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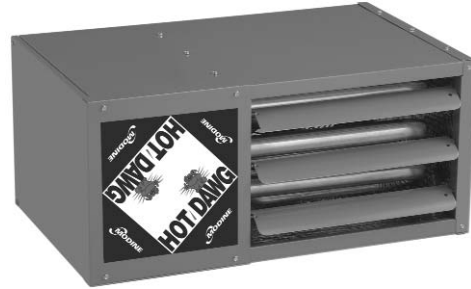


## GAS-FIRED UNIT HEATERS POWER VENTED & SEPARATED COMBUSTION



**Hot Dawg® Model HD**  
power-exhausted, gas-fired unit heater.

- Hush-puppy quiet operation.
- Uses natural or propane gas.
- Certified for residential, commercial and industrial use.
- Low-profile design and neutral color to blend in with decor.
- Lightweight, easily installs 1" from ceiling with only 2 angle brackets (included).
- Install quickly and easily with field wiring connections and knockouts for quick access to gas and electricity.
- Standard power exhaust simplifies side-wall or roof venting with small-diameter vent pipe.
- Versatile design allows for right or left hand controls and installation. Gas, electrical and flue connections can be changed from one side to the other by simply flipping the Hot Dawg over.
- Permanently-lubricated motor for trouble-free dependability.
- Full 10-year warranty on heat exchanger.



**Hot Dawg® Model HDS**  
separated-combustion, gas-fired unit heater.

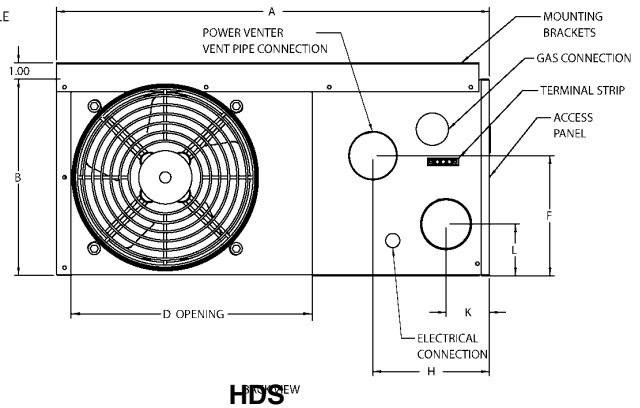
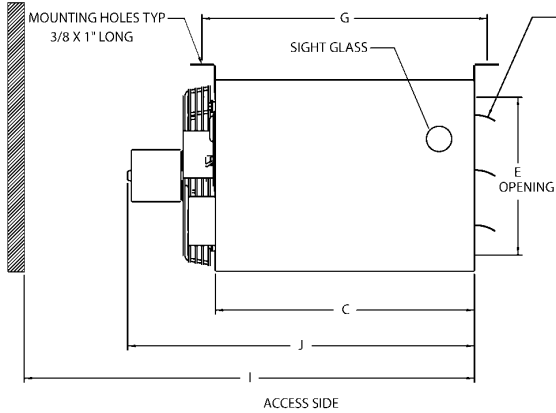
The separated combustion Hot Dawg draws its combustion air from outside to ensure that the unit will always have plenty of fresh, clean air to breath. This fresh-air supply reduces common concerns about dusty, dirty or humid applications. In addition, by drawing the combustion air from the outside, the overall heating efficiency is increased. In short, the Hot Dawg separated combustion unit gives you the added advantages of:

- Less maintenance in dusty environments,
- Improved efficiency by using outside air for combustion,
- Greater durability in "hostile" environments (environments possessing substances that may deteriorate the performance of the unit),
- External thermostat and gas connections.

Unit	Btu/Hr Input	Typical Application
HD/HDS 30	30,000	1 to 1-1/2 Car Garage
HD/HDS 45	45,000	2 to 2-1/2 Car Garage
HD/HDS 60	60,000	3 to 3-1/2 Car Garage
HD/HDS 75, 100, 125	75,000 - 125,000	Large Garage

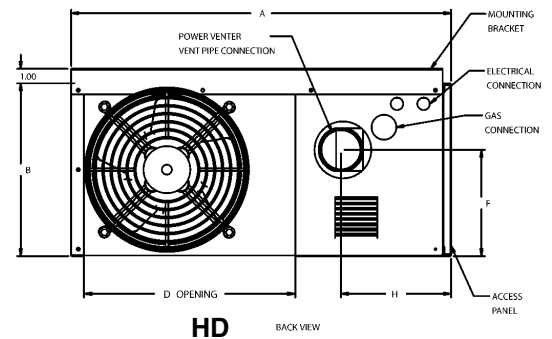
Sizing data for sample only. Consult a qualified installer for the actual requirements for your building.

# GAS-FIRED UNIT HEATERS POWER VENTED & SEPARATED COMBUSTION



## PERFORMANCE

Models	30	45	60	75	100	125	
Btu/Hr Input	30,000	45,000	60,000	75,000	100,00	125,00	
Btu/Hr Output	24,000	36,000	48,000	60,000	80,000	100,00	
Entering Airflow (CFM)	505	720	990	1,160	1,490	1,980	
Outlet Velocity	523	749	653	769	565	747	
Air Temp. Rise (°F)	44	46	45	48	50	47	
Mounting Height (Max ft.)	10	10	12	14	12	16	
Heat Throw (ft.)	25	27	36	38	42	56	
Motor Data	Horsepower	1/25	1/15	1/12	1/12	1/12	1/8
	RPM	1,550	1,550	1,625	1,625	1,050	1,550
	Type	S.P.	S.P.	P.S.C.	P.S.C.	S.P.	P.S.C.
	Amps	1.5	2.4	1.2	1.2	2.7	2.2
Unit Total Amps	2.8	3.7	2.5	2.5	4.7	4.2	
Vent Connector Size (in.)	3	3	3/4	3/4	4	4	



## CLEARANCES

Unit Side	Clearance To Combustible Materials	Recommended Service Clearance
Top and Bottom	1"	1"
Access Side	18"	18"
Non-Access Side	1"	1"
Rear	18"	18"
Vent Connector	4"	4"

## DIMENSIONS (inches)

Models	30	45	60	75	100/125
A	26.8	26.8	26.8	26.8	35.5
B	12.2	12.2	18.0	18.0	20.5
C	16.5	16.5	16.5	16.5	22.0
D	14.9	14.9	14.9	14.9	22.5
E	10.1	10.1	15.9	15.9	18.4
F	7.25	7.25	10.75	10.75	14.0
G	18.5	18.5	18.5	18.5	24.0
H	7.6	7.6	7.835	7.835	8.4
Gas Connection	1/2	1/2	1/2	1/2	1/2
I	34.5	34.5	34.5	34.5	43.0
J	22	22	25	25	31.0
K	2.74	2.74	3.15	3.15	3.87
L	3.19	3.19	5.55	5.55	10.73
Fan Diameter	10	10	14	14	18.0
Approx. Weight (lbs.)	55	60	80	85	125

## MOUNTING

1" - angle, mounting brackets are slotted to accommodate joists on 16" or 24" centerlines.





## Power Vented Unit Heaters



Power vented  
propeller unit heater  
(PDP)



Power vented  
blower unit heater  
(BDP)

### Power Vented Unit Heater

The power vented unit heater was designed for use with a building's heating systems where negative pressure or energy savings may be an issue. Available in 12 propeller and 11 blower power vented model sizes, the unit covers a wide variety of applications. They have input ranges from 150,000 to 400,000 Btu/Hr and can operate on either natural or propane gas.

#### Standard Features:

- CSA certification for use in the US and Canada
- 80% thermally efficient
- Power Exhauster Motor
- Differential pressure switch for proof of venting
- 20 gauge aluminized steel cabinet
- 115V control step down transformer with 24V gas controls
- Aluminized steel heat exchanger
- Aluminized steel burner with stainless steel separator strip
- Certified to 0.5" W.C. external static pressure
- Single stage intermittent pilot with continuous retry control system for operation on natural gas.
- High limit safety control
- Control terminal board
- Adjustable motor sheaves on blower models
- Totally enclosed fan/blower motors

#### Optional Features - Factory Installed

- 409 stainless steel heat exchanger
- 409 stainless steel burner
- Single stage intermittent pilot control system for operation on propane gas
- Intermittent pilot with continuous retry control system with two-stage and mechanical modulation controls for either natural or propane gas
- Single stage standing pilot control system for either natural or propane gas
- Gas control step down transformers for 208/230V/1Ph for propeller models
- Gas control step down transformers for 208/230V/1Ph and 208/230/460/575V/3Ph for blower models
- Fan delay timer
- Fingerproof propeller fan guard

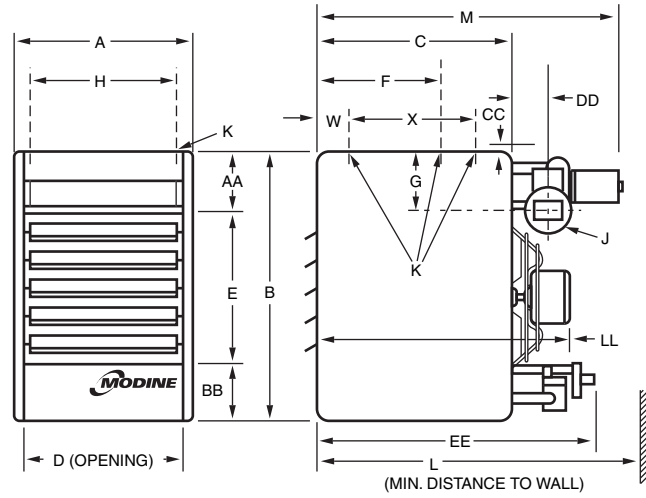
### Accessories - Field Installed

- Single-stage room thermostats
- Two stage room and duct thermostats
- Summer/winter switch
- Pipe hanger adapter kits
- 5-10 PSI gas pressure regulator
- Room thermostat guard
- Control transformers
- SPST relays
- Energy saver kit
- Blower enclosure on blower models
- Filter rack and duct connector on blower models
- Outlet duct connector on blower models
- Belt guard on blower models
- Discharge nozzle on blower models
- Discharge transition for polytube on blower models
- Deflector hood
- Natural gas to propane gas conversion kit
- Unit step down transformers for propeller units operating on 200-208/230/460/575/3ph. supply power.

### Special Applications

A 409 stainless steel heat exchanger and burner is recommended when the combined entering/return air to the unit is below 40°F or if the unit is located in a humid environment.

# Propeller Units - Model PDP



## DIMENSIONS (INCHES) — PDP<sup>1</sup>

Dimensions	Model Number						
	PDP 150	PDP 175	PDP 200	PDP 250	PDP 300	PDP 350	PDP 400
A	21	23-1/2	25-5/8	25-5/8	28-5/8	33-5/8	40
B	35-1/4	35-1/4	40-1/4	40-1/4	40-1/4	40-1/4	40-1/4
C	22	22	25	25	25	25	25
D	18-9/16	21-1/16	23-3/16	23-3/16	26-3/16	31-3/16	37-1/2
E	20	20	24	24	24	24	24
F	12	12	13-1/2	13-1/2	14	—	—
G	6-9/16	6-9/16	7-1/2	7-1/2	7-1/2	7-1/2	7-1/2
H	17-3/8	19-7/8	22	22	25	30	36-3/8
J <sup>2</sup>	5	5	5	6	6	6	6
L <sup>4</sup>	35-13/16	35-9/16	40-3/4	40-3/4	40-3/4	40-3/4	44-3/16
M	29-13/16	29-9/16	34-3/4	34-3/4	34-3/4	34-11/16	38-3/16
W	—	—	—	—	—	5	5
X	—	—	—	—	—	16	16
AA	8	8	9	9	9	9	9
BB	7-1/4	7-1/4	7-1/4	7-1/4	7-1/4	7-1/4	7-1/4
CC	—	—	—	—	—	—	—
DD	2-3/4	2-3/4	3-3/8	3-3/8	3-3/8	3-3/8	6-13/16
EE	30-1/2	30-1/2	32-7/8	32-7/8	32-7/8	32-7/8	32-7/8
LL	31-1/8	31-1/8	34-7/8	34-7/8	36-1/4	35-1/2	40-1/2
Gas Connections	1/2	1/2	1/2	1/2	1/2	3/4	3/4
Fan Diameter	16	18	20	20	22	22	24
Approx. Weight	168	175	239	239	269	338	418

<sup>1</sup> Do not use propeller units with duct work.

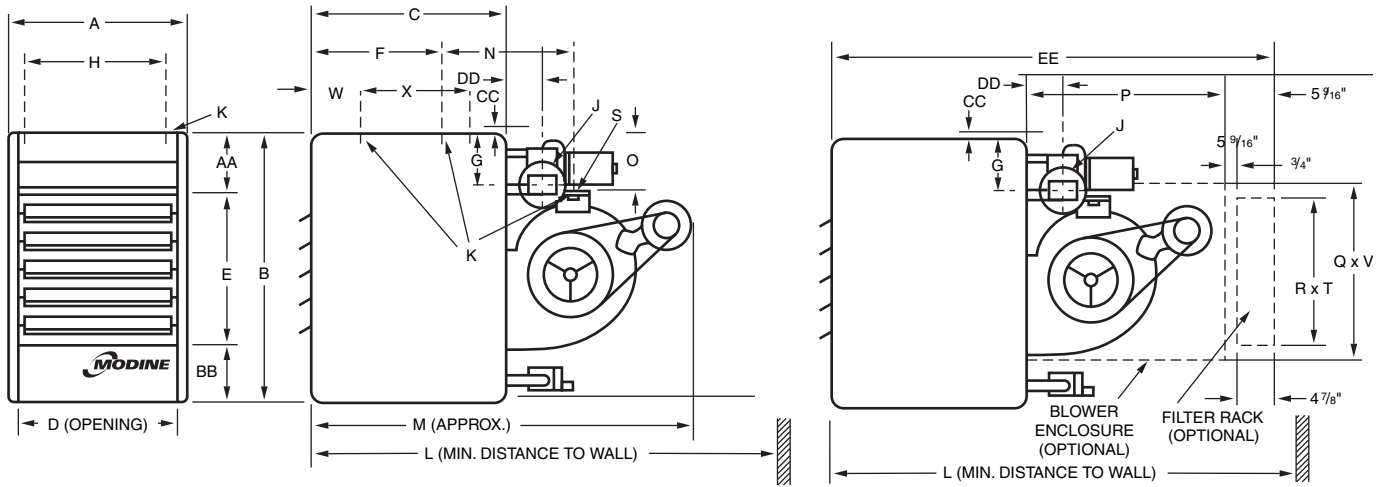
<sup>2</sup> For some models, this is the dimension of the vent transition outlet supplied.

<sup>3</sup> PDP 30 through PDP 300 — 2 holes (and the level hanging adjustment feature). PDP 350 through PDP 400 — 4 holes. (Listed is the hole diameter and threads per inch to accept threaded rod).

<sup>4</sup> Dimension equals overall plus 6".



**Blower Units - Model BDP**



**DIMENSIONS (INCHES) — BDP**

Dimension Symbol	Model Number						
	BDP 150	BDP 175	BDP 200	BDP 250	BDP 300	BDP 350	BDP 400
A	21	23-1/2	25-5/8	25-5/8	28-5/8	33-5/8	40
B	35-1/4	35-1/4	40-1/4	40-1/4	40-1/4	40-1/4	40-1/4
C	22	22	25	25	25	25	25
D	18-9/16	21-1/16	23-3/16	23-3/16	26-3/16	31-3/16	37-1/2
E	20	20	24	24	24	24	24
F	12	12	13-1/2	13-1/2	14	—	—
G	6-9/16	6-9/16	7-1/2	7-1/2	7-1/2	7-1/2	7-1/2
H	17-3/8	19-7/8	22	22	25	30	36-3/8
J	5	5	5	6	6	6	6
K Mounting Holes	3/8-16	3/8-16	3/8-16	3/8-16	3/8-16	3/8-16	3/8-16
L w/ Blwr Encl & Filt Rk	62-5/8	62-5/8	69-5/8	69-5/8	69-5/8	69-5/8	69-5/8
L w/o Blwr Encl & Filt Rk	53-1/8	53-1/8	61	61	61	61	65
M	47-1/8	47-1/8	55	55	55	55	59
N	21-1/2	21-1/2	25-7/16	25-7/16	24-15/16	17-15/16	22
O	7-1/4	7-1/4	8-1/2	8-1/2	8-1/2	8-1/2	8-1/2
P	30	30	34	34	34	34	34
Q Blower Encl Ht	21-3/8	21-3/8	25-1/8	25-1/8	25-1/8	25-1/8	25-1/8
R Inlet Duct Height	20	20	23-3/4	23-3/4	23-3/4	23-3/4	23-3/4
T Inlet Duct Width	27-1/2	27-1/2	32-3/4	32-3/4	32-3/4	42-7/8	42-7/8
V Blower Encl Width	29	29	34-1/4	34-1/4	34-1/4	44-3/8	44-3/8
W	—	—	—	—	—	5	5
X	—	—	—	—	—	16	16
AA	8	8	9	9	9	9	9
BB	7-1/4	7-1/4	7-1/4	7-1/4	7-1/4	7-1/4	7-1/4
CC	—	—	—	—	—	—	—
DD	2-3/4	2-3/4	2-3/4	3-3/8	3-3/8	3-3/8	6-13/16
EE	56-5/8	56-5/8	63-5/8	63-5/8	63-5/8	63-5/8	63-5/8
Gas Connections	1/2	1/2	1/2	1/2	1/2	3/4	3/4
Std. Mtr. Sheave Dia.	3	3	3	3	3	3	4-1/2
Std. Blower Sheave Dia.	11	7	14	10	7	6	10
Blower Wheel Diameter	13	13	15	15	15	15	15
Approx. Weight	152	152	315	315	339	428	498



# HIGH EFFICIENCY GAS-FIRED SEPARATED COMBUSTION UNIT HEATERS

Call for size & availability



## Series PTS/BTS

Modine's new PTS/BTS, tubular heat exchanger, separated combustion unit is specifically designed for environments with hostile atmospheric conditions, such as chemicals, high humidity or negative pressure. Built on our successful Hot Dawg heater platform, this new line expands tubular heat exchanger coverage to units rated from 150,000 to 400,000 BTU/hr.

On these units, combustion air is brought in from outside the heated area, either from outdoor air or from an adjacent room. This eliminates the need to use contaminated indoor air for combustion.

All PTS/BTS units are packed with features to deliver maximum comfort:

- Swept wing fan on sizes from 100,000 to 200,000 BTU's/hr for superior airflow and noise reduction where it's needed most
- In-shot burners fire each heat exchanger tube for reliable performance, ease of service and decreased noise on ignition
- Same-size vent and combustion air inlets throughout product line makes installation easier
- Optional stainless steel heat exchanger
- Centrifugal blower models with adjustable sheaves for wide airflow range (BTS line)
- Longer allowable vent lengths (up to 50' vs 30') versus previous line, providing greater installation options



## Effinity93

Modine is pleased to introduce the Effinity93 (model PTC), the most efficient gas-fired unit heater in North America.

With six models available - from 135,000 to 310,000 BTU/hr - all operating at 93% efficiency, the Effinity93 will dramatically lower energy costs through decreased gas/propane consumption. For those looking to feel even more green, each unit will reduce CO2 output by roughly 13% versus comparable sized heaters.

With the Effinity93 you are assured the following features:

- Modine's exclusive Conservicore™ technology relieves your fear of failure thanks to its ability to withstand acidic condensate
- A design that was made with contractors in mind for faster installation and lower installation costs
- Product line that's built off the successful PTS-model footprint; all Effinity93 box sizes are equal to a corresponding PTS model
- The Contractor Convenience Package is standard on all units, allowing for easier connectivity and troubleshooting

Modine makes it easy to accessorize your Effinity93 to meet your specifications:

- Complete line of accessories to handle the condensate
- Energy Saver Kit
- GFCI surge protection adapter plug
- 30, 60, 90 degree air deflector hoods
- Horizontal and vertical concentric vent kits
- Two-point mounting kit
- Conversion kits for natural gas and propane, including high-altitude



## GAS-FIRED INDOOR DUCT FURNACES



### INDOOR GRAVITY VENTED (DFG)

#### FOR HEATING, HEATING/COOLING AND MAKE-UP AIR SYSTEMS

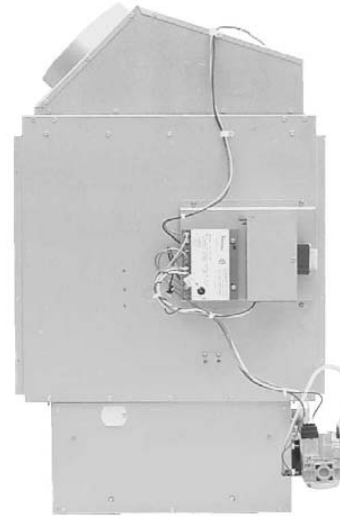
The indoor gravity vented duct furnace was designed for use with a building's heating, heating/cooling and make-up air systems. Available in 11 gravity vented model sizes, the unit covers a wide variety of applications. They have input ranges from 75,000 to 400,000 Btu/Hr and can operate on either natural or propane gas. The airflow direction can be specified when ordering the unit. The duct furnace is certified for location either upstream or downstream from cooling coils and has a drain pan that allows connection to a condensate drain line.

#### Standard Features:

- CSA certification for use in the US and Canada
- ETL certification
- 80% thermally efficient
- Blocked vent safety switch
- 20 gauge aluminumized steel cabinet
- 115V control step down transformer with 24V gas controls
- Aluminumized steel heat exchanger
- Aluminumized steel burner with stainless steel separator strip
- Certified to 3.0" W.C. external static pressure
- Single stage standing pilot control system for operation on natural gas
- Right side access to burner and gas controls (when looking into the discharge) with slide-out burner drawer
- High limit safety control
- Control terminal board

#### Optional Features - Factory Installed

- 409 stainless steel heat exchanger and burner
- 409 stainless steel drip pan
- Single stage standing pilot control system for operation on propane gas
- Intermittent pilot with continuous retry control system with single-stage, two-stage, mechanical modulation, and electronic modulation controls for either natural or propane gas
- Building management compatible gas controls for modulation control using a 0-10 Vdc or 4-20 mA input
- Multiple furnace electronic amplifier for controlling up to 4 duct furnaces with one discharge air sensor
- Gas control step down transformers for 208/230V/1Ph and 208/230/460/575V/3Ph
- Left side access to burner and gas controls
- Adjustable differential air flow proving system
- Fan delay timer
- High and/or low gas pressure switches
- Manual reset high limit switch
- Timed freeze protection
- Supply air fire stat
- Control relay - double pole, double throw
- Installed thermostat - two-stage
- Separate line voltage and low voltage terminal strips
- Premium control box and gas control string



#### Accessories - Field Installed

- Power exhauster with vent adapter
- Electronic programmable heat/cool room thermostats—for single and two stage units
- Smoke detector
- 7-day digital and 7-day econo time clocks
- Single-stage room thermostats
- Two stage room and duct thermostats
- Electronic two stage duct thermostats
- Electronic modulating room and duct thermostats and a room override for the duct thermostat
- Summer/winter switch
- Condensate connection drain kits
- Pipe hanger adapter kits
- 5-10 PSI gas pressure regulator
- Room thermostat guards

#### Special Applications

A 409 stainless steel heat exchanger and burner is recommended when the unit is installed downstream of a cooling coil or evaporative cooler, and when the combined entering/return air to the unit is below 40°F.

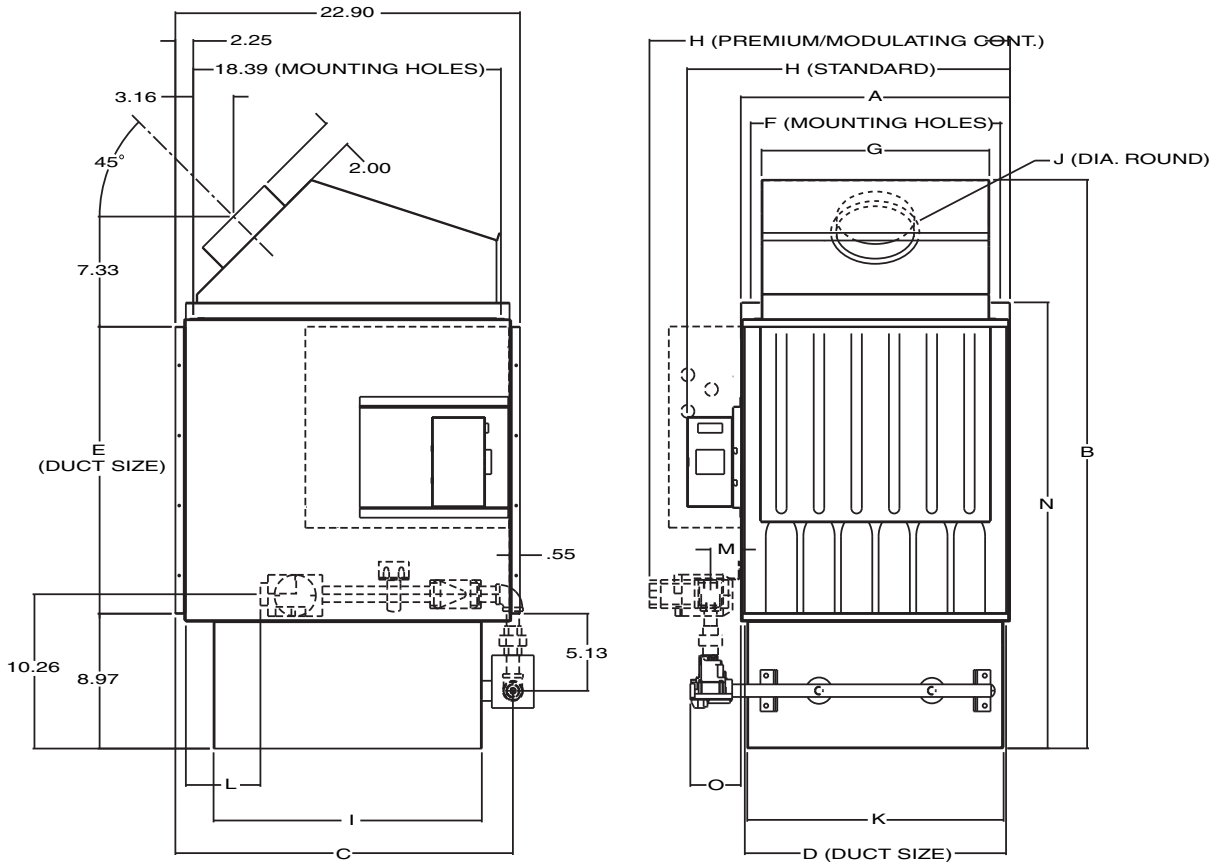
#### Variable Air Movement Applications

When the air mover supplied by others can provide variable air movement (i.e. 2-speed or variable frequency drive units), the certified allowable minimum CFM of the gravity vented duct furnace can be 66% of the minimum listed CFM in Table 8.2 if the unit is applied as follows:

1. The unit is provided with two-stage, mechanical modulation, or electronic modulation gas controls.
2. The unit is provided with a factory installed discharge air controller.
3. The system does not include a room thermostat.

The factory installed discharge air thermostat will prevent the unit from firing above the allowable 100°F rise when the unit is at or above the minimum CFM by monitoring the discharge air and going to low fire. A room thermostat cannot be used, because it is located remote from the unit, and could cause the unit to over-fire.

# GAS-FIRED INDOOR DUCT FURNACES



## Indoor Gravity Vented Duct Furnace Dimensions (DFG)

(All dimensions in inches)

Dimensions	Model Size						
	75	100/125	150/175	200/225	250/300	350/400	
A	15.41	17.90	22.16	24.29	27.33	38.83	
B	37.80	37.80	37.80	41.80	41.80	41.80	
C	22.43	22.43	22.43	24.09	24.09	24.09	
D	15.21	17.70	21.96	24.09	27.13	38.63	
E	19.07	19.07	19.07	23.07	23.07	23.07	
F	14.09	16.59	20.85	22.98	26.01	37.51	
G	12.65	15.14	19.41	21.60	24.60	36.14	
H (standard)	18.98	21.47	25.73	28.06	31.40	42.40	
H (premium/modulating cont.)	21.48	23.97	28.24	30.30	33.31	44.84	
I	17.83	17.83	17.83	20.68	20.68	20.68	
J	5	6	7	7	8/10	10	
K	14.55	17.04	21.31	23.26	26.44	37.80	
L (min. approx.)	5.0	5.0	5.0	6.6/6.1	6.1	6.1/5.8	
M	2.01	2.01	2.01	1.94	1.94	1.94	
N	29.65	29.65	29.65	33.65	33.65	33.65	
O (max. approx.)	5.6	5.6	5.6	6.8/6.2	6.2	8.3/8.6	
Gas Connection Pipe Size (max. std.)	1/2	1/2	1/2	1/2 / 3/4	3/4	3/4	
Gas Connection Pipe Size (max. prem.)	3/4	3/4	3/4	3/4	3/4	3/4	
Approx. Weight	Unit Shipping	89#	113#	140#	175#	213#	284#
	Unit Net	73#	95#	121#	155#	181#	251#

## GAS-FIRED OUTDOOR DUCT FURNACES



### OUTDOOR GRAVITY & POWER EXHAUSTED (HFG/HFP)

#### FOR HEATING, HEATING/COOLING AND MAKE-UP AIR SYSTEMS

The outdoor duct furnace was designed for use with a building's heating, heating/cooling and make-up air systems. Available in 11 gravity vented or power exhausted model sizes, the unit covers a wide variety of applications. They have input ranges from 75,000 to 400,000 Btu/Hr and can operate on either natural or propane gas. The airflow direction can be specified when ordering the unit. The duct furnace is certified for location either upstream or downstream from cooling coils and has holes to drain any condensate that may form onto the roof.

#### Standard Features:

- C.S.A. certification for use in the US and Canada
- ETL certification
- All units a minimum of 80% thermally efficient
- 18 gauge aluminized steel cabinet with a baked-on polyester powder paint finish on exterior casing parts
- Single 115V control step down transformer with 24V gas control circuit
- Aluminized steel heat exchanger
- Aluminized steel burner with stainless steel separator strip
- Certified to 3.0" W.C. external static pressure
- Combination combustion air/exhaust vent cap
- Single stage intermittent pilot with continuous retry control system for operation on natural gas.
- Separate line voltage and low voltage terminal strips
- Right side (when looking into the discharge) access to burner and gas controls with slide-out burner drawer
- Side or bottom gas connection access
- High limit safety control
- Rail type mounting base for slab installation

#### Optional Features - Factory Installed

- Power exhaust
- 409 stainless steel heat exchanger and burner
- 409 stainless steel drip pan
- Single stage intermittent pilot with lockout control system for operation on propane gas
- Two-stage, mechanical modulation, and electronic modulation controls for either natural or propane gas
- Building management compatible gas controls for modulation control using a 0-10 Vdc or 4-20 mA input
- Multiple furnace electronic amplifier for controlling up to 4 duct furnaces with one discharge air sensor
- Control step down transformers for 208/230V/1Ph and 208/230/460/575V/3Ph
- Left side access to burner and gas controls
- Adjustable differential air flow proving system
- Fan delay timer
- High and/or low gas pressure switches
- Manual reset high limit switch
- Timed freeze protection
- Supply air fire stat
- Control relay - double pole, double throw
- Installed thermostats - two-stage and electronic modulation



#### Accessories - Field Installed

- Electronic programmable heat/cool room thermostats - for single and two stage units
- Smoke detector
- 7-day digital and 7-day econo time clocks
- Single-stage room thermostats
- Two stage room and duct thermostats
- Electronic two stage duct thermostats
- Electronic modulating room and duct thermostats
- Room override for the duct thermostat
- 4 foot exhaust vent extension
- Summer/winter switch
- 5-10 PSI gas pressure regulator
- Room thermostat guards

#### Special Applications

A 409 stainless steel heat exchanger and burner is recommended when the unit is installed downstream of a cooling coil or evaporative cooler, and when the combined entering/return air to the unit is below 40°F.

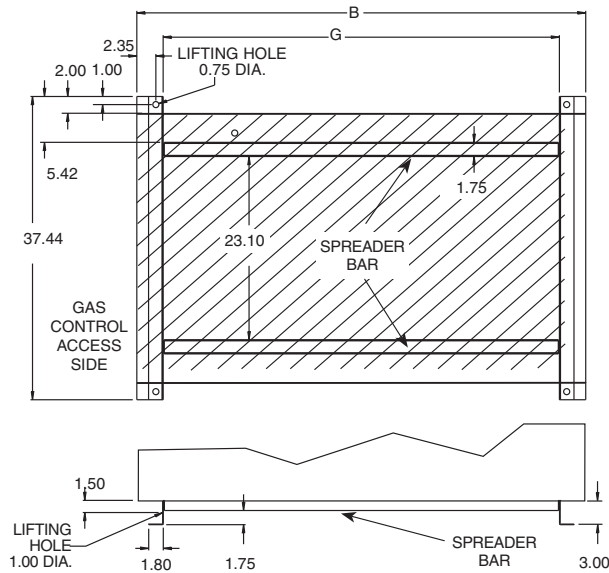
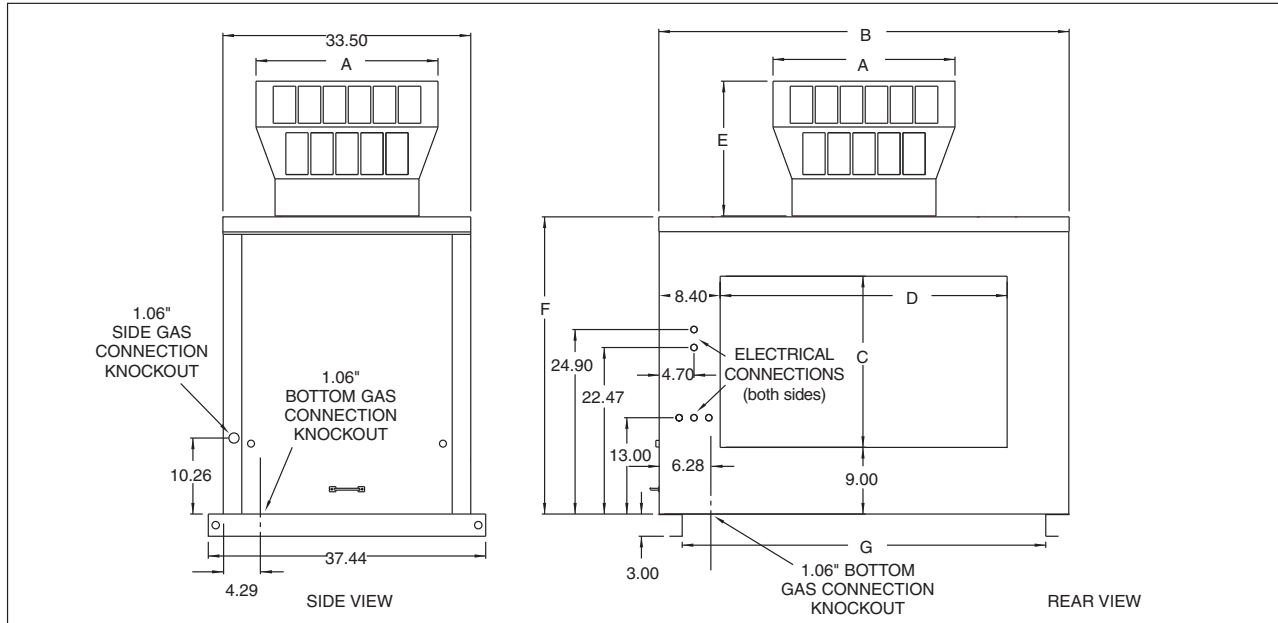
#### Variable Air Movement Applications

When the air mover supplied by others can provide variable air movement (i.e. 2-speed or variable frequency drive units), the certified allowable minimum CFM of the outdoor duct furnace can be 66% of the minimum listed CFM in Table 8.2 if the unit is applied as follows:

1. The unit is provided with two-stage, mechanical modulation, or electronic modulation gas controls.
2. The unit is provided with a factory installed discharge air controller.
3. The system does not include a room thermostat.

The factory installed discharge air thermostat will prevent the unit from firing above the allowable 100°F rise when the unit is at or above the minimum CFM by monitoring the discharge air and going to low fire. A room thermostat cannot be used, because it is located remote from the unit, and could cause the unit to over-fire.

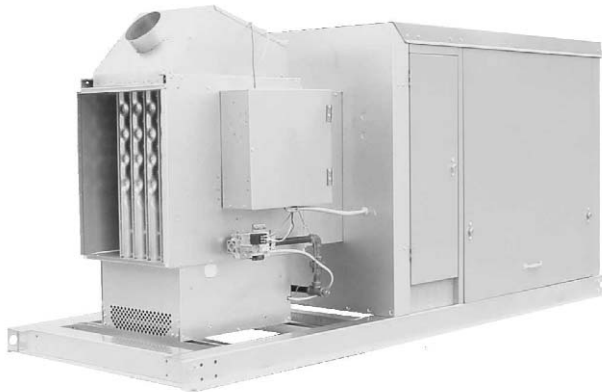
# GAS-FIRED OUTDOOR DUCT FURNACES



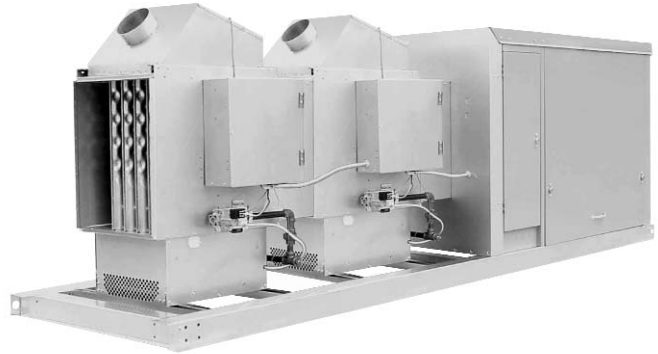
**Outdoor Gravity Vented Duct Furnace Dimensions (HFG)** (All dimensions in inches)

Model Size	75	100/125	150/175	200/225	250/300	350/400
<b>A</b>	19.22	19.22	19.22	19.22	21.31	24.64
<b>B</b>	31.96	34.46	38.72	40.84	43.86	55.38
<b>C</b>	18.98	18.98	18.98	22.98	22.98	22.98
<b>D</b>	15.18	17.69	21.94	24.06	27.09	38.60
<b>E</b>	14.20	14.20	14.20	14.20	15.18	18.38
<b>F</b>	36.11	36.11	36.11	40.11	40.11	40.11
<b>G</b>	25.50	28.00	32.25	34.38	37.40	48.92
<b>Gas Connection Pipe Size</b>	1/2"	1/2"	1/2"	1/2"	3/4"	3/4"
<b>Approx. Weight</b>	<b>Unit Shipping</b>	282#	305#	333#	383#	525#
	<b>Unit Net</b>	207#	225#	248#	288#	400#
	<b>Cap Net</b>	16#	16#	16#	16#	26#

## GAS-FIRED INDOOR DUCT FURNACES FOR HEATING OR MAKE UP AIR



Indoor Gravity Vented Duct Furnace  
with Blower Section (DBG)



Indoor Gravity Vented Multiple Duct Furnace  
with Blower Section (DBG)

### INDOOR GRAVITY VENTED FOR HEATING, HEATING/VENTILATING/COOLING AND MAKE-UP AIR SYSTEMS

The indoor gravity vented duct furnace with blower, and/or cooling sections was designed for use with a building's heating, heating/ventilating/cooling and make-up air systems. They have input ranges from 75,000 to 1,200,000 Btu/Hr and can operate on either natural or propane gas. The airflow ranges from 556 to 14,500 CFM and the airflow direction can be specified when ordering the unit. The unit can be provided with a cooling coil section with either a factory installed DX or chilled water cooling coil or the coil can be provided by others.

#### Standard Features:

- All standard duct furnace features (see page 4)
- ETL certification of the entire system unit
- 18 gauge aluminized steel blower cabinet with a baked-on polyester powder paint finish on blower and cooling cabinet exterior casing parts
- 115V step down transformer with 24V gas controls
- Aluminized steel heat exchanger and burner
- Blower performance up to 3.0" W.C. external static pressure
- Single stage standing pilot control system for operation on natural gas
- Separate line voltage and low voltage terminal strips
- Right side access to burner and gas controls (when looking into the discharge) with slide-out burner drawer
- Side gas and electrical connection access
- Fan timer and high limit safety control
- Combination suspension and slab type mounting
- Adjustable belt drive
- Premium control box

#### Optional Features - Factory Installed

- All optional duct furnace features (see page 4)
- DX or chilled water section with optional factory installed cooling coil (see page 62 for performance and CFM ranges)
- 409 stainless steel heat exchanger and burner
- Open drip proof, totally-enclosed, high efficiency, and two speed motors
- Motor starters and contactors with one normally open contact
- 1" or 2" permanent, 2" disposable, and 2" FARR® 30/30 filters
- 1" Insulation for the blower and/or cooling cabinet sections
- Double wall construction for blower, and/or cooling cabinet sections
- Dead-front disconnect switches
- Two position, modulating, building pressure sensing, three position, building management (0-10 Vdc or 4-20 mA) damper actuators
- Economizer warm-up packages
- Step-down transformers for 460/575V/3Ph
- Left side access to blower, burner, and gas controls
- Mild temperature thermostat
- Supply and return air firestats
- Blower door interlock switch
- Convenience outlet
- Blower and motor vibration isolation
- Pillow block bearings
- Extended grease lines
- Burner/blower/damper service switches
- 6, 10, or 14 point circuit analyzer

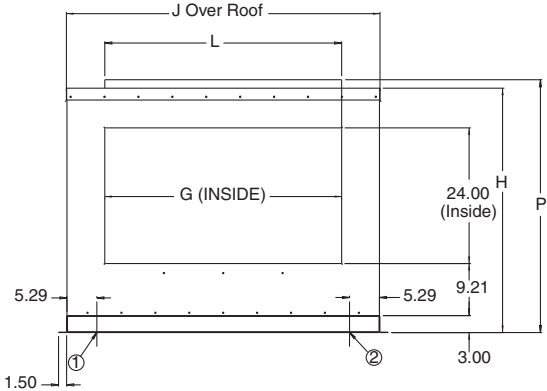
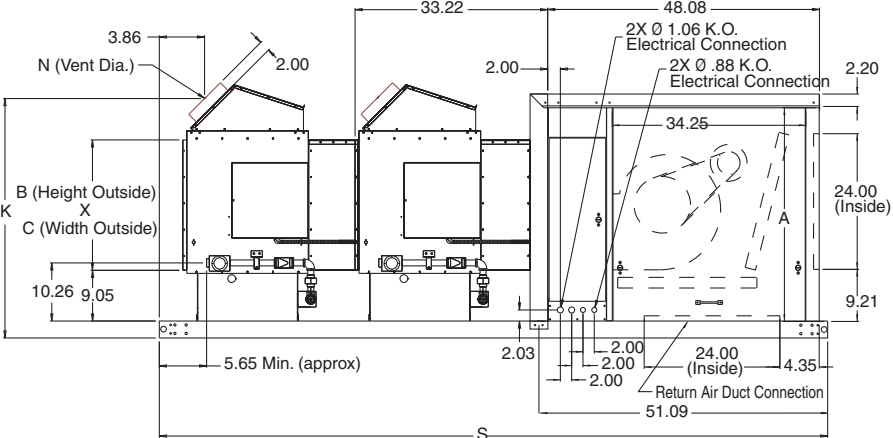
#### Accessories - Field Installed

- All accessory duct furnace features
- Remote control panels
- Building pressure sensing damper controls
- Smoke detector
- 7-day digital and 7-day econo time clocks
- Single-stage room thermostats
- Two-stage room and duct thermostats
- Electronic two stage duct thermostats
- Electronic modulating room and duct thermostats and a room override for the duct thermostat
- Electronic temperature control allowing for two, three, four or six stage control

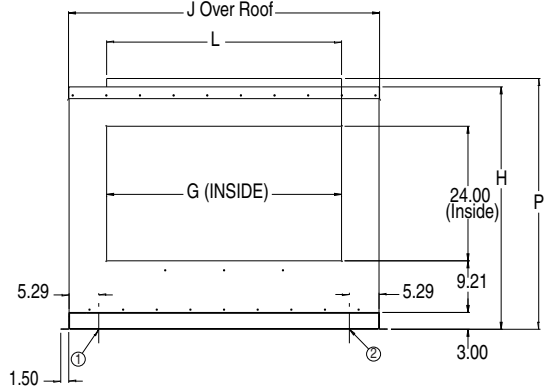
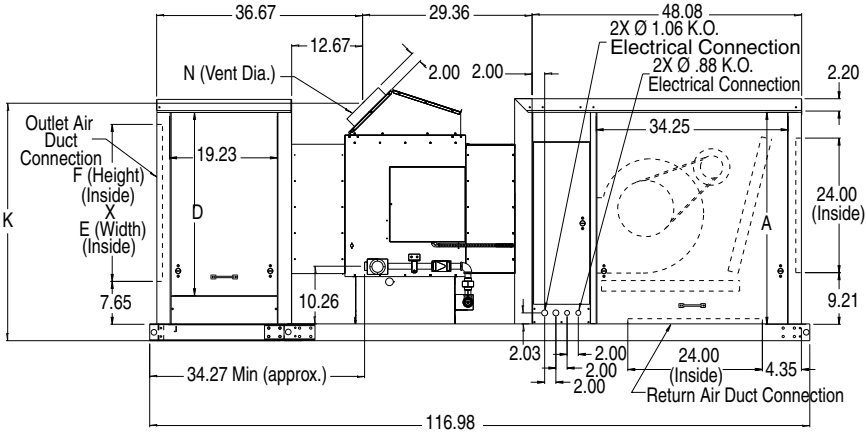


# GAS-FIRED INDOOR DUCT FURNACES FOR HEATING OR MAKE UP AIR

## DBG Indoor Gravity Vented Blower Package Unit Dimensions



## DCG Indoor Gravity Vented Cooling Package Unit Dimensions



## DBG/DCG Indoor Gravity Vented Unit Dimensions (All dimensions in inches)

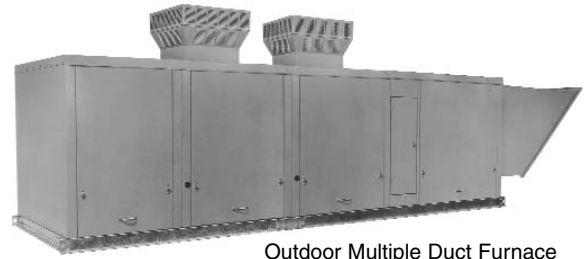
Model Size	Blower Type (Digit 16)	Qty. of Furnaces	Dimensions														Gas Conn.
			A	B	C	D	E	F	G	H	J	K	L	N	P	S	
75	All	1	37.75	19.07	15.21	28.75	18.00	25.50	20.02	39.23	32.06	38.37	12.65	5	40.80	87.77	1/2
100/125	All	1	37.75	19.07	17.70	28.75	21.00	25.50	20.02	39.23	34.56	38.37	15.14	6	40.80	87.77	1/2
150/175	All	1	37.75	19.07	21.96	28.75	24.00	25.50	23.99	39.23	38.82	38.37	19.41	7	40.80	87.77	1/2
200/225	All	1	37.75	23.07	24.09	32.75	27.00	30.50	23.99	43.23	40.94	42.37	21.60	7	44.80	87.77	1/2 / 3/4
250/300	E, F, G, or H	1	37.75	23.07	27.13	32.75	30.00	30.50	29.96	43.23	44.05	42.37	24.60	8/10	44.80	87.77	3/4
350/400	E, F, G, or H	1	37.75	23.07	38.63	32.75	42.00	30.50	41.90	43.23	55.57	42.37	36.14	10	44.80	87.77	3/4
500/600	G or H	2	37.75	23.07	27.13	32.75	n/a	n/a	29.96	43.23	44.05	42.37	24.60	8/10	44.80	120.90	3/4
700/800	G or H	2	37.75	23.07	38.63	32.75	n/a	n/a	41.90	43.23	55.57	42.37	36.14	10	44.80	120.90	3/4

① For Right Hand Access Units - Location of electrical connection knock-outs are identical sizes as side electrical connections.  
 ② For Left Hand Access Units - Location of electrical connection knock-outs are identical sizes as side electrical connections.

## GAS-FIRED INDOOR AND OUTDOOR DUCT FURNACES



Outdoor Duct Furnace with Blower, Cooling Cabinet, and Downturn Plenum Sections (HPG)



Outdoor Multiple Duct Furnace with Blower and Downturn Plenum Sections (HDG)

### OUTDOOR GRAVITY VENTED & POWER EXHAUSTED

#### FOR HEATING, HEATING/VENTILATING/COOLING AND MAKE-UP AIR SYSTEMS

The outdoor duct furnace with blower, cooling, and/or downturn plenum sections was designed for use with a building's heating, heating/ventilating/cooling and make-up air systems. They have input ranges from 75,000 to 1,200,000 Btu/Hr and can operate on either natural or propane gas. The airflow ranges from 556 to 14,500 CFM and the airflow direction can be specified when ordering the unit. The unit can be provided with a cooling coil section with either a factory installed DX or chilled water cooling coil or the coil can be provided by others.

#### Standard Features:

- All standard duct furnace features (see page 7)
- ETL certification of the entire system unit
- 18 gauge insulated aluminized steel cabinet with a baked-on polyester powder paint finish on exterior casing parts
- 1" insulation for blower, cooling cabinet, and downturn plenum sections
- Single 115V control step down transformer with 24V gas control circuit
- Aluminized steel heat exchanger and burner
- Blower performance up to 3.0" W.C. external static pressure
- Single stage intermittent pilot with continuous retry control system for operation on natural gas
- Separate line voltage and low voltage terminal strips
- Right side (when looking into the discharge) access to burner and gas controls with slide-out burner drawer
- Side or bottom (through a roof curb) gas and electrical connection access
- Fan timer and high limit safety control
- Combination curb and slab type mounting base
- Adjustable belt drive

#### Optional Features - Factory Installed

- All optional duct furnace features (see page 7)
- Downturn plenum section
- DX or chilled water section with optional factory installed cooling coil
- 409 stainless steel heat exchanger and burner
- Open drip proof, totally-enclosed, high efficiency, and two speed motors
- Low voltage motor starters and contactors with one normally open contact
- 1" or 2" permanent, 2" disposable, and 2" FARR® 30/30 filters
- Double wall construction for blower, cooling cabinet, and/or downturn plenum sections
- Dead-front disconnect switches
- Two position, modulating, building pressure sensing, three position, building management (0-10 Vdc or 4-20 mA) damper actuators
- Economizer warm-up packages
- Discharge air dampers (Downturn plenum units only)
- Step-down transformers for 460/575V/3Ph
- Left side access to blower, burner, and gas controls
- Mild temperature thermostat
- Supply and return air firestats
- Blower door interlock switch
- Convenience outlet
- Evaporative cooling section
- Blower and motor vibration isolation
- Pillow block bearings
- Extended grease lines
- Burner/blower/damper service switches
- 6, 10, or 14 point circuit analyzer
- Electronic temperature control allows for two, three, four or six stage control

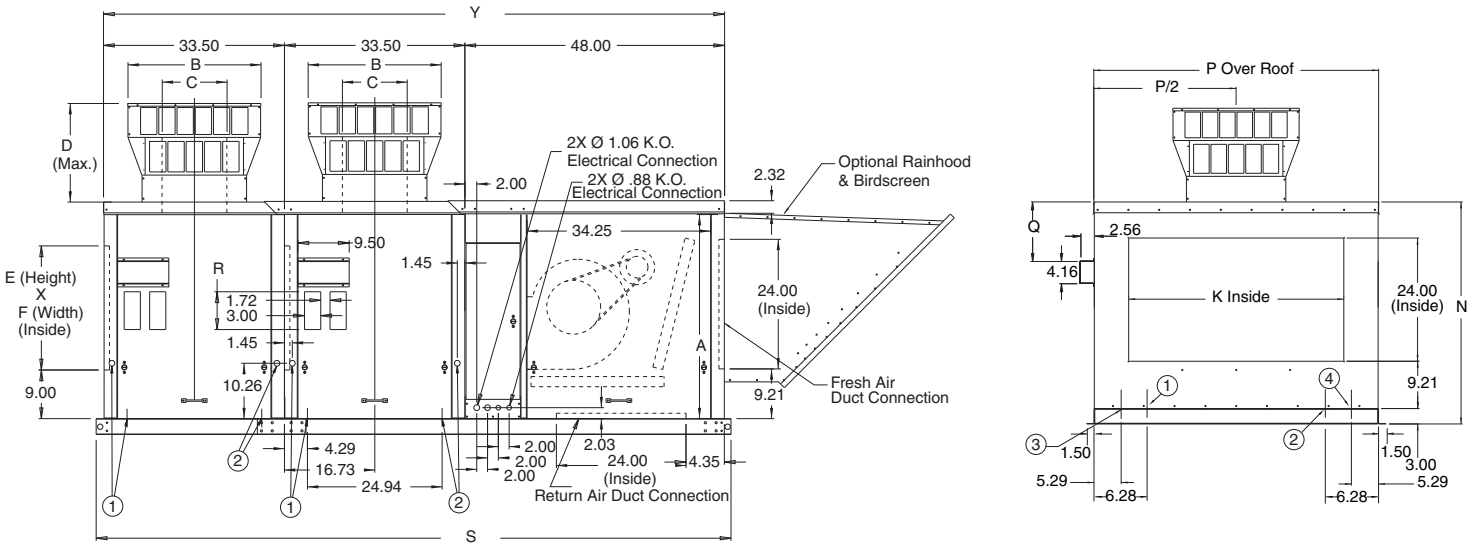
#### Accessories - Field Installed

- All accessory duct furnace features
- Remote control panels
- Building pressure sensing damper controls
- Evaporative cooler fill and drain kits
- Insulated roof curbs
- Roof curb discharge and return air connection kits
- Smoke detector
- 7-day digital and 7-day econo time clocks
- Single-stage room thermostats
- Two-stage room and duct thermostats
- Electronic two stage duct thermostats
- Electronic modulating room and duct thermostats
- Electronic temperature control allows for two, three, four or six stage control
- Room override for the duct thermostat

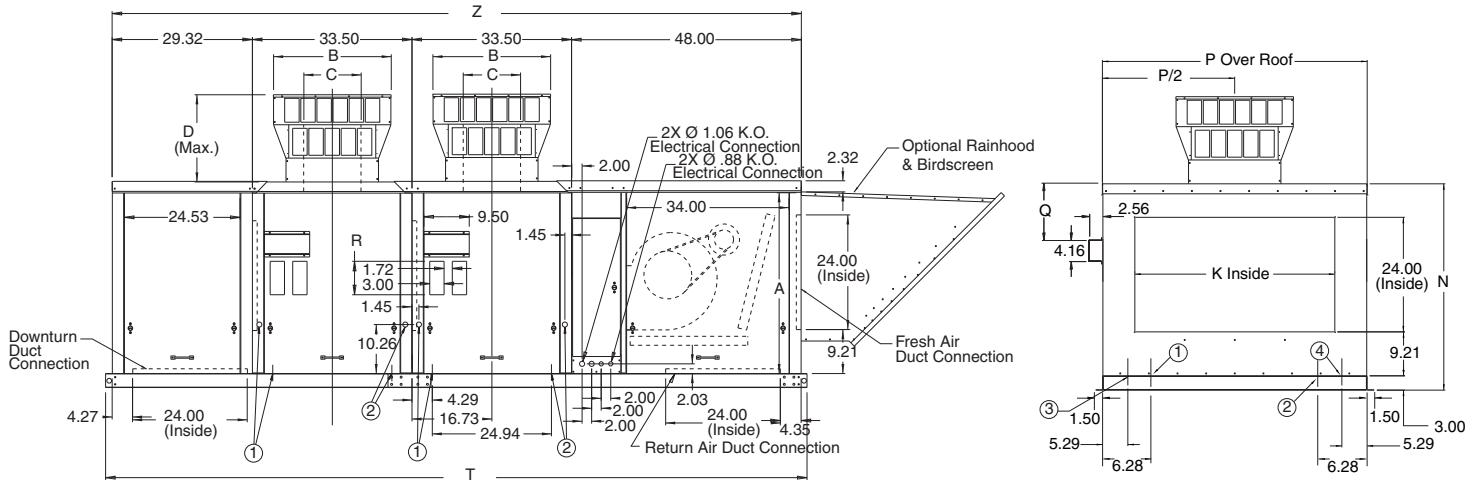


# GAS-FIRED INDOOR AND OUTDOOR DUCT FURNACES

## HBG/HBP Outdoor Blower Package Unit Dimensions



## HDG/HDP Outdoor Downturn Package Unit Dimensions



## HBG/HBP/HDG/HDP Outdoor Unit Dimensions (All dimensions in inches)

Model Size	Blower Type (Digit 16)	Qty. of Furnaces	Dimensions														Gas Conn.	
			A	B ⑤	C ⑤	D ⑤	E	F	K	N	P	Q ⑤	R ⑤	S	T	Y		Z
75	All	1	33.75	19.22	8.62	14.07	18.98	15.18	20.02	39.23	32.06	10.75	7.00	84.41	108.39	81.49	110.82	1/2
100/125	All	1	33.75	19.22	8.62	14.07	18.98	17.69	20.02	39.23	34.56	10.75	7.00	84.41	108.39	81.49	110.82	1/2
150/175	All	1	33.75	19.22	8.62	14.07	18.98	21.94	23.99	39.23	38.82	10.75	7.00	84.41	108.39	81.49	110.82	1/2
200/225	All	1	37.75	19.22	8.62	14.07	22.98	24.06	23.99	43.23	40.94	11.58	9.90	84.41	108.39	81.49	110.82	1/2
250/300	E, F, G, or H	1	37.75	21.31	10.62	15.05	22.98	27.09	29.96	43.23	44.05	11.58	9.90	84.41	108.39	81.49	110.82	3/4
350/400	E, F, G, or H	1	37.75	24.64	12.62	18.25	22.98	38.60	41.90	43.23	55.07	11.58	9.90	84.41	108.39	81.49	110.82	3/4
500/600	G or H	2	37.75	21.31	10.62	15.05	22.98	27.09	29.96	43.23	44.05	11.58	9.90	117.53	146.77	114.94	144.12	3/4
700/800	G or H	2	37.75	24.64	12.62	18.25	22.98	38.60	41.90	43.23	55.07	11.58	9.90	117.53	146.77	114.94	144.12	3/4

- ① For Right Hand Access Units - Location of 1.06" gas connection knock-out - one side of unit and one on bottom.
- ② For Left Hand Access Units - Location of 1.06" gas connection knock-out - one side of unit and one on bottom.
- ③ For Right Hand Access Units - Location of electrical connection, knock-outs are identical sizes as side electrical connections.
- ④ For Left Hand Access Units - Location of electrical connection, knock-outs are identical sizes as side electrical connections.
- ⑤ For Gravity Vented Models, the combustion air/vent cap is required so only dimensions B, C and D apply. For Power Vented Models, the power exhauster discharge cover and inlet louvers are included so only dimensions Q and R apply.

# Steam/Hot Water Unit Heaters



## GENERAL INFORMATION

Installation and service instructions in this manual are applicable to the three types of steam/hot water unit heaters which should be installed in their proper applications for their most effective function as overhead heating units.

The copper condensers are warranted for operation at steam or hot water pressures up to 150 lbs. per sq. in. gauge, and or temperatures up to 375°F, cupronickel tube units are warranted for operating pressures up to 250 PSI and operating temperatures up to 400°F. Canadian Standards Association (CSA) requirements state that explosion-proof units may not be used with a fluid temperature in excess of 329°F and still maintain their explosion-proof rating, for national electric code ignition temperature rating T3B for grain dust.

Motors are designed for continuous duty. They can operate in a maximum ambient temperature of 104°F (40°C).



**Model HSB**  
Horizontal Delivery  
Top/Bottom  
Inlet/Outlet



**Model HC**  
Horizontal Delivery  
Side  
Inlet/Outlet



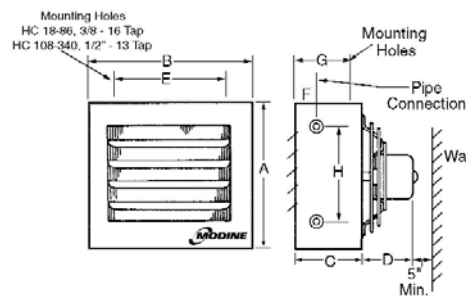
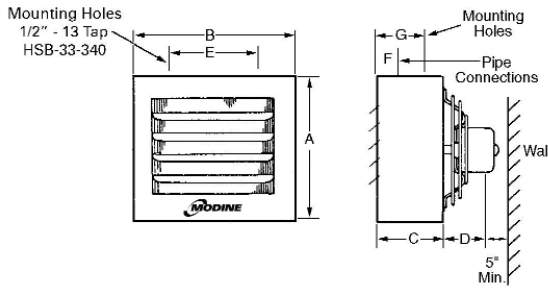
**Models V/VN**  
Vertical Delivery

## DIMENSIONAL / MOTOR DATA

### Horizontal Air Delivery Models — Two Styles

#### Model HSB - Top/Bottom — Inlet/Outlet

#### Model HC - Side Inlet/Outlet



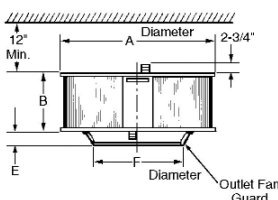
### Model HSB and HC Dimensions\*

Model Number	A	B	C	D		E	F	G	H	Female Connections NPT	Fan Diameter	Approx. Shipping Wt. lb.
				115 Std. Motor	115V Exp. Motor							
HSB-18	12-3/8	13	6	5	12	-	3	-	-	3/4	9	16
HSB-24	12-3/8	13	6	6-1/2	12	-	3	-	-	3/4	9	20
HSB-33	16-3/8	17-1/2	8-3/4	6-1/2	12-1/4	11	3-5/8	6	-	1-1/4	12	34
HSB-47	16-3/8	17-1/2	8-3/4	8	12-1/4	11	3-5/8	6	-	1-1/4	12	36
HSB-63	20-7/16	21-1/2	8-3/4	8	12-3/4	15	3-5/8	6	-	1-1/4	14	48
HSB-86	20-7/16	21-1/2	8-3/4	9	12-3/4	15	3-5/8	6	-	1-1/4	14	52
HSB-108	24-7/16	25-1/2	9-1/2	8	11-1/2	18	3-3/4	6-3/8	-	1-1/4	18	74
HSB-121	24-7/16	25-1/2	9-1/2	7-1/2	11	18	3-3/4	6-3/8	-	1-1/4	18	76
HSB-165	30-1/2	30-1/2	9-1/4	9-1/2	14	21-1/4	3-3/4	6-3/8	-	1-1/4	22	92
HSB-193	30-1/2	30-1/2	9-1/4	9-1/2	14	21-1/4	3-3/4	6-3/8	-	1-1/4	22	98
HSB-258	38-1/2	38-1/2	12-1/2	10-1/2	14	18-1/2	3-5/8	7-7/8	-	1-1/4	22	162
HSB-290	38-1/2	38-1/2	12-1/2	10-1/2	14	18-1/2	3-5/8	7-7/8	-	1-1/4	24	168
HSB-340	38-1/2	44-1/2	12-1/2	10-1/2	14	18-1/2	3-5/8	7-7/8	-	1-1/4	24	176
HC-18	11-1/2	12-3/4	6	5	12	5-5/8	2-1/4	4-1/8	7-1/2	1/2	9	16
HC-24	11-1/2	12-3/4	6	6-1/2	12	5-5/8	2-1/4	4-1/8	7-1/2	1/2	9	20
HC-33	15	17-1/2	8-3/4	6-1/2	12-1/4	11	3-5/8	6	10	3/4	12	34
HC-47	15	17-1/2	8-3/4	8	12-1/4	11	3-5/8	6	10	3/4	12	35
HC-63	18-1/2	21-1/2	8-3/4	8	12-3/4	15	3-5/8	6	14	3/4	12	48
HC-86	18-1/2	21-1/2	8-3/4	9	12-3/4	15	3-5/8	6	14	3/4	14	52
HC-108	22-1/2	25-1/2	9-1/2	8	11-1/2	18	3-5/8	6-3/8	18	3/4	18	74
HC-121	22-1/2	25-1/2	9-1/2	7-1/2	11	18	3-5/8	6-3/8	18	3/4	18	76
HC-165	26-1/2	29-1/2	9-1/4	9-1/2	14	21-1/4	3-5/8	6-3/8	22	3/4	22	92
HC-193	30-1/2	32-1/2	9-1/4	9-1/2	14	21-1/4	3-5/8	4-3/4	26	1-1/4	22	98
HC-258	38-1/2	38-1/2	12-1/2	10-1/2	14	18-1/2	3-5/8	8	34	1-1/4	22	163
HC-290	38-1/2	38-1/2	12-1/2	10-1/2	14	18-1/2	3-5/8	8	34	1-1/4	24	168
HC-340	38-1/2	44-1/2	12-1/2	10-1/2	14	18-1/2	3-5/8	8	34	1-1/4	24	176

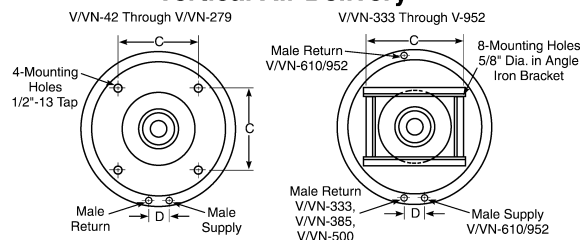


# Steam/Hot Water Unit Heaters

## DIMENSIONAL / MOTOR DATA



### Vertical Air Delivery



## DIMENSIONAL / MOTOR DATA Models V/VN and PT/PTN Dimensions\*

Model Number	A	B	C	D	E	F	L	M	N	P	Fan Dia.	Male Conn. NPT		Approx. Shipping Wt. Lbs.
												Top	Bottom	
V/VN-42	24-3/4	3-5/8	11-3/8	2-1/8	4-3/8	14-1/2	6-1/2	12	10-1/4	6-1/2	14	1-1/4	1-1/4	36
V/VN-59	24-3/4	5-1/8	11-3/8	2-1/8	4-3/8	14-1/2	6-1/2	12	10-1/4	6-1/2	14	1-1/4	1-1/4	42
V/VN-78	24-3/4	6-5/8	11-3/8	2-1/8	2-5/8	16-1/2	6-1/2	12	13	6-1/2	16	1-1/4	1-1/4	46
V/VN-95	24-3/4	8-1/8	11-3/8	2-1/8	2-5/8	16-1/2	6-1/2	12	13	6-1/2	16	1-1/4	1-1/4	48
V/VN-139	34-3/4	6-7/8	18-3/8	2-1/8	3	19-1/2	7-1/2	13	11-1/4	7-1/2	19	1-1/2	1	70
V/VN-161	34-3/4	8-3/8	18-3/8	2-1/8	3	19-1/2	7-1/2	13	11-1/4	7-1/2	19	1-1/2	1	80
V/VN-193	34-3/4	9-7/8	18-3/8	2-1/8	3	19-1/2	7-1/2	13	11-1/4	7-1/2	19	1-1/2	1	86
V/VN-212	34-3/4	12-7/8	18-3/8	2-1/2	3	19-1/2	7-1/2	13	11-1/4	7-1/2	19	2	1-1/4	94
V/VN-247	34-3/4	12-7/8	18-3/8	2-1/2	3	21-1/2	8	16	12-3/4	8	21	2	1-1/4	108
V/VN-279	34-3/4	14-3/8	18-3/8	2-1/2	3	21-1/2	8	16	12-3/4	8	21	2	1-1/4	112
V/VN-333	43-1/4	14-5/8	24	2-7/8	3-1/8	22-1/2	8-1/2	16	12	8-1/2	22	2-1/2	1-1/2	166
V/VN-385	43-1/4	14-1/2	24	2-7/8	3-1/2	27-1/2	10	21	14	10	27	2-1/2	1-1/2	168
V/VN-500	43-1/4	19	24	2-7/8	3-1/2	27-1/2	10	21	14	10	27	2-1/2	1-1/2	360
V/VN-610	51-1/2	19-1/8	29-7/8	—	3-3/4	30-1/2	10-1/2	21	—	10-1/2	30	2-1/2	1-1/2	450
V-952	53-3/4	21-1/8	30	—	3-1/2	31	—	22	—	18-3/4	30	3	3	487

\*All dimensions in inches. Dimensions shown are for Standard and Low Outlet Temperature Models.

## Hot Water Performance Data – Standard Models

Performance Data for Standard Units at Standard Conditions of 200°F Entering Water and 60°F Entering Air High Motor Speed

Type	Model No.	Btu/hr.	Water Data			Air Data							Motor Data		
			GPM	Pressure Drop (Ft. of Water)	Min/Max GPM	Sound Class	Maximum Mounting Height (ft.)	Heat Throw or Spread @ Max. Height	Cfm	Outlet Velocity (Fpm)	Final Air Temp. (°F)	Hp	Approx. RPM		
Horizontal Delivery	HSB/HC-18	12,600	1.3	0.5	0.3 / 5.0	II	9	18	340	615	93	1/60	1550		
	HSB/HC-24	16,200	1.7	0.8	0.3 / 5.0	II	10	19	370	675	100	1/25	1550		
	HSB/HC-33	21,700	2.3	0.2	0.4 / 10.0	II	11	23	630	675	91	1/25	1550		
	HSB/HC-47	30,900	3.2	0.4	0.4 / 10.0	III	13	30	730	785	98	1/12	1550		
	HSB/HC-63	45,600	4.7	0.6	0.5 / 20.0	III	15	31	1120	680	97	1/12	1550		
	HSB/HC-86	60,200	6.3	1.0	0.5 / 20.0	III	16	33	1340	820	101	1/8	1625		
	HSB/HC-108	83,700	8.7	2.8	0.5 / 30.0	III	18	33	2010	775	98	1/8	1625		
	HSB/HC-121	93,000	9.7	3.3	0.7 / 30.0	III	17	27	1775	700	107	1/5	1075		
	HSB/HC-165	130,900	13.6	8.6	2.0 / 30.0	IV	20	43	3240	870	96	1/3	1075		
	HSB/HC-193	143,000	14.9	1.4	2.0 / 50.0	IV	19	41	2900	790	105	1/3	1075		
Vertical Delivery	HSB/HC-258	201,900	21.0	5.7	2.5 / 70.0	V	20	47	4560	740	100	1/2	1075		
	HSB/HC-290	228,600	23.8	7.1	2.5 / 70.0	V	22	50	4590	750	105	1/2	1075		
	HSB/HC-340	271,100	28.2	11.3	2.8 / 70.0	V	22	50	5130	720	108	1/2	1075		
	V/VN-42	30,100	3.1	0.6	0.5 / 10.0	II	12	16	18	12	950	825	90	1/30	1050
	V/VN-59	42,600	4.4	0.5	0.8 / 15.0	II	15	20	22	15	1155	1005	96	1/30	1050
	V/VN-78	57,000	5.9	0.5	1.0 / 20.0	II	16	22	24	16	1590	1065	95	1/15	1050
	V/VN-95	69,300	7.2	0.5	1.3 / 25.0	II	16	22	24	16	1665	1120	101	1/15	1050
	V/VN-139	106,600	11.1	2.6	1.0 / 30.0	III	19	26	29	19	2660	1285	99	1/6	1075
	V/VN-161	123,200	12.8	2.2	1.3 / 40.0	IV	21	29	32	22	2945	1420	101	1/3	1075
	V/VN-193	147,200	15.3	2.2	1.5 / 50.0	IV	23	32	35	24	3500	1690	101	1/3	1075
	V/VN-212	161,700	16.8	1.5	2.0 / 60.0	IV	23	32	35	24	3610	1740	104	1/3	1075
	V/VN-247	188,700	19.7	2.1	2.0 / 60.0	V	28	37	41	28	4820	1910	98	1/2	1075
	V/VN-279	212,600	22.2	2.1	2.3 / 75.0	V	32	40	48	32	5460	2165	98	1/2	1075
V/VN-333	260,100	27.1	3.8	2.8 / 75.0	V	32	40	48	32	5980	2165	102	3/4	1140	
V/VN-385	302,100	31.5	5.0	3.3 / 75.0	VI	32	39	48	32	7680	1860	98	1	1140	
V/VN-500	391,700	40.8	4.8	3.0 / 100.0	VI	39	47	59	40	10,390	2520	96	1-1/2	1140	
V/VN-610	450,400	46.9	1.0	6.0 / 100.0	VI	38	46	57	39	11,750	2315	97	1-1/2	1140	
V-952	721,600	75.2	1.1	14.0 / 200.0	VI	39	63	59	70	12,166	2321	120	2	1140	

## Steam/Hot Water Unit Heaters



### Steam Performance Data – Standard Models

Performance Data for Standard Units at Standard Conditions of 2 lb. Steam and 60°F Entering Air High Motor Speed

Type	Model No.	Btu/hr	Sq. Ft. EDR	Sound Class	Air Data							Motor Data		
					Maximum Mounting Height (ft.)	Heat Throw or Spread @ Max. Height		Cfm	Outlet Velocity (Fpm)	Final Air Temp. (°F)	Condensate lb/hr	Hp	Approx. RPM	
Horizontal Delivery	HSB/HC-18	18,000	75	II	8	17	17	340	625	107	19	1/60	1550	
	HSB/HC-24	24,000	100	II	9	18	18	370	695	119	25	1/25	1550	
	HSB/HC-33	33,000	138	II	10	21	21	630	690	108	34	1/25	1550	
	HSB/HC-47	47,000	196	III	12	28	28	730	810	119	49	1/12	1550	
	HSB/HC-63	63,000	263	III	14	29	29	1120	690	111	65	1/12	1550	
	HSB/HC-86	86,000	358	III	15	31	31	1340	835	118	89	1/8	1625	
	HSB/HC-108	108,000	450	III	17	31	31	2010	790	109	112	1/8	1625	
	HSB/HC-121	121,000	504	III	16	25	25	1775	715	122	125	1/5	1075	
	HSB/HC-165	165,000	688	IV	19	40	40	3240	880	106	171	1/3	1075	
	HSB/HC-193	193,000	804	IV	18	38	38	2900	810	121	200	1/3	1075	
	HSB/HC-258	258,000	1075	V	19	44	44	4560	750	111	267	1/2	1075	
HSB/HC-290	290,000	1208	V	20	46	46	4590	765	117	300	1/2	1075		
HSB/HC-340	340,000	1417	V	20	46	46	5130	735	120	352	1/2	1075		
Vertical Delivery <sup>3</sup>	V/VN-42	42,000	175	II	11	15	17	11	950	825	103	43	1/30	1050
	V/VN-59	59,000	246	II	14	19	21	14	1155	1005	111	61	1/30	1050
	V/VN-78	78,000	325	II	15	20	23	15	1590	1065	109	81	1/15	1050
	V/VN-95	95,000	396	II	15	20	23	15	1665	1120	118	98	1/15	1050
	V/VN-139	139,000	579	III	18	24	27	18	2660	1285	112	144	1/6	1075
	V/VN-161	161,000	671	IV	20	27	30	20	2945	1420	115	167	1/3	1075
	V/VN-193	193,000	804	IV	22	30	33	22	3500	1690	116	200	1/3	1075
	V/VN-212	212,000	883	IV	22	30	33	22	3610	1740	120	219	1/3	1075
	V/VN-247	247,000	1029	V	26	34	39	26	4820	1910	111	256	1/2	1075
	V/VN-279	279,000	1163	V	30	37	45	30	5460	2165	111	289	1/2	1075
	V/VN-333	333,000	1388	V	30	37	45	30	5980	2165	116	345	3/4	1140
	V/VN-385	385,000	1604	VI	30	36	45	30	7680	1860	110	398	1	1140
	V/VN-500	500,000	2083	VI	37	44	56	37	10,390	2520	108	517	1-1/2	1140
V/VN-610	610,000	2542	VI	36	43	54	36	11,750	2315	112	631	1-1/2	1140	
V-952	952,000	3967	VI	37	45	56	56	12,170	2321	139	985	2	1140	



PRO SERIES™

ELECTROMOIDE

BASEBOARD HEATER



FEATURES

Exclusive contoured design with full rounded end caps for safety and contemporary styling

May be used with wall or unique side mounted built-in thermostat (not included)

Large rear entry junction boxes on both sides of unit for quick and easy installation full length automatic reset overheat protection for safety

APPLICATIONS

All residential applications, commercial offices, washrooms, meeting rooms, lobbies

SPECIFICATIONS

**VOLTAGE** 120, 208, 240, 277 volts.\*

**WATTAGE** Sizes ranging from 300W to 2500W.

**COLOR** White or Almond

**FINISH** Specially-formulated powder coating is environmentally friendly and resists fading and abrasion.

**HEATING ELEMENT** A nickel chromium element is totally enclosed within a stainless steel sheath providing superior life expectancy. Aluminum fins are firmly staked to the surface and provide excellent heat transfer.

**INSTALLATION & OPERATION** Large rear entry left and right junction boxes provide ease of installation. A thermostat control (wall mounted or built-in) is required to operate this unit (supplied separately).

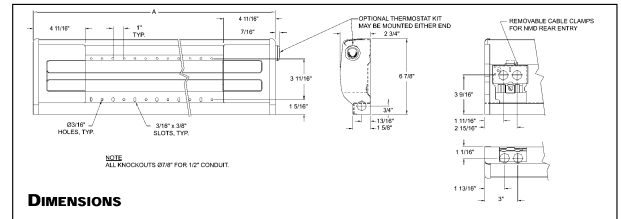
**WARRANTY** Ten year element warranty. One year warranty on complete unit.

\*227V Special order.

Slim contoured design is the perfect complement for both contemporary and traditional decors.



UNIQUE SIDE MOUNT  
OPTIONAL THERMOSTAT  
MAY BE INSTALLED FROM  
THE REAR.



CAT. NO.	WATTS	BTU	VOLTS	LGTH. IN.	WGT. LBS.
BN280511	500	1706	120	27.6	7
BN280531	500/375	1706/1280	240/208		
BN390711	750	2559	120	38.6	9
BN390731	750/563	2559/1919	240/208		
BN481011	1000	3412	120	47.6	11
BN481031	1000/750	3412/2559	240/208		
BN571211	1250	4265	120	56.7	13
BN571231	1250/938	4265/3199	240/208		
BN661511	1500	5118	120	65.8	14
BN661531	1500/1125	5118/3839	240/208		
BN751731	1750/1313	5971/4478	240/208	74.8	16
BN842031	2000/1500	6824/5120	240/208	83.9	19
BN1022531	2000/1500	6824/5120	240/208	102	22

CAT. NO.	DESCRIPTION	RATING
DTK-SP	Single pole thermostat kit	120-277V, 17A
DTK-DP	Double pole thermostat kit	120-277V, 17A