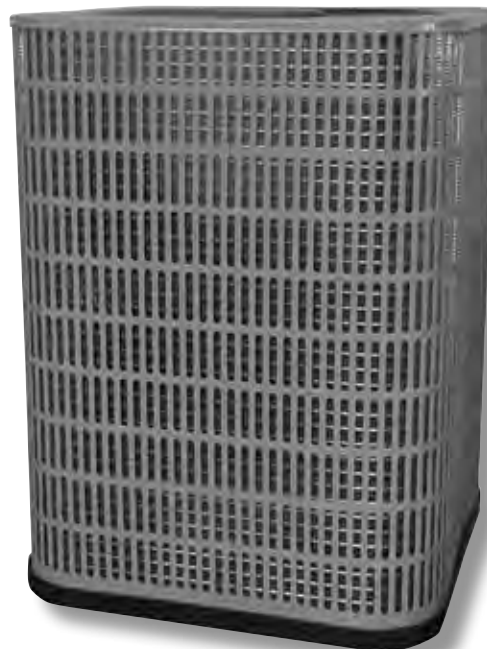
Cabinet/Coil Size
A = 14" Wide
B = 17¹/₂" Wide
C = 21" Wide
D = 24¹/₂" Wide

Series/
Revision

MATCHED TO 16 SEER CONDENSERS

The CMG, MMG and VMG micro-channel coils are AHRI matched to Heat Controller 16 SEER condensing units for the optimum in comfort and efficiency..

UPFLOW CASED COIL	RSG1624S1E	VMG24FAE, -24FBE
	RSG1630S1E	VMG30FCE, VMG36FAE, -36FBE
	RSG1636S1E	VMG36FBE, -36FCE
		VMG42FCE
	RSG1642S1E	VMG42FBE, -42FCE, -42FDE
	RSG1648S1E	VMG48FCE, -48FDE
MULTI-POSITION CASED COIL	RSG1660S1E	VMG60FCE, -60FDE
	RSG1624S1E	MMG24FAE, -24FBE
	RSG1630S1E	MMG30FCE, MMG36FAE, -36FBE
	RSG1636S1E	MMG36FBE, -36FCE
		MMG42FCE
	RSG1642S1E	MMG42FBE, -42FCE, -42FDE
UPFLOW/ DOWNFLOW UNCASED COIL	RSG1648S1E	MMG48FCE, -48FDE
	RSG1660S1E	MMG60FCE, -60FDE
	RSG1624S1E	CMG24FAE, -24FBE
	RSG1630S1E	CMG30FCE, CMG36FAE, -36FBE
	RSG1636S1E	CMG36FBE, -36FCE
		CMG42FCE
	RSG1642S1E	CMG42FBE, -42FCE, -42FDE
	RSG1648S1E	CMG48FCE, -48FDE
	RSG1660S1E	CMG60FCE, -60FDE



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HEAT CONTROLLER

1900 Wellworth Ave., Jackson MI 49203 • Ph. 517-787-2100 • www.heatcontroller.com

A **WALSH** Company

Residential Package

This section contains:

Package Cooling

Package Heat Pump

Package/Gas/Electric Heat/Cool



RESIDENTIAL PACKAGE COOLING & HEAT PUMP

FEATURES

Installation & Maintenance

- Controls and compressor are easily reached through access panels on the side of unit
- High and low (pressure) service ports allow access without disrupting operation
- Removable top grille assembly simplifies service for the fan motor
- Evaporator coil is easily accessed for cleaning and maintenance

Efficient Cooling

- All-aluminum micro-channel coils provide resistance against formicary corrosion while optimizing heat transfer
(Cooling only—both indoor and outdoor coils are micro-channel; heat pump—outside coils are copper tube/aluminum fin construction)
- State-of-the-art compressor is protected by a high pressure switch to prolong its life
- ECM blower motor is high efficiency to help lower energy usage while operating quietly

Durable and Reliable

- PSC condenser motor is permanently lubricated for quiet operation, requires no maintenance, and is completely protected from the weather
- Liquid line filter-driers are factory installed
- Low voltage transformer includes 3 amp fuse to protect the low voltage circuit

Rugged Cabinet

- Durable galvanized steel cabinet has a polyester urethane finish that meets 950 hour salt spray test and resists corrosion
- Plastic mesh hail guard protects the unit from weather hazards and will never rust
- Raised base pan drains water away from the unit for superior water management



TARG Series—Cooling only

TPRG Series—Heat Pump

2 to 5 Tons 208/230V-1-60



These self-contained units are ideal for homes without a basement or adequate utility space. At just 35" wide and 49" long, the compact size makes them easy to transport and install, and ideal for homes with minimal yard space.

Easily installed on a slab, requiring only ductwork and a thermostat, packaged units are suitable for a wide range of residential and light commercial applications. Shipped from the factory with side discharge, they can be field modified for rooftop applications. Zero clearance to combustibles on duct side of unit makes installation possible in tight areas.

Optional electric heat kits can be field installed and are available in 5 through 20 kW capacities. and

RESIDENTIAL PACKAGED AIR CONDITIONER

- Energy efficient cooling
- All aluminum micro-channel coils for maximum efficiency and corrosion resistance (indoor and outdoor sections)
- Quiet operation with ECM multi-speed blower
- Fast, easy installation and maintenance
- Durable cabinet with corrosion protection and water management design features
- A full range of accessories including roof curbs and economizers is available



TARG Series

Specifications

208/230V-1-60

13 SEER, 11 EER

MODEL	COOLING BTUH*	SOUND RATINGS dBa	ECM BLOWER HP	CFM @ ESP, WC ¹	TOTAL AMPS	MIN. CIRCUIT AMPACITY	DIMENSIONS H x W x L (in.)	SHIPPING WT. (LBS)
TARG24001E	23,800	73	1/2	755 @ .30	14.4	16.8	22 ⁷ / ₃₂ x 35 x 49	244
TARG30001E	28,600	73	1/2	925 @ .30	14.9	17.4	22 ⁷ / ₃₂ x 35 x 49	249
TARG36001E	36,000	76	1/2	1190 @ .30	19.9	23.7	30 ⁷ / ₃₂ x 35 x 49	280
TARG42001E	40,500	76	3/4	1310 @ .30	26.9	31.9	30 ⁷ / ₃₂ x 35 x 49	297
TARG48001E	47,000	78	3/4	1535 @ .30	31.2	37.3	30 ⁷ / ₃₂ x 35 x 49	301
TARG60001E	56,000	78	1	1820 @ .30	37.9	45.3	34 ⁷ / ₃₂ x 35 x 49	317

¹ Airflow performance is with dry coil

Heaters & Accessories for TARG and TPRG Models

FIELD-INSTALLED ELECTRIC HEATER			
MODEL	Kw @ 240 Volt	FITS MODELS	SHIPPING WT. (LBS)
H3HK005H-01B	4.8	TARG/TPRG 24, 30, 36, 42, 48, 60	3
H3HK008H-01B	7.2	TARG/TPRG 24, 30, 36, 42, 48, 60	5
H3HK010H-01B	9.6	TARG/TPRG 24, 30, 36, 42, 48, 60	5
H3HK015H-01B	14.4	TARG/TPRG 30, 36, 42, 48, 60	7
H3HK020H-01B	19.2	TARG/TPRG 42, 48, 60	7

ACCESSORIES	
MODEL	DESCRIPTION
913350	4-Pole Single Circuit Adapter
913556	6-Pole Single Circuit Adapter
913554	Single Phase Circuit Breaker (2-Pole)
920908	Extreme High Wind Kit—Ground Mount
917701	Duct Collar—12" Round
917702	Duct Collar—14" Round

**Limited Warranty—10 years on heat exchanger;
5 years on compressor; 1 year on parts**
(See printed warranty for limitations.)

RESIDENTIAL PACKAGED HEAT PUMP

- Automatically shifts between cooling and heating based on thermostat demand
- Quiet operation with ECM multi-speed blower
- Fast, easy installation and maintenance
- Durable cabinet with corrosion protection and water management design features
- Ideal for residential and light commercial installations in tight spaces, allows zero clearance to combustibles on duct side
- A full range of accessories including roof curbs and economizers is available.



TPRG Series

The heat pump function includes time/temperature defrost, which is the accepted industry defrost control that offers a variety of time settings to meet virtually any climate.

Heat pump models are built with copper tube/aluminum fin coils in the outside section.

Evaporator coil features all-aluminum micro-channel construction in 2-3 ton models, while 3¹/₂ to 5 ton models are built with Anteaater™ tubing technology—both provide maximum resistance against formicary corrosion.

Specifications

208/230V-1-60

13 SEER, 7.7 HSPF

MODEL	COOLING BTUH	HEATING BTUH	EER	SOUND RATINGS dBa	ECM BLOWER HP	CFM @ ESP, WC ¹	MIN. CIRCUIT AMPS	DIMENSIONS H x W x L (in.)	SHIPPING WT. (LBS)
TPRG24001E	24,000	24,000	11.0	77	1/2	800 @ .30	16.9	30 ⁷ / ₃₂ x 35 x 49	295
TPRG30001E	28,400	28,400	11.0	77	1/2	1060 @ .30	17.5	30 ⁷ / ₃₂ x 35 x 49	306
TPRG36001E	34,600	34,600	11.0	77	1/2	1324 @ .30	23.7	30 ⁷ / ₃₂ x 35 x 49	308
TPRG42001E	40,500	40,500	11.0	78	3/4	1429 @ .30	29.3	30 ⁷ / ₃₂ x 35 x 49	355
TPRG48001E	46,000	44,500	11.0	79	3/4	1578 @ .30	34.2	34 ⁷ / ₃₂ x 35 x 49	385
TPRG60001E	56,000	54,500	10.8	79	3/4	1623 @ .30	39.9	38 ⁷ / ₃₂ x 35 x 49	401

¹ Airflow at Motor Tap setting for heating and cooling; airflow performance is with dry coil.

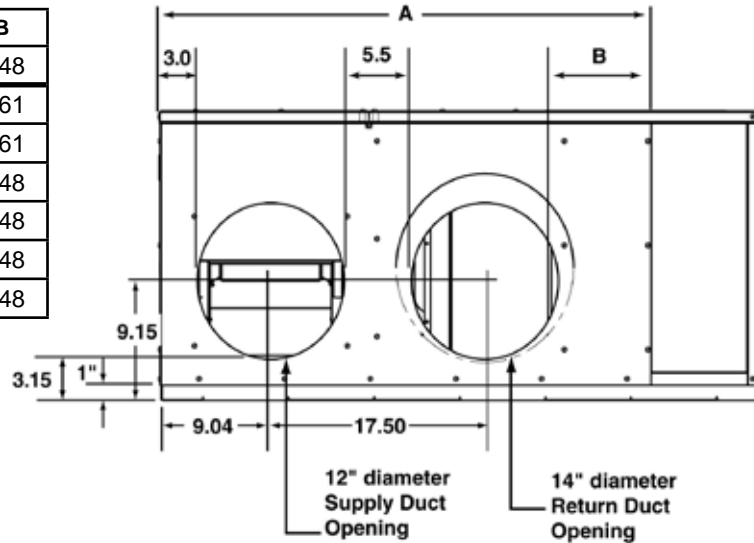
See Technical Specifications for complete air flow data.

MODEL NOMENCLATURE

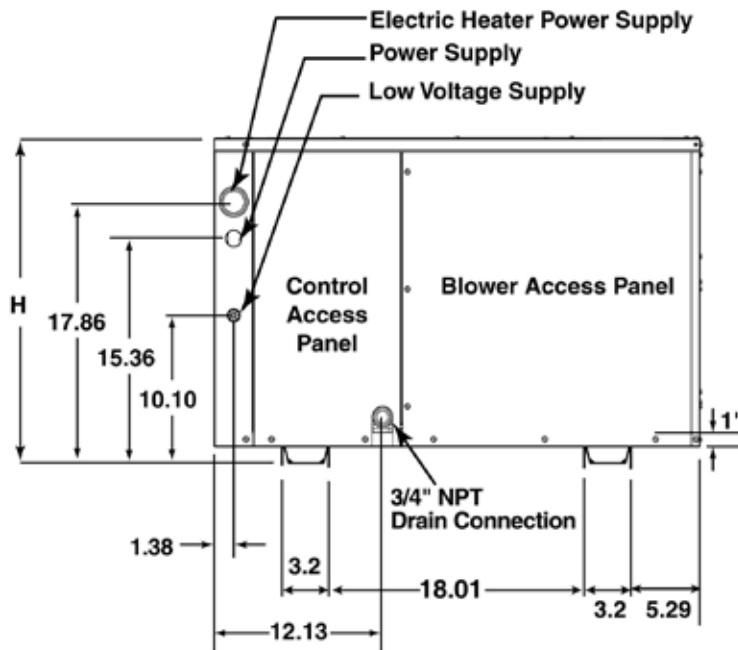
T	A	R	G	24	00	1	E
Package Unit	A = A/C only P = Heat Pump	Residential	'Green' Gas R-410A	Nominal Cooling Capacity BTUH x 1000	Non-Gas Heat (See TGRG model for gas heat)	Power 208/230-1-60	Series/ Revision

RESIDENTIAL PACKAGED UNIT DIMENSIONS

Model	A	B
TARG	35.02	2.48
TPRG	40.15	7.61
	40.15	7.61
	35.02	2.48
	35.02	2.48
	35.02	2.48
	35.02	2.48



Back (Duct) View



Side View



Due to ongoing product improvements, design, specifications, materials and performance data is subject to change without notice.

HEAT CONTROLLER

1900 Wellworth Ave., Jackson MI 49203 • Ph. 517-787-2100 • www.heatcontroller.com

A **WHS** Company



Residential Package

Gas/Electric Heat/Cool

The self-contained TGRG series provides electric air conditioning in warm weather and comfortable gas heat in cold weather. The compact design makes it ideal for homes without a basement or adequate utility space. Since the unit can be slab-mounted or roof-mounted, it also works well for residences with minimal yard space.

Units come pre-charged with environmentally friendly R-410A.



TGRG models are easily installed and require only ductwork and a thermostat, making them suitable for a wide variety of residential and light commercial applications. Units can be converted for horizontal or downflow air delivery.

TGRG units are designed for efficient delivery of conditioned air. The hot surface igniter is reliable, and the scroll compressor provides maximum efficiency combined with quiet operation.

Both indoor and outdoor coils are all-aluminum micro-channel type that maximizes heat transfer. These coils are highly resistant to corrosion, small and lightweight to keep the overall size to a minimum, and easier to clean than other types.

The mesh hail guard protects the coils from damage from both yard hazards and weather extremes. Water management is provided by a one-piece top with drip



TGRG Series
2 to 5 Tons



edges on the top panels, while an embossed bottom pan keeps the blower compartment dry.

A full range of accessories including roof curbs, economizers, and LP conversion kits is available.

FEATURES

Installation & Maintenance

- Externally accessible service ports provide quick access without disrupting service
- All controls and major components are easily accessed to speed service
- Unit is built with standard components to enhance availability of components

Electric Cooling

- Low vibration 20" fan blade is combined with a custom venturi condenser fan for quiet operation
- Condenser and evaporator coils are micro-channel construction of aluminum extruded tubes brazed to enhanced aluminum fins for excellent heat transfer and efficiency
- A high pressure switch adds protection for the compressor

Gas Heat

- Hot surface igniter and flame sensor deliver proven reliability
- Programmed adaptive ignition feature varies the warm-up to match the current conditions
- In-shot gas burners and manifold efficiently regulate the flow of gas for combustion

Rugged Cabinet

- Durable galvanized steel cabinet has a polyurethane finish that meets 950-hour salt spray corrosion resistance
- Full perimeter baserails make the unit easy to handle during installation, even for rooftop installations
- Corrosion resistant drain pan quickly eliminates evaporator condensate

SPECIFICATIONS

13 SEER/11 EER

80% AFUE*

MODEL	COOLING BTUH	HEATING INPUT BTUH	HEATING OUTPUT BTUH	INDOOR BLOWER MOTOR TYPE	INDOOR BLOWER HP	INDOOR BLOWER SIZE (in.)	SOUND dBa	DIMENSIONS H x W x L (in.) with BASE RAILS	UNIT/ SHIPPING WT. (LBS)
TGRG24451E	23,600	45,000	36,000	PSC	1/4	10 x 10	71	35 x 47 ¹ / ₂ x 55 ¹³ / ₁₆	397/413
TGRG24721E	23,600	72,000	57,600	PSC	1/4	10 x 10	71	35 x 47 ¹ / ₂ x 55 ¹³ / ₁₆	405/421
TGRG30451E	29,000	45,000	36,000	PSC	1/4	10 x 10	76	35 x 47 ¹ / ₂ x 55 ¹³ / ₁₆	398/414
TGRG30721E	29,000	72,000	57,600	PSC	1/4	10 x 10	76	35 x 47 ¹ / ₂ x 55 ¹³ / ₁₆	406/422
TGRG36721E	35,800	72,000	57,600	Fixed Torque	1/2	10 x 10	78	35 x 47 ¹ / ₂ x 55 ¹³ / ₁₆	403/419
TGRG36961E	35,800	96,000	76,800	Fixed Torque	1/2	10 x 10	78	35 x 47 ¹ / ₂ x 55 ¹³ / ₁₆	411/427
TGRG42961E	42,000	96,000	76,800	Fixed Torque	1/2	11 x 10	78	39 x 47 ¹ / ₂ x 55 ¹³ / ₁₆	443/461
TGRG48961E	46,000	96,000	76,800	Fixed Torque	3/4	11 x 10	77	39 x 47 ¹ / ₂ x 55 ¹³ / ₁₆	453/470
TGRG601201E	57,000	120,000	96,000	Fixed Torque	1	11 x 10	78	43 x 47 ¹ / ₂ x 55 ¹³ / ₁₆	480/497

*AFUE = Annual Fuel Utilization Efficiency

ELECTRICAL DATA

208/230V-1-60

MODEL	HEATING INPUT BTUH	VOLTAGE RANGE		COMPRESSOR		FAN AMPS	BLOWER MOTOR AMPS	MIN. CIRCUIT AMPACITY	MAX. OVER- CURRENT PROTECTION
		MIN.	MAX.	RLA	LRA				
TGRG24451E	45,000	187	253	12.8	58.3	1.0	1.3	18.3	30
TGRG24721E	72,000	187	253	12.8	58.3	1.0	1.3	18.3	30
TGRG30451E	45,000	187	253	15.7	73.0	1.46	1.3	22.4	35
TGRG30721E	72,000	187	253	15.7	73.0	1.46	1.3	22.4	35
TGRG36721E	72,000	187	253	18.6	79.0	1.46	3.6	28.3	45
TGRG36961E	96,000	187	253	18.6	79.0	1.46	3.6	28.3	45
TGRG42961E	96,000	187	253	22.1	109.0	1.46	3.6	32.7	50
TGRG48961E	96,000	187	253	24.3	117.0	1.46	5.0	36.8	60
TGRG601201E	120,000	187	253	29.3	134.0	1.5	6.5	44.6	70

Limited Warranty—20 years on heat exchanger; 10 years on all other parts (With registration, see printed warranty for details)

MODEL NOMENCLATURE

T	G	R	G	24	45	1	E
Package Unit	Gas/Electric	Residential	'Green' Gas R-410A	Nominal Cooling Capacity BTUH x 1000	Heating BTUH 45=45,000 72=72,000 96=96,000 120=120,000	Power 208/230-1-60	Series/Revision

Design, specifications, materials and performance data subject to change without notice.

HEAT CONTROLLER

1900 Wellworth Ave., Jackson MI 49203 • Ph. 517-787-2100 • www.heatcontroller.com

A  Company

Gas & Oil Furnaces

This section contains:

95% Two Stage Gas Furnace

95% Single Stage Gas Furnace

92% Single Stage Gas Furnace

80% Single Stage Gas Furnace

Manufactured Home Gas Furnace

Patriot 80 Oil Furnace

Commercial Oil Furnace

Maximum Comfort. Maximum Efficiency.

An Unbeatable Combination!



95% Two Stage Gas Furnace
with ECM Variable Speed Blower

Comfort-Aire®
HEAT CONTROLLER

Here's how our two stage furnace gives you **maximum comfort and maximum efficiency**

A conventional single stage furnace operates at high heat until the thermostat is satisfied, then shuts off until there's a demand for heat again. As a result the house is constantly warming up and cooling off. But with a two stage furnace, these temperature swings are virtually eliminated and your home stays at the comfort level you select.

Most of the time, a two stage furnace operates in the low stage, delivering a gentle yet steady flow of heated air. When the weather turns really cold, the furnace automatically shifts into the high stage, providing the extra heat needed to keep the home at the desired comfort level.

Whenever the furnace is in the low stage, energy is saved because the burner flame is smaller and the blower fan runs at a slower speed. Even in the high stage, this model with its AFUE rating of 95% saves on utility bills.

Less on-off cycling reduces wear and tear on components. Also, with the furnace running for longer periods of time, more air is passing through the filter, helping improve indoor air quality at the same time.

The ECM variable speed blower motor adjusts the blower speed to deliver the airflow required by the system. By maintaining constant airflow across

a wide range of external static pressures in the air ducts, it results in more even temperatures than a single speed motor can provide. And because air is constantly being drawn across the filter, indoor air quality and humidity control are enhanced. In addition, the blower is designed to deliver the conditioned air quietly.

Igniter Technology

The control board is programmed to learn individual igniter heat-up and then to adjust the heat-up interval to best suit the furnace's characteristics, ensuring reliable ignition while helping to prolong igniter life.

Outstanding Warranty

The primary and secondary heat exchangers on the two stage 95% furnace are covered by a limited lifetime warranty; other components are covered for 12 years.

(Limitations apply; see printed warranty or web site for details.)

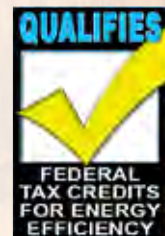
Reliability You Can Trust

Heat Controller, Comfort-Aire's parent company, has been in the furnace business since its founding in 1933—in fact, the company can trace its roots to the Wingert Furnace Co. which began building coal, gas and oil furnaces in 1907. Air conditioning equipment was later added to round out the product line.

Known today for efficient, reliable equipment for both heating and cooling, Comfort-Aire® continues to keep homes and businesses comfortable, season after season.



GUH95T Series



For year-'round comfort, ask your dealer about our line of central air conditioning—the perfect match for energy savings!

Specifications

GUH95T Models	-060B4	-080C5	-100C5	-120D5
Input-BTUH—High Fire ¹	60,000	80,000	100,000	120,000
Input-BTUH—Low Fire	39,000	52,000	65,000	78,000
Heating Cap. BTUH—High Fire	57,000	76,000	95,000	114,000
Heating Cap. BTUH—Low Fire	37,050	49,400	61,750	74,100
AFUE	95.1%	95.1	95.1	95.1
Blower D x W	11 x 8	11 x 10	11 x 10	11 x 10
Motor HP - Type	1/2 - Variable Speed	3/4 - Variable Speed	3/4 - Variable Speed	1.0 - Variable Speed
Motor FLA	6.2	8.7	8.7	11.7
Rated Ext. SP in W.C.	0.5	0.5	0.5	0.5
Temp. Rise Range °F	30 - 60	35 - 65	35 - 65	40-70
Power Supply	115-1-60	115-1-60	115-1-60	115-1-60
Shipping Weight (lbs/kg)	125/56.7	135/61.2	145/65.8	160/72.6

Gas connection for all models is 1/2" N.P.T.

¹Ratings to 2,000 ft. Over 2,000 ft, reduce 4% for each 1,000 ft. above sea level.

Model Nomenclature

G	UH	95	T	060	B	4	X	E
Gas Furnace	UH=Upflow/ Horizontal	AFUE 95%	T=Two Stage/ Variable Speed ECM	Heating Input BTUH 060=60,000 120=120,000	Cabinet Width B=17 1/2" C=21" D=24 1/2"	Max. CFM Cooling* 4=1600 CFM 5=2000 CFM *Airflow @ 0.5 ESP or 400 CFM/ton	X=Low Nox	Series/ Revision

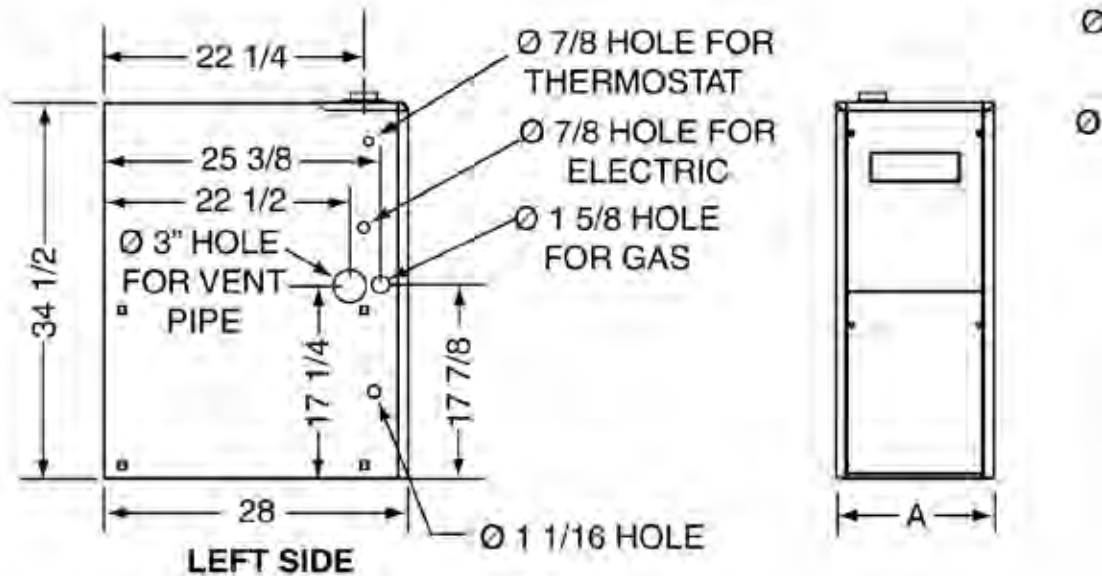
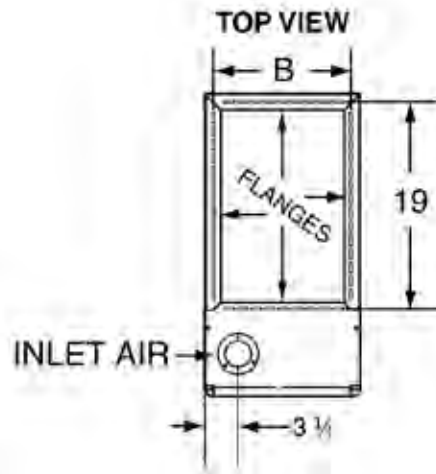
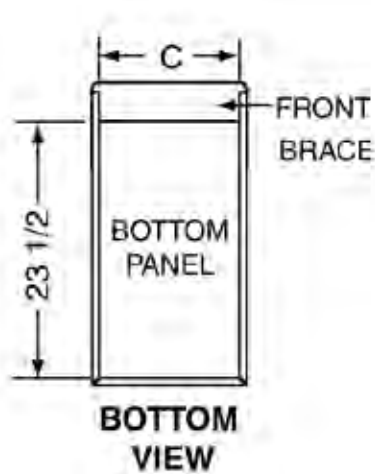
95% Two Stage Accessories

PART NO.	DESCRIPTION
904952	2" Concentric vent kit
904953	3" Concentric vent kit
904617	2" Side wall vent kit
904347	3" Side wall vent kit

PART NO.	DESCRIPTION
905028	U.S. LP conversion kit (0 - 10,000 ft.)
905029	Canada LP conversion kit (0 - 4500 ft.)
541036	Side return filter kit
902377	Neutralizer kit

Category IV Venting System: Units may be vertically or horizontally vented using either a one-pipe or two-pipe system, allowing maximum flexibility in installation.

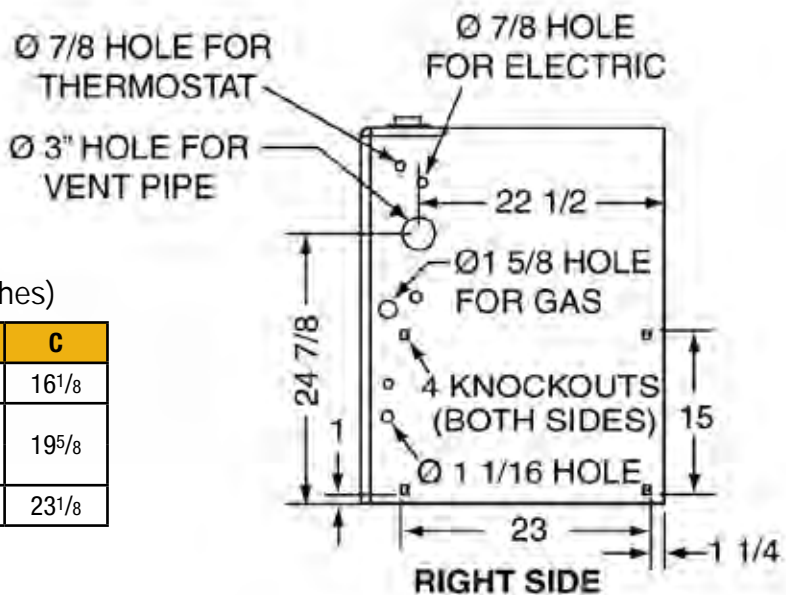
Specifications - Dimensions



IMPORTANT: Before proceeding with installation, refer to installation instructions packaged with each model, as well as complying with all Federal, State, Provincial, and Local codes, regulations, and practices.

95% Two Stage Gas Furnace (inches)

GUH95T Models	A	B	C
-060B4	$17\frac{1}{2}$	$15\frac{7}{8}$	$16\frac{1}{8}$
-080C5	21	$19\frac{3}{8}$	$19\frac{5}{8}$
-100C5			
-120D5	$24\frac{1}{2}$	$22\frac{7}{8}$	$23\frac{1}{8}$



Blower Performance

NOTES:

1. Temperature rises in the tables are approximate; actual temperature rises may vary.
2. Temperature rises in gray shaded areas are for reference only; these conditions are not recommended.
4. Two openings are recommended for airflows above 1600 CFM if filter(s) adjacent to furnace.

WARNING

THESE FURNACES ARE NOT APPROVED OR
RECOMMENDED FOR USE IN MOBILE HOMES

GUH060B4XE					
Switch Settings Heat				Input 60,000 BTUH	
A/B	2	3	4	CFM	Temp Rise °F
1	0	0	0	1000	53
1	0	0	1	1100	48
1	0	1	0	1200	44
1	0	1	1	1300	41
1	1	0	0	1400	38
1	1	0	1	1500	35
1	1	1	0	1600	33
1	1	1	1	1700	31

Switch not used—
can be 0 or 1

GUH080C5XE & GUH100C5XE							
Switch Settings Heat				Input 80,000 BTUH		Input 100,000 BTUH	
A/B	2	3	4	CFM	Temp Rise °F	CFM	Temp Rise °F
#	0	0	0	1000	70	1000	88
#	0	0	1	1115	63	1115	79
#	0	1	0	1230	57	1230	72
#	0	1	1	1345	52	1345	65
#	1	0	0	1460	48	1460	60
#	1	0	1	1575	45	1575	56
#	1	1	0	1690	42	1690	52
#	1	1	1	1805	39	1805	49

Switch not used—
can be 0 or 1

GUH120D5XE					
Switch Settings Heat				Input 120,000 BTUH	
A/B	2	3	4	CFM	Temp Rise °F
#	0	0	0	1500	70
#	0	0	1	1615	65
#	0	1	0	1730	61
#	0	1	1	1845	57
#	1	0	0	1960	54
#	1	0	1	2075	51
#	1	1	0	2190	48
#	1	1	1	2305	46

Comfort-Cire
by HEAT CONTROLLER, INC.

Cooling Airflow

GUH060B4XE								
Switch Settings					CFM		Nominal A/C and Heat Pump Capacity	
Heat	Cool							
A/B	5	6	7	8	Low	High		
1	0	0	0	0	485	700	2.0 Ton	
1	0	0	0	1	525	760		
1	0	0	1	0	565	820		
1	0	0	1	1	605	880		
1	0	1	0	0	650	940		
1	0	1	0	1	690	1000		
1	0	1	1	0	730	1060		
1	0	1	1	1	775	1120		
1	1	0	0	0	815	1180		
1	1	0	0	1	855	1240		
1	1	0	1	0	895	1300	2.5 Ton	
1	1	0	1	1	940	1360		
1	1	1	0	0	980	1420		
1	1	1	0	1	1020	1480		
1	1	1	1	0	1065	1540		
1	1	1	1	1	1105	1600	3.0 Ton	

GUH080C5XE & GUH100C5XE									
Switch Settings					CFM		Nominal A/C and Heat Pump Capacity		
Heat	Cool								
A/B	5	6	7	8	Low	High			
#	0	0	0	0	705	1025	4.0 Ton	3.0 Ton	2.0 Ton
#	0	0	0	1	750	1090			
#	0	0	1	0	795	1155			
#	0	0	1	1	840	1220			
#	0	1	0	0	885	1285			
#	0	1	0	1	930	1350			
#	0	1	1	0	975	1415			
#	0	1	1	1	1020	1480			
#	1	0	0	0	1065	1545			
#	1	0	0	1	1110	1610			
#	1	0	1	0	1155	1675	5.0 Ton		
#	1	0	1	1	1200	1740			
#	1	1	0	0	1245	1805			
#	1	1	0	1	1290	1870			
#	1	1	1	0	1335	1935			
#	1	1	1	1	1380	2000			

Switch not used—
can be 0 or 1

GUH120D5XE							
Switch Settings				CFM		Nominal A/C and Heat Pump Capacity	
Heat	Cool						
A/B	5	6	7	8	Low	High	
#	0	0	0	0	965	1400	4.0 Ton
#	0	0	0	1	995	1440	
#	0	0	1	0	1020	1480	
#	0	0	1	1	1050	1520	
#	0	1	0	0	1075	1560	
#	0	1	0	1	1105	1600	
#	0	1	1	0	1130	1640	
#	0	1	1	1	1160	1680	
#	1	0	0	0	1185	1720	5.0 Ton
#	1	0	0	1	1215	1760	
#	1	0	1	0	1240	1800	
#	1	0	1	1	1270	1840	
#	1	1	0	0	1295	1880	
#	1	1	0	1	1325	1920	
#	1	1	1	0	1350	1960	
#	1	1	1	1	1380	2000	

NOTES: Furnaces are not listed for use with fuels other than natural or L.P. (propane) gas.

All models can be converted by a qualified distributor or local service dealer to use L.P. (propane) gas. Factory approved kits must be used to convert from natural to L.P. (propane) gas and may be ordered as options.

For L.P. (propane) operation, refer to instructions packed with conversion kit.

All models are approved for vertical non direct (1 pipe) and direct (2 pipe) venting applications. See installation instructions for further details.

Features and Benefits



34 1/2"

Save space as well as energy!

At just 34 1/2" high, our two stage furnace is a real space miser. While it's great for new construction, this energy efficient series is also ideal for replacements because it can fit in the space of virtually any older furnace. Its light weight and small dimensions make even bigger capacity models easy to unload and move up or down stairs and through doorways during installation. And the low profile design leaves plenty of room for add-ons, including the new higher SEER coils with taller cabinets.

Easily converted to L.P. (propane)

Kits are available to allow a trained installer to convert the furnace to L.P. gas source quickly and easily in the field. All that's needed is a simple burner orifice and regular spring change.

Features and Benefits

- **Quiet Operation**—Blower compartment has sealed door and insulation to lock in heat and sound; sealed vestibule reduces burner and inducer sound levels; plus two stage inducer and ECM blower motor make this one of the quietest furnaces on the market
- **Extraordinary Efficiency**—Two heat exchangers deliver 95%+ of the heated air to the home, while the two stage inducer optimizes first stage efficiency
- **ECM Blower Motor**—Runs at a variety of speeds to match the load demand, for efficiency and quiet operation. Constant airflow through a wide variety of ductwork conditions reduces temperature stratification while improving indoor air quality
- **Hot Surface Igniter**—Silicon nitride type igniter is automatic, eliminating the need for a standing pilot light
- **Designed for Long Life**—Primary heat exchanger is made of heavy gauge aluminized steel and secondary heat exchanger is made of stainless steel; cabinet is steel with corrosion resistant finish
- **Thermostat**—Can be used with either a single or two-stage thermostat; two stage is recommended for optimal efficiency (not included with furnace)



On-Board Diagnostics—Unlike some units that require counting flashes to determine the problem, the GUH95T has a dedicated light for flame signal strength, and two lights that illuminate in combination for easily recognized fault codes

Our High Efficiency Furnace May Actually Pay For Itself in Energy Savings!

A home is most people's biggest investment and making sure it's comfortable in all seasons is a primary concern. A Comfort-Aire gas furnace helps provide that comfortable environment. There are several types and a wide range of capacities to meet the home's specific requirements and the homeowner's individual preferences. Not only are the furnaces quality designed and constructed, they're energy efficient, helping to save on utility bills.

All Comfort-Aire products are backed by outstanding warranties and after-sales support. Experienced technicians can help solve operation and service issues over the phone. And our web site is another resource with owner's manuals and technical documentation for installers.

The compact size of our furnaces makes them ideal for replacements; builders and architects also appreciate the installation flexibility they offer for new construction. A Comfort-Aire dealer can evaluate the home and determine which furnace (and related equipment such as central air conditioning) is best suited to specific climates and needs.

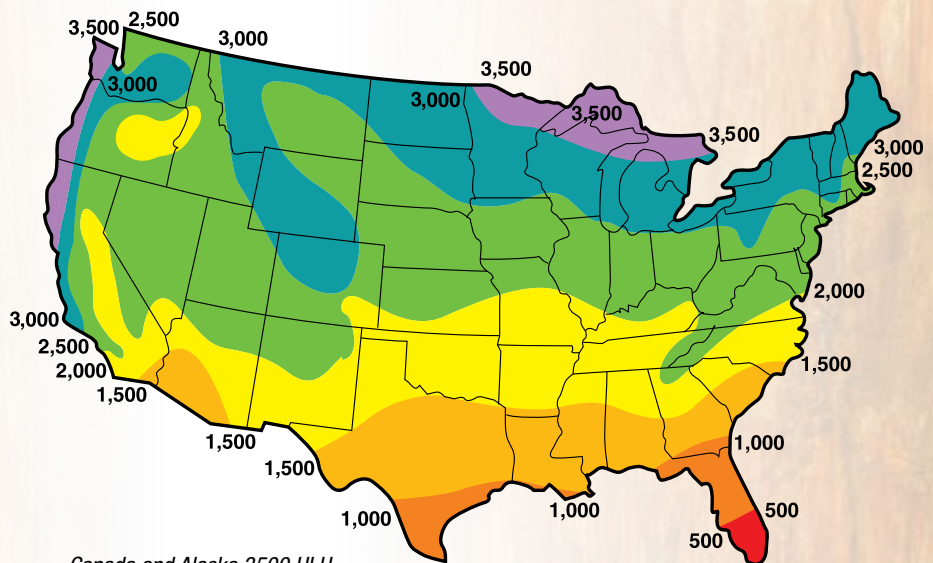
With our broad product range, Comfort-Aire has the model and accessories to suit just about any home's location and heating requirements.

Annual Fuel Utilization Efficiency (A.F.U.E. ratings) is your guide for comparing gas furnace efficiencies. The higher the number, the more efficient the furnace.

Beginning in 1992, the Federal Government required all gas furnaces to meet or exceed an A.F.U.E. (Annual Fuel Utilization Efficiency) rating of 78%. Although this was an improvement over previous furnace ratings of 65% or less, today's furnaces offer even greater efficiencies. Replacing your older gas furnace with a high efficiency 95% two stage model can result in significant energy savings.

And the greater the number of heating load hours for your area (see chart) the greater the energy savings.

Regional Winter Heating Load Hours



Specifications and performance data subject to change without notice.

Comfort-Aire®
HEAT CONTROLLER

1900 Wellworth Ave., Jackson MI 49203 • Ph. 517-787-2100 • www.comfort-aire.com



SP 4M 4-13
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A *DAVE* Company

HC-95T-C

Comfort and Energy Savings.

An Unbeatable Combination!



95% Gas Furnace

Comfort-Cure®
HEAT CONTROLLER

Comfort,
efficiency, and
dependability
make an
unbeatable
combination
in the 95%
gas furnace!



Energy Savings

Two heat exchangers make this one of the most efficient furnaces on the market today. The primary exchanger pulls about three-quarters of the available heat from the burner, then the secondary heat exchanger captures most of what's remaining. Using 95% or more of the heat output from each cubic foot of gas, this furnace produces not just greater comfort, but also significant fuel savings.

A Perfect Fit

At only 34 ½" in height, the furnace is ideal for renovations and replacements. It will fit in virtually any space where a furnace was previously installed, including basements and utility closets. For contractors and architects, the low profile design is a distinct advantage, offering many placement options.

Simple Installation

Our 95% furnace comes assembled and pre-wired, with a color-coded wiring harness and quick connect fittings. An integrated control board simplifies hook-ups, and all components are easy to reach. Because of its small size, the furnace is a snap to load and unload on a truck or van, and easily fits through doors, halls and stairways.

Easy-To-Change Filter

A clogged filter greatly reduces a furnace's efficiency—that's why the furnace's filter is readily accessible. The front panel door is easy to remove when it's time to replace the filter.

Quiet Operation

Inherent in the proven design of the furnace are quality components that are not only dependable but that keep operational sound to a minimum. The blower compartment has a sealed insulated door, while a sealed vestibule reduces burner and inducer sound levels for clean, efficient, quiet combustion.

Outstanding Warranty

The primary and secondary heat exchangers are covered by a limited lifetime warranty; other components are covered for twelve years.

(Some limitations apply; see printed warranty for details.)

Reliability You Can Trust

Heat Controller, Comfort-Aire's parent company, has been in the furnace business since its founding in 1933—in fact, the company can trace its roots to the Wingert Furnace Co. which began building coal, gas and oil furnaces in 1907. Air conditioning equipment was later added to round out the product line.

Known today for efficient, reliable equipment for both heating and cooling, Comfort-Aire® continues to keep homes and businesses comfortable, season after season.



For year-'round comfort, ask your dealer about our line of central air conditioners—the perfect match for energy savings!

Upflow/Horizontal Specifications

GUH95A Models	-038B4	-054B4	-072C5	-090C5	-108D5	-120D5
Input-BTUH ¹	38,000	54,000	72,000	90,000	108,000	120,000
Heating Cap. BTUH	36,100	51,300	68,400	85,500	102,600	114,000
AFUE	95.0	95.0	95.0	95.0	95.0	95.0
Blower D x W	10 x 8	11 x 8	10 x 10	11 x 10	11 x 10	11 x 10
Motor HP/Speed/Type	1/2-4-PSC	1/2-4-PSC	1/2-4-PSC	1.0-4-PSC	1.0-4-PSC	1.0-4-PSC
Heating Speed*	Med-Low	Med-Low	Med-High	Med-High	Med-High	Med-High
Cooling Speed*	High	High	High	High	High	High
Motor FLA	8.60	8.60	8.0	13.75	13.75	13.75
Rated Ext. SP in W.C.	0.5	0.5	0.5	0.5	0.5	0.5
Temp. Rise Range °F	30-60	30-60	35-65	35-65	40-70	40-70
Shipping Weight (lbs/kg)	100/45.4	120/54.4	130/59	135/61.2	155/70.3	155/70.3

* Factory setting

Gas connection for all models is 1/2" N.P.T.

¹Ratings to 2,000 ft. Over 2,000 ft, reduce 4% for each 1,000 ft. above sea level.

GUH 95A- Model	Htg Input BTUH	Motor Speed	External Static Pressure (Inches Water Column)															
			0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8	
			CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise
-038B4	38K	High*	1664	18	1631	21	1596	21	1546	22	1489	23	1433	24	1366	25	1285	26
		Med Hi	1272	26	1255	27	1249	27	1217	28	1189	29	1145	30	1096	31	1036	33
		M-Low [†]	1130	29	1114	31	1100	31	1079	31	1048	33	1025	33	987	35	944	36
		Low	869	39	839	42	809	42	790	44	764	45	739	47	711	48	664	52
-054B4	54K	High*	1664	30	1631	31	1596	31	1546	32	1489	34	1433	35	1366	37	1285	39
		Med Hi	1272	39	1255	40	1249	40	1217	41	1189	42	1145	44	1096	46	1036	48
		M-Low [†]	1130	44	1114	45	1100	45	1079	46	1048	48	1025	49	987	51	944	53
		Low	869	58	839	60	809	62	790	63	764	65	739	68	711	70	664	75
-072C5	72K	High*	1916	35	1848	36	1773	38	1692	39	1613	41	1515	44	1426	47	1316	51
		Med Hi [†]	1815	37	1771	38	1711	39	1641	41	1533	43	1468	45	1373	49	1270	52
		M-Low	1259	53	1241	54	1224	54	1192	56	1063	57	1115	60	1056	63	982	68
		Low	1139	59	1120	60	1096	61	1075	62	1047	64	1014	66	959	70	884	75
-090C5	90K	High*	2273	37	2222	38	2164	39	2098	40	2052	41	1947	43	1864	45	1780	47
		Med Hi [†]	2084	40	2039	41	2007	42	1955	43	1895	44	1832	45	1750	48	1665	50
		M-Low	1784	47	1777	47	1749	48	1725	48	1679	50	1629	51	1576	53	1501	56
		Low	1482	56	1470	57	1444	58	1432	58	1405	59	1375	61	1339	62	1286	65
-108D5	108K	High*	2306	43	2247	45	2192	46	2121	47	2044	49	1979	51	1892	53	1787	56
		Med Hi [†]	2135	47	2103	50	2050	51	1995	53	1935	54	1858	57	1778	59	1690	62
		M-Low	1845	54	1834	57	1805	58	1776	59	1719	61	1663	63	1605	66	1533	69
		Low	1543	65	1521	69	1502	70	1477	71	1452	73	1412	75	1368	77	1314	80
-120D5	120K	High*	2306	48	2247	49	2192	51	2121	52	2044	54	1979	56	1892	59	1787	62
		Med Hi [†]	2135	52	2103	53	2050	54	1995	56	1935	57	1858	60	1778	62	1690	66
		M-Low	1845	60	1834	61	1805	62	1776	63	1719	65	1663	67	1605	69	1533	72
		Low	1543	72	1521	73	1502	74	1477	75	1452	77	1412	79	1368	81	1314	85

Notes for Upflow Blower Specifications

* Factory set cooling speed

[†] Factory set heating speed

NOTES:

1. Temperature rises in the table are approximate; actual temperature rises may vary.
2. Temperature rises in shaded areas are for reference only; these conditions are not recommended.
3. Two openings are recommended for airflows above 1600 CFM if filter(s) adjacent to furnace. Specifications shown for side return.

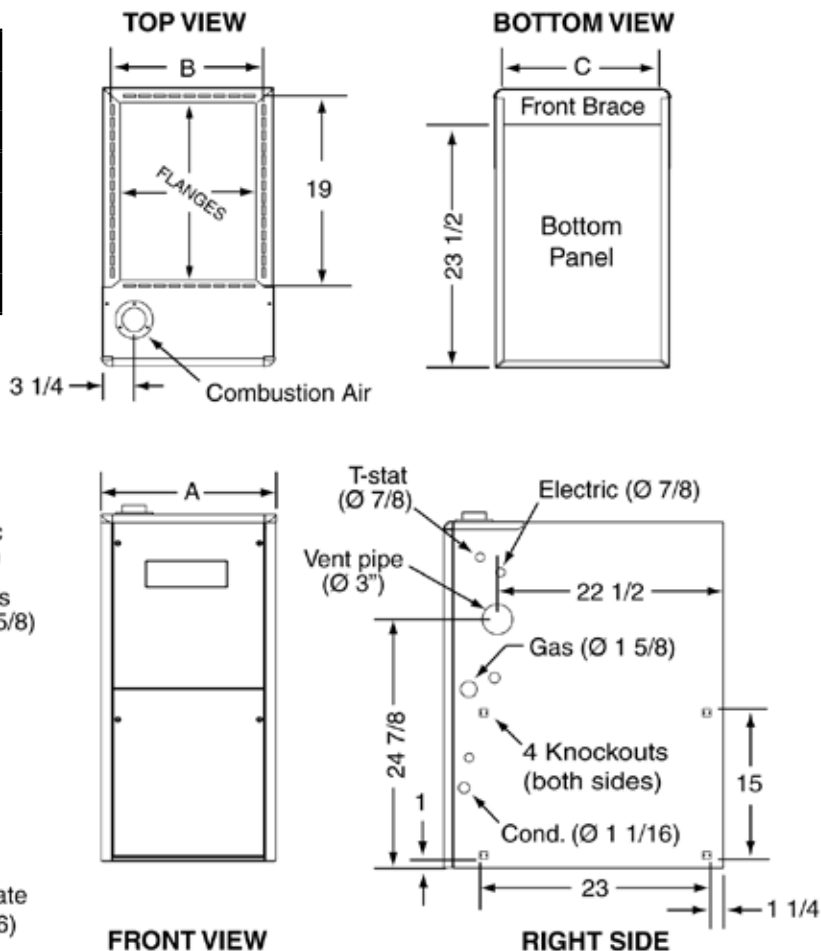
WARNING

THIS FURNACE IS NOT APPROVED OR
RECOMMENDED FOR USE IN MOBILE HOMES

Upflow/Horizontal Dimensions

95% Gas Furnace Upflow/Horizontal

GUH95A Models	A	B	C
-038B4	17 1/2	15 7/8	16 1/8
-054B4			
-072C5	21	19 3/8	19 5/8
-090C5			
-108D5	24 1/2	22 7/8	23 1/8
-120D5			



Model Nomenclature

G	UH	95	A	038	B	3	X	E
Gas Furnace	UH=Upflow/Horizontal DD=Dedicated Downflow UU = Upflow Only DH = Downflow/Horizontal	AFUE 95%	A=Single Stage/Fixed Speed PSC	Heating Input BTUH 038=38,000 120=120,000	Cabinet Width A=14 1/2" B=17 1/2" C=21" D=24 1/2"	Max. CFM Cooling* 2 = 800 CFM 3=1200 CFM 4=1600 CFM 5=2000 CFM *Airflow @ 0.5 ESP or 400 CFM/ton	X=Low Nox	Series/Revision

Category IV Venting: All models may be vertically or horizontally vented using either a one-pipe or two-pipe system. See the IOM for details.

Downflow Specifications

GDD95A Models	-054B4	-072C5	-090C5	-118D5
Input-BTUH ¹	54,000	72,000	90,000	118,000
Heating Cap. BTUH	51,300	68,400	85,500	112,100
AFUE	95.0	95.0	95.0	95.0
Blower D x W	11 x 8	11 x 10	11 x 10	11 x 10
Motor HP-Speed-Type	1/2-4-PSC	1.0-4-PSC	1.0-4-PSC	1.0-4-PSC
Heating Speed*	Med-Low	Med-High	Med-High	Med-High
Cooling Speed*	High	High	High	High
Motor FLA	8.60	13.70	13.70	13.75
Rated Ext. SP in W.C.	0.5	0.5	0.5	0.5
Temp. Rise Range °F	30-60	35-65	35-65	40-70
Shipping Weight (lbs/kg)	120/54.4	125/56.7	135/61.2	155/70.3

* Factory setting

Gas connection for all models is 1/2" N.P.T.

¹ Ratings to 2,000 ft. Over 2,000 ft, reduce 4% for each 1,000 ft. above sea level.

WARNING

THIS FURNACE IS NOT APPROVED OR
RECOMMENDED FOR USE IN MOBILE HOMES



Blower Performance - Downflow

GDD 95A- Model	Htg Input BTUH	Motor Speed	External Static Pressure (Inches Water Column)															
			0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8	
			CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise
-054B4	54K	High*	1590	31	1563	32	1538	33	1513	33	1477	34	1430	35	1370	36	1312	38
		Med Hi	1228	41	1207	41	1193	42	1169	43	1157	43	1127	44	1084	46	1037	48
		M-Low†	1096	46	1079	46	1061	47	1038	48	1010	50	986	51	957	52	919	54
		Low	855	58	825	61	800	63	777	64	753	66	723	69	696	72	665	75
-072C5	72K	High*	2235	30	2176	31	2121	31	2067	32	2010	33	1936	34	1864	36	1783	37
		Med Hi†	2095	32	2052	32	2005	33	1957	34	1906	35	1852	36	1781	37	1709	39
		M-Low	1871	36	1838	36	1797	37	1761	38	1716	39	1667	40	1602	42	1536	43
		Low	1568	43	1552	43	1527	44	1485	45	1457	46	1418	47	1370	49	1343	50
-090C5	90K	High*	2208	38	2150	39	2089	40	2026	41	1959	43	1893	44	1825	46	1738	48
		Med Hi†	2065	40	2015	41	1970	42	1910	44	1866	45	1805	46	1737	48	1668	50
		M-Low	1802	46	1773	47	1750	48	1703	49	1670	50	1623	51	1556	54	1490	56
		Low	1490	56	1482	56	1464	57	1436	58	1407	59	1380	60	1329	63	1271	66
-118D5	118K	High*	2358	46	2299	48	2253	48	2191	50	2130	51	2060	53	1990	55	1903	57
		Med Hi†	2176	50	2135	51	2102	52	2046	53	1985	55	1932	57	1862	59	1777	61
		M-Low	1873	58	1852	59	1816	60	1790	61	1750	62	1699	64	1643	66	1571	70
		Low	1544	71	1528	72	1514	72	1499	73	1462	75	1441	76	1429	76	1386	79

* Factory set cooling speed

† Factory set heating speed

NOTE: 1. Temperature rises shown are approximate; actual temperature rises may vary.
2. Temperature rises in shaded areas are for reference only; these conditions are not recommended.
3. Two openings are recommended for airflows above 1600 CFM if filter(s) adjacent to furnace.
Downflow built with top return configuration.

NOTE: Furnace is not listed for use with fuels other than natural or L.P. (propane) gas.

All models can be converted by a qualified distributor or local service dealer to use L.P. (propane) gas. Factory approved kits must be used to convert from natural to L.P. (propane) gas and may be ordered as options.

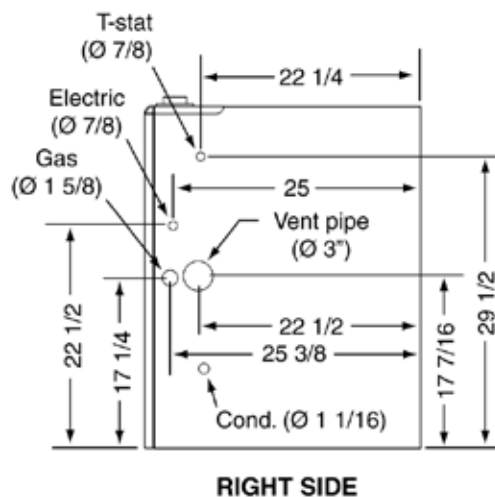
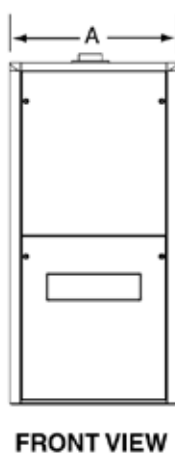
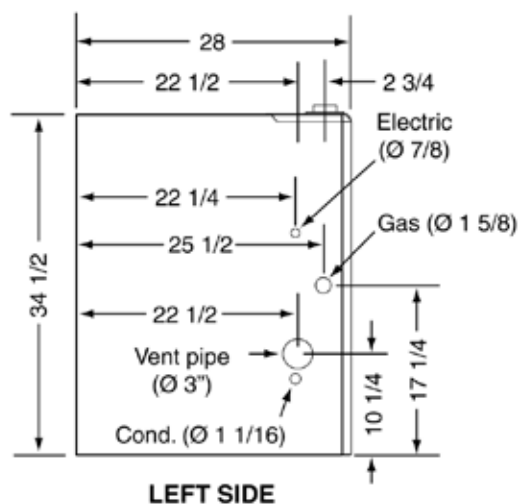
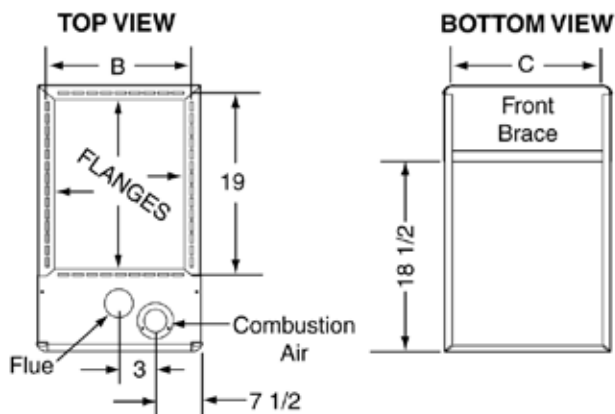
For L.P. (propane) operation, refer to Conversion Kit instructions.

Comfort-Aire

Downflow Dimensions

95% Gas Furnace Downflow

GDD95A Models	A	B	C
-054B4	17 ¹ / ₂	15 ⁷ / ₈	16 ¹ / ₈
-072C5			
-090C5	21	19 ³ / ₈	19 ⁵ / ₈
-118D5	24 ¹ / ₂	22 ⁷ / ₈	23 ¹ / ₈



95% Single Stage Accessories

PART NO.	DESCRIPTION
904952	2" Concentric vent kit
904953	3" Concentric vent kit
904911	Downflow sub base kit
904617	2" Side wall vent kit
904347	3" Side wall vent kit
905028	U.S. LP conversion kit (0 - 10,000 ft.)
905029	Canada LP conversion kit (0 - 4500 ft.)
541036	Side return filter kit

PART NO.	DESCRIPTION
902377	Neutralizer kit
904873	Hi efficiency blower kit 17 ¹ / ₂ " - fixed speed
904874	Hi efficiency blower kit 21" - fixed speed
905875	Hi efficiency blower kit 24 ¹ / ₂ " - fixed speed
904877	Hi efficiency blower kit 17 ¹ / ₂ " - variable speed
904878	Hi efficiency blower kit 21" - variable speed
904879	Hi efficiency blower kit 24 ¹ / ₂ " - variable speed

IMPORTANT: Before proceeding with installation, refer to installation instructions packaged with each model, as well as complying with all Federal, State, Provincial, and Local codes, regulations, and practices.

Space Saving, Energy Saving Gas Heat Source

Primary Heat Exchanger

The tubular design extracts heat from combustion gases; made of heavy gauge aluminized steel, it's resistant to corrosion and thermal fatigue, and is covered by a limited lifetime warranty

Draft Inducer

Specially designed for the tubular heat exchanger, it pulls hot combustion gases through the exchanger; heated air is locked in while cold air is locked out

Efficient Blower

Multi-speed, high static blower delivers warm air throughout the house quietly and efficiently, for a wide range of cooling capacities

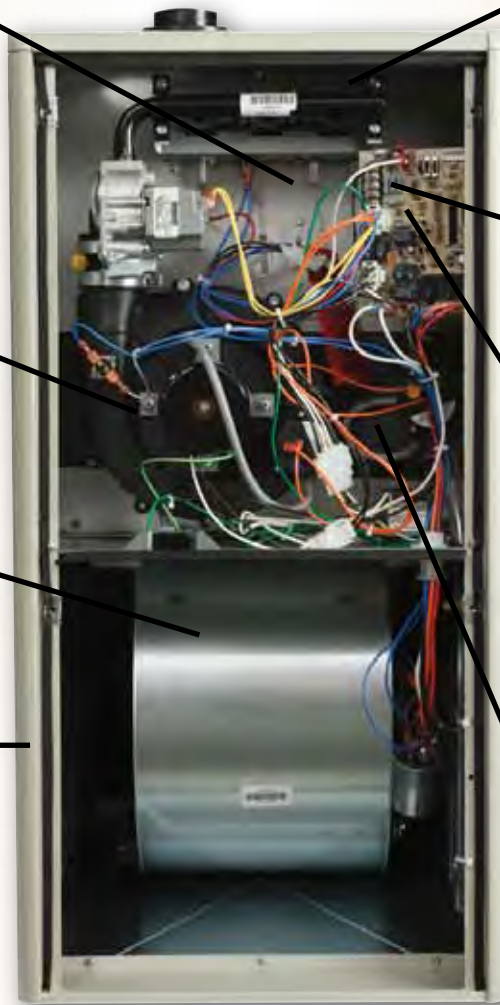
Low Profile Cabinet

Steel cabinet has corrosion-resistant finish; lightweight 34½" high design saves on space; upflow model is shown, two piece door has "captured" screws to prevent their loss

30 Second Blower Delay

The delay assures a warm duct temperature at furnace start-up; blower off settings can be adjusted to 60, 90 120 and 180 seconds

Can be converted to LP gas by qualified contractor using a conversion kit shown in "Accessories" on page 6.



In-Shot Burner

Engineered to provide the most efficient air/gas mixture for combustion, the shutter-free design requires no adjustments to regulate the mix

Hot Surface Ignition

Silicon nitride type igniter is quiet and automatic, eliminating the need for a standing pilot light, while offering improved efficiency

Integrated Furnace Control (IFC)

Controls are integrated into one board set up for fast, easy installation, it includes connections for an electronic air cleaner and dehumidifier, and features on-board diagnostics with easy to recognize faults codes so there's no need to count flashes

Secondary Heat Exchanger

Made of stainless steel for durability, the secondary heat exchanger extracts additional heat (which would be lost by less efficient furnaces); it is covered by a limited lifetime warranty



NOTE: Upflow model shown. Downflow models feature the same components in a different configuration.

Horizontal installation is for right side only with air supply on the left.

Upflow Models	Input BTUH	Heating Cap. BTUH	AFUE
GUH95A038B4	38,000	36,100	95.0%
GUH95A054B4	54,000	51,300	95.0%
GUH95A072C5	72,000	68,400	95.0%
GUH95A090C5	90,000	85,500	95.0%
GUH95A108D5	108,000	102,600	95.0%
GUH95A120D5	120,000	114,000	95.0%

Downflow Models	Input BTUH	Heating Cap. BTUH	AFUE
GDD95A054B4	54,000	51,300	95.0%
GDD95A072C5	72,000	68,400	95.0%
GDD95A090C5	90,000	85,500	95.0%
GDD95A118D5	118,000	112,100	95.0%

A.F.U.E. Ratings of 95% mean energy savings for you!

Our High Efficiency Furnace May Actually Pay For Itself in Energy Savings!

A home is most people's biggest investment and making sure it's comfortable in all seasons is a primary concern. A Comfort-Aire gas furnace helps provide that comfortable environment. There are several types and a wide range of capacities to meet the home's specific requirements and the homeowner's individual preferences. Not only are the furnaces quality designed and constructed, they're energy efficient, helping to save on utility bills.

All Comfort-Aire products are backed by outstanding warranties and after-sales support. Experienced technicians can help solve operation and service issues over the phone. And our web site is another resource with owner's manuals and technical documentation for installers.

The compact size of our furnaces makes them ideal for replacements; builders and architects also appreciate the installation flexibility they offer for new construction. A Comfort-Aire dealer can evaluate the home and determine which furnace (and related equipment such as central air conditioning) is best suited to specific climates and needs.

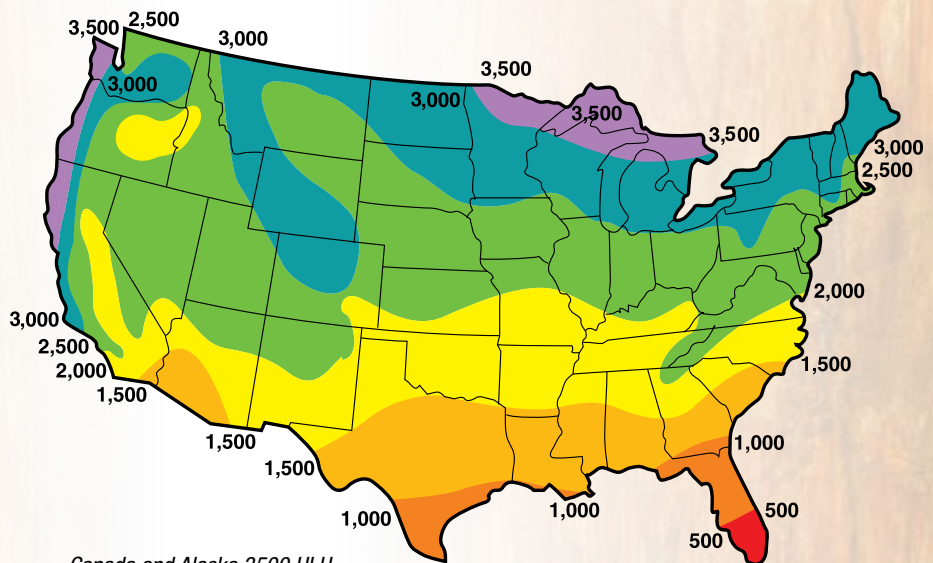
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And the greater the number of heating load hours for your area (see chart) the greater the energy savings.

Regional Winter Heating Load Hours



Specifications and performance data subject to change without notice.

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HEAT CONTROLLER

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HC-95S-B

Energy Saving. Space Saving.

An Unbeatable Combination!



92% Gas Furnace

Comfort-Cure®
HEAT CONTROLLER

Comfort,
**efficiency, and
dependability**
make an
unbeatable
combination
in the 92%
Comfort-Aire[®]
gas furnace!



Energy Savings

Two heat exchangers make this one of the most efficient furnaces on the market today. The primary exchanger pulls about three-quarters of the available heat from the burner, then the secondary heat exchanger captures most of what's remaining. Using 92% or more of the heat output from each cubic foot of gas, this furnace delivers comfort and fuel savings.

A Perfect Fit

At only 34 1/2" in height, the compact design is ideal for renovations and replacements. It will fit in virtually any space where a furnace was previously installed, including basements, utility rooms and closets.

For contractors and architects, the low profile design is a distinct advantage in the design phase. Available in upflow/horizontal and downflow models, the line offers many placement options.

Simple Installation

Our 92% furnace comes assembled and ready for installation. An integrated control board and color-coded wire harness simplify hook-ups. Because of its small size, the furnace is a snap to load and unload on a truck or van, and easily fits through doors, halls and stairways.

Easy-To-Change Filter

A clogged filter greatly reduces a furnace's efficiency—that's why the furnace's filter is readily accessible. Just remove the panel door to replace the filter—and the door screws are "captured" to keep them from getting lost.

Quiet Operation

The sealed vestibule minimizes burner and inducer sound levels, while the blower compartment has a sealed door to reduce air leakage and insulation to contain operational sound. Quality components are all designed to provide clean, efficient, quiet combustion.

Outstanding Warranty

The primary and secondary heat exchangers are covered by a lifetime warranty; other components are covered for twelve years.

(Limitations apply; see printed warranty for details.)

Reliability You Can Trust

Heat Controller, Comfort-Aire's parent company, has been in the furnace business since its founding in 1933—in fact, the company can trace its roots to the Wingert Furnace Co. which began building coal, gas and oil furnaces in 1907. Air conditioning equipment was later added to round out the product line.

Known today for efficient, reliable equipment for both heating and cooling, Comfort-Aire continues to keep homes, and businesses comfortable, season after season.



For year-'round comfort, ask your dealer about the *Comfort-Aire*[®] line of central air conditioning—the perfect match for energy savings!

Upflow/Horizontal Specifications

GUH92A Models	038A3	054B4	072B4	072C5	090C5	108D5	120D5
Input-BTUH ¹	38,000	54,000	72,000	72,000	90,000	108,000	120,000
Heating Cap. BTUH	35,000	49,700	66,000	66,000	82,800	99,000	110,400
AFUE	92.1	92.1	92.1	92.1	92.1	92.1	92.1
Blower D x W	10 x 6	11 x 8	11 x 8	10 x 10	11 x 10	11 x 10	11 x 10
Motor HP/Speed/Type	1/3-4-PSC	1/2-4-PSC	1/2-4-PSC	1/2-4-PSC	1.0-4-PSC	1.0-4-PSC	1.0-4-PSC
Heating Speed*	Med-Low	Med-Low	Med-High	Med-High	Med-High	Med-High	Med-High
Cooling Speed*	High	High	High	High	High	High	High
Motor FLA	4.80	8.20	8.20	7.50	13.75	13.75	13.75
Rated Ext. SP in W.C.	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Temp. Rise Range °F	30-60	30-60	35-65	35-65	35-65	40-70	40-70
Shipping Weight (lbs)	100	120	125	130	135	155	155

* Factory setting

¹Ratings to 2,000 ft. Over 2,000 ft, reduce 4% for each 1,000 ft. above sea level.

Gas connection for all models is 1/2" N.P.T.

GUH92-Model	Input BTUH	Motor Speed	External Static Pressure (Inches Water Column)															
			0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8	
			CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise
-038A3	38K	High*	1330	24	1285	25	1230	26	1175	28	1125	29	1055	31	985	33	925	35
		Med Hi	1195	27	1150	28	1100	29	1060	31	1000	32	940	34	875	37	790	41
		M-Low†	840	39	825	39	800	40	770	42	730	44	685	47	640	51	560	58
		Low	680	48	675	48	655	49	620	52	600	54	560	58	515	63	450	72
-054B4	54K	High*	1630	28	1595	29	1560	29	1525	30	1480	31	1430	32	1365	34	1320	35
		Med Hi	1315	35	1280	36	1260	37	1230	37	1200	38	1160	40	1120	41	1060	43
		M-Low†	980	47	955	48	925	50	890	52	855	54	825	56	775	59	715	64
		Low	755	61	725	63	690	67	650	71	615	75	580	79	545	84	510	90
-072B4	72K	High*	1670	37	1630	38	1600	38	1550	40	1495	41	1450	42	1390	44	1300	47
		Med Hi†	1325	46	1300	47	1280	48	1245	49	1220	50	1165	53	1140	54	1080	57
		M-Low	1180	52	1165	53	1140	54	1100	56	1075	57	1040	59	985	62	910	67
		Low	940	65	910	67	870	70	835	66	815	75	790	78	730	84	640	96
-072C5	72K	High*	1970	31	1865	33	1780	34	1695	36	1615	38	1505	41	1385	44	1275	48
		Med Hi†	1845	33	1780	34	1715	36	1615	38	1530	40	1440	43	1340	46	1230	50
		M-Low	1305	47	1250	49	1200	51	1150	53	1090	56	1040	59	965	64	865	71
		Low	1185	52	1145	54	1110	55	1065	58	1020	60	965	64	905	68	840	73
-090C5	90K	High*	2240	34	2175	35	2100	37	2040	38	1985	39	1910	40	1825	42	1725	44
		Med Hi†	2095	37	2040	38	2000	38	1935	40	1875	41	1825	42	1765	43	1680	46
		M-Low	1775	43	1740	44	1705	45	1655	46	1615	47	1555	49	1490	51	1335	57
		Low	1465	52	1445	53	1420	54	1385	55	1360	56	1325	58	1285	60	1260	61
-108D5	108K	High*	2115	43	2075	44	2020	46	1955	47	1890	49	1822	50	1720	53	1660	55
		Med Hi†	1980	46	1935	48	1880	49	1830	50	1780	52	1720	53	1650	56	1555	59
		M-Low	1650	56	1645	56	1610	57	1575	58	1515	61	1485	62	1400	66	1330	69
		Low	1370	67	1345	68	1300	71	1290	71	1260	73	1240	74	1190	77	1140	81
-120D5	120K	High*	2115	48	2075	49	2020	51	1955	52	1890	54	1822	56	1720	59	1660	62
		Med Hi†	1980	52	1935	53	1880	54	1830	56	1780	57	1720	59	1650	62	1555	66
		M-Low	1650	62	1645	62	1610	63	1575	65	1515	67	1485	69	1400	73	1330	77
		Low	1370	75	1345	76	1300	79	1290	79	1260	81	1240	82	1190	86	1140	90

Notes for Upflow Blower Specifications

* Factory set cooling speed

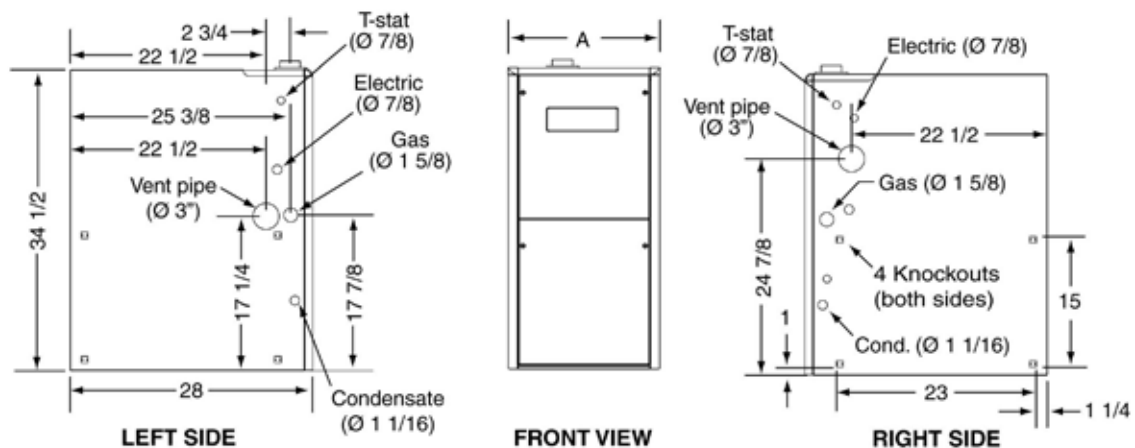
† Factory set heating speed

NOTES: 1. Temperature rises in the table are approximate; actual temperature rises may vary.
 2. Temperature rises in shaded areas are for reference only; these conditions are not recommended.
 3. Two openings are recommended for airflows above 1600 CFM if filter(s) adjacent to furnace.
 Specifications shown for side return. See Technical Specifications for bottom return or two sides return.

Upflow Dimensions

92.1% Gas Furnace Upflow

GUH92A Models	A	B	C
-038A3	14 ¹ / ₄	12 ⁵ / ₈	12 ⁷ / ₈
-054B4	17 ¹ / ₂	15 ⁷ / ₈	16 ¹ / ₈
-072B4			
-072C5	21	19 ³ / ₈	19 ⁵ / ₈
-090C5			
-108D5	24 ¹ / ₂	22 ⁷ / ₈	23 ¹ / ₈
-120D5			



Model Nomenclature

G	UH	92	A	038	A	3	N	E
Gas Furnace	UH=Upflow/ Horizontal DD=Dedicated Downflow UU = Upflow Only DH = Downflow/Horizontal	AFUE 92.1%	A=Single Stage/ Fixed Speed PSC	Heating Input BTUH 038=38,000 120=120,000	Cabinet Width A=14 ¹ / ₂ " B=17 ¹ / ₂ " C=21" D=24 ¹ / ₂ "	Max. CFM Cooling* 2 = 800 CFM 3=1200 CFM 4=1600 CFM 5=2000 CFM *Airflow @ 0.5 ESP or 400 CFM/ton	N=Natural Gas X=Low Nox	Series/ Revision

NOTE: Furnace is not listed for use with fuels other than natural or L.P. (propane) gas.

All models can be converted by a qualified distributor or local service dealer to use L.P. (propane) gas. Factory approved kits must be used to convert from natural to L.P. (propane) gas and may be ordered as optional accessories from a parts distributor.

For L.P. (propane) operation, follow instructions provided with the unit and the L.P. conversion kit.

WARNING

THIS FURNACE IS NOT APPROVED
OR RECOMMENDED
FOR USE IN MOBILE HOMES

Downflow Specifications

GDD92A Models	-054B4	-072B4	-090C5	-120D5
Input-BTUH ¹	54,000	72,000	90,000	120,000
Heating Cap. BTUH	49,700	66,000	82,800	110,400
AFUE	92.1	92.1	92.1	92.1
Blower D x W	11 x 8	11 x 8	10 x 10	11 x 10
Motor HP-Speed-Type	1/2-4-PSC	1/2-4-PSC	1.0-4-PSC	1.0-4-PSC
Heating Speed*	Med-Low	Med-High	Med-High	Med-High
Cooling Speed*	High	High	High	High
Motor FLA	8.20	8.20	7.50	13.75
Rated Ext. SP in W.C.	0.5	0.5	0.5	0.5
Temp. Rise Range °F	30-60	35-65	35-65	40-70
Shipping Weight (lbs)	120	125	135	155

* Factory setting

Gas connection for all models is 1/2" N.P.T.

¹ Ratings to 2,000 ft. Over 2,000 ft, reduce 4% for each 1,000 ft. above sea level.



WARNING

THIS FURNACE IS NOT APPROVED OR RECOMMENDED
FOR USE IN MOBILE HOMES

Blower Performance - Downflow

GDD92- Model	Htg Input BTUH	Motor Speed	External Static Pressure (Inches Water Column)															
			0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8	
			CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise
-054B4	54K	High*	1580	29	1550	30	1520	30	1485	31	1460	32	1425	32	1375	33	1320	35
		Med Hi	1240	37	1230	37	1210	38	1185	39	1165	39	1135	41	1100	42	1045	44
		M-Low†	1145	40	1120	41	1100	42	1080	43	1055	44	1030	45	985	47	940	49
		Low	895	51	870	53	850	54	825	56	800	58	770	60	740	62	715	64
-072B4	72K	High*	1560	39	1530	40	1500	41	1480	41	1435	43	1400	44	1360	45	1310	47
		Med Hi†	1245	49	1225	50	1205	51	1180	52	1150	53	1125	55	1090	56	1045	59
		M-Low	1085	57	1070	57	1045	59	1025	60	1000	61	970	63	930	66	880	70
		Low	850	72	830	74	800	77	780	79	760	81	730	84	710	86	685	90
-090C5	90K	High*	1955	39	1905	40	1835	42	1795	43	1730	44	1620	47	1545	50	1450	53
		Med Hi†	1845	42	1790	43	1750	44	1680	46	1515	51	1540	50	1475	52	1410	54
		M-Low	1320	58	1290	59	1250	61	1215	63	1180	65	1120	68	1050	73	970	79
		Low	1190	64	1165	66	1125	68	1080	71	1055	73	1000	77	945	81	875	88
-120D5	120K	High*	2215	46	2150	48	2075	49	2035	50	1970	52	1905	54	1800	57	1745	59
		Med Hi†	2050	50	2015	51	1955	52	1900	54	1860	55	1795	57	1720	59	1620	63
		M-Low	1720	59	1690	60	1655	62	1640	62	1610	63	1560	66	1505	68	1465	70
		Low	1420	72	1410	72	1400	73	1365	75	1350	76	1335	77	1290	79	1260	81

* Factory set cooling speed

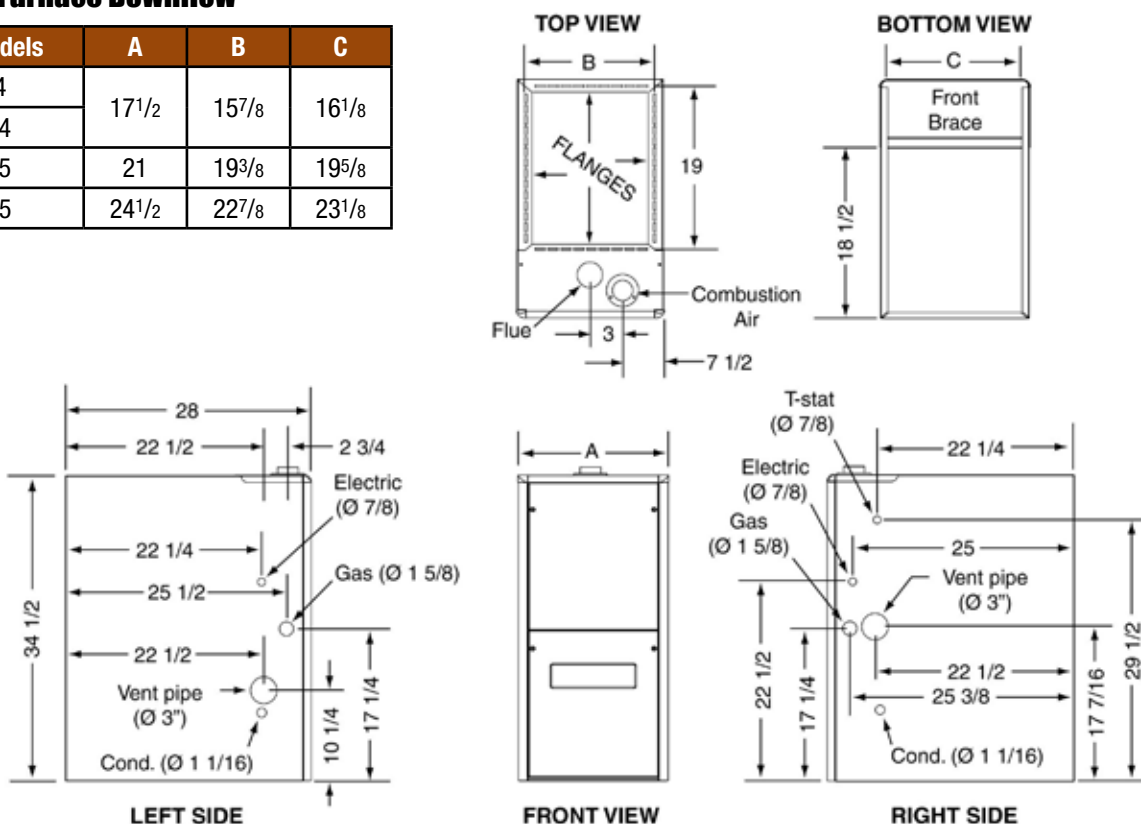
† Factory set heating speed

NOTE: 1. Temperature rises shown are approximate; actual temperature rises may vary.
2. Temperature rises in shaded areas are for reference only; these conditions are not recommended.

Downflow Dimensions

92.1% Gas Furnace Downflow

GDD92A Models	A	B	C
054B4	17 ¹ / ₂	15 ⁷ / ₈	16 ¹ / ₈
-072B4			
-090C5	21	19 ³ / ₈	19 ⁵ / ₈
-120D5	24 ¹ / ₂	22 ⁷ / ₈	23 ¹ / ₈



92% Gas Furnace Accessories

PART NO.	DESCRIPTION
904952	2" Concentric vent kit
904953	3" Concentric vent kit
904911	Downflow sub base kit
904617	2" Side wall vent kit
904347	3" Side wall vent kit
905028	U.S. LP conversion kit (0 - 10,000 ft.)
905029	Canada LP conversion kit (0 - 4500 ft.)
541036	Side return filter kit
902377	Neutralizer kit

PART NO.	DESCRIPTION
904872	Hi efficiency blower kit 14 ¹ / ₂ " - fixed speed
904873	Hi efficiency blower kit 17 ¹ / ₂ " - fixed speed
904874	Hi efficiency blower kit 21" - fixed speed
905875	Hi efficiency blower kit 24 ¹ / ₂ " - fixed speed
904876	Hi efficiency blower kit 14 ¹ / ₂ " - variable speed,
904877	Hi efficiency blower kit 17 ¹ / ₂ " - variable speed
904878	Hi efficiency blower kit 21" - variable speed
904879	Hi efficiency blower kit 24 ¹ / ₂ " - variable speed

IMPORTANT: Before proceeding with installation, refer to installation instructions packaged with each model, as well as complying with all Federal, State, Provincial, and Local codes, regulations, and practices.

Space Saving, Energy Saving Gas Heat Source

Primary Heat Exchanger

The patented tubular design extracts heat from combustion gases; made of aluminized steel, it is resistant to corrosion and thermal fatigue, and it's covered by a lifetime warranty

Draft Inducer

Specially designed for the tubular heat exchanger, it pulls hot combustion gases through the exchanger; heated air is locked in while cold air is locked out

High Efficiency Blower

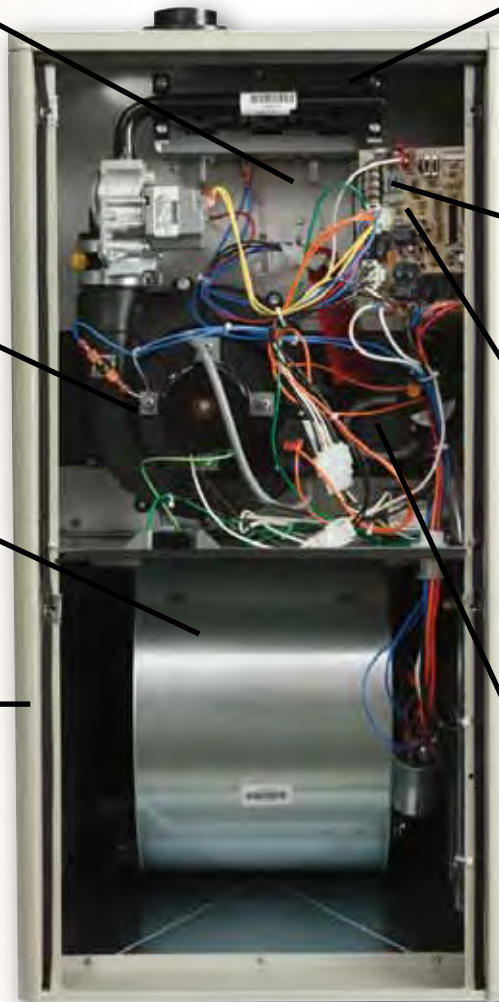
Three-speed blower delivers warm air throughout the house quietly and efficiently; direct drive system has no belts or pulleys to wear out

Low Profile Cabinet

Steel cabinet has corrosion-resistant finish; lightweight 34½" high design saves on space; upflow model is shown; downflow features same components in a different configuration

30 Second Blower Delay

The delay assures a warm duct temperature at furnace start-up; blower off settings can be adjusted to 60, 90 120 and 180 seconds



In-Shot Burner

Engineered to provide the most efficient air/gas mixture for combustion, the design requires no manual adjustments to regulate the mix

Hot Surface Ignition

Silicon nitride type igniter is quiet and automatic, eliminating the need for a standing pilot light, while offering improved efficiency

Integrated Furnace Control

Controls are integrated into one board set up for fast, easy installation, also accommodates air cleaner and humidifier options; features on-board diagnostics with easy to recognize fault codes without counting flashes

Secondary Heat Exchanger

Unique heat recovery coil extracts additional heat (which would be lost by less efficient furnaces); stainless steel construction has a lifetime warranty

Can be converted to LP gas by qualified contractor using a conversion kit shown in "Accessories" on page 6.

NOTE: Upflow model shown. Downflow models feature the same components in a different configuration.

Horizontal installation is for right side only with air supply on the left.



Upflow Models	Input BTUH	Heating Cap. BTUH	AFUE
GUH92A038A3	38,000	35,000	92.1%
GUH92A054B4	54,000	49,700	92.1%
GUH92A072B4	72,000	66,000	92.1%
GUH92A072C5	72,000	66,000	92.1%
GUH92A090C5	90,000	82,800	92.1%
GUH92A108D5	108,000	99,000	92.1%
GUH92A120D5	120,000	110,400	92.1%

Downflow Models	Input BTUH	Heating Cap. BTUH	AFUE
GDD054B4	54,000	49,700	92.1%
GDD072B4	72,000	66,000	92.1%
GDD090C5	90,000	82,800	92.1%
GDD120D5	120,000	110,400	92.1%

CATEGORY IV VENTING:

All models may be vertically or horizontally vented using either a one-pipe or two-pipe system, for greatest installation flexibility.

A.F.U.E. Ratings of 92.1% mean energy savings for you!

Our High Efficiency Furnace May Actually Pay For Itself in Energy Savings!

A home is most people's biggest investment and making sure it's comfortable in all seasons is a primary concern. A Comfort-Aire gas furnace helps provide that comfortable environment. There are several types and a wide range of capacities to meet the home's specific requirements and the homeowner's individual preferences. Not only are the furnaces quality designed and constructed, they're energy efficient, helping to save on utility bills.

All Comfort-Aire products are backed by outstanding warranties and after-sales support. Experienced technicians can help solve operation and service issues over the phone. And our web site is another resource with owner's manuals and technical documentation for installers.

The compact size of our furnaces makes them ideal for replacements; builders and architects also appreciate the installation flexibility they offer for new construction. A Comfort-Aire dealer can evaluate the home and determine which furnace (and related equipment such as central air conditioning) is best suited to specific climates and needs.

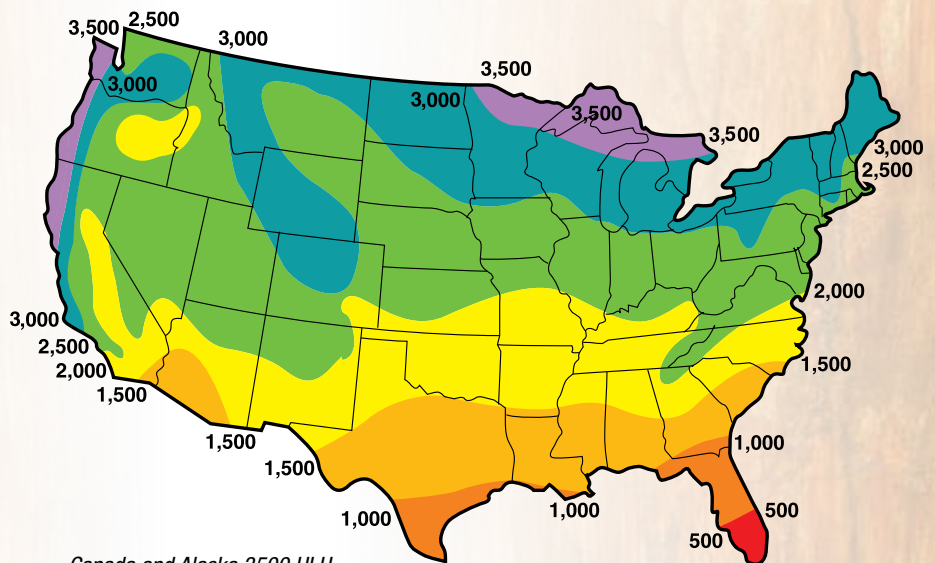
With our broad product range, Comfort-Aire has the model and accessories to suit just about any home's location and heating requirements.

Annual Fuel Utilization Efficiency (A.F.U.E. ratings) is your guide for comparing gas furnace efficiencies. The higher the number, the more efficient the furnace.

Beginning in 1992, the Federal Government required all gas furnaces to meet or exceed an A.F.U.E. (Annual Fuel Utilization Efficiency) rating of 78%. Although this was an improvement over previous furnace ratings of 65% or less, today's furnaces offer even greater efficiencies. Replacing your older gas furnace with a high efficiency 92% model can result in significant energy savings.

And the greater the number of heating load hours for your area (see chart) the greater the energy savings.

Regional Winter Heating Load Hours



Specifications and performance data subject to change without notice.

Comfort-Aire®
HEAT CONTROLLER

1900 Wellworth Ave., Jackson MI 49203 • Ph. 517-787-2100 • www.comfort-aire.com



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A *DAVE* Company

HC-92S-B

Comfort, Quality and Efficiency.

An Unbeatable Combination!



80% Gas Furnace

Comfort-Cure®
HEAT CONTROLLER

This low **profile** gas furnace stands tall in features and fuel economy



Models are available in
upflow/horizontal and downflow
configurations;
upflow/horizontal shown.

Low Profile Cabinet

At just 34½" high, our 80% furnace cabinet is ideally suited to both new construction and replacements—models can fit into the space of virtually any furnace being replaced, including attics, crawl spaces and utility closets. That also leaves plenty of room for add-ons such as an electronic air cleaner.

Contractors will appreciate not just the small size, but also the number of installation options, including left- or right-side gas, and left- or right-side electric connections.

Because of the small size, there's plenty of working room when the furnace is being installed. It's also a convenient size for loading and unloading on a truck or van, and fits easily through most doors and hallways.

Energy Efficiency

AFUE ratings of 80% mean that nearly all the heat generated by the furnace is used to heat the home. In this time of soaring fuel prices, better utilization of natural resources can mean significant dollar savings for you.

Full Range of Models

Our 80% Series packs a lot of heating punch in a small package. The GUH Upflow/Horizontal Series comes in capacities ranging from 45,000 BTUH to 126,000 BTUH, while the GDD Downflow Series is available in 54,000 to 126,000 BTUH capacities.

Simple Installation

This non-condensing furnace comes completely assembled, ready for installation with a color-coded wiring harness and quick connect fittings. The integrated solid state control board speeds installation and is ready to accept comfort options such as an electronic air cleaner and a humidifier.

Maintenance and servicing is easy to do with readily accessible components. Two-piece doors remove quickly and door screws are secured to the doors so they can't be lost after they're loosened.

Diagnostic lights make it easy to troubleshoot operation: a dedicated light signals flame strength, and others illuminate in combinations that indicate fault codes.

Quiet Operation

The insulated blower compartment, high static blower, gas valve, and hot surface igniter are all designed and proven over time to provide clean, efficient, and quiet combustion and air delivery.

Warranty Coverage

Our 80% furnaces are backed by a 20 year warranty on the aluminized steel heat exchanger and a 12 year warranty on other components.

(Limitations apply; refer to printed warranty.)

Reliability You Can Trust

Heat Controller, Comfort-Aire's parent company, has been in the furnace business since its founding in 1933—in fact, the company can trace its roots to the Wingert Furnace Co. which began building coal, gas and oil furnaces in 1907. Air conditioning equipment was later added to round out the product line.

Known today for efficient, reliable equipment for both heating and cooling, Comfort-Aire continues to keep homes and businesses comfortable, season after season.



For year 'round comfort, ask your dealer about the
Comfort-Aire® **line of energy efficient central air conditioning**

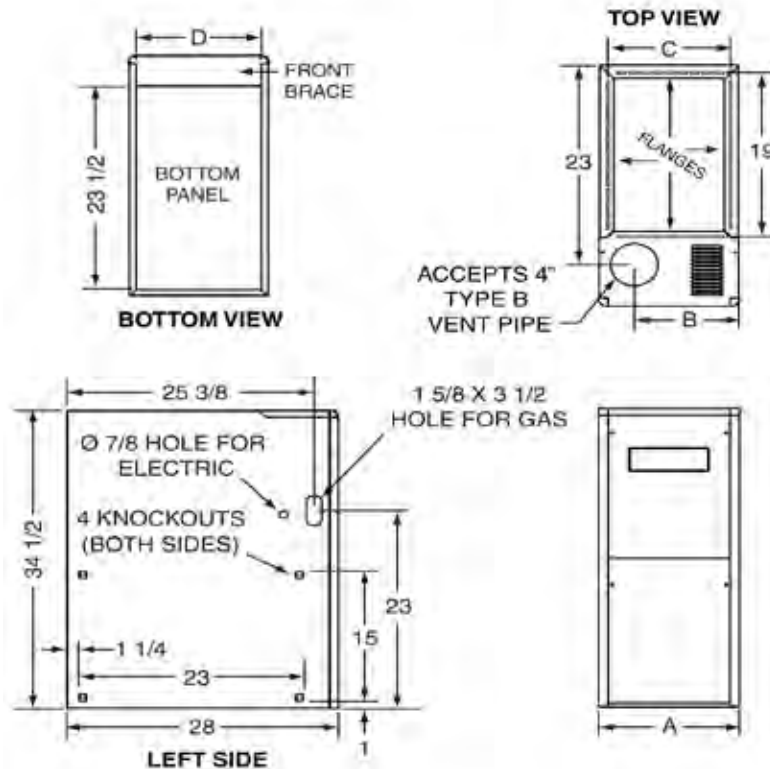
Upflow/Horizontal GUH

Physical and Data Specifications

GUH80 Models	-045A3	-054A3	-072B4	-072C5	-090B4	-090C5	-108C5	-126D5
Input-BTUH	45,000	54,000	72,000	72,000	90,000	90,000	108,000	126,000
Heating Cap. BTUH	36,000	43,200	57,600	57,600	72,000	72,000	86,400	100,800
AFUE	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
Nominal Tons Cooling	3	3	4	5	4	5	5	5
Blower D x W	10 x 6	10 x 6	11 x 8	10 x 10	11 x 8	10 x 10	11 x 10	11 x 10
Motor HP/Speed/Type	1/3-4-PSC	1/3-4-PSC	1/2-4-PSC	1/2-4-PSC	1/2-4-PSC	1/2-4-PSC	1.0-4-PSC	1.0-4-PSC
Motor FLA	4.8	4.8	8.2	7.5	8.2	7.5	13.75	13.75
Rated Ext. SP in W.C.	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Temp. Rise Range °F	30-60	30-60	35-65	35-65	35-65	35-65	40-70	40-70
Power Supply	115-1-60	115-1-60	115-1-60	115-1-60	115-1-60	115-1-60	115-1-60	115-1-60
Shipping Weight (lbs)	100	100	110	115	115	120	125	145

Gas connection size for all models is 1/2" N.P.T.

Upflow/Horizontal GUH Dimensions



80% Gas Furnace Upflow

GUH80 Models	A	B	C	D
-045A3	14 1/4	10 3/4	12 5/8	12 7/8
-054A3	14 1/4	10 3/4	12 5/8	12 7/8
-072B4	17 1/2	11 3/4	15 7/8	16 1/8
-090B4	17 1/2	11 3/4	15 7/8	16 1/8
-072C5	21	14	19 3/8	19 7/8
-090C5	21	14	19 3/8	19 7/8
-108C5	21	14	19 3/8	19 7/8
-126D5	24 1/2	15 1/4	22 7/8	23 1/8

GUH80 Series High Efficiency Upflow/Horizontal Series

Warning: Do not install horizontal furnace on its back - either side only

Blower Performance Data - Upflow

GUH80-Model	Htg Input BTUH	Motor Speed	External Static Pressure (Inches Water Column)															
			0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8	
			CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise
-045A3	45K	High*	1350	25	1290	26	1225	27	1155	29	1100	30	1025	33	950	35	885	38
		Med Hi	1025	33	1015	33	1005	33	1000	33	990	34	920	36	855	39	775	43
		M-Low†	885	38	855	39	815	41	780	43	740	45	695	48	640	52	565	59
		Low	700	48	675	49	655	51	620	54	590	56	555	60	515	65	465	72
-054A3	54K	High*	1350	30	1290	31	1225	33	1155	35	1100	36	1025	39	950	42	885	45
		Med Hi	1025	39	1015	39	1005	40	1000	40	990	40	920	43	855	47	775	52
		M-Low†	885	45	855	47	815	49	780	51	740	54	695	58	640	63	565	71
		Low	700	57	675	59	655	61	620	65	590	68	555	72	515	78	465	86
-072B4	72K	High*	1770	30	1720	31	1685	32	1645	32	1590	34	1550	34	1485	36	1415	38
		Med Hi	1400	38	1360	39	1340	40	1310	41	1275	42	1245	43	1190	45	1125	47
		M-Low†	1235	43	1215	44	1180	45	1155	46	1130	47	1100	48	1060	50	1005	53
		Low	975	55	940	57	930	57	890	60	865	62	840	63	810	66	775	69
-072C5	72K	High*	2030	26	1940	27	1860	29	1785	30	1695	31	1615	33	1535	35	1445	37
		Med Hi	1935	28	1850	29	1780	30	1700	31	1640	40	1560	34	1470	36	1380	39
		M-Low†	1350	40	1290	41	1250	43	1205	44	1165	46	1110	48	1035	52	945	56
		Low	1215	44	1160	46	1105	48	1065	50	1025	52	980	54	925	58	860	62
-090B4	90K	High*	1690	39	1655	40	1610	41	1560	43	1510	44	1455	46	1405	47	1340	50
		Med Hi†	1360	49	1325	50	1300	51	1280	52	1235	54	1190	56	1150	58	1065	63
		M-Low	1215	55	1190	56	1155	58	1125	59	1090	61	1065	63	1015	66	965	69
		Low	925	72	900	74	870	77	840	79	800	83	775	86	710	94	695	96
.090C5	90K	High*	2020	33	1935	34	1860	36	1780	37	1690	39	1600	42	1510	44	1410	47
		Med Hi†	1895	35	1830	36	1765	38	1685	40	1610	41	1525	44	1435	46	1330	50
		M-Low	1345	50	1295	51	1250	53	1200	56	1155	58	1100	61	1035	64	950	70
		Low	1190	56	1155	58	1115	60	1075	62	1040	64	980	68	940	71	870	77
-108C5	108K	High*	2295	35	2235	36	2180	37	2110	38	2050	39	1975	41	1900	42	1810	44
		Med Hi†	2130	38	2075	39	2035	39	1970	41	1915	42	1845	43	1765	45	1675	48
		M-Low	1770	45	1750	46	1710	47	1675	48	1630	49	1585	50	1520	53	1430	56
		Low	1445	55	1425	56	1410	57	1375	58	1350	59	1320	61	1275	63	1225	65
-126D5	126K	High*	2230	42	2180	43	2105	44	2045	46	1990	47	1915	49	1835	51	1740	54
		Med Hi†	2055	45	2005	47	1950	48	1920	49	1855	50	1790	52	1735	54	1665	56
		M-Low	1705	55	1680	56	1640	57	1615	58	1565	60	1505	62	1440	65	1375	68
		Low	1345	69	1360	69	1350	69	1300	72	1230	76	1290	72	1250	75	1220	77

Notes for Upflow Blower Specifications

- * Factory set cooling speed
- † Factory set heating speed

NOTES:

1. Temperature rises in the table are approximate; actual temperature rises may vary.
2. Temperature rises in shaded areas are for reference only; these conditions are not recommended.
3. Two openings are recommended for airflows above 1600 CFM if filter(s) adjacent to furnace.

Specifications shown for side return. See Technical Specifications for bottom return or two sides return.

WARNING

THIS FURNACE IS NOT APPROVED OR
RECOMMENDED FOR USE IN MOBILE HOMES

Downflow GDD Models

Physical and Data Specifications

GDD80 Models	-054A3	-072B4	-090B4	-108C5	-126D5
Input-BTUH	54,000	72,000	90,000	108,000	126,000
Heating Cap. BTUH	43,200	57,600	72,000	86,400	100,800
AFUE	80.0	80.0	80.0	80.0	80.0
Nominal Tons Cooling	3	4	4	5	5
Blower D x W	10 x 6	11 x 8	11 x 8	11 x 10	11 x 10
Motor HP-Speed-Type	1/3-4-PSC	1/2-4-PSC	1/2-4-PSC	3/4-4-PSC	1.0-4-PSC
Heating Speed*	Med-Low	Med-Low	Med-Low	Med-Low	Med-Low
Cooling Speed*	High	High	High	High	High
Motor FLA	4.80	8.20	8.20	13.75	13.75
Rated Ext. SP in W.C.	0.5	0.5	0.5	0.5	0.5
Temp. Rise Range of	30-60	35-65	35-65	40-70	40-70
Shipping Weight (lbs)	100	110	115	125	145

* Factory setting

Gas connection for all models is 1/2" N.P.T.

WARNING

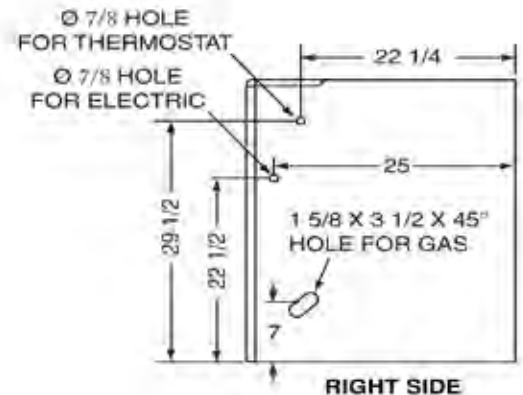
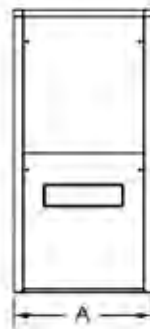
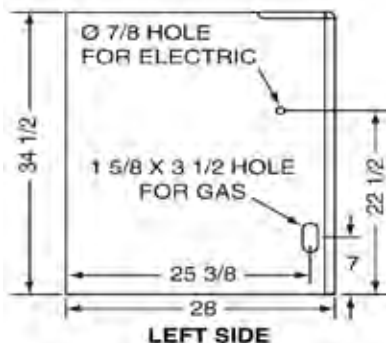
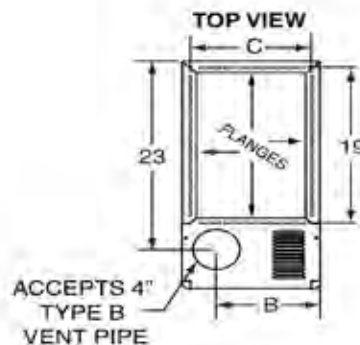
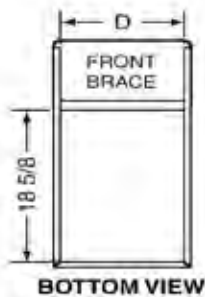
THIS FURNACE IS NOT APPROVED OR
RECOMMENDED FOR USE IN MOBILE HOMES



Downflow GDD Dimensions

80% Gas Furnace Downflow

GDD80 Models	A	B	C	D
-054A3	14 ¹ / ₄	10 ³ / ₄	12 ⁵ / ₈	12 ⁷ / ₈
-072B4	17 ¹ / ₂	11 ³ / ₄	15 ⁷ / ₈	16 ¹ / ₈
-090B4				
-108C5	21	14	19 ³ / ₈	19 ⁵ / ₈
-126D5	24 ¹ / ₂	15 ¹ / ₄	22 ⁷ / ₈	23 ¹ / ₈



GDD80 Series High Efficiency Downflow Series

Blower Performance Data - Downflow

GDD80-Model	Htg Input BTUH	Motor Speed	External Static Pressure (Inches Water Column)															
			0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8	
			CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise
-054A3	54K	High*	1375	29	1340	30	1300	31	1270	31	1225	33	1175	34	1115	36	1035	39
		Med Hi	1155	35	1130	35	1110	36	1085	37	1055	38	1015	39	975	41	910	44
		M-Low†	790	51	775	52	765	52	750	53	730	55	700	57	665	60	610	66
		Low	650	62	640	63	630	63	610	66	590	68	565	71	530	75	480	83
-072B4	72K	High*	1610	33	1590	34	1575	34	1560	34	1540	35	1495	36	1460	37	1415	38
		Med Hi	1295	41	1275	42	1260	42	1250	43	1220	44	1195	45	1170	46	1120	48
		M-Low†	1155	46	1135	47	1115	48	1095	49	1065	50	1040	51	1015	53	980	54
		Low	910	59	885	60	860	62	835	64	810	66	785	68	765	70	735	73
-090B4	90K	High*	1675	40	1655	40	1640	41	1620	41	1590	42	1560	43	1520	44	1475	45
		Med Hi	1330	50	1315	51	1300	51	1280	52	1255	53	1230	54	1200	56	1150	58
		M-Low†	1180	56	1165	57	1150	58	1135	59	1115	60	1090	61	1060	63	1010	66
		Low	940	71	925	72	900	74	880	76	850	78	825	81	795	84	760	88
-108C5	108K	High*	2395	33	2335	34	2285	35	2230	36	2200	36	2140	37	2080	38	2000	40
		Med Hi	2190	37	2135	37	2115	38	2080	38	2030	39	1975	41	1915	42	1810	44
		M-Low†	1785	45	1770	45	1740	46	1725	46	1685	47	1645	49	1615	50	1565	51
		Low	1145	70	1110	72	1070	75	1035	77	1000	80	950	84	905	88	835	96
-126D5	126K	High*	2445	38	2395	39	2385	39	2330	40	2275	41	2225	42	2130	44	2015	46
		Med Hi	2195	43	2170	43	2140	44	2120	44	2090	45	2030	46	1975	47	1855	50
		M-Low†	1795	52	1780	52	1770	53	1760	53	1725	54	1690	55	1655	56	1610	58
		Low	1480	63	1475	63	1450	64	1440	65	1440	65	1415	66	1405	66	1375	68

* Factory set cooling speed

† Factory set heating speed

NOTES: 1. Temperature rises in the table are approximate; actual temperature rises may vary.
2. Temperature rises in shaded areas are for reference only; these conditions are not recommended.

Downflow GDD Accessories

Part No.	Description
902974	Downflow sub base kit, 14 ½" cabinet
904911	Downflow sub base kit, 17 ½", 21", and 24 ½" cabinets
905028	U.S. LP conversion kit (0 to 10,000 ft.)
905029	Canada LP conversion kit (0 to 4,500 ft.)
541036	Side return filter kit
904872	Fixed Speed High Eff. Blower Kit, -054A3
904873	Fixed Speed High Eff. Blower Kit, -072B, -090B
904874	Fixed Speed High Eff. Blower Kit, -108C
904875	Fixed Speed High Eff. Blower Kit, -126D
904876	Variable Speed High Eff. Blower Kit, -054A3
904877	Variable Speed High Eff. Blower Kit, -072B, -090B
904878	Variable Speed High Eff. Blower Kit, -108C
904879	Variable Speed High Eff. Blower Kit, -126D

Clearances

CLEARANCES TO COMBUSTIBLE MATERIALS

Left Side0 inches Top0 inches
Right side0 inches Front..... 4* inches
Vent.....0 inches Back.....0 inches

*Minimum clearance for servicing is 24 inches; the recommended clearance is 36 inches.

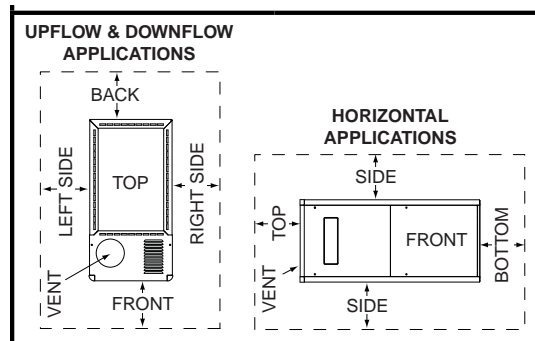


Table 1. Minimum Clearances to Combustible Materials

FLEXIBLE CATEGORY 1 VENTING: May be vented with a dedicated venting system or vented in common with other Category 1 appliances.

Space Saving, Energy Saving Gas Heat Source

Tubular Heat Exchanger

The heart of the furnace, the heat exchanger is made of heavy gauge aluminized steel, and carries a 20-year warranty

Hot Surface Igniter

Quiet and automatic, it eliminates the need for a standing pilot light for improved efficiency

In-Shot Burner

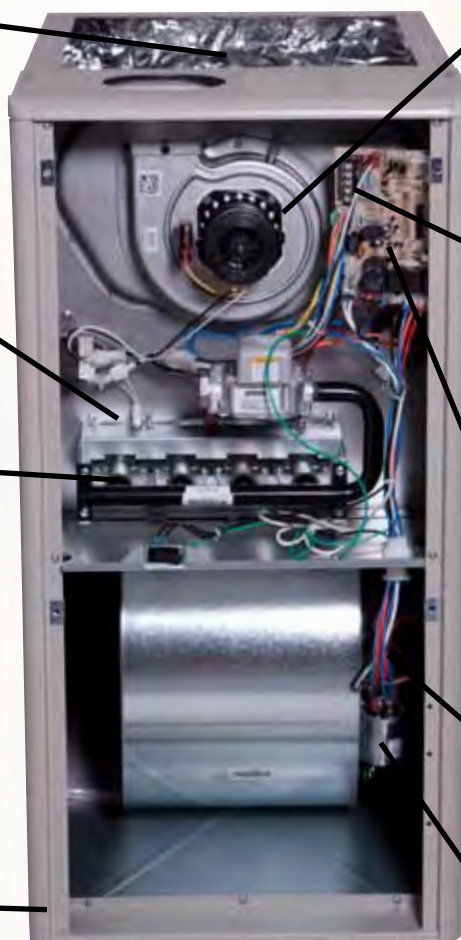
Engineered to deliver to most efficient air/gas mixture, it allows heat to be generated efficiently

30 Second Blower Delay

Delay at furnace start-up allows time for duct temperature to warm to alleviate cold blow when furnace turns on; blower off settings can be set at 60, 90, 120 or 180 seconds

Durable Cabinet

Steel cabinet has attractive corrosion-resistant finish; two-piece door provides easy access to components



Induced Draft Blower

Designed specifically to work with the tubular heat exchanger, it pulls hot combustion gases through the exchanger until the burner cycles off; heated air is locked in while cold air is locked out

Diagnostic Lights

Simplifies troubleshooting with a dedicated light for flame signal strength, and specific combinations for other fault codes, eliminating the need to count flashes

Integrated Control Board

Combining all controls and functions into one board makes the furnace easy to install, and is designed to accept options such as an electronic air cleaner

Color-Coded Wiring Harness

Harness and quick connect fittings make it easy to service or replace components

Multi-Speed Direct Drive Blower

Direct drive blower delivers warm, filtered air through the ductwork to each room and also covers a wide range of cooling capacities; switches on PCB make it easy to select motor speed

NOTE: Upflow model is pictured; features of the downflow model are identical although component arrangement differs.



Comfort-Cure

Upflow/Horizontal & Downflow Gas Furnaces

All models can be converted by a qualified distributor or local service dealer to L.P. (propane) gas with a simple burner orifice and regulator spring change. Factory approved kits must be used to convert from natural to L.P. gas.

Upflow/Horizontal Models—For utility room, closet, alcove, crawl space, attic or basement applications.

Downflow Models—For homes without a basement or crawlspace; can be used in utility room, closet, attic or similar space.

A.F.U.E. Ratings of 80% or better mean energy savings for you!

There's a Comfort-Aire 80% furnace model that's right for your home's heating needs

MODELS	INPUT BTUH	HEATING CAP. BUTH	AFUE*	NOM. TONS COOLING	MOTOR HP	SHIPPING WEIGHT
GUH80 - UPFLOW/HORIZONTAL						
-045A3	45,000	36,000	80.0	3	1/3	100
-054A3	54,000	43,200	80.0	3	1/3	100
-072B4	72,000	57,600	80.0	4	1/2	110
-072C5	72,000	57,600	80.0	5	1/3	115
-090B4	90,000	72,000	80.0	4	1/2	115
-090C5	90,000	72,000	80.0	5	1/2	120
-108C5	108,000	86,400	80.0	5	1.0	125
-126D5	126,000	100,800	80.0	5	1.0	145
GDD80 - DOWNFLOW						
-054A3	54,000	43,200	80.0	3	1/3	100
-072B4	72,000	57,600	80.0	4	1/2	110
-090B4	90,000	72,000	80.0	4	1/2	115
-108C5	108,000	86,400	80.0	5	3/4	125
-126D5	126,000	100,800	80.0	5	1.0	145

* Annual Fuel Utilization Efficiency (A.F.U.E.) rating is your guide for comparing gas furnace efficiencies. The higher the number, the more efficient the furnace. Replacing an older gas furnace with a higher efficiency model such as a Comfort-Aire 80% unit can result in significant energy savings.

Your Comfort-Aire dealer can help you select the model that fits your heating requirements. He can also recommend options such as central air conditioning to create a system for total comfort, and can provide quality installation and maintenance for your new system.



Specifications and performance data subject to change without notice.

Comfort-Aire[®]
HEAT CONTROLLER

1900 Wellworth Ave., Jackson MI 49203 • Ph. 517-787-2100 • www.comfort-aire.com

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Comfort-Care®

HEAT CONTROLLER

***Top quality furnaces
packed with features!***

- **60,000 to 90,000 BTUH**
- **Clean, Efficient Gas Heat**
- **Multi-Speed Blower**
- **A/C Ready Up to 5 Tons**

**MGD-B
SERIES**



**GAS FURNACES
FOR MANUFACTURED HOMES**

TECHNICAL INFORMATION

GAS FURNACES ARE COMPACT, EFFICIENT AND A/C READY

These downflow furnaces are specially designed for installation in manufactured housing. Three heat capacity and two blower choices handle heating and heating/cooling (2 to 5 tons) in any climate. All blowers are multi-speed to adjust airflow to the home for quiet operation, high efficiency, and comfort. Units come with sealed combustion venting and can be installed with zero clearance to construction.

Model No.	HP	Blower
MGD60-E3B	1/3	3 speed, 1200 cfm
MGD70-E3B	1/3	3 speed, 1200 cfm
MGD77-E3B	1/3	3 speed, 1200 cfm
MGD90-E3B	1/3	3 speed, 1200 cfm
MGD60-E5B	3/4	4 speed, 1600 cfm
MGD70-E5B	3/4	4 speed, 1600 cfm
MGD77-E5B	3/4	4 speed, 1600 cfm
MGD90-E5B	3/4	4 speed, 1600 cfm

SPECIFICATIONS

Model No.	MDG60	MGD70	MGD77	MGD90
Input, BTUH	60,000	70,000	77,000	90,000
Output, BTUH	48,000	56,000	61,600	72,000
AFUE	80%	80%	80%	80%
Ignition Type	Electronic Hot Surface			
Air Temperature Rise, Range	40-70°F	40-70°F	40-70°F	45-75°F
Blower	Heat/Cool			
Designed Max. Outlet Air Temp.	170°F			
Max. External SP (Duct)	0.03 W.C.			
Factory Equipped Fuel	Natural Gas (L.P. Orifice Furnished)			
High Altitude—derate 4% for each 1000 ft above 2000 ft	Main burner orifice change required. See table in installation instructions or contact factory.			
Furnace Flue Pipe and Cap	Must use RJS (sloped roof) or RJF (flat roof) Roof Jack and RJCRWN Crown			
Gas Connection	1/2" NFPT			
Electric Service	115V-1-60			
Fuse or Circuit Breaker	15 Amp			
Thermostat Circuit	24V AC 60Hz, 40VA			
Filters	Two 16" x 20" x 1"			

FEATURES AND BENEFITS

Mobile furnaces fit virtually anywhere—As a replacement unit for an older furnace, you'll find just the size you need with the features you want, ensuring a cost-effective installation!

Four-way duct connector—Unique design provides alignment flexibility and makes a leak-free gasketed connection to all manufactured home supply ducts



Sealed combustion system—Safe and efficient because no indoor air is used for combustion

A/C ready—2 to 5 ton air conditioning capacity, select three- or four-speed blower

Twin disposable filters—Standard models clean the air effectively and are available everywhere

Aluminized steel heat transfer tubes—By extracting more heat from the flue gas, they provide heating comfort for fewer dollars

FURNACE INFORMATION AND SELECTION

Furnace Dimensions: 77¹/₂" High x 19³/₄" Wide x 25" Deep

STEP ONE: Furnace Size and Blower Selection

Model Number	BTUH Input/Output	BLOWER SELECTION w/NOMINAL CFMs & TONS @ .2 ESP	
		-E3B	-E5B
MGD60	60,000/48,000	3 Speed Blower	4 Speed Blower
MGD70	70,000/56,000	1240* CFM	1660* CFM
MGD77	77,000/61,600	2 - 3.5 Tons	3 - 5 Tons**
MGD90	90,000/72,000	1/3 HP	3/4 HP

* Air ratings at high speeds with coil and filter in place.

** Recommend A/C lower speed set at MED-HI or below due to potential A-coil water blow-off.
All gas furnaces set for natural gas. Furnace includes LP orifice for conversion.

STEP TWO: Roof Jack and Accessory Selection based on Furnace Location & Roof Type



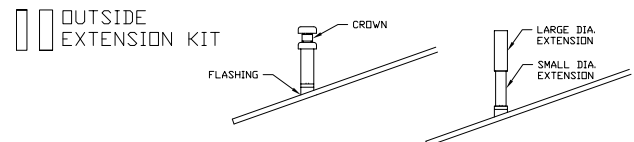
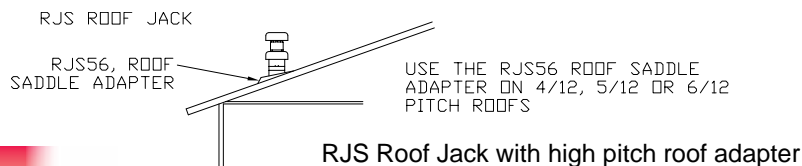
WARNING: All units must be installed utilizing factory accessories as indicated below. DO NOT reuse existing flue components and/or accessories. Failure to comply with this warning will invalidate certification, which may make the installation illegal and may result in unsafe operation, explosion, and/or fire or asphyxiation.

ROOF JACK: Distance from FLOOR of home to where ROOF JACK meets the ROOFING MATERIAL=Dimension "A"

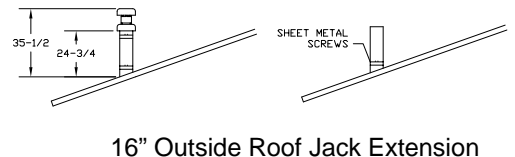
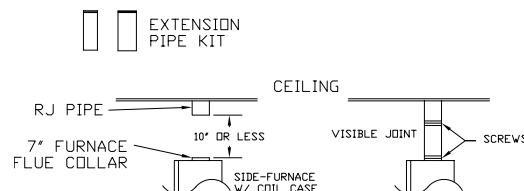
These Roof Jacks MUST BE USED to complete the installation.

Part Number	Adjustable Height Added To Furnace Height (In.)	Roof	"A" Dimension (In.)
90-RJF1729-AL	17 to 29	Flat	94 ¹ / ₂ to 106 ¹ / ₂
90-RJF2551-AL	25 to 51	Flat	102 ¹ / ₂ to 128 ¹ / ₂
90-RJS1729-AL	17 to 29	3/12 Slope	94 ¹ / ₂ to 106 ¹ / ₂
90-RJS2551-AL	25 to 51	3/12 Slope	102 ¹ / ₂ to 128 ¹ / ₂
90-RJS3868-AL	38 to 68	3/12 Slope	115 ¹ / ₂ to 145 ¹ / ₂
90-RJS6399-AL	63 to 99	3/12 Slope	140 ¹ / ₂ to 176 ¹ / ₂

Accessories REQUIRED with Each Roof Jack	
90-RJCRWN-AL	Crown (Vent/Intake Cap)
R75GF0001	Roof Jack Sealant
Optional Roof Jack Accessories	
90-TRM-RNG	Ceiling Trim Ring
90-RJTRC	Transit Kit
90-RJS56	5-6/12 Slope Saddle Adapter
90-OUTXT16-AL	Outside Roof Jack 16" Ext-Gas
90-INSXT10-AL	Inside Roof Jack 10" Ext-Gas



10"L Inside Extension for RJ-Roof Jack
NOTE: Field assembled joints will be visible below ceiling



STEP THREE: Purchase proper Duct Connector, if existing connector is unsuitable

Duct Connection Adjustable Style	Depth—Home Floor To Duct Surface	Duct Connector	Furnace Base
90-DCU0-01	1" to 4"	86AA0013 +	87FB0005
90-DCU0-02	6" to 8"	86AA0014 +	87FB0005
90-DCU0-03	8" to 12"	86AA0015 +	87FB0005

FURNACE INFORMATION AND SELECTION

CLEARANCES

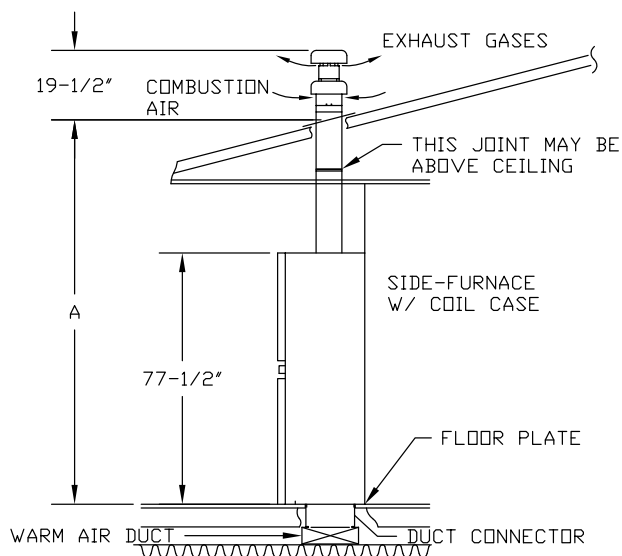
Top.....	6 in.
Sides.....	0 in. *
Back.....	0 in. *
Alcove—front of furnace.....	18 in.
Closet—front of furnace.....	6 in. **
Duct	0 in.
Vent/Roof Jack	0 in.

* If the return air opening is below the top of the furnace, clearance to the side or rear must be 6".

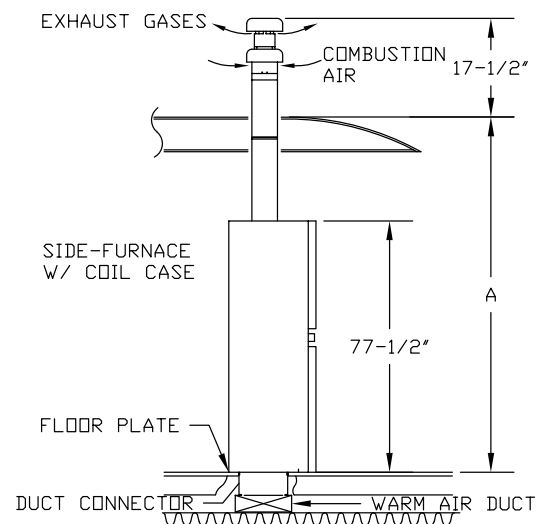
**See Return Air for clearances for less than 6".

SELECT SEALED COMBUSTION ROOF JACK (REQUIRED)

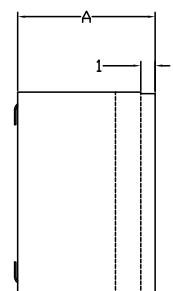
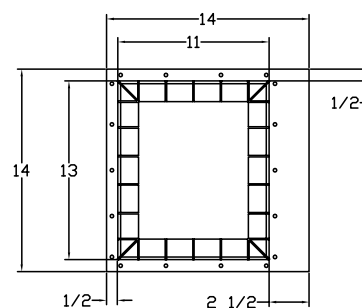
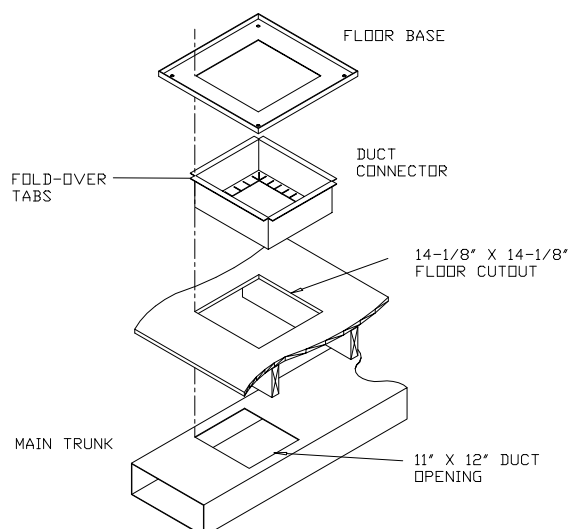
3/12 Pitch Roof



Flat-Bow Rafter Roof



87FB0005 FURNACE BASE AND 86AA001 (X) DUCT CONNECTOR — FLOOR TO DUCT SURFACE



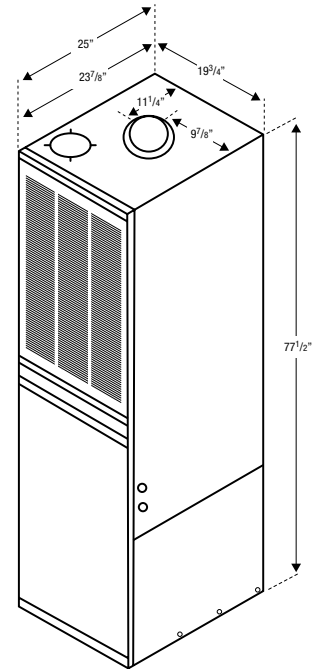
DIMENSION	A
86AA0013	4 1/2"
86AA0014	8 1/4"
86AA0015	12 1/4"

MGD-B SERIES FURNACES

BLOWER PERFORMANCE

ESP, In. W.C. DUCT	0.1	0.2	0.3	0.4	0.5
3 BLOWER—10x8, 1/3 HP, 3 Speed					
CFM—No Coil LO	980	950	910	875	825
“ MED	1220	1170	1120	1065	1015
“ HI	1460	1400	1340	1270	1195
CFM—With Coil LO	945	905	865	815	775
“ MED	1130	1085	1030	970	905
“ HI	1300	1240	1180	1105	1035
5 BLOWER—10x8, 3/4 HP, 4 Speed					
CFM—No Coil LO	995	960	915	875	825
“ MED	1205	1165	1130	1090	1045
“ MED HI	1470	1425	1385	1345	1310
“ HI	1810	1765	1720	1680	1635
CFM—With Coil LO	950	905	865	835	790
“ MED	1145	1115	1080	1035	1000
“ MED HI	1375	1345	1315	1280	1245
“ HI	1700	1660	1620	1575	1540

DIMENSIONS



MODEL IDENTIFICATION

M	G	D	70	-	E	3	B
Manufactured Home	Gas	Downflow	BTUH Input X1000		Electronic Hot Surface Ignition	Blower 3=1/3HP, 3 Spd 5=3/4HP, 4 Spd	Revision Level

We offer a complete line of accessories for the MGD Series of manufactured home furnaces. Some are necessary to meet certification requirements. Some are options that may be needed depending upon the application and the geographical location of the installation. These accessories are described in detail inside this brochure.



Solid state integrated control board—Monitors flame, plus start up and shut down of blower to improve efficiency

Combustion blower—Provides a consistent and stable flow of air to the burner and is unaffected by outside conditions

Hot surface ignition system—Safe method used with high efficiency 80% AFUE models—no standing pilot

Attractive appearance—Appliance white doors have rounded corners and plastic caps for a modern look

Fully insulated cabinet—Fiberglass insulation with reflective foil makes the units quiet and efficient while minimizing heat loss

Coil compartment—Handles coils for add-on A/C systems up to 5 tons

Monoport burner—Uses stainless steel and sintered metal for exceptional burner efficiency and long life

Warranty—5 years on mechanical parts, 10 years on heat exchanger (see printed warranty for limitations and details)

COST-EFFECTIVE, EFFICIENT GAS FURNACES — A PERFECT FIT FOR REPLACEMENT INSTALLATIONS



Sealed combustion "pipe-within-a-pipe" roof jack vents combustion gases while bringing in outdoor air for increased efficiency and safety



Hot surface, automatic ignition with high temp (2500° F) silicon carbide element is not affected by extreme weather or high winds



Solid state controls provide trouble-free ignition, and the programmed on-off blower achieves even room temperature for greater comfort



**Standard Furnace A/C ready
with coil compartment**

The Quality Leader in Conditioning Air

Heat Controller has entered its eighth decade of providing quality products for conditioning air. Founded in 1933, the company can trace its roots to the Wingert Furnace Co. which began operations in 1907. In 1955 the company moved to a new facility in Jackson, Michigan, which remains its headquarters today.

Heat Controller is known throughout the industry for efficient, reliable products and in-season availability. Whether for heating or cooling, these products meet or exceed industry standards for energy efficiency.

Every unit, including our gas furnaces for manufactured home use, is built to exacting standards using quality materials and is backed by solid warranty coverage and technical support.

Comfort-Aire®
HEAT CONTROLLER

1900 Wellworth Ave., Jackson MI 49203 • Ph. 517-787-2100 • www.comfort-aire.com

A **MARS** Company



OIL FURNACES



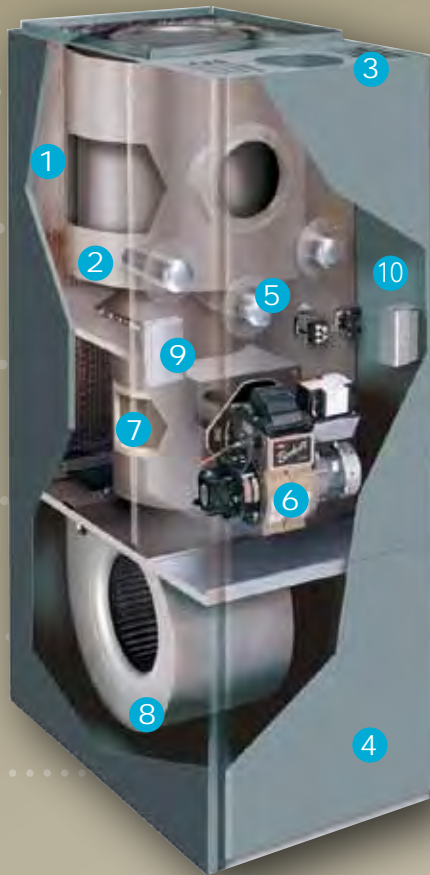
Comfort-Aire®

CLEAN, COMFORTABLE OIL HEAT

FEATURES

- 1 Foil-faced high density fiberglass insulation to minimize noise and heat loss
- 2 Heavy duty 14 gauge steel heat exchanger engineered for efficiency; covered by limited lifetime warranty
- 3 Available in upflow, downflow, horizontal, front or rear flue configurations
- 4 Corrosion-resistant steel cabinet construction with baked enamel finish for durability
- 5 Easy access stainless steel clean-out ports for complete servicing of heat exchanger

Highboy depicted; components representative of other configurations



- 6 State-of-the-art Beckett "AFG" burner with flame retention head, PSC burner motor and solid state ignition for smooth igniting
- 7 High temperature ceramic combustion chamber for quiet, high efficiency combustion
- 8 Multi-speed direct drive blower assembly with slide-out design and handy plug-in wiring (adjustable belt drive on OLRA200-BH)
- 9 Primary with integral fan center
- 10 Honeywell fan/limit for simple operation



Limited Lifetime Warranty
on Heat Exchanger

GeniSys™ Advanced Burner Control

Designed for trouble-free operation, the control has programmable delays for valve on and motor off, and indicator lights to simplify system monitoring and diagnostics. Two communication ports allow the addition of alarm contacts and future wireless communications. Features include technician pump prime mode, limited reset and limited recycle, and welded relay protection.

Quiet, Clean Comfort

A dense, ceramic fiber combustion chamber provides a quiet and efficient operating furnace while foil-faced high density insulation reduces operation sound as well as heat loss. State-of-the-art engineering and top quality components combine to provide clean burning warm air comfort—plus many models come pre-wired to easily add central air conditioning (two to five ton cooling capacities).

Efficiency and Versatility

The Patriot 80 oil furnace is exceptionally efficient and versatile thanks to its powerful heat exchanger that maximizes energy usage to minimize utility costs. Models feature multiple firing rates and capacities ranging from 58,000 to 196,000 BTUH, allowing a wide choice of heating efficiencies.

All models are AFUE rated at 80% or above.

Trouble-Free Maintenance

All components from the welded heat exchanger to the Beckett high efficiency oil burner with flame retention head are built to be reliable. With removable panels and easily accessed clean-out ports, all components are located for simple access and maintenance. In addition, the Patriot 80 features standard components should replacement parts be needed.

BLOWER PERFORMANCE

HIGHBOY

DIRECT DRIVE MODEL	MOTOR HP	BLOWER SIZE	TEMP RISE DEG. F	BLOWER SPEEDS	CFM@ EXT. STATIC PRESSURE - IN W.C.				
					0.2	0.3	0.4	0.5	0.6
OUFB75-D3	1/3	10 x 8	50-80	HIGH	1410	1355	1300	1220	1155
				MED. HIGH	1260	1215	1170	1120	1060
				MED.	1040	1025	990	960	910
				LOW	885	880	850	830	785
OUFB95-D4	1/2	10 x 10	50-80	HIGH	1755	1695	1940	1590	1495
				MED. HIGH	1445	1425	1400	1335	1285
				MED.	1190	1180	1145	1110	1055
				LOW	990	980	960	925	880
OUFB125-D5	3/4	12 x 11	45-75	HIGH	2090	1995	1940	1835	1760
				MED. HIGH	1835	1785	1725	1660	1595
				MED.	1630	1615	1569	1500	1460
				LOW	1425	1390	1375	1335	1300

LOWBOY

DIRECT DRIVE MODEL	MOTOR HP	BLOWER SIZE	TEMP RISE DEG. F	BLOWER SPEEDS	CFM@ EXT. STATIC PRESSURE - IN W.C.				
					0.2	0.3	0.4	0.5	0.6
OLFB95-D4/ OLRB95-D4	1/2	10 x 9	45-75	HIGH	1760	1670	1600	1550	1410
				MED. HIGH	1605	1515	1460	1395	1305
				MED.	1375	1345	1300	1260	1190
				LOW	1160	1150	1130	1105	1035
OLFB125-D5 OLRB125-D5	3/4	12 x 10	45-75	HIGH	2360	2275	2190	2130	2025
				MED. HIGH	2000	1975	1900	1835	1790
				MED.	1730	1720	1695	1675	1605
				LOW	1470	1465	1450	1440	1410
OLRB170-D5	3/4	12 x 10	45-75	HIGH	2245	2140	2035	1985	1835
				MED. HIGH	1835	1780	1730	1670	1610
				MED.	1620	1590	1540	1490	1435
				LOW	1460	1435	1400	1320	1280
BELT DRIVE MODEL				MOTOR PULLEY	MOTOR PULLEY ADJ.	BLOWER PULLEY	BELT SIZE INCHES	CFM @ 0.2" W.C.	
OLRA200-BH	3/4	12 x 12	65-95	6	CLOSED	3.5"	43	2660	

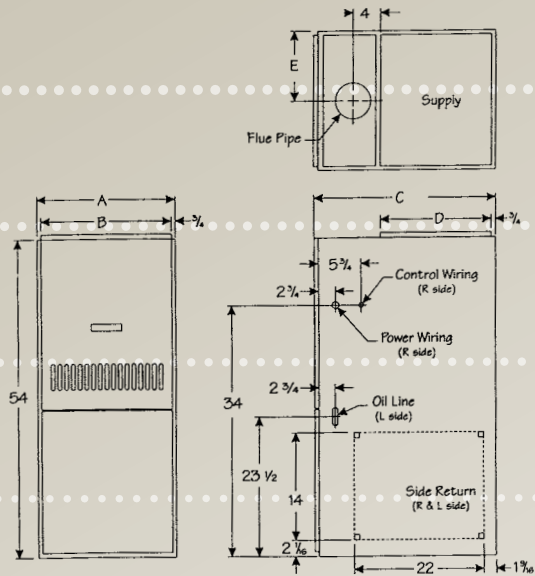
DOWNFLOW/HORIZONTAL

DIRECT DRIVE MODEL	MOTOR HP	BLOWER SIZE	TEMP RISE DEG. F	BLOWER SPEEDS	CFM@ EXT. STATIC PRESSURE - IN W.C.				
					0.2	0.3	0.4	0.5	0.6
ODFB95-D4	1/2	10 x 10	45-75	HIGH	1410	1320	1280	1195	1090
				MED. HIGH	1340	1280	1190	1100	1015
				MED.	1235	1175	1090	1015	920
				LOW	1090	1035	975	900	855
ODRB95-D4	1/2	10 x 10	45-75	HIGH	1485	1400	1305	1210	1105
				MED. HIGH	1380	1305	1220	1150	1035
				MED.	1230	1170	1110	1000	935
				LOW	1055	1020	970	910	835
ODFB125-D5	3/4	12 x 9	45-75	HIGH	2205	2120	2070	2005	1930
				MED. HIGH	1770	1740	1745	1710	1640
				MED.	1550	1530	1515	1485	1455
				LOW	1295	1290	1280	1270	1255

DIMENSIONS

HIGHBOY (in.)

DIMENSIONS	A	B	C	D	E
OUIB75/95	19 1/2	18	30 5/8	19 5/8	9 3/4
OUIB125	22 1/2	21	33 1/8	22 1/8	11 1/4
CLEARANCES	FRONT	SIDE	REAR		
All upflow models	4	0	0		
	ABOVE	FLUE	FLOOR		
	2	6	Combustible		



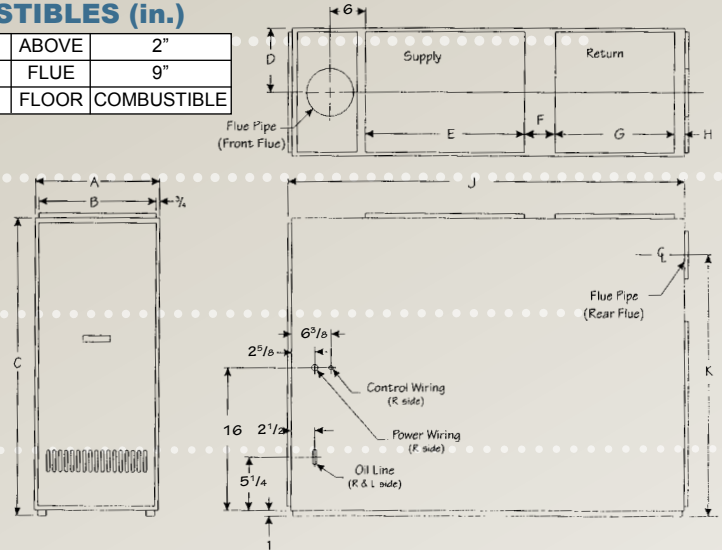
LOWBOY (in.)

DIMENSIONS	A	B	C	D	E	F	G	H	J	K*
OLBA95	19 1/2	18	37	9 3/4	21	3 1/4	16	1 1/2	52	N/A
OLRB95	19 1/2	18	37	N/A	21	3 1/4	16	1 1/2	52	27 5/8
OLFB125	22 1/2	21	37	11 1/4	21	3 1/4	16	1 1/2	52	N/A
OLRB125	22 1/2	21	37	N/A	21	3 1/4	16	1 1/2	52	27 5/8
OLRA170	24	22 1/2	39	12	23 1/8	2 1/4	18	1	54 3/4	29
OLRA200	26	24 1/2	42	N/A	24 3/8	2 1/2	23	1	60 1/2	32

* Rear flue models only.

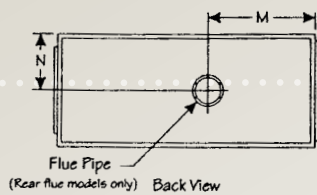
CLEARANCE TO COMBUSTIBLES (in.)

FRONT	4	ABOVE	2"
SIDES	6	FLUE	9"
REAR	24	FLOOR	COMBUSTIBLE



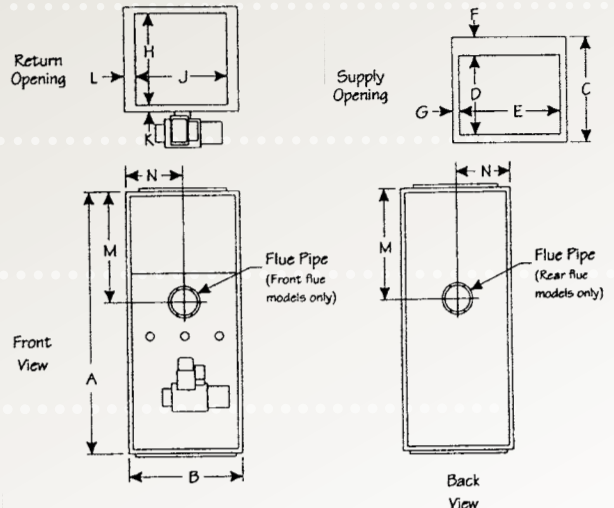
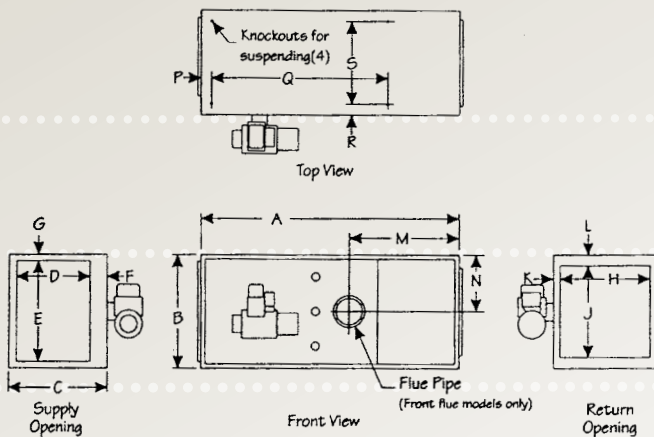
DOWNFLOW/HORIZONTAL

DIMENSIONS	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S
ODFB95/ODRB95	59	20 1/2	20 1/2	18 1/4	18 1/4	1 1/4	1 1/4	18	18	1 1/4	1 1/4	32 1/2	10 1/4	3	41 1/2	3	14 1/2
ODFB125	59	23 1/2	23 1/2	21 1/4	21 1/4	1 1/4	1 1/4	21	21	1 1/4	1 1/4	32 1/2	11 3/8	3	41 1/2	3	17 1/2



CLEARANCES (in.)

HORIZONTAL POSITION	FRONT	ABOVE	REAR	FLUE	BOTTOM	SIDE
ODFB95/ODFB125	24	1	1	7	1	N/A
ODRB95	24	1	24	7	1	N/A
DOWNFLOW POSITION	FRONT	ABOVE	REAR	FLUE	SIDES	FLOOR
ODFB95/ODRB95	16	0	1	7	1	Non-Combustible
ODFB125						



SPECIFICATIONS

NOTES:

All models rated at 140 psi pump pressure except the OUFB75-D3-1A.

All units shipped with high fire nozzle installed. Low fire nozzle included uninstalled.

HIGHBOY

MODEL	NOZZLE SIZE	INPUT BTUH	OUTPUT BTUH	AFUE	NOM. CAP. COOLING	FLUE DIA. (IN.)	FILTER SIZE	VOLTS/HZ/ PHASE	MAX. TIME DELAY BREAKER OR FUSE	TRANS. VA.	SHIPPING WEIGHT LBS.
OUFB75-D3	.50GPH-80°A	67,500	57,000	84	2.0-3.0	6	16 x 25	120/60/1	15 amp	40	230
	.65GPH-80°B	85,500	72,000	84							
OUFB95-D4	.65GPH-80°B	101,000	84,000	83	2.5-4.0	6	16 x 25	120/60/1	15 amp	40	250
	.75GPH-80°B	113,500	95,000	83							
OUFB125-D5	.85GPH-80°B	135,000	113,000	83	3.0-5.0	6	(2) 16 x 25*	120/60/1	15 amp	40	270
	1.00GPH-80°B	151,000	126,000	83							

NOTES:

*-Requires return air to be brought in on both sides above 1600 cfm.

Upflow models shipped with filter(s) for side return.

LOWBOY

MODEL	NOZZLE SIZE	INPUT BTUH	OUTPUT BTUH	AFUE	NOM. CAP. COOLING	FLUE DIA. (IN.)	FILTER SIZE	VOLTS/HZ/ PHASE	MAX. TIME DELAY BREAKER OR FUSE	TRANS. VA.	SHIPPING WEIGHT LBS.
OLFB95-D4/	.65GPH-80°B	101,000	85,000	83	2.5-4.0	6	18 x 19	120/60/1	15 amp	40	225
OLRB95-D4	.75GPH-80°B	113,500	95,000	83							230
OLFB125-D5/	.85GPH-80°B	134,000	113,000	83	3.0-5.0	6	19 x 21	120/60/1	15 amp	40	225
OLRB125-D5	1.00GPH-80°B	151,000	127,000	83							230
OLRA170-D5	1.10GPH-80°B	175,000	140,000	80	3.5-5.0	6	20 ¹ / ₈ x 22 ⁷ / ₁₆	120/60/1	15 amp	40	295
	1.25GPH-80°B	210,000	168,000	80							
OLRA200-BH	1.50GPH-80°B	245,000	196,000	80	5.0-6.0	8	24 ⁵ / ₈ x 24 ³ / ₈	120/60/1	20 amp	12*	390

DOWNFLOW/HORIZONTAL

MODEL	NOZZLE SIZE	INPUT BTUH	OUTPUT BTUH	AFUE	NOM. CAP. COOLING	FLUE DIA. (IN.)	VOLTS/HZ/ PHASE	MAX. TIME DELAY BREAKER OR FUSE	TRANS. VA.	SHIPPING WEIGHT LBS.
ODFB95-D3	.65GPH-80°B	101,000	85,000	83	2.0-3.0	6	120/60/1	15 amp	40	250
ODRB95-D3	.75GPH-80°B	113,500	95,000	83						
ODFB125-D5	.85GPH-80°B	135,000	113,000	84	3.0-5.0	6	120/60/1	15 amp	40	270
	1.00GPH-80°B	150,000	126,000	84						

Filters are not shipped with downflow/horizontal models.

Downflow/Horizontal

Combustible floor bases used on
75 & 95 models -7605-100
125 models - 7605-101

Filters

75 & 95 models -7605-102
125 models - 7605-103

Clean Out Kit

7605-104 (all models)



OIL FURNACES



The compact Patriot 80 comes in a variety of configurations to fit virtually anywhere, including utility rooms, alcoves, closets, crawl spaces and attics. In addition to upflow, downflow/horizontal, rear flue and front flue versions, models are available in heat only or A/C ready combinations.

In selecting a furnace, oversizing is not recommended—the closer the heating output is matched to the heat loss of the residence, the more comfortable the homeowner will be while saving on fuel usage. With the Patriot 80, the model can be easily matched to the desired heating requirements: units are built with multiple firing rates and a simple nozzle change adjusts the firing rate to the heating requirement.



All Patriot 80 Oil Furnaces are covered by a limited Lifetime Warranty on the heat exchanger and a 5 Year Warranty on other parts.

Some limitations apply, see printed warranty on web site for details.

Specifications and performance data subject to change without notice.



Comfort-Aire[®]
HEAT CONTROLLER



1900 Wellworth Ave., Jackson MI 49203 • Ph. 517-787-2100 • www.comfort-aire.com

A *TRIS* Company



**225,000
to 450,000 BTUH**



BURNER KITS

Model	Oil Burner
LG14-225/275B40	A501-1
LG14-350/450B60	A502-1

*Burners must be ordered separately—
See part numbers above.*

Oil Industrial Furnace

Heating capacities of 225,000 to 450,000 BTU/hour are available in our LG Series oil furnaces, making them ideal for churches, schools, and commercial buildings. Select the size you need, then select the burner—burners are ordered separately depending on your requirements. A barometric control is included with the oil burner package.

LG units can be installed either vertically or horizontally for site application flexibility. The cabinet is constructed of steel for durability with a removable panel to access the motor. and a convenient observation door.

Designed with a 3450 RPM burner with stainless steel flame retention head, oil valve, two-stage fuel pump and primary safety relay Motor size is 1½ HP for the 225/275 size, and 2 HP for the 350/450 size unit.

FEATURES

- **Efficient**—The energy efficiency rating is 81%; twin blowers move heated air
- **Durable**—The base frame and blower deck are 16 gauge steel, the front header box is 14 gauge aluminized steel, and the heat exchanger is 14 gauge stainless steel
- **Easily Serviced**—Removable panels permit easy access to the motor for service and for clean-out; twin blowers are mounted on rails to be serviced from either side
- **Safety Features**—Internal overload protection for the motor, primary and secondary fan and limit controls

Steady State Efficiency 81%

Power 230-1-60

	Oil Burner		Rated CFM	Drive Pulley Size	Belt Size	Motor Size	Dimensions H x W x D (in.)	Shipping Wt. (lbs)
Models	Output BTUH	Nozzle Size						
VERTICAL/HORIZONTAL INSTALLATION								
LG14-225/275B40	225,000	2.0 70°B	4,000	4 ¹ / ₈ " x 11 ³ / ₄ "	58"	1.5 HP	66 x 29 x 44	520
	275,000	2.5 60°B						
LG14-350/450B60	350,000	3.0 70°B	6,000	4 ¹ / ₈ " x 13 ³ / ₄ "	61"	2.0 HP	66 x 29 x 63	680
	450,000	4.0 60°B						

Note: Filter is not supplied as standard.

Limited Warranty—5 years on heat exchanger, 1 year on parts
(Some limitations apply; see printed warranty for details.)

Product specifications, design, materials and appearance subject to change without notice.

HEAT CONTROLLER

1900 Wellworth Ave., Jackson MI 49203 • Ph. 517-787-2100 • www.heatcontroller.com

A **WELPS** Company

Geothermal & Water Source Heat Pumps

This section contains:

Geothermal Catalog

Geothermal Coils

Geothermal Air Handlers

Geothermal Accessories Catalog

Water Source Catalog

GEO THERMAL

THE LOGICAL CHOICE
FOR ENERGY EFFICIENT
RESIDENTIAL HEATING
AND COOLING



Comfort-Caire®

NOTHING COMPARES

...TO THE EFFICIENCY OF A GEOTHERMAL HEAT PUMP

Glossary *of* Terms

GEOTHERMAL—Refers to a geothermal heat pump which uses the thermal energy of the ground or ground water to provide heating and cooling; primarily residential

WATER SOURCE—Refers to water source heat pumps used in commercial installations; generally involves boiler/cooling tower and/or water loop installation

BTUH—British thermal units per hour, used to indicate heat output

CLOSED LOOP—Another name for ground loop geothermal systems

COP—Coefficient of Performance, a measurement of efficiency in heating; the higher the number, the more efficient the equipment

DESUPERHEATER—A partial heat recovery system that captures heat from hot refrigerant as it leaves the heat pump compressor and transfers the heat to domestic hot water

EER—Energy Efficiency Ratio, a measurement of efficiency in cooling; the higher the number, the more efficient the equipment



ENERGY STAR®—Signifies an energy efficient product, designation first developed by United States government and now recognized by Canada and a number of other countries

EWI—Entering water temperature which is the temperature of the water or water/antifreeze solution when it enters the coaxial coil of the unit where the heat exchange process with the refrigerant cycle begins

HVAC—Refers to heating, ventilation and air conditioning equipment and systems

GROUND LOOP—Geothermal system with heat transfer liquid permanently contained in piping buried in the ground or submerged in a pond or lake

GROUND WATER—Geothermal system in which water is pulled from an aquifer and used for heat transfer, then released to another well, a ditch or other approved water source

OPEN LOOP—Another name for ground water geothermal installations



R-410A—The environmentally friendly refrigerant now used in all HVAC equipment; all Comfort-Aire geothermal units shown in this brochure are charged with R-410A

SINGLE STAGE—Heat pump that operates at one stage and one capacity

TAX CREDITS—U.S. Federal law allows a tax credit of 30% for installations of new qualifying geothermal equipment, with no dollar cap, through 2016



TWO STAGE—Heat pump that operates at two stages, depending on demand, and at different speeds through the use of multi-stage compressors and multi-speed blower motors; exceptionally efficient at low speeds but capable of supplying more heat or cooling when required

WATER LOOP—Installation used in many commercial applications, includes boiler/cooling tower

Table of Contents

Geothermal Advantages.....	4
Installation Flexibility	6
Advanced Design	7
Energy Efficiency Explained	7
Guide to Features.....	8
Two-Stage Configurations.....	9
HTV/HTD/HTH Two-Stage Package.....	10
HEV/HEH Two Stage Package	11
HTS Two-Stage Split	12
HWW Water-to-Water.....	14
Ready to Buy?.....	15

Comfort-Aire®



All Comfort-Aire geothermal heat pumps have AHRI (Air Conditioning, Heating and Refrigeration Institute) certification and are tested for safety by ETL for use in the United States and Canada.

TODAY'S GEOTHERMAL:

Energy Efficient *and* Earth Friendly



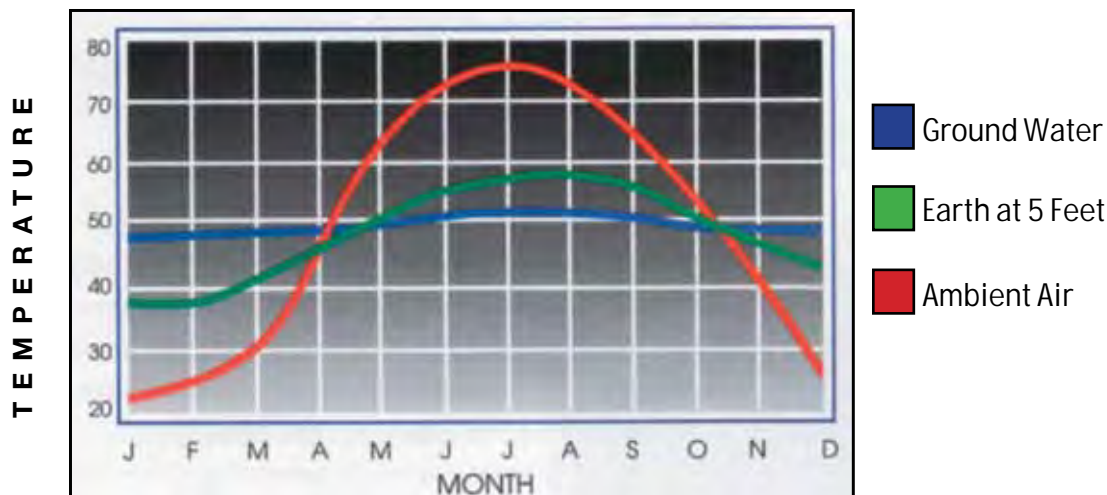
Rising energy costs have made us all aware of the need for energy efficiency. At the same time, we are becoming conscious of the cost to the earth's environment for the ever-expanding use of fossil fuels. While there are many approaches to saving energy, lowering utility costs, and conserving natural resources, geothermal systems offer a proven solution that's not only practical, but readily available today. Nothing compares to the efficiency of geothermal systems.

A geothermal heat pump can save half the cost of heating and cooling the average home. In fact, for every unit of energy used to run a geothermal pump and blower, three to five units of heat energy are produced.

Because geothermal systems rely on the relatively stable temperatures of the earth for heat transfer, they aren't burning fossil fuels to create energy for heat or cooling. The systems are extraordinarily efficient because in most geographical areas, the temperature of the earth at five feet below the surface remains fairly consistent, no matter what the season. Similarly, ground water temperatures are constant over the course of the year.

The basic concept is simple: piping or tubing is buried in the ground or submerged in a pond or lake. In the winter, heat is absorbed from the water or ground (depending on the type of system) and transferred to the heat pump where it is distributed through the home's ductwork. In the summer, hot air in the home is extracted and

USING THE EARTH ITSELF FOR HEAT TRANSFER



The year 'round stable temperatures of ground water and the earth itself make it possible for the energy exchange to occur in geothermal systems.

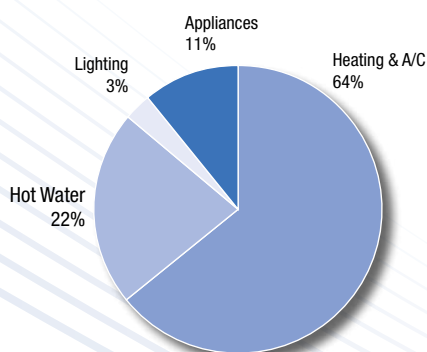


transferred to the cooler ground or water. It is this consistency of earth or water temperature that allows heat transfer to occur—keeping you cool in summer and warm in winter.

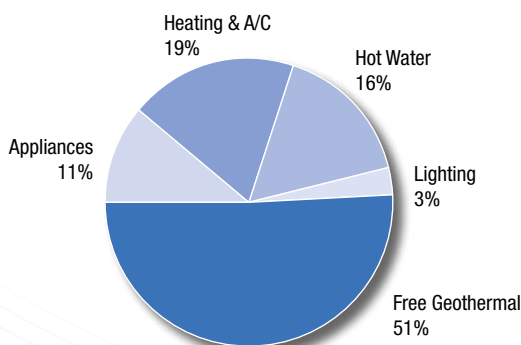
Energy efficiency is the primary advantage of a geothermal system. Energy is needed only to run the compressor and to pump a water solution through the buried piping and then to run the system's blower to distribute the conditioned air. Not only is it possible to heat and cool your home with a geothermal heat pumps, but several of our systems come with a hot water generator that supplements heating of domestic hot water (in both the heating and cooling modes) for further savings.

With a geothermal system, over half your home's energy is free!

RESIDENTIAL ENERGY USE



Conventional System



Geothermal System

Our geothermal systems can work in virtually every climate. With an extended operating range of 20° to 120° F for entering water temperature, they provide a comfortable indoor environment all year long, although some northern locations may require a supplemental heat source.

Other advantages include exceptionally quiet operation.

Multiple sound attenuation features are built into the design, including a special compressor mounting system that reduces vibration and interior cabinet insulation. Also, there are fewer moving parts to wear out than with a conventional heating/cooling system.

Many people appreciate the safety that is inherent in a geothermal system. No gas or oil is used, there's no standing pilot light, no fumes and no odors to worry about.

Finally, there's the confidence that comes from having technology that's been proven over many years and recognized by the EPA and the U.S. Department of Energy.

Exceptional efficiency means fast payback...

Although the initial cost of a geothermal system is higher than a conventional heat pump or furnace/condenser combination, you can quickly recoup these costs through energy savings and potential Federal tax credits.

On average, geothermal heat pumps provide:

- 40% greater efficiency than air-to-air heat pumps
- 48% greater efficiency than gas furnaces
- 75% greater efficiency than oil furnaces

(Source: Geothermal Heat Pump Consortium)

Ask your dealer to prepare a cost savings analysis for you to determine just how much you can save over the life of the system. Our LoopLogix® software makes it easy to compare operating costs of various systems based on your home's requirements and historical weather data.



Geothermal... the logical choice

Installation Flexibility

WHICH TYPE OF SYSTEM AND WHICH TYPE OF INSTALLATION YOU CHOOSE IS DETERMINED BY YOUR PREFERENCE, YOUR GEOGRAPHIC AREA, AND THE AVAILABILITY OF GROUND WATER OR ADEQUATE LAND FOR BURYING LOOP PIPES. DESIGNED PROPERLY, ALL SYSTEMS WORK EQUALLY WELL.

GROUND LOOP

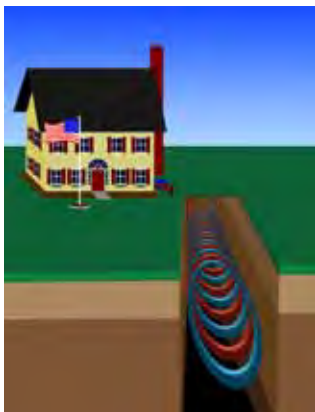
In this heat exchange method, the heat transfer fluid is permanently contained in a closed piping system. This piping, typically made of polyethylene tubing, is buried in the earth or submerged in a pond or lake. The heat transfer fluid—a solution of antifreeze and water—is pumped through the piping. In the winter, it absorbs heat from

the earth or water. This relatively warm solution is then pulled back to the heat pump which extracts heat and circulates warm air throughout the house.

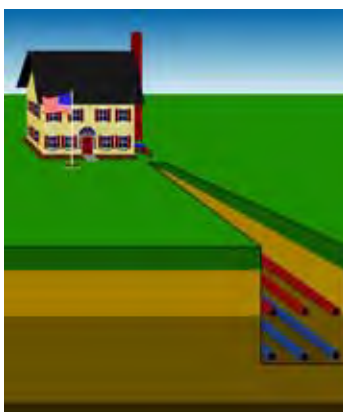
During hot weather, heat in the home is extracted by the heat pump and transferred to the liquid circulating through the closed loop piping. The cooler earth or water then absorbs this heat, and the cooled water is

circulated back to the heat pump and used to cool the house.

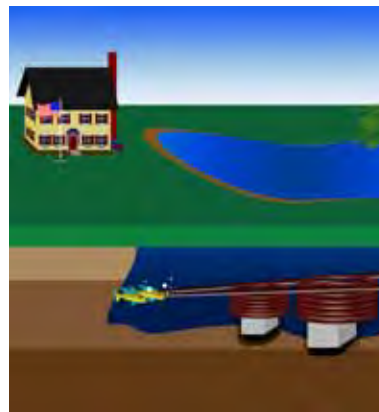
Ground loop systems can have piping buried in horizontal trenches or in vertical bores—some types of installations are shown below. The number, length and diameter of the pipes are determined by the heating/cooling load of the house, as well as the amount of land or the availability of a pond or lake.



Slinky-type piping can be buried in a horizontal trench.



This backhoe trench shows six pipes—three outgoing, three incoming.



Coils of piping can be submerged in a pond, as can slinky piping.



For a limited space, a vertical hole is used; this one shows two u-tubes.

GROUND WATER

In this type of system, there is no heat exchange fluid enclosed in piping. Water is removed from an aquifer and is circulated through the heat pump. This water is then discharged to a pond or lake, or into another well—unchanged except for temperature.

The heat exchange process works the same as in a Ground Loop system: in the heating mode, heat is extracted from the

water and transferred to the air being circulated in the home. In the cooling mode, the process is reversed and heat from the home is extracted by the heat pump and transferred to the cooler ground water.

The illustration shows how water is pulled from a well into the heat pump inside the house, before being discharged into another well, pond or approved location.



A typical ground water well installation.

advanced DESIGN

All Comfort-Aire geothermal heat pumps are designed for reliable, quiet operation and long life to keep you comfortable for years to come

DEPENDABLE

- State-of-the-art, solid state microprocessor controls feature easy to understand diagnostics
- Scroll compressor is rated for heat pump use, and designed for quiet operation and efficiency
- Performance monitoring system signals a potential problem, much like a car's "check engine" light, so service can be scheduled
- Insulated, stainless steel drain pan has condensate overflow protection
- Limited number of moving parts means less wear and long life expectancy
- Tin-plated air coil prolongs equipment life in most environments and improves efficiency

INSTALLATION FLEXIBILITY

- Condensate line is internally trapped
- Swivel connectors make water hook-up quick and easy
- Compact models are ideal for tight spaces or retrofit applications

QUIET OPERATION

- Double spring and grommet isolation mounting system for the compressor reduces vibration
- Flexible torsion motor mounting further reduces vibration and related sound
- Compressor compartment is insulated; it's also separated from the air handler by an insulated divider (package models)
- Discharge muffler reduces inherent compressor pulse noise

EASY SERVICING

- Components can be accessed from multiple sides to simplify service and maintenance
- Removable blower inlet ring allows easy access to the fan and motor for maintenance
- Safety features protect the unit: High pressure and loss of refrigerant charge to protect compressor; condensate overflow; freeze protection for coaxial heat exchanger and air coil; hot water generator limiter; fault lock-out enables emergency heat and prevents compressor operation



What do we mean by 'Energy Efficiency'?

In recent years, the HVAC industry has made significant advances in the energy efficiency of heating and cooling systems. You can judge efficiencies yourself by comparing some industry standards.

Cooling efficiency is measured by an Energy Efficiency Ratio (EER). This is a ratio of total cooling capacity to electrical energy output. The higher the number, the more efficient the equipment. Our geothermal units have EER ratings as high as 31.5 at ground water conditions, while conventional air-to-air heat pumps have ratings generally in the teens—13 to 18 SEER, for instance, which translates to an actual EER of 10 to 15.

On the heating side, efficiency is shown by a Coefficient of Performance (COP), which shows the ratio of total heating capacity to electrical energy output. As with EERs, the higher the number, the more efficient the equipment. Again, geothermal systems—especially our two-stage models—rate significantly higher than traditional heat pumps.



Comfort-Aire models in this brochure are Energy Star® compliant and most qualify for Federal Tax Credits.

Look for the Energy Star logo throughout this brochure.



LOOPLOGIX®
Geothermal Design Software from Comfort-Aire has everything the installer/dealer needs to help you decide on the right type of geothermal system—or even if a geothermal system is right for you. Once the heating/cooling load has been determined, it takes just a few clicks to design a loop field, compare operating costs of up to six different installations (or types of systems), and calculate return on investment.

Results can be printed out for you—be sure to ask for your LoopLogix® report when you're considering a geothermal installation.

Quick Reference Guide to Features

Feature	HTV	HTH	HTD	HTS	HEV/HEH	HWW
Residential Applications	•	•	•	•	•	•
Commercial Applications	•	•	•	•	•	•
Energy Star® Compliant	•	•	•	•	•	•
Scroll Compressor	•	•	•	•	•	•
Two Stage Compressor	•	•	•	•	•	
Microprocessor Controls	•	•	•			•
DMX Digital Electronic Controls*				•	•	
ECM Blower Motor	•	•	•		•	
Performance Monitoring	•	•	•	•	•	•
"Safeties" Protection	•	•	•	•	•	•
Hot Water Generator*	•	•	•	•	•	•
Interior Insulation	•	•	•	•	•	•
Discharge Muffler	•	•	•	•	•	
Double Isolation Mounting	•	•	•	•	•	•
Tin Plated Air Coil	•	•	•	•	•	•
Extended Range 20° - 120° F** HWW 20° - 110° F	•	•	•	•	•	•
TXV Metering Device	•	•	•	•	•	•
Brass Swivel Connections	•	•	•	•	•	•
Galvanized Steel Cabinet	•	•	•	•	•	•
Epoxy Powder Coat Finish	•	•	•	•	•	•
Multiple Removable Panels	•	•	•	•	•	•
Available in Multiple Voltages						•
Ground Loop	•	•	•	•	•	•
Ground Water	•	•	•	•	•	•

Hot water generator may be optional; see individual series for specific features.

*These units can work with a communicating thermostat, our part no. 7602-443.

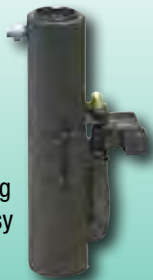
**Entering water temperature.

Due to ongoing product improvements, design, specifications, materials and appearance are subject to change without notice.

ASK YOUR DEALER ABOUT THESE CONVENIENT COMFORT-AIRE ACCESSORIES

Standard Flow Center

A permanent part of your geothermal system, this non-pressurized pumping station makes it easy to flush the system and add fluid, then automatically purges any air.



Deluxe Flow Center

This non-pressurized pumping station includes the same components as Standard model, but in an attractive cabinet. Choose from one pump or two pump versions.



Pressurized Loop Pump

An essential part of the geothermal system, pump circulates liquid through the heat exchanger, then out through the loop and back, so heat transfer can occur. Available in single or dual pump models.



Advanced design and quality construction make our two-stage models exceptionally quiet and efficient



Heavy duty blower with multiple features for noise dampening

ECM blower motor automatically adapts to system requirements for even temperatures

Removable panels on three sides allow easy access for installation, maintenance

Air handler and compressor compartments are separated by an insulated divider

Insulated, stainless steel drain pan has condensate overflow protection

Microprocessor controls with monitoring system

G90 galvanized steel cabinet with epoxy powder coat paint for durability and attractive appearance

Large filter captures pollutants for enhanced indoor air quality, can be easily changed

Tin plated air coil for corrosion protection

Two-stage compressor delivers comfort more efficiently than single stage models, has discharge muffler for sound reduction

Double isolated compressor mounting reduces vibration and related operational sound

Brass swivel connectors are standard and are conveniently located for fast installation

All Comfort-Aire geothermal heat pumps meet or exceed all applicable industry standards.



HT SERIES HEAT PUMP CONFIGURATIONS



HTV VERTICAL:
As shown above



HTH HORIZONTAL: Includes same components as shown above, with upper and lower compartments placed side by side.



HTD DOWNFLOW: Includes the same components as shown above, but with upper and lower compartments reversed.



HTS SPLIT SYSTEM:
Contains components in the bottom half of the unit shown above. A separate air handler or furnace fan is required.

GEO THERMAL

Two-Stage Package Heat Pump

GeoLogix Plus™

Our two-stage design far exceeds ASHRAE 90.1 efficiencies, allowing the unit to run at 67% capacity most of the time to maintain a consistent temperature and humidity level. When there's a demand for greater heating or cooling, such as during weather extremes, the unit instantly shifts to 100% capacity.

This full load/part load capacity significantly lowers operating costs. At the same time, it increases comfort because there's no on/off cycling of the system.

The high tech design of the high efficiency ECM blower motor adapts automatically to system demand, delivering a multitude of benefits including silent ramp-up, a speed for every mode and much more—all designed to overcome ductwork static pressure (even poor duct design) to maximize the flow of conditioned air.



FEATURES

- **Quiet Operation**—Double isolation compressor mounting and vibration isolation springs combined with insulated compressor and air handler compartments dampen operating sound
- **Variable Speed Blower Motor**—Automatically adapts to all applications; provides a multitude of operational modes that maximize comfort and efficiency
- **Two Stage Compressor**—Copeland multi-stage scroll compressor delivers comfort at higher efficiencies than single stage models
- **Microprocessor Controls**—Includes performance monitoring system to signal a potential problem before a lockout can occur
- **Standard Features**—Comes with domestic hot water generator with built-in pump for value and extra efficiency
- **Extended Operating Range**—20° to 120° F entering water temperature makes the HT Series suitable for virtually all applications and climates



▲ **HTV Models**—Vertical upflow

◀ **HTD Models**—Downflow/counterflow

▼ **HTH Models**—Horizontal



Power 208/230-1-60

AHRI/ISO/ASHRAE/ANSI 13256-1 Performance

2 to 6 Tons

Model	Capacity Modulation	Ground Water				Ground Loop				Shipping Wt. (lbs)
		Cooling		Heating		Cooling		Heating		
		Water 59°F		Water 50°F		Full Load 77 °F Part Load 68°F		Full Load 32 °F Part Load 41°F		
		BTUH	EER	BTUH	COP	BTUH	EER	BTUH	COP	
HTV/HTD/ HTH024	Full Part	28,500 21,800	27.1 35.1	24,600 17,500	4.9 5.2	26,100 20,700	19.7 27.8	18,700 15,100	3.9 4.5	308
HTV/HTD/ HTH036	Full Part	43,100 31,100	26.9 34.2	37,000 25,900	5.1 5.3	39,700 30,200	20.1 29.4	29,000 23,000	4.3 4.7	345
HTV/HTD/ HTH048	Full Part	55,600 41,800	25.9 34.1	48,200 34,800	4.7 5.0	50,600 40,100	19.1 27.7	37,000 29,900	3.9 4.3	458
HTV/HTD/ HTH060	Full Part	71,300 52,900	24.2 32.3	63,000 43,800	4.7 4.9	66,000 51,000	18.6 26.5	48,500 37,900	3.8 4.3	485
HTV/HTD/ HTH070	Full Part	77,500 60,600	22.3 28.4	71,200 53,000	4.3 4.4	71,500 57,900	16.7 23.0	55,600 45,800	3.6 3.8	485

Outstanding Limited Warranty—12 years on compressor and parts

10 (Some limitations apply; see printed warranty for details.)

Cooling capacities based on 80.6° F DB, 66.2° F WB entering air temp.
Heating capacities based on 68° F DB, 59° F WB entering air temp.
All ratings based on 208V operation.

GEO THERMAL

2 to 5 Tons

Two Stage Package Heat Pump

Self-contained, package HE Series units combine a small footprint with two stage operation and integrated digital communication controls at a competitive price. Exceeding industry standards for energy efficiency including Energy Star® Tier 3 requirements, the units are eligible for tax credits.

A digital electronic controller links the thermostat, fan motor and compressor staging to provide set-up and diagnostic data, saving time during installation and service calls. Also saving installation time is a four wire connection between the controller and the communicating thermostat. If the communicating thermostat is not used, the installer can use an optional separate diagnostic tool to access the data, and a port for the tool is built into the unit.

The two stage compressor runs at 67% capacity most of the time to maintain a consistent temperature/humidity level. When there's demand, the unit instantly shifts to 100% capacity. The ECM blower motor automatically adapts to system requirements for increased efficiency.

The HE Series is designed for open loop, closed loop and boiler/cooling tower applications, and the compact size makes it ideal for tight spaces. (Vertical unit pictured, horizontal unit also available.)



**With Electronic
Digital Controller**



FEATURES

- **Extended Range Refrigerant Circuit**—HE unit is capable of geothermal ground loop and ground water applications, as well as boiler/cooling tower water loop installations
- **Scroll Compressor**—Dependable two stage design is efficient, reliable and quiet
- **Large Filter**—Captures pollutants for enhanced indoor air quality, can be quickly changed as needed

- **System Performance Monitoring**—Signals when the system is not running at peak performance so maintenance can be scheduled
- **Quiet Operation**—Double isolation compressor mounting and air handler compartment insulation make the HE one of the quietest units on the market
- **Easy Service Access**—All components can be accessed through the conveniently located control box and large access panels for fast installation, easy maintenance



All models 208/230V-1-60

AHRI/ISO/ASHRAE/ANSI 13256-1 Performance

Model	Capacity Modulation	Ground Water				Ground Loop				Shipping Weight (lbs.)
		Cooling Water 59° F		Heating Water 50° F		Cooling Full Load 77° F Part Load 68° F		Heating Full Load 32° F Part Load 41° F		
		BTUH	EER	BTUH	COP	BTUH	EER	BTUH	COP	
HEV/HEH 024	Full	24,900	20.2	22,900	4.2	22,700	15.0	18,200	3.5	213
	Part	18,600	24.0	16,200	4.3	17,800	20.0	14,100	3.7	
HEV/HEH 030	Full	32,100	20.5	29,800	4.1	29,700	15.5	23,600	3.5	213
	Part	24,700	24.6	21,800	4.2	24,000	20.7	19,200	3.8	
HEV/HEH 036	Full	37,200	19.6	34,700	4.1	34,500	14.6	27,700	3.5	239
	Part	27,700	25.0	24,500	4.4	26,900	20.4	22,100	3.9	
HEV/HEH 042	Full	46,100	21.1	42,100	4.0	42,900	15.9	33,100	3.4	250
	Part	35,000	26.2	30,300	4.2	33,800	21.8	26,700	3.8	
HEV/HEH 048	Full	51,600	20.7	44,800	4.3	47,900	15.3	35,400	3.6	306
	Part	39,000	26.6	32,400	4.5	37,400	21.0	29,000	4.0	
HEV/HEH 060	Full	63,800	20.4	58,000	4.0	59,600	15.9	45,700	3.4	321
	Part	48,900	25.9	42,100	4.2	47,000	21.8	37,000	3.8	

Outstanding Limited Warranty—10 years on compressor and parts

(Some limitations apply; see printed warranty for details.)

Two-Stage Split System

GeoLogix Plus™

The HTS Series combines the advantages of split system design with two stage efficiency. Far exceeding ASHRAE 90.1 efficiencies, the unit runs at 67% capacity most of the time to maintain a constant temperature and humidity level. When there's a demand for greater heating or cooling, such as during weather extremes, the unit instantly shifts to 100% capacity. Comfort is increased and operating costs lowered through this shifting of part load and full load capacity.



The HTS split system is ideal for locations where a packaged geothermal unit won't fit the existing space, such as an attic or crawl space. Not only is the cabinet compact in size, it can be stacked for multi-unit installation and, when matched with an air handler, delivers high levels of efficiency similar to our two-stage package heat pumps. All models are pre-charged with environmentally friendly R-410A.



FEATURES

- **Quiet Operation**—Double isolation compressor mounting system and vibration isolation springs for sound attenuation; insulated compressor compartment also reduces operational sound
- **Easy Installation/Service**—Back-seating service valves included; panels on three sides are easily removed for access to components
- **Extended Operating Range**—20° to 120° F EWT range makes units suitable for virtually all applications and climates
- **Two-Stage Compressor**—Copeland multi-stage scroll compressor provides steady comfort at higher efficiencies than single stage models
- **DMX Controls**—Two-way communication capability with optional communicating digital thermostat speeds set-up and configuration, helps diagnose operation problems
- **Durable Cabinet**—G90 galvanized steel has a tough epoxy powder coat paint finish; drain pan is stainless steel; air coils are tin plated for corrosion protection



WDG Air Handler

- Multi-position—can be installed for vertical upflow or downflow, or horizontal right or left airflow
- ECM blower motor matches speed to changing requirements for efficiency
- Factory installed A-coil
- Insulation reduces blower sound

Cabinet Sizes: A = 18.5 W x 44 H x 22 D
B = 22 W x 55 H x 22 D
C = 25.5 W x 59 H x 22 D



MWG Cased Coil

- Multi-position for upflow, horizontal and downflow applications, and horizontal left or right airflow
- Built with R-410A TXV thermal expansion valve
- Corrosion-proof drain pan
- Lined with foil faced insulation for quiet operation
- Dual condensate connections simplify hook-ups

Fits Furnace Width: B = 17.5"
C = 21" to 21.5"
D = 24.5"

Model	Nom. Cap. BTUH	Fan Motor HP	Cabinet Sizes	Shipping Wt. (lbs)
WDG24VS	24,000	1/2	A & B	96 & 179
WDG36VS	36,000	1/2	B & C	198 & 206
WDG48VS	48,000	1	B & C	218 & 226
WDG60VS	60,000	1	C	236

Model	Nom. Cap. BTUH	Fan Motor HP	Furnace Width	Shipping Wt. (lbs)
MWG24	24,000	1/2	B & C	57 & 60
MWG36	36,000	1/2	C & D	60 & 118
MWG48	48,000	1	C & D	83 & 118
MWG60	60,000	1	D	118

Coil and air handlers are AHRI certified when matched with HTS split units for water source applications.

Ground Water

2 to 5 Tons

Model	Coil Match	Capacity Modulation	Cooling Water 59° F		Heating Water 50° F		Shipping Wt. (lbs)
			BTUH	EER	BTUH	COP	
HTS024	WDG24-A	Full	29,000	23.2	24,900	4.60	218
		Part	22,500	31.5	18,700	5.30	
HTS036	WDG36-A	Full	41,300	22.2	36,700	4.70	236
		Part	30,100	29.6	26,000	5.00	
HTS048	WDG48-A	Full	52,100	21.3	48,400	4.70	265
		Part	39,900	26.5	35,900	5.20	
HTS060	WDG60-A	Full	63,900	20.1	59,900	4.10	280
		Part	51,000	26.9	42,600	4.30	

Model	Air Handler Match	Capacity Modulation	Cooling Water 59° F		Heating Water 50° F		Shipping Wt. (lbs)
			BTUH	EER	BTUH	COP	
HTS024	MWG24-A	Full	28,700	22.3	25,200	4.60	218
		Part	21,900	29.1	18,600	5.20	
HTS036	MWG36-A	Full	41,800	22.4	35,300	4.60	236
		Part	30,300	29.9	25,100	5.10	
HTS048	MWG48-A	Full	54,700	22.0	46,100	4.60	265
		Part	42,500	28.3	34,200	5.00	
HTS060	MWG60-A	Full	62,200	19.7	56,000	4.00	280
		Part	50,400	25.4	42,200	4.40	

Ground Loop

Model	Coil Match	Capacity Modulation	Cooling Full Load 59° F Part Load 68° F		Heating Full Load 32° F Part Load 41° F		Shipping Wt. (lbs)
			BTUH	EER	BTUH	COP	
HTS024	WDG24-A	Full	26,400	17.5	19,800	3.9	218
		Part	21,200	26.0	16,400	4.6	
HTS036	WDG36-A	Full	37,400	16.8	28,200	3.9	236
		Part	28,400	24.6	22,500	4.4	
HTS048	WDG48-A	Full	47,900	16.3	37,400	3.9	265
		Part	37,600	22.1	31,200	4.6	
HTS060	WDG60-A	Full	60,200	15.8	45,600	3.4	280
		Part	47,900	22.2	37,000	3.8	

Model	Air Handler Match	Capacity Modulation	Cooling Full Load 59° F Part Load 68° F		Heating Full Load 32° F Part Load 41° F		Shipping Wt. (lbs)
			BTUH	EER	BTUH	COP	
HTS024	MWG24-A	Full	26,500	17.1	20,100	3.9	218
		Part	21,000	24.7	16,600	4.6	
HTS036	MWG36-A	Full	38,900	17.4	28,100	4.0	236
		Part	29,600	25.6	22,300	4.5	
HTS048	MWG48-A	Full	50,100	17.0	35,600	3.9	265
		Part	39,600	23.4	29,900	4.4	
HTS060	MWG60-A	Full	59,900	15.8	45,100	3.5	280
		Part	48,800	21.9	37,700	3.9	

Cooling capacities based on 80.6° F DB, 66.2° F WB entering air temp.

Heating capacities based on 68° F DB, 59° F WB entering air temp.

All ratings based on 208V operation.

GEO THERMAL

HWW Series Water-to-Water Systems

3 to 10 Tons

These flexible systems, available in 3, 5, and 10 ton capacities, have a wide range of HVAC and industrial applications. Units are used for such applications as radiant floors, snow/ice melting, chilled water for fan coils, potable hot water, and other types of residential or industrial applications that require cost-effective heated or chilled water. They can be installed using a ground loop, ground water or water loop (boiler/cooling tower) installation. As with all geothermal models, they offer the benefits of super high efficiency with low operating costs.

Flexibility is a hallmark of geothermal units. As reverse cycle heat pumps, 208/230V models can provide both hot and chilled water, as well as domestic hot water. All HWW units can be installed side by side for large capacity applications, thanks to compact size, single side service access, and water connections at the top of the unit.

With no outdoor fan, special mounting systems and 1/2" dual density acoustic type fiberglass cabinet insulation, operation is exceptionally quiet. A system performance monitor signals when the system is not running at peak performance so maintenance can be scheduled. Units come pre-charged with R-410A.



Exceeds
ASHRAE 90.1
efficiencies



FEATURES

- **Microprocessor Controls**—State-of-the-art controls include on-board diagnostics and seven standard “Safeties” including anti-short cycle, over- and under-voltage, loss of charge, high refrigerant pressure and more, to protect the unit and the compressor
- **Quiet Operation**—Double compressor mounting system and compressor compartment insulation minimize operating noise
- **Scroll Compressor**—Dependable design is proven efficient and quiet, with internally sprung and externally isolated vibration isolation system, including rubber grommet mounts
- **System Performance Monitoring**—Signals when the system is not running at peak performance so maintenance can be scheduled
- **Easy Service Access**—All components can be accessed through a front panel for maintenance and service; side panel can also be opened

PERFORMANCE DATA

AHRI/ISO/ASHRAE/ANSI 13256-2 Performance

Model	Water loop—BTUH				Ground Loop—BTUH				Shipping Wt. (lbs.)
	Cooling		Heating		Cooling		Heating		
	Indoor 53.6°F Outdoor 86°F		Indoor 104°F Outdoor 68°F		Indoor 53.6°F Outdoor 77°F		Indoor 104°F Outdoor 32°F		
	Cap. BTUH	EER	Cap. BTUH	COP	Cap. BTUH	EER	Cap. BTUH	COP	
HWW036A	33,000	14.6	44,000	5.0	34,000	16.8	28,000	3.1	373
HWW060B	52,800	14.3	72,700	4.7	55,600	16.2	48,500	3.0	385
HWW120B	105,600	14.1	145,400	4.6	111,200	16.0	97,000	3.0	770

Model	Ground Water—BTUH			
	Cooling		Heating	
	Indoor 53.6°F Outdoor 59°F		Indoor 104°F Outdoor 50°F	
	Cap. BTUH	EER	Cap. BTUH	COP
HWW036A	37,000	23.1	36,000	4.0
HWW060B	60,200	22.0	60,300	4.0
HWW120B	120,400	21.6	120,600	3.9

Limited Warranty—5 years on compressor, 1 year on parts
(Some limitations apply; see printed warranty for details.)

NOTES:

Units available in 208/230-1-60, 208/230-3-60, 460-3-60, and 575-3-60 (no HWW036).

208/230-1-60 models available with hot water generator with internal pump.



Ready to buy?

Here are some things to consider:

When you buy Comfort-Aire products, you're purchasing the peace of mind that comes from dealing with a company that's been in business for 75 years. We have a well-deserved reputation not only for quality products, but also for standing behind those products with excellent warranty and support programs. We have technicians available to handle telephone inquiries about operation, installation and maintenance. Our web site is another resource: owners' manuals can be downloaded and your installer can access technical information and service manuals at any time.

FEDERAL TAX CREDITS

United States federal legislation allowing tax credits has been enacted to encourage energy efficient geothermal installations in new construction, as well as improvements to existing homes through 2016. The tax credit is 30% of the total cost of the equipment and installation costs with no upper limit. Most Comfort-Aire geothermal heat pumps shown in this brochure are eligible for these tax credits. Visit www.energystar.gov for complete details.

WARRANTY COVERAGE

Comfort-Aire stands behind its geothermal equipment with some of the strongest warranties in the industry. Specific warranties are shown with each product (some restrictions apply, see our web site for full warranty details).

CONSUMER FINANCING PROGRAM

Your Comfort-Aire dealer makes it easy for you to purchase a geothermal system for residential use. Our GEOSmart® Financing Program is designed to give qualified buyers the credit needed for a system, installation and any related equipment—with no long wait and no credit hassle. GEOSmart representatives are available by phone seven days a week and, in most cases, they can give you an answer within minutes. There's no annual fee and a variety of payment options is available. Talk to your Comfort-Aire dealer about the advantages of this financing option.

EXTENDED SERVICE AGREEMENTS

Although a study by the EPA showed geothermal systems have the lowest life-cycle cost of all systems available today, as with any product containing mechanical and electronic components, service is sometimes needed. Our AssurancePlus® Extended Service Agreement (ESA) gives you an extra measure of protection that extends beyond the standard warranty coverage. It protects against unexpected problems that require service and/or replacement parts. AssurancePlus® ESAs allow you to extend coverage beyond the original warranty, and there are a variety of plans to choose from, offering parts and labor coverage, parts only or labor only. Your Comfort-Aire dealer can explain the AssurancePlus® plans and pricing.

GEOSmart financing is sponsored by Heat Controller and the Electric & Gas Industries Association (a non-profit association) and underwritten by GE Money.

AssurancePlus is a registered trademark of Heat Controller, Inc.

GEOHERMAL HEAT PUMPS

COMFORT COMBINED WITH EFFICIENCY

At Comfort-Aire, we're in the business of making you comfortable while saving energy.

We offer a broad range of products that are efficient and reliable for home, school, office, work and institutional settings. All meet or exceed industry standards for energy efficiency, and are built for durability.

We've been in the comfort business since our founding in 1933, and our roots go back even further. We can trace our beginnings to the Wingert Furnace Co. which began building coal, gas and oil furnaces in 1907. We moved to new headquarters in Jackson, Michigan, in 1955, and this facility has been expanded many times to accommodate our growth. The acquisition of Aitons' Equipment in Canada in 2000 helped build a stronger international presence.

Comfort-Aire is known throughout the heating and air conditioning industry for efficient, reliable products and in-season availability—which means there's a good chance we can ship the unit your contractor specifies within days. We're also known as experts in geothermal technology, offering training courses for distributors and contractors.

Geothermal and water source heat pumps are among our fastest growing product groups, largely due to the exceptional energy savings they offer as well as the level of comfort they deliver.

This brochure shows the full range of our equipment for residential and commercial installations. It also explains how geothermal installations can make you comfortable year 'round, and do it economically.

Comfort-Aire®
HEAT CONTROLLER

1900 Wellworth Ave., Jackson MI 49203 • Ph. 517-787-2100 • www.comfort-aire.com

A **WATS** Company

HEAT CONTROLLER

R-410A CASED COILS



MWG SERIES Multi-Position Cased



Nominal Capacities
24,000-60,000 BTUH

High quality coils are multi-position, designed for upflow, horizontal, and downflow applications, and horizontal left or right airflow.



These coils are AHRI certified for system applications when matched with Heat Controller HTS split units for water source applications. For match specifications, see brochure HC-GTHP-B.

Designed specifically for use with split system water source heat pumps

Coils are designed to match Heat Controller split HTS geothermal heat pump units for R-410A. The cased coil is ideal for dual fuel add-on applications.

- **Wide Range of Applications**—Coils are ideally suited to new construction and replacement installations
- **Thermal expansion valves**—All coils are equipped with R-410A TXVs
- **Designed for efficiency**—Aluminum fins are bonded to internally grooved copper tubing
- **Corrosion-Proof Drain Pan**—Unique design maximizes application flexibility and condensate removal; constructed of high grade, heat resistant and corrosion-free material that is thermal-set
- **Insulation**—Cased coils are fully insulated with foil faced insulation
- **Easy Installation**—Coils come with dual right and left hand 3/4" F.P.T. condensate drain connections to simplify hook-ups
- **Secure Connections**—Refrigerant sweat connections are swaged and factory sealed with copper caps
- **Durable Cabinet**—Heavy gauge, galvanized steel cabinet has powder coat finish
- **Factory Tested**—Coils undergo extensive factory refrigerant leak test
- **Verification**—Schrader valve verifies factory nitrogen charge, ensures leak-tight integrity

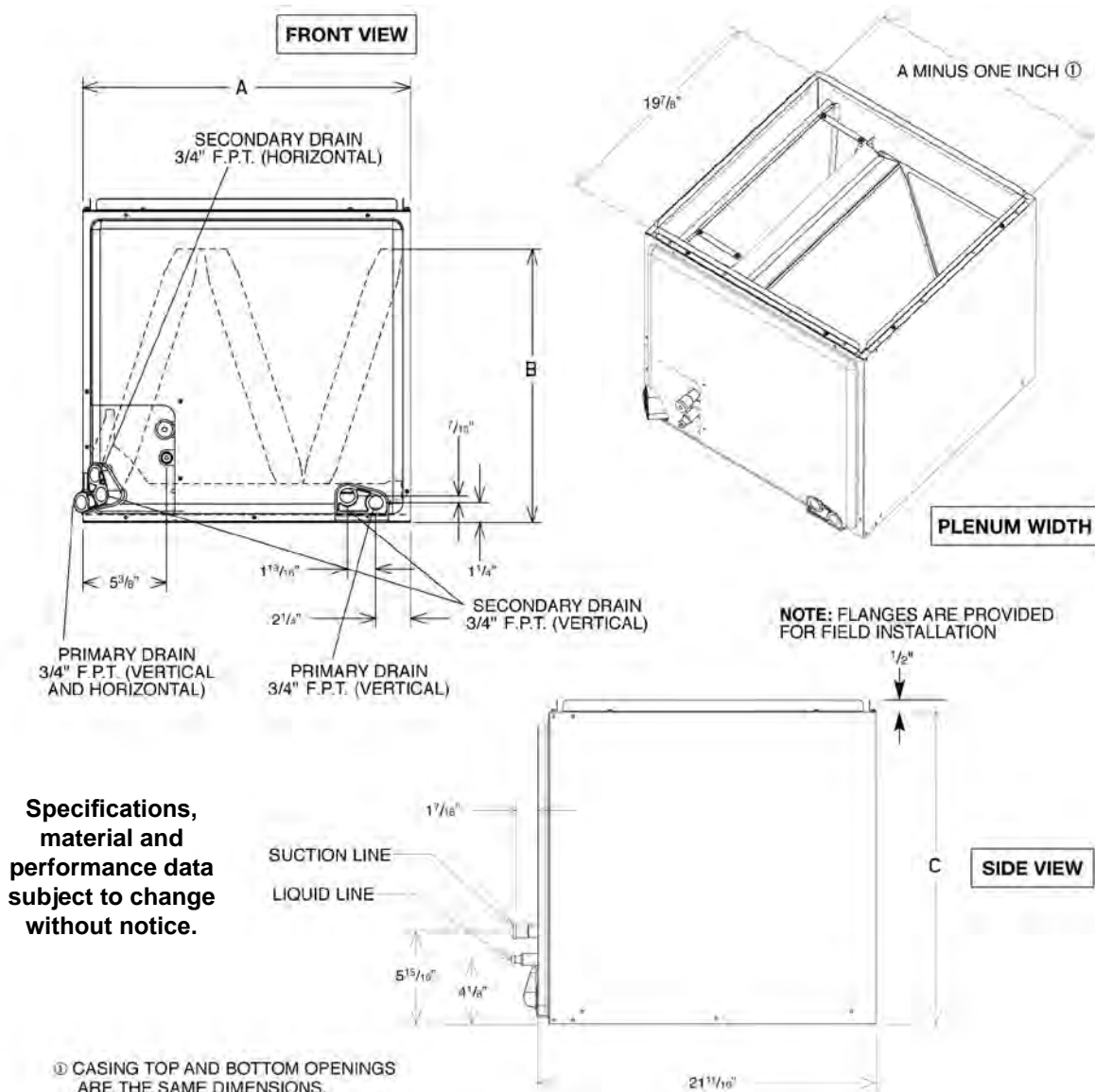
Dimensional and specification data on reverse.

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A **WATTS** Company

Dimensions and Specifications



Model	Approx. Air Flow Design—CFM Range	Connections—Sweat		Coil Dimensions (in.)			Shipping Weight (lbs.)
		Liquid I.D. (in.)	Suction I.D. (in.)	Width	Depth	Height	
MWG24TB-A	600/800	3/8	3/4	17 1/2	17 7/8	20	57
MWG24TC-A	600/800	3/8	3/4	21 1/2	17 1/2	20	60
MWG36TC-A	825/1175	3/8	7/8	21	17 1/2	20	60
MWG36TD-A	825/1175	3/8	7/8	24 1/2	30 1/4	32	118
MWG48TC-A	1000/1600	3/8	7/8	21	25 7/8	28	83
MWG48TD-A	1000/1600	3/8	7/8	24 1/2	30 1/4	32	118
MWG60TD-A	1050/1700	3/8	7/8	24 1/2	30 1/4	32	118

Model Nomenclature: 7th Digit B = coil width 17 1/2"; 7th Digit C = coil width 21-21 1/2"; 7th Digit D = 24 1/2"

Note: Coils fit a variety of furnace models with widths of 17 1/2", 21", and 24 1/2"

HEAT CONTROLLER

WDG SERIES AIR HANDLER FOR SPLIT WATER SOURCE SYSTEMS

1½ - 5 TONS



**WDG SERIES AIR HANDLER
208/240V**

FOR R-410A



Certification applies only for
AHRI matched systems

Designed specifically for use with our HTS Series geothermal split system heat pumps, systems reach some of the highest efficiency ratings in the industry. Suitable for new installations or add-on air conditioning.

Multi-Position Design

Can be installed for vertical upflow or downflow, and horizontal left or right airflow without switching any internal components, ideal for new installations or add-on air conditioning

ECM Blower Motor

Matches speed to changing requirements to overcome ductwork static pressure and provide efficient delivery of conditioned air; designed for quiet operation with soft start and ramp down

Drain Pan Construction

Made of high grade heat resistant, thermal-set material to be corrosion-free, unique design maximizes condensate removal and includes condensate overflow protection; features two sets of 3/4" FPT drain connections for flexibility

Factory Installed A-Coil

Units are A/C ready with installed coil equipped with R-410A TXV; coils constructed of aluminum fins bonded to internally grooved copper tubing, come with sweat refrigerant connections

Factory Installed Air Filter

Disposable 1" filter in standard sizes

Cabinet Insulation

Reduces blower noise for quiet operation

Durable Cabinet

Quality constructed for less than 2% air leakage, powder coat paint finish

Electric Heat

HG Series auxiliary heater kits are available for WDG models

MODEL IDENTIFICATION

WD	G	24	V	S	A	-	1	A
WATER SOURCE AIR HANDLER, DIRECT EXPANSION	REFRIGERANT G = R-410A	CAPACITY (BTU/H) 24 = 18-24,000 36 = 30-36,000 48 = 42-48,000 60 = 60,000	METERING V = TXV	STANDARD CONTROLS	CABINET SIZE A = 18.5" X 44" B = 22.5" X 55" C = 25.5" X 59"		POWER SUPPLY 1 = 208/230-1-60 (Can be field converted to 115V)	REVISION LEVEL

WDG AIR HANDLER SPECIFICATIONS

Model	Nom. Cap. BTUH	Liquid I.D. in.	Suction I.D. in.	Fan Motor HP	Blower Wheel Dia x W (in.)	Air Coil H x W (in.)	Filter Size (inches)	Heater kW Range	Shipping Wt. (lbs.)
WDG24VSA	24,000	3/8	3/4	1/2	9 x 7	14 x 17	16 x 20 x 1	0-10	96
WDG24VSB	24,000	3/8	3/4	1/2	9 x 7	14 x 17	20 x 20 x 1	0-10	179
WDG36VSB	36,000	3/8	7/8	1/2	12 x 10	24 x 17	20 x 20 x 1	0-15	198
WDG36VSC	36,000	3/8	7/8	1/2	12 x 10	24 x 17	20 x 24 x 1	0-15	206
WDG48VSB	48,000	3/8	7/8	1	12 x 10	24 x 17	20 x 20 x 1	0-15	218
WDG48VSC	48,000	3/8	7/8	1	12 x 10	24 x 17	20 x 24 x 1	0-15	226
WDG60VSC	60,000	3/8	7/8	1	12 x 10	24 x 17	20 x 24 x 1	0-20	236

WDG AIR HANDLER BLOWER PERFORMANCE

Model	Max ESP (in. wg)	HP-Fan Motor	Air Flow*	Cooling Mode		Dehum. Mode		Heat Mode		Aux. Heat	Emerg. Heat	Fan
				Stg 1	Stg 2	Stg 1	Stg 2	Stg 1	Stg 2			
WDG 024	0.50	1/2	Max	800	1000	600	800	850	1000	1000	1000	1000
			Default	525	700	425	550	600	750	850	850	350
			Min	450	600	400	550	450	600	700	700	300
WDG 036	0.50	1/2	Max	1100	1500	900	1200	1100	1500	1500	1500	1500
			Default	800	1050	650	850	850	1100	1350	1350	550
			Min	675	900	600	825	675	900	1350	1350	450
WDG 048	0.75	1	Max	1500	2000	1200	1600	1500	2000	2000	2000	2000
			Default	1050	1400	850	1100	1150	1500	1500	1500	700
			Min	900	1200	825	1100	900	1200	1350	1350	600
WDG 060	0.75	1	Max	1900	2300	1500	2000	1900	2300	2300	2300	2300
			Default	1300	1750	1050	1400	1450	1875	1875	1875	875
			Min	1100	1500	1000	1375	1100	1500	1500	1500	750

* Air Flow in CFM with wet coil and clean air filter.

NOTES:

Factory shipped on Tap Setting 2.

During Auxiliary operation (residential units only), CFM will run at the higher if the heating (delay jumper) on AUX settings.

Air flow is controlled within +/- 5% up to Max ESP shown with wet coil and standard 1" fiberglass filter.

Do not select Dehumidification Mode if HP CFM is on setting 1.

All units AHRI/ISO/ASHRAE 13256-1 rated HP (cooling) Delay (heating) CFM setting 3.

AHRI MATCHES

GROUND WATER

2 TO 5 TONS

Model	Air Handler Match	Capacity Modulation	Cooling Water 59° F		Heating Water 50° F		Shipping Wt. (lbs)
			BTUH	EER	BTUH	COP	
HTS024	WDG24-A	Full	29,000	23.2	24,900	4.60	220
		Part	22,500	31.5	18,700	5.20	
HTS036	WDG36-A	Full	41,300	22.2	36,700	4.70	235
		Part	30,100	29.6	26,000	5.00	
HTS048	WDG48-A	Full	52,100	21.3	48,400	4.70	260
		Part	39,900	26.5	35,900	5.20	
HTS060	WDG60-A	Full	63,900	20.1	59,900	4.10	280
		Part	51,000	26.9	42,600	4.30	

GROUND LOOP

Model	Air Handler Match	Capacity Modulation	Cooling Full Load 59° F Part Load 68° F		Heating Full Load 32° F Part Load 41° F		Shipping Wt. (lbs)
			BTUH	EER	BTUH	COP	
HTS024	WDG24-A	Full	26,400	17.5	19,800	3.9	220
		Part	21,200	26.0	16,400	4.6	
HTS036	WDG36-A	Full	37,400	16.8	28,200	3.9	235
		Part	28,400	24.6	22,500	4.4	
HTS048	WDG48-A	Full	47,900	16.3	37,400	3.9	260
		Part	37,600	22.1	31,200	4.6	
HTS060	WDG60-A	Full	60,200	15.8	45,600	3.4	280
		Part	47,900	22.2	37,000	3.8	

Cooling capacities based on 80.6° F DB, 66.2° F WB entering air temp.

Heating capacities based on 68° F DB, 59° F WB entering air temp.

All ratings based on 208V operation.

ELECTRIC HEATER KITS

Aux. Heat Model	Used with	kW Rating		BTUH Rating		Min. CFM Required
		240V	208V	240V	208V	
HGM4C	WDG24	3.8	2.9	13000	9900	500
HGM5C		4.8	3.6	16300	12300	500
HGM8C		7.6	5.7	25900	19400	650
HGM10C		9.6	7.2	32700	24600	650
HGL10C	WDG36, WDG48	9.6	7.2	32700	24600	1300
HGL15C	WDG60	14.4	10.8	49100	36900	1350
HGL20C	WDG60	19.2	14.4	65500	49200	1350

ELECTRIC HEAT

HG Series Auxiliary Electric Heater mounts internally in units. It contains a four stage relay control board which activates the elements directly via an internally wired low voltage harness.

Geothermal Accessories

FOR RESIDENTIAL SYSTEMS

Geothermal systems offer an effective way to cut utility costs while ensuring comfort. Heat Controller's line includes two stage and single stage geothermal heat pumps, both package and split system types. Additionally, Heat Controller offers a full range of accessories required to configure and install these systems.



This catalog contains the following geothermal accessory products and specification guides:

PRODUCT	PAGE
Deluxe Flow Center	1
Standard Flow Center	3
Double O-Ring Flow Center.....	5
O-Ring Fittings	6
Pressurized Loop Pump.....	7
Geothermal Accessory Fittings	8
Flow Meter Tool	9
Fusion Kit.....	9
Flush Cart	10
Commercial Accessories	11

HEAT CONTROLLER

1900 Wellworth Ave., Jackson MI 49203 • Ph. 517-787-2100 • www.heatcontroller.com

A **MAFS** Company

Deluxe Flow Center



Reliable operation, stylish appearance

The Deluxe Flow Center is a non-pressurized pumping station that's housed in an attractive, durable cabinet, and is a recommended accessory for the installation of closed loop geothermal systems.

The Deluxe Flow Center includes patented features not available in any other system including its built-in pump protection. This design eliminates the need for a flush cart when filling and flushing a closed loop system with indoor manifolds. Because it is non-pressurized, the flow center allows you to add fluids like antifreeze or water, while automatically eliminating air from the closed loop system.

Simple to install

The Deluxe Flow Center is completely assembled at the factory to simplify installation, which is completed by connecting a return line from the loop system to the Deluxe Flow Center and then connecting a supply line from the Deluxe Flow Center to the heat pump unit.

Easy to operate and maintain

The QT Flow Center system includes self-sealing features that keep air out and water in. For you, that means trouble-free operation, easier installation and fewer call backs. For the homeowner, it means added reliability.

Adding antifreeze is easy. Just remove the self-sealing top and pour the liquid into the air elimination chamber. The top is completely sealed to keep dirt and air out—an exclusive feature of the Deluxe Flow Center.

The only moving parts of the system are the pumps, helping make service minimal. Each part can be removed for servicing without risk of fluid loss or air entry into the system.

Smart addition to water source technology

A geothermal system is a significant investment for the homeowner and one he will want to protect. Recommending the Deluxe Flow Center will not only add to the dependability of the closed loop system, it will add to the customer's satisfaction in the long run.

CATALOG NO.	ITEM
7602-402	1-Pump 230V Flow Center
7602-403	2-Pump 230V Flow Center
7602-408	Wrench
7602-407	Flow Meter Tool (pg. 9)

Features & Benefits

Removable Lid—Makes it easy to install, fill the unit, check flow rates and add antifreeze.

Air Separation Chamber—Continually performs purging function.

Foam Insulation—Eliminates unsightly condensation, assures quiet operation.

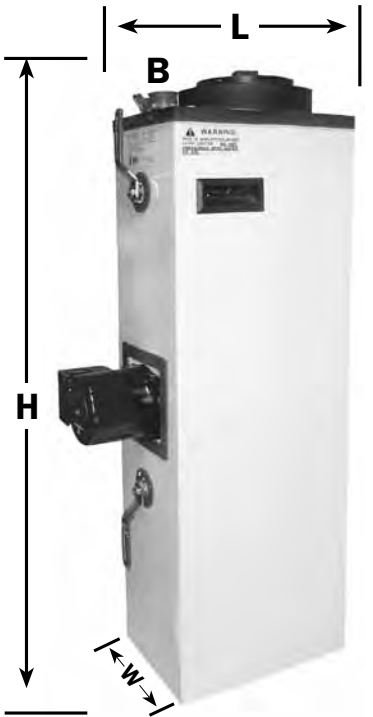
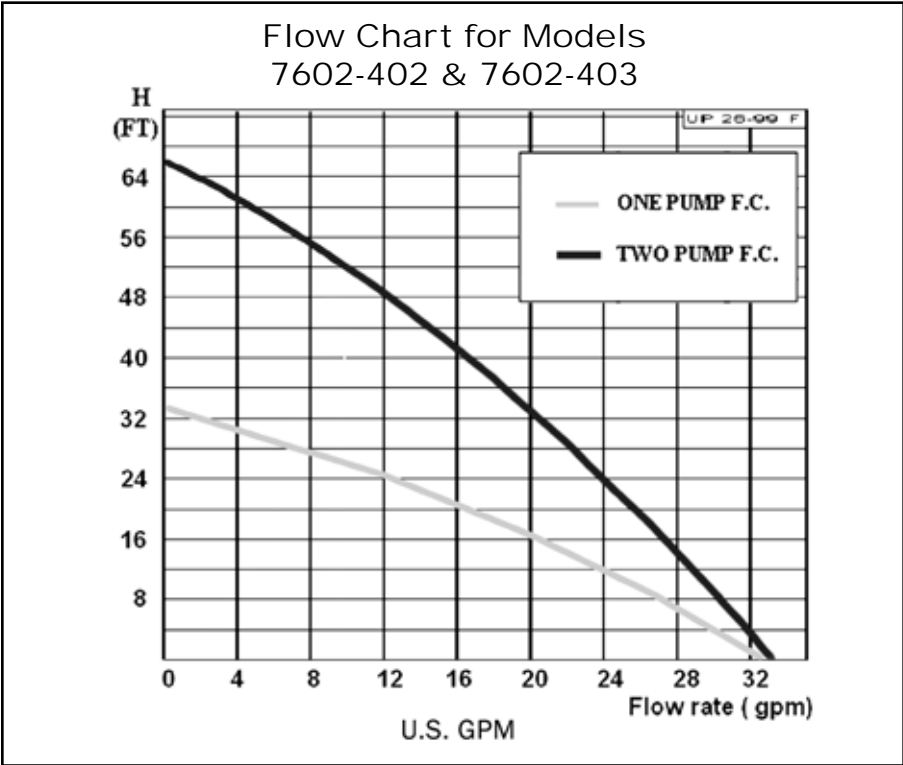
Solid, Durable Construction—Designed for long life while maintaining an attractive appearance.

Check Valve—Protects the pump(s) by keeping water on the bearing even if the chamber runs dry.

Built-in Handles—Makes it easy to handle the unit during installation.

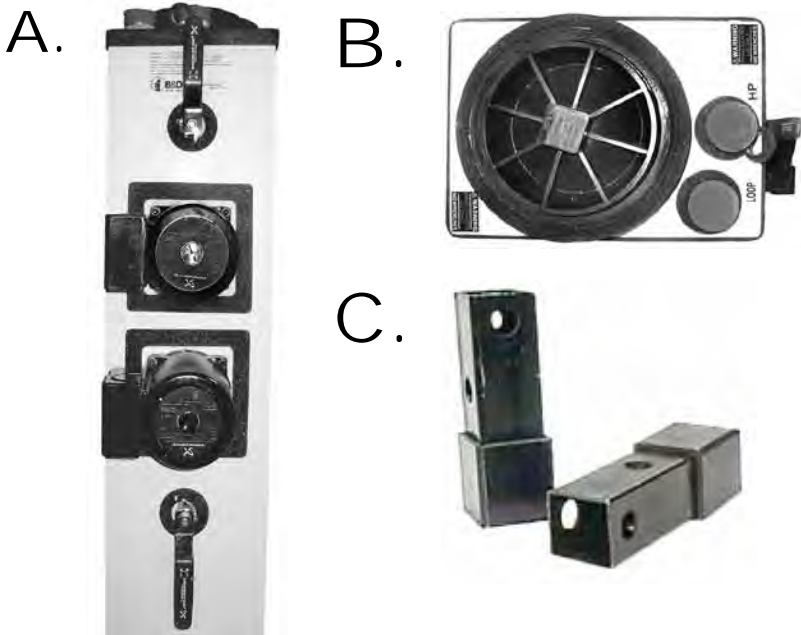
DELUXE FLOW CENTERS

Deluxe Flow Center	Pumps	Power	Insulation	Approx. Volume of Fluid	Water Pump	Dimensions			Weight (lbs.)
						H	L	W	
7602-402	1	230/1/60	Foam Cabinet	4.5 Gal.	Grundfos 26-99	35"	15"	7 ³ / ₄ "	40
7602-403	2	230/1/60	Foam Cabinet	4.5 Gal.	Grundfos 26-99	35"	15"	7 ³ / ₄ "	55

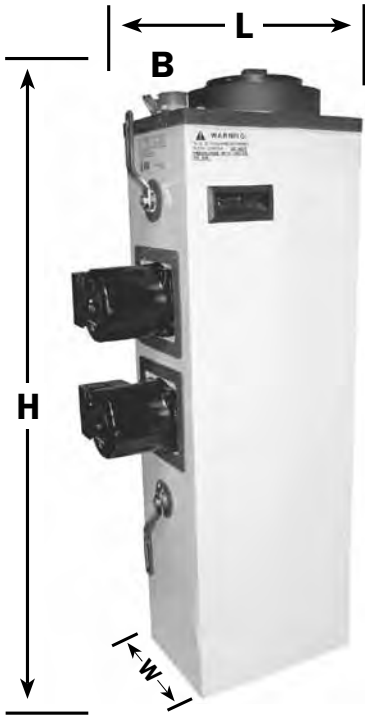


Model 7602-402

B = 1" FNPT with ball valve



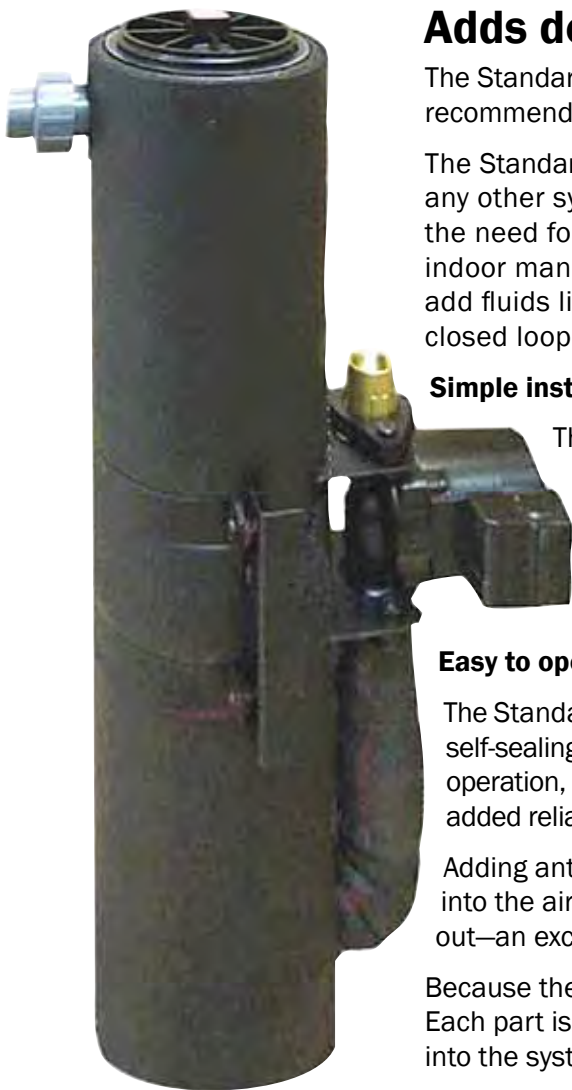
- A. View from side of flow center
- B. View from top of flow center
- C. Wrench for flow center top [separate accessory]



Model 7602-403

B = 1" FNPT with ball valve

Standard Flow Center



Adds dependability to a closed loop system

The Standard Flow Center is a non-pressurized pumping station that's a recommended accessory for the installation of closed loop geothermal systems.

The Standard Flow Center incorporates patented features not available in any other system, including built-in pump protection. This design eliminates the need for a flush cart when filling and flushing a closed loop system with indoor manifolds. Because it is non-pressurized, the flow center allows you to add fluids like antifreeze or water, while automatically eliminating air from the closed loop system.

Simple installation

The Standard Flow Center is completely assembled at the factory to simplify installation. The unit is installed by connecting a return line from the loop system to the Standard Flow Center. Then connect a supply line from the Standard Flow Center to the heat pump unit. That's all there is to adding reliable pump protection to any closed loop system.

Easy to operate and maintain

The Standard Flow Center system is designed for dependability. The system includes self-sealing features that keep air out and water in. For you, that means trouble-free operation, easier installation and fewer call backs. For the homeowner, it means added reliability.

Adding antifreeze is easy. Just remove the self-sealing top and pour the liquid into the air elimination chamber. The top is completely sealed to keep dirt and air out—an exclusive feature of the Standard Flow Center.

Because the only moving parts of the system are the pumps, service is minimal. Each part is made to be removed for servicing without risk of fluid loss or air entry into the system.

Protecting an investment

A geothermal system is a significant investment for the homeowner and one he will want to protect. Recommending the Standard Flow Center will not only add to the dependability of the closed loop system, it will add to the customer's satisfaction in the long run.

CATALOG NO.	ITEM
7602-404	1-Pump 230V Flow Center
7602-405	2-Pump 230V Flow Center
7602-408	Wrench
7602-407	Flow Meter Tool (pg. 9)

Features & Benefits

Removable Lid—Makes it easy to install, fill the unit, check flow rates and add antifreeze.

Air Separation Chamber—Continually performs purging function.

Foam Insulation—Eliminates unsightly condensation, assures quiet operation.

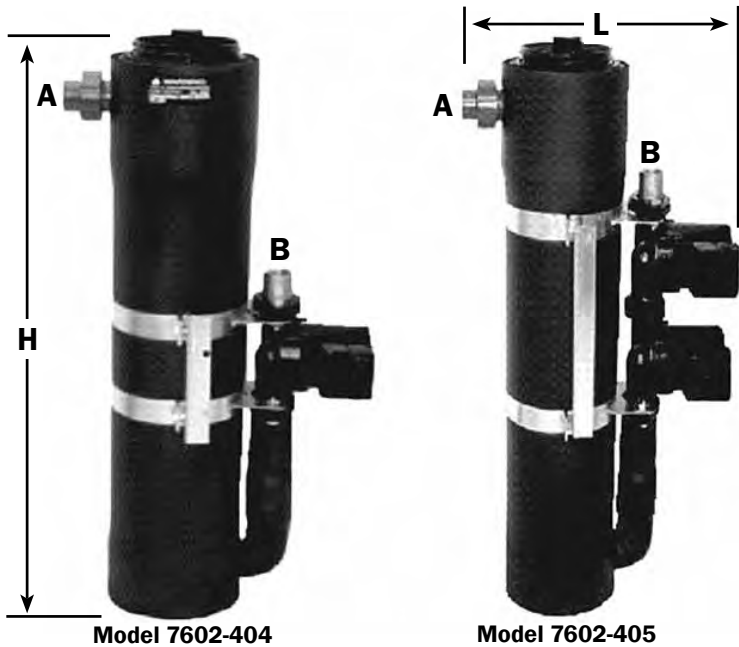
Solid, Durable Construction—Designed for long life while maintaining a low profile appearance.

Check Valve—Protects the pump(s) by keeping water on the bearing even if the chamber runs dry.

Dip Tube—Improves system performance by preventing air entry into the closed loop system.

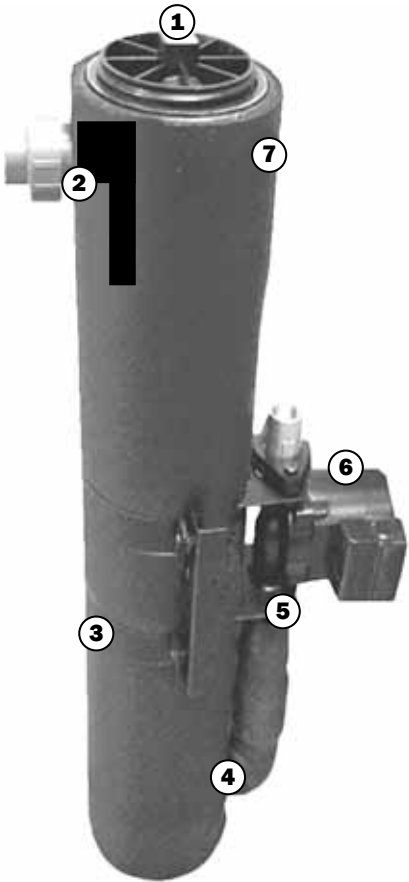
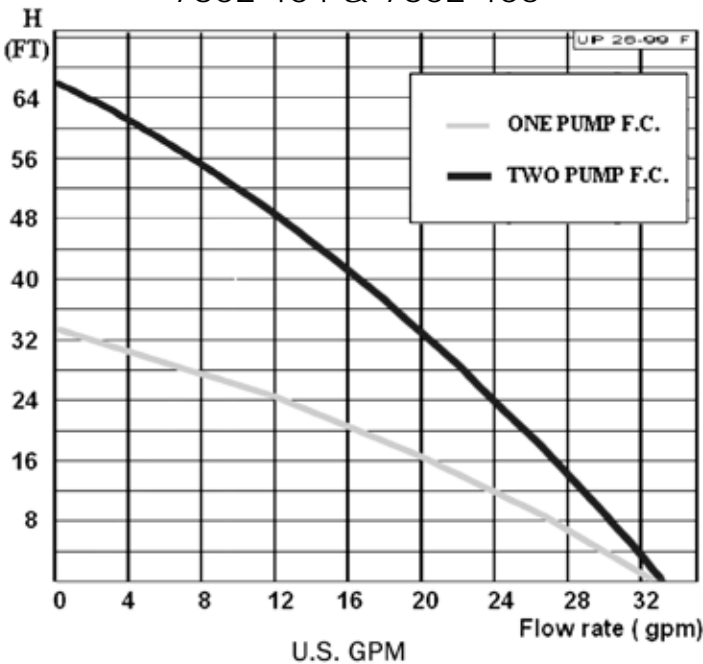
STANDARD FLOW CENTERS

Standard Flow Center	Pumps	Power	Insulation	Approx. Volume of Fluid	Water Pump	Dimensions			Weight (lbs.)
						H	L	D	
7602-404	1	230/1/60	3/8" Foam	4.5 Gal.	Grundfos 26-99	35"	15 1/2"	6"	35
7602-405	2	230/1/60	3/8" Foam	4.5 Gal.	Grundfos 26-99	35"	15 1/2"	6"	47



Specifications
 A = 1" Union PVC
 B = 1" FNPT with ball valve
 Material: 6" SDR35 D3034 PVC

Flow Chart for Models 7602-404 & 7602-405



Detailed part description

- 1. SELF-SEALING TOP**—All fluids are poured in the top of the chamber for filling, flushing and adding anti-freeze.
- 2. DIP TUBE**—Improves system performance by preventing air entry into the closed loop system.
- 3. TANK**—Includes a self-sealing, removable screw-on top for ease in installation.
- 4. BUILT-IN CHECK VALVE**—Holds water in the pump volutes after initial filling. This protects the pump by keeping water on the bearing even if the chamber runs dry.
- 5. BALL VALVE**—Allows each pump to be removed for service without the risk of fluid loss to the system
- 6. PUMP(S)**—Circulate fluid throughout the earth loop system (7602-404 has one pump while the 7602-405 has two pumps).
- 7. AIR ELIMINATION CHAMBER**—Removes air from the system as it is circulated through the canister.

Double O-Ring Loop Pump

O-Ring design eliminates leaks

Our Double O-Ring Loop Pump, built with a high impact polystyrene cabinet, contains 3-way valves and pumps with connections for flushing, filling and pumping residential geothermal closed loop systems. The double O-ring design allows the connections to be hand tightened for ease of installation.

This enhanced, proven design is foam insulated to prevent condensation and will not rust. Full flow service valves minimize pressure drop. The Double O-Ring Loop Pump also utilizes the industry standard Grundfos circulator pumps.

Installation

The module comes fully assembled and leak tested; external connections are double O-ring. The light weight module can be easily mounted to the wall using the slotted mounting holes in the built-in mounting brackets.

Operation

The heat pump and earth loop are filled and flushed through the side connections; the composite valves rotate to four different positions to direct the flow of liquid solution, also allowing isolation of the heat pump or loop as needed for maintenance.

PRESSURIZED LOOP PUMP SPECIFICATIONS

- **Power Supply:** 230V-1Ph-60Hz
- **Volume:** Single Pump: 20 GPM Maximum @ 15 ft head
Dual Pump: 20 GPM Maximum @ 30 ft head
- **Maximum Operating Pressure:** 150 PSI
- **Maximum Operating Temperature:** 120°F
- **Minimum Operating Temperature:** 20°F
- **Connection Size:** 1" Double O-Ring
- **Approx. Weight in lbs.:** 26 single pump/32 dual pump



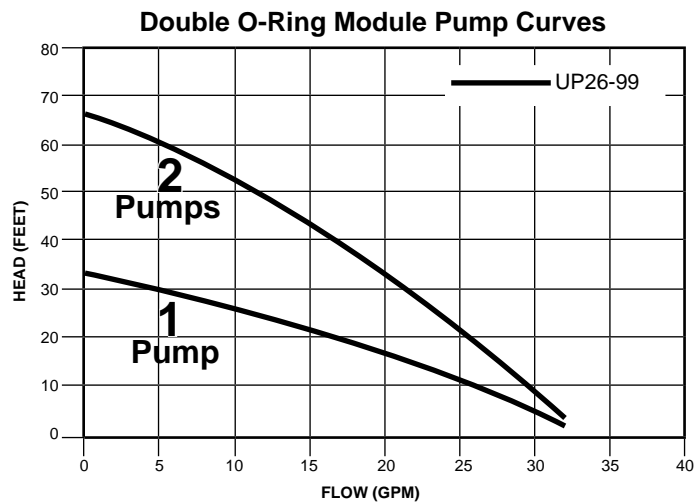
Composite Valve Flow Center—Single



Composite Valve Flow Center—Dual

CATALOG NO.	ITEM
7602-423	Single Pump Flow Center
7602-424	Dual Pump Flow Center

(Order Double O-Ring fittings from page 6)



Double O-Ring Loop Pump Fittings

For use with installations utilizing Double O-Ring Loop Pumps



1 1/4" Socket Fusion
7602-425



Garden Hose Male
7602-429



1" Cam Lever Male
7602-426



Elbow, 1" MPT
7602-430



1" MPT
7602-427



1" Hose Barb
7602-431



1" Copper Sweat
7602-428



Elbow, 1" Hose Barb
7602-432

Standard Pressurized Loop Pump

Circulates fluid through a closed loop

Our Standard Pressurized Loop Pump modules, used for closed loop geothermal installations, are designed to circulate the liquid solution through the heat exchanger of the geothermal heat pump, out through the loop and back, so heat transfer can occur.

The pump module is compact at just 14 1/8" tall and engineered for quiet, reliable operation. The heavy duty cabinet is insulated with thick foam to eliminate condensation and includes full flow 1" brass valves.

Installation

The module comes fully assembled and leak tested; external connections are 1" FPT. The module can be easily mounted to the wall using the slotted mounting holes in the built-in mounting brackets. Connection of the module to the heat pump is quick and easy with the hose kit listed below.

Operation

The heat pump and earth loop are filled and flushed through the side connections; the two brass valves rotate to four different positions to direct the flow of liquid solution, also allowing isolation of the heat pump or loop as needed for maintenance.

PRESSURIZED LOOP PUMP SPECIFICATIONS

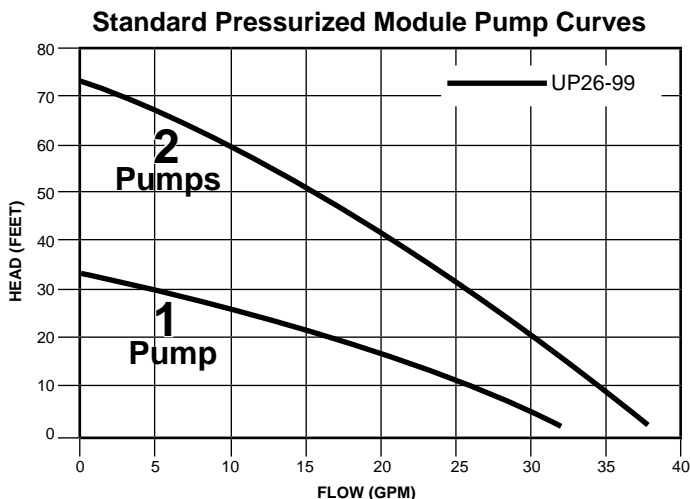
- **Power Supply:** 230V-1Ph-60Hz
- **Volume:** Single Pump: 20 GPM Maximum @ 15 ft head
Dual Pump: 20 GPM Maximum @ 30 ft head
- **Maximum Operating Pressure:** 150 PSI
- **Maximum Operating Temperature:** 120°F
- **Minimum Operating Temperature:** 20°F
- **Connection Size:** 1" FPT
- **Approx. Weight in lbs.:** 38 single pump/42 dual pump



Brass Valve Flow Center—Single



Brass Valve Flow Center—Dual



CATALOG NO.	ITEM
7602-300	Single Pressurized Pump
7602-301	Dual Pressurized Pump
7602-103	1" Neoprene Hose Kit*

*Hose kit includes one 12' neoprene hose, two MPT 1" barbed connectors, two 90° MPT 1" barbed connectors with PT ports, and four hose clamps.

Geothermal Accessory Fittings

For use with open and/or closed loop geothermal installations

OPEN

The following accessories are used exclusively in open loop geothermal installations



Flow Controllers

7602-203	3 GPM	3/4" MPT X FPT
7602-204	4 GPM	3/4" MPT X FPT
7602-205	5 GPM	3/4" MPT X FPT
7602-206	6 GPM	3/4" MPT X FPT
7602-207	7 GPM	3/4" MPT X FPT
7602-208	8 GPM	3/4" MPT X FPT
7602-209	9 GPM	3/4" MPT X FPT
7602-210	10 GPM	1" MPT X FPT
7602-211	11 GPM	1" MPT X FPT
7602-212	12 GPM	1" MPT X FPT
7602-213	13 GPM	1" MPT X FPT



Solenoid Valves

7602-150	3/4" FPT
7602-151	1" SWT

CLOSED

The following accessories are used exclusively in closed loop geothermal installations



1 1/4" Couplings x 1" Fusion Flange with nut
7602-409



Fusion x MPT Adaptor
1" x 1" MPT - 7602-410
1 1/4" x 1" MPT- 7602-411



1 1/4" PVC Transition Socket x Brass FPT
7602-420



Geo-Gooser
Used to boost pressure in loops
7602-419



PE to PVC with union
1" PE to 1" PVC with union - 7602-412
1 1/4" PE to 1 1/4" PVC
with union - 7602-413

(For Neoprene Hose Kits,
see page 11)

BOTH

The following accessories can be used for in both open and closed loop geothermal installations



Hot Water Concentric Connector
2040-0114



Gauge Adapter PT Plug with guard
7602-416



Heat Pump Adapter 1" MPT x 1" HB
7602-418



Insert Adapter 1" MPT x 1" HB
7602-417



PT Plug
1/4" MPT - 7602-414
1/2" MPT - 7602-415

Flow Meter

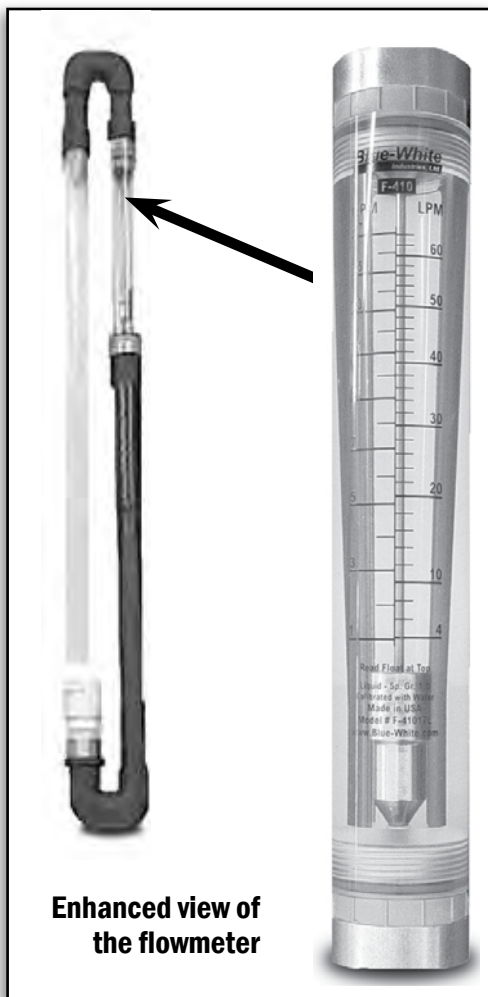
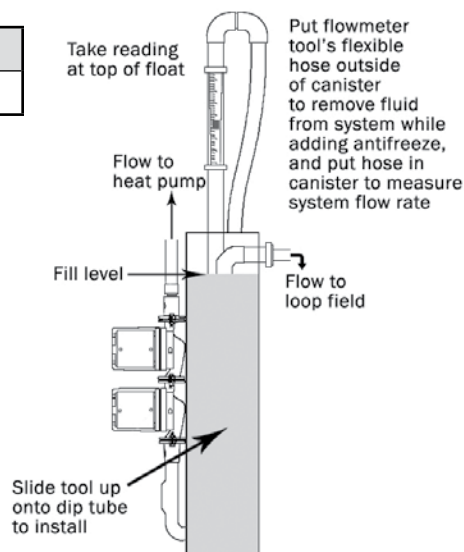
For clear, dependable readings

A flowmeter tool is used specifically with geothermal and water source heat pump system applications that use non-pressurized flow centers. A flow meter is a removable tool that can be carried from job site to job site to check systems for proper flow rates.

Each flowmeter is machined of high quality, acrylic rod stock and carefully polished for a ultra-clear finish to provide the most accurate and repeatable reading, Flowmeters feature easy to read scales screen printed on the meter body.

CATALOG NO.	ITEM
7602-407	Flow Meter Tool

Used in models 7602-402, 7602-403, 7602-404, 7602-405 only



Fusion Kit

Safe, dependable kit for fusing tubes in geothermal systems

The R63 TE socket fusion tool is designed specifically for use in fusing tubing used in geothermal and water source systems. The fusion kit is practical, easy to handle and safe, thanks to the warning lights (main power ON and working temperature OK), the plastic ergonomic handle and excellent thermal insulation provided by the stainless steel wiring enclosure.

The tool is supplied with an electronic thermal regulator with temperature set at 500° F (260° C) on the socket and possibility to adjust from 82° F (180° C) to 560° F (290° C) on the plate with the adjustable temperature. Two year limited warranty.



CATALOG NO.	ITEM
7602-406	Fusion Kit Socket Set
7602-421	Socket Fusion 1" add on kit

Included in the tool kit

3/4" & 1-1/4" set

R63 TE Socket Fusion Tool	Socket Face Set - 3/4" and 1 1/4" IPS	Fusion Tool Mounting Bracket
Depth Gauge - 3/4" and 1 1/4"	Cold Rings - 3/4" and 1 1/4"	Tempstik 500° & 525° F (one of each)
Hex Key	Roll Cutter 3/4" - 2"	Second Timer
Tool Cover Bag	Kwik Cutter (up to 2" IPS)	Cotton Wipe Rag

Flush Cart

Easy to cart from jobsite to jobsite

Heavy duty stainless steel flush carts, available in either 1.5 or 2 HP pumps, provide the proper amount of head required to fill, flush and purge loops. Each flush system is factory mounted to a heavy duty cart for great maneuverability and easy transportation to and from the job site. The cart's design also features supports on the back for hoses to be mounted.

CATALOG NO.	ITEM
7602-400	Flush Cart 1.5 HP 115V
7602-401	Flush Cart 2 HP 115V

Features

VALVES– Equipped with 1 $\frac{1}{4}$ " full port valves with 1 $\frac{1}{4}$ " (1 $\frac{1}{2}$ HP) and 1" hose (2 HP)

DRAIN– Antifreeze flush drain

MOTOR– Flush carts are available with 1 $\frac{1}{2}$ and 2 horse power motors (115V)

PUMP– 60 GPM at 68 FT head on the 1 $\frac{1}{2}$ HP motor and 90 GPM at 62 FT head on the 2 HP motor

CART– Flush systems are factory mounted to a heavy duty cart with 13" wheels and includes mounts on the back for hoses. Flush carts include a pressure drain, 14-gauge stainless steel tanks (10 gallons), stainless steel piping, a gravity drain, quick connect couplings, lift out filter screen and water tight switch box located on the back of the cart.



Specifications

Flush Cart	7602-400	7602-401
Cart Material	Mild Steel	Mild Steel
Tank Material	304L Stainless Steel	304L Stainless Steel
Piping	304 Stainless, Red Brass	304 Stainless, Red Brass
Piping Size	1 $\frac{1}{4}$ "	1 $\frac{1}{4}$ "
Valves	Yellow Brass	Yellow Brass
Valve Size	1 $\frac{1}{4}$ "	1 $\frac{1}{4}$ "
Drain Valves	Stainless (Hose Bid)	Stainless (Hose Bid)
Hoses	150 PSI Rubber Hose	200 PSI Rubber Hose
Hose Size	1 $\frac{1}{4}$ "	1"
Pump	90 GPM @ 63 FT Head	60 GPM @ 68FT Head
Electrical Plug	20 Amp ~ 115V	20 Amp ~ 115V
Hose Connections	1 $\frac{1}{4}$ " Cam and Groove	1" Cam and Groove
Total Weight	196 lbs.	192 lbs.
Dimensions	H=57" W=22 $\frac{1}{4}$ " D=25"	H=57" W=22 $\frac{1}{4}$ " D=25"
Tank Volume	10 Gallons	10 Gallons
Filter	In Tank; Double Woven Screen	In Tank; Double Woven Screen

Commercial Accessories

Water Source Heat Pumps

Stainless Steel Hoses with Automatic Flow Controls and Shut-Off Valves

For inlet and outlet of unit, 2' hose length/3' overall length. Inlet hose has shut-off valve, strainer and P/T plug. Outlet hose has shut-off valve, P/T plug and automatic flow controller. MPT unit connection and FPT field connection.

MODEL	CONNECTION SIZE (in.)	AUTO FLOW RATE (GPM)	FOR USE WITH MODELS
7602-135015	1/2	1.5	HBH006; HBH/V009
7602-135020	1/2	2.0	HBH006; HBH/V009; HBH/V012; HBH018
7602-135030	1/2	3.0	HBH/V009; HBH/V012; HBH/V018
7602-135050	1/2	5.0	HBH012; HBH/V018
7602-131060	3/4	6.0	HBH/V024; HBH/V030; HBH/V036
7602-131080	3/4	8.0	HBH/V024; HBH/V030; HBH/V036; HBH/V042
7602-131090	3/4	9.0	HBV024; HBH/V030; HBH/V036; HBH/V042
7602-131100	3/4	10.0	HBH/V030; HBH/V036; HBH/V042
7602-132120	1	12.0	HBH/V048; HBH/V060
7602-132150	1	15.0	HBH/V048; HBH/V060
7602-132180	1	18.0	HBV048; HBH/V060
7602-133180	1-1/4	18.0	HBH072; HBH096; HBH120
7602-133200	1-1/4	20.0	HBH072; HBH096; HBH120
7602-133300	1-1/4	30.0	HBH072; HBH096; HBH120
7602-134200	1-1/2	20.0	HKV80; HKV100; HKV120
7602-134300	1-1/2	30.0	HKV80; HKV100; HKV120; HKV160; HKV200
7602-134400	1-1/2	40.0	HKV100; HKV120; HKV160; HKV200; HKV240
7602-134500	1-1/2	50.0	HKV160; HKV200; HKV240; HKV300
7602-134600	1-1/2	60.0	HKV200; HKV240; HKV300

Stainless Steel Hose Kit (2-2' foot hoses) with Balance Valve, Shut-Off Valve, with memory stop and PT Plugs

Hose length 2', 3' overall.

MODEL	CONNECTION SIZE (in.)	CONN. TYPE		FOR USE WITH MODELS
		UNIT	FIELD	
7602-130	1/2	MPT	FPT	HBH006, HBH/V009, HBH/V012; HBH/V018
7602-131	3/4	MPT	FPT	HBH/V024, HBH/V030, HBH/V036, HBH/V042
7602-132	1	MPT	FPT	HBH/V048, HBH/V060
7602-133	1-1/4	MPT	FPT	HBH072, HBH096, HBH120
7602-134	1-1/2	MPT	FPT	HKV100, HKV120, HKV160, HKV200, HKV240, HKV300

Stainless Steel Hose Only

Unit connection and field connection are both MPT; no P/T port.

MODEL	CONNECTION SIZE (in.)	LENGTH	FOR USE WITH MODELS
7602-101	3/4	3'	HBH/V024, HBH/V030, HBH/V036, HBH/V042
7602-100	1	3'	HBH/V048, HBH/V060

Neoprene Hose Kits

Kit contains 12' neoprene hose to cut to length required; two 90° MPT x barbed connectors with P/T ports; two MPT x barbed connectors; 4 screw hose clamps.

MODEL	CONNECTION SIZE (in.)
7602-102	3/4
7602-103	1

Water Source Heat Pumps

*Energy efficient
heating and cooling
commercial applications*



Comfort-Cure®

Commercial Water Source

Commercial

Energy-Saving Heating & Cooling Units for Replacements and New Construction

Comfort-Aire commercial water source heat pumps are ideal for improving the efficiency of older buildings and also as part of the design of sustainable structures. Because our water source systems use less energy, they lessen the economic and environmental impact of heating and cooling compared to HVAC systems powered solely by fossil fuels.

Multiple package models connected by a water loop are ideal for zoned heating and cooling in such facilities as schools, nursing homes, and condominiums—offering superior comfort and energy control throughout the building. Large capacity models are designed to condition single expansive spaces.

An extensive range of models, capacities and voltages means there's a model to meet the demands of designer, contractor and building owner—a great choice for new construction and retrofits, as well as replacements! With an innovative cabinet design, there are units to fit just about any existing location and multiple access panels make installation easy, even in tight spots.

HKV AND HBH SERIES

6 to 25 tons, for large spaces such as gyms and commons areas; units can be used in water loop, ground water or ground loop installations, depending on the type of facility and the available land or source of water.

GLOSSARY OF TERMS

Water Loop—Commercial water source installation in which a water loop connects all the individual, independently controlled units in the building, with excess heat energy rejected through a cooling tower and additional heat energy added by a boiler installed in the loop

Ground Loop—Geothermal system with heat transfer liquid permanently sealed in piping buried in the ground or submerged in a pond or lake (also called “Closed Loop”)

Ground Water—Geothermal system in which water is pulled from an aquifer and used for heat transfer, then released to another well, a ditch or other water source (also called “Open Loop”)

R-410A—The environmentally friendly refrigerant now used in all our HVAC equipment

HB SERIES

1/2 to 5 Tons, designed specifically for water loop, boiler/cooling tower applications, they provide effective zone control for comfort and efficiency; can also be used in ground loop installations.



HB Series Compact Commercial

Individual package units designed specifically for boiler/cooling tower applications, these highly efficient models allow for comfortable heating or cooling in separate zones at the same time. Each unit can be operated year 'round in heating or cooling mode, and independently controlled. Individual units are connected by a water loop which allows heat transfer throughout the building. Excess heat energy is rejected through a cooling tower; additional heat energy is added by a boiler in the loop.

The innovative cabinet design means there are models to fit just about any existing location. Vertical and horizontal versions are available and can be ordered in a variety of configurations with options for supply air, return, and heat exchanger material. Horizontal units come with factory-installed hanger brackets and field-convertible discharge.

The HB Series is ideal for multi-story structures such as office buildings, as well as single story facilities such as nursing homes and schools.



1/2 to 5 TONS



FEATURES

- **Quiet Operation**—Sound absorbing glass fiber insulation, plus insulated divider to separate compressor and air handler compartments
- **Extended Range Refrigerant Circuit**—Capable of ground loop as well as water loop installation for flexibility
- **Performance Sentinel System**—Monitors the operation and signals a potential problem so maintenance can be scheduled before a lockout occurs
- **Heavy Duty Compressors**—Copeland scroll compressors on -024 and larger models; rotary compressors on -018 and smaller models
- **Compact Size**—With some of the smallest cabinet sizes in the industry, units are designed to be compatible with thousands of older water source heat pumps

Rated in accordance with ISO 13256-1

Available voltages: 208/230-1-60, 208/230-3-60, 460-3-60, 575-3-60, 265-1-60, although all models are not available in all voltages. See *HB Engineering Design Guide* or *Price Book* for complete part number list.

All units available in right or left return.

See *Engineering Design Guide* for Ground Water/Ground Loop performance data.

Model	Water Loop Performance				Shipping Weight (lbs)
	Cooling @ 86° F EWT	EER	Heating @ 68° F EWT*	COP	
HBH/HBV006	5,800	13.2	7,500	4.7	113
HBH/HBV009	8,800	13.4	11,600	4.2	115
HBH/HBV012	11,700	13.5	15,200	4.3	124
HBH/HBV015	14,500	15.4	17,300	5.0	158
HBH/HBV018	17,300	14.3	21,500	5.0	163
HBH/HBV024	23,700	13.4	28,500	4.7	194
HBH/HBV030	28,100	13.4	35,100	4.6	202
HBH/HBV036	34,500	13.5	45,200	4.4	209
HBH/HBV042	40,100	13.1	52,700	4.3	224
HBH/HBV048	47,700	13.3	55,900	4.7	270
HBH/HBV060	59,400	13.4	77,000	4.3	285

*EWT = Entering water temperature.

Warranty—5 years on compressor, 1 year on parts
(Some limitations apply; see printed warranty for details.)

Office buildings are among the many structures that can benefit from the independently controlled comfort and low operating costs of an interconnected water loop system.



HKV Series Large Capacity Commercial



These individual packaged units transfer heat via water loop systems for effective heating and cooling. Our largest capacity units, they feature belt drive blowers and reliable scroll compressors. Power and water connections can be made on either side (also refrigerant connections for HKV), and discharge air is field convertible.

Because each unit operates independently of others, they can be zoned for maximum comfort. With their large capacity, this equipment meets the requirements of common areas, gymnasiums, cafeterias and other areas where individual comfort control of a large area is required, and is also ideal for multi-story structures

The extended range option, allows ground water and ground loop installations (requires extended range insulation kit).

HKV SERIES 6 to 25 TONS



HBH SERIES 6 to 10 TONS

**Units rated in accordance with AHRI/ASHRAE/ISO 13256-1*

FEATURES

- **Quiet Operation**—Fully insulated cabinet, plus insulated divider to separate compressor and air handler compartments, and double isolated compressor minimize noise
- **Microprocessor Controls**—Provides reliability and ease in controlling temperature and operation
- **Performance Sentinel System**—Monitors the operation and signals a potential problem before a lockout occurs
- **Easy Installation**—Multiple access panels simplify installation, especially in tight spots; HBH includes installed hanging brackets
- **Dual Circuits**—HKV168A to -300A units have two refrigerant circuits and dual scroll compressors which can operate independently for maximum temperature control flexibility

Available voltages:

All models are available in 208/230-3-60, 460-3-60, or 575-3-60. See the Engineering Design Guide or Price Book for a complete part number list. Available in front or back return, and front, back or top supply.

Warranty—5 years on compressor,
1 year on parts

(Some limitations apply; see printed warranty for details.)

HKV VERTICAL SERIES PERFORMANCE DATA

Model	Water Loop Performance				Shipping Weight (lbs)
	Cooling @ 86° F EWT	EER	Heating @ 68° F EWT*	COP	
HKV084A	82,000	15.2	101,000	4.8	665
HKV096A	94,000	15.0	118,000	4.7	665
HKV120A	118,000	15.0	144,000	5.0	711
HKV150A	150,000	14.0	186,000	4.7	715
HKV168A	166,000	15.5	204,000	4.9	1330
HKV192A	190,000	15.3	238,360	4.8	1330
HKV240A	238,500	15.3	291,000	5.1	1376
HKV300A	300,000	14.0	372,000	4.7	1434

HBH HORIZONTAL SERIES PERFORMANCE DATA

Model	Water Loop Performance				Shipping Weight (lbs)
	Cooling @ 86° F EWT	EER	Heating @ 68° F EWT*	COP	
HBH072A	69,000	13.3	92,500	5.0	626
HBH096A	95,000	13.7	123,000	5.0	684
HBH120A	119,000	13.3	160,000	4.6	738

*EWT = Entering water temperature. See Engineering Guide for Ground Water/Ground Loop data.

advanced DESIGN

All Comfort-Aire water source heat pumps are designed for reliable, quiet operation and long life

DEPENDABLE

- State-of-the-art, solid state microprocessor controls feature easy-to-understand diagnostics and monitor key system points
- Heavy duty compressor is rated for heat pump use; larger models have dual compressors
- Performance monitoring system signals a potential problem, much like a car's "check engine" light, so service can be scheduled
- Limited number of moving parts means less wear and long life expectancy
- Plated air coil prolongs equipment life in most environments and improves efficiency

INSTALLATION FLEXIBILITY

- Models are available in multiple voltages and with numerous options to meet building design requirements
- Discharge air configuration is field convertible for horizontal unit
- Compact models take up little room, maximizing usable space in the building and making them ideal for tight spaces or retrofit applications; they also utilize a compact ductwork system

QUIET OPERATION

- Dual spring and grommet isolation mounting system for the compressor reduces vibration
- Flexible torsion motor mounting further reduces vibration and related sound
- Compressor and air handler compartments in package models are separated by an insulated divider and the blower housing is covered in noise suppression material
- Discharge muffler reduces inherent compressor pulse noise

EASY SERVICING

- Components can be accessed from multiple sides to simplify service and maintenance
- Removable blower inlet rings allow easy access to the fan and motor for maintenance
- Safety features protect the unit: High pressure and loss of refrigerant charge; condensate overflow; freeze protection for coaxial heat exchanger and air coil; hot water generator limiter; fault lock-out enables emergency heat and prevents compressor operation; anti-short cycle protects the compressor



What do we mean by 'Energy Efficiency'?

In recent years, the HVAC industry has made significant advances in the energy efficiency of heating and cooling systems. You can judge efficiencies yourself by comparing some industry standards.

Cooling efficiency is measured by an Energy Efficiency Ratio (EER). This is a ratio of total cooling capacity to electrical energy output. The higher the number, the more efficient the equipment. Our water source units have EER ratings as high as 15.5 (water loop installation), a substantial improvement over efficiency of other types of commercial cooling equipment.

On the heating side, efficiency is shown by a Coefficient of Performance (COP), which indicates the ratio of total heating capacity to electrical energy output. As with EERs, the higher the number, the more efficient the equipment. Again, water source systems rate significantly higher than comparable gas or electric heating equipment.

Commercial water source installations may qualify for Federal Tax Credits.

Talk to your tax professional to discuss the implications of the law with regard to your specific situation.

Water Source Heat Pumps

Comfort combined with Efficiency

At Comfort-Aire, we're in the business of making you comfortable while saving energy. We offer a broad range of products that are efficient and reliable for home, school, office, work and institutional settings. All meet or exceed industry standards for energy efficiency, and are built for durability.

We've been in the comfort business since our founding in 1933, and our roots go back even further. We can trace our beginnings to the Wingert Furnace Co. which began building coal, gas and oil furnaces in 1907. We moved to new headquarters in Jackson, Michigan, in 1955, and this facility has been expanded many times to accommodate our growth. The acquisition of Aitons' Equipment of Canada in 2000 helped build a stronger international presence.

Comfort-Aire is known throughout the heating and air conditioning industry for efficient, reliable products and in-season availability—which means there's a good chance we can ship the specified unit within days. We're also known as experts in geothermal technology, providing dealer and installer training in geothermal and water source systems.

Geothermal and water source heat pumps are among our fastest growing product groups, largely due to the exceptional energy savings they offer as well as the level of comfort they deliver.

This brochure shows the full range of our equipment for commercial installations. It also explains how water source installations can make your facility comfortable year 'round, and do it economically.

Design, materials and specifications subject to change without notice.

Comfort-Aire®
HEAT CONTROLLER

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A **DAIS** Company

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