

## Unitary Heating Products

GAS | STEAM/HOT WATER | OIL | ELECTRIC



# Table of Contents Gas-Fired, Power-Exhausted Unit Heaters Effinity<sup>®</sup> Gas-Fired Separated Combustion Unit Heaters Hot Dawg<sup>®</sup> H<sub>2</sub>0 and Lodronic<sup>\*</sup> Hot Water Unit Heaters Oil-Fired Unit Heaters 2 Gas-Fired Infrared Unit Heaters 2

4		Gas-Fired Separated Combustion Unit Heaters	6
8	Sea of the	Gas-Fired Blower Unit Heaters	10
°C™  4		Steam/Hot Water Unit Heaters	16
20		Electric Unit Heaters	22
26		Gas-Fired, Gravity and Pov Vented Duct Furnaces	wer 30

### EASY TO USE • INEXPENSIVE TO INSTALL • EXCELLENT IN-SERVICE ECONOMY

Power-Exhausted unit heaters are certified for residential, commercial and industrial use. Installation is seamless with a lightweight design in addition to knockouts with quick access to gas and electricity. These units are designed to be vented both vertically and horizontally with the smallest diameter vent pipe possible.

- All models feature 82% minimal efficiency for fuel savings
- Made in the USA
- Permanently lubricated motor for trouble-free dependability
- Uses natural or propane gas, field convertible from natural to propane gas
- External gas connections
- Standard power exhaust simplifies sidewall or roof venting with small-diameter vent pipe
- 100% shut-off with continuous retry to allow for safe ignition in the event the unit doesn't light on the first try
- Installation made easy with knockouts for quick access to gas and electricity
- Full 10-year warranty on heat exchanger

### PERFORMANCE DATA 12

Model	Model Size	Btu/hr Input	Btu/hr Output	Temperature Rise (°F)	CFM Range
	30	30,000	24,600	44	505
	45	45,000	36,900	46	720
HD	60	60,000	49,200	45	990
пр	75	75,000	61,500	48	1,160
	100	100,000	82,000	50	1,490
	125	125,000	102,500	47	1,980
	150	150,000	123,000	51 - 53	2,140 - 2,180
	175	175,000	143,000	48 - 51	2,550 - 2,725
	200	200,000	164,000	52	2,870
PDP, PTP	250	250,000	205,000	47 - 50	3,700 - 3,995
1.11	300	300,000	246,000	50	4,460 - 4,545
	350	350,000	287,000	50 - 53	4,870 - 5,280
	400	400,000	328,000	51 - 54	5,440 - 5,995

 $\odot$  Ratings are shown for elevations up to 2,000 feet.

 $\ensuremath{\textcircled{O}}$  Units approved for use in California by CEC.

Do Not Locate ANY Gas-Fired Unit in Areas with Chlorinated, Halogenated or Acidic Vapors in Atmosphere.

For complete technical information and specifications reference catalog 6-189

### **MODEL PDP** Expands on the size range of the Hot Dawg<sup>®</sup> Series:

- Available in 7 model sizes from 150,000 to 400,000 Btu/hr
- Airflow range 2,140 to 5,595 CFM
- Power exhaust can rotate 180-degrees, allowing the unit to be vented vertically or horizontally
- Commercial Certified

### MODEL PTP

- Available in 7 model sizes from 150,000 to 400,000 Btu/hr
- Airflow range 2,140 to 5,595 CFM
- The stainless steel heat exchanger is standard on all units, extending the life of your PTP investment
- Commercial Certified only

### MODEL HD

- Available in 6 model sizes from 30,000 to 125,000 Btu/hr
- Airflow range 505 to 1,980 CFM
- Finger-proof fan guards\*
- Right- or left-hand controls available on 30-75 models by rotating unit 180 degrees
- Low-profile, lightweight design easily installs 1" from ceiling with only two angle brackets\*
- Residential and Commercial Certified \*Standard on HD 30-75; accessory for HD 100-125.







### EFFICIENT THERMAL HEATING • LIGHTWEIGHT DESIGN • EASY INSTALLATION

Gas-Fired Separated Combustion unit heaters pulls 100% of the combustion air from outside, making this unit ideal for workspaces such as woodshops or garages where paint or flammable materials are used regularly. The fresh air supply reduces the common concerns about performance and durability that can come when working in a dusty or particulate laden environment.

- All models feature 82% minimal efficiency for fuel savings
- Made in the USA
- Permanently-lubricated motor for trouble-free dependability
- A sealed compartment protects the combination gas valve, ignition control, manifold, and burner from the environment
- Combustion air is brought in from outside the heated area eliminating the need to use contaminated indoor air for combustion
- Uses natural or propane gas, field convertible from natural to propane gas
- External gas connections
- Standard power exhaust simplifies sidewall or roof venting with small-diameter vent pipe
- Installation made easy with knockouts for quick access to gas and electricity
- Full 10-year warranty on heat exchanger



### MODEL HDS

- Available in 6 model sizes from 30,000 to 12
- Airflow range 505 to 1,980 CFM
- Finger-proof fan guards\*
- Right- or left-hand controls available on 30-75 rotating unit 180°
- Low-profile, lightweight design easily installs with only two angle brackets\*
- Residential and Commercial Certified

\*Standard on HDS 30-75; accessory for HDS 100-125.

### **MODEL PTS**

- Available in 7 model sizes from 150.000 to 4
- Airflow range 2,140 to 5,595 CFM
- The aluminized steel heat exchanger is stand extending the life of your PTS investment
- Commercial Certified only

### **PERFORMANCE DATA** ①②

Model	Model Size	Btu/hr Input	Btu/hr Output	Temperature Rise (°F)	CFM Range
	30	30,000	24,600	44	505
	45	45,000	36,900	46	720
UDC	60	60,000	49,200	45	990
HDS	75	75,000	61,500	48	1,160
	100	100,000	82,000	50	1,490
	125	125,000	102,500	47	1,980
	150	150,000	123,000	53	2,140
	175	175,000	143,500	48	2,725
	200	200,000	164,000	52	2,870
PTS	250	250,000	205,000	47	3,995
	300	300,000	246,000	50	4,545
	350	350,000	287,000	50	5,280
	400	400,000	328,000	51	5,995

 $\odot$  Ratings are shown for elevations up to 2,000 feet. ② Units approved for use in California by CEC.

For complete technical information and specifications reference catalog 6-170

6



25,000 Btu/hr	
75 models by 1" from ceiling	BURNESS AND
00,000 Btu/hr	
dard on all units,	MODINE

Do Not Locate ANY Gas-Fired Unit in Areas with Chlorinated, Halogenated or Acidic Vapors in Atmosphere.

### MAXIMIZE EFFICIENCY • GREENER SOLUTION • AMERICAN-MADE QUALITY

Effinity<sup>®</sup> unit heaters are the most efficient gas-fired, condensing unit heater in North America. All models are equipped with a Modine Controls System offering the capabilities to connect to an existing Building Management Systems (BMS). The controls are compatible with major Building Management Systems such as BACnet MS/TP or IP and LonWorks.

- Available in 10 model sizes from 55,000 to 310,000 Btu/hr
- Airflow range 1,097 to 5,400 CFM
- Up to 97% efficient with all models offering a minimum of 93% efficiency
- Blowers available for more robust air distribution\*
- Can be vented as either two-pipe or concentric vent system with 3" and 4" PVC
- Energy saving controls monitors the temperature and automatically disables the gas or turns it back on as the temperature increases/decreases

\*Only available on models PTC215, PTC260 and PTC310.

### **OPTIONAL FEATURES**

- Condensate pump, mounting kit and a pH neutralizing kit
- Stainless steel primary heat exchanger
- GFCI surge protection adaptor plug for service
- 30-, 60- and 90-degree air deflector hoods
- Variety of room thermostats

- Two-point mounting kit
- Horizontal and vertical concentric vent kits
- Finger-proof fan guard
- Conversion kits for natural gas and propane, including high-altitude kits



**MODEL PTC** 



### **PERFORMANCE DATA** 12

Model	Model Size	Btu/hr Input	Btu/hr Output	Temperature Rise (°F)	CFM Range
	55	55,000	51,150	43	1,097
	65	65,000	60,450	49	1,141
	85	80,000	79,050	44	1,650
	110	110,000	102,300	54	1,750
	135	135,000	125,550	54	2,160
PTC	155	155,000	144,150	51	2,600
	180	180,000	167,400	51	3,020
	215	215,000	199,950	48	3,865
	260	260,000	241,800	49	4,585
	310	310,000	288,300	49	5,400

 $\odot$  Ratings are shown for elevations up to 2,000 feet. ② Units approved for use in California by CEC.

### Do Not Locate ANY Gas-Fired Unit in Areas with Chlorinated, Halogenated or Acidic Vapors in Atmosphere.

For complete technical information and specifications reference catalog 6-170

### ANNUAL FUEL COST SAVINGS 12

		Estimated Annual Savings Against Other Equipment						
Design Heat Load (Btu/hr)		Gravit	y Vented	Power Vented				
		120,000	280,000	120,000	280,000			
	500	\$306	\$713	\$136	\$318			
	1,000	\$611	\$1,427	\$273	\$637			
	1,500	\$917	\$2,140	\$409	\$955			
Annual Heat Load Hours	2,000	\$1,223	\$2,583	\$546	\$1,274			
Load Hours	2,500	\$1,529	\$3,567	\$682	\$1,592			
	3,000	\$1,834	\$4,280	\$819	\$1,911			
	3,500	\$2,140	\$4,993	\$955	\$2,229			

① Based on natural gas rate of \$1.10/therm. Actual realized savings can vary significantly based on a number of changing factors including, but not limited to, fuel prices, climate, building use or construction, etc.

© Compares 93% efficient against 65% seasonally efficient gravity vented and 78% seasonal efficient power vented.

### Do Not Locate ANY Gas-Fired Unit in Areas with Chlorinated, Halogenated or Acidic Vapors in Atmosphere.

For complete technical information and specifications reference catalog 6-170

8



### NOISE REDUCTION • CORROSION RESISTANT • EASY TO INSTALL

Gas-fired blower unit heaters are designed for both heating and ventilating and certified for residential, commercial, and industrial use. All models can be equipped with blowers, including the Hot Dawg<sup>®</sup> low-profile residential garage heaters and the Effinity<sup>®</sup>. In fact, the Effinity<sup>®</sup> is the only high-efficiency gas-fired unit heater in North America with this option available. Units are mounted remotely and ducted in warm air, protecting from corrosion. With the ability to duct blower units, in addition to the blower fans, noise level is brought to a minimum.

- Made in the USA
- Permanently-lubricated motor for trouble-free dependability
- Ducting air in from adjacent spaces for ventilation
- Uses natural or propane gas, field convertible from natural to propane gas
- External gas connections
- Standard power exhaust simplifies sidewall or roof venting with small-diameter vent pipe
- Installation made easy with knockouts for quick access to gas and electricity
- Full 10-year warranty on heat exchanger



### MODEL HDC/HDB

- Available in 5 model sizes from 60,000 to 12
- Airflow range 635 to 1,111 CFM
- 82% minimal efficiency for fuel savings
- Lightweight design easily installs 1" from ceil only two angle brackets\*
- Residential and Commercial Certified
   Note: Model HDC is a separated combustion

\*Standard on HDC 30-75; accessory for HDC 100-125.

### MODEL BTC

- Available in 3 model sizes from 215,000 to 3
- Airflow range 2,645 to 6,674 CFM
- 82% minimal efficiency for fuel savings
- Compatible with major Building Management as BACnet MS/TP or IP and LonWorks
- Commercial Certified

### **MODEL BTS/BTP**

- Available in 7 model sizes from 150,000 to 4
- Airflow range 1,587 to 7,407 CFM
- 82% minimal efficiency for fuel savings
- Compatible with major Building Management as BACnet MS/TP or IP and LonWorks\*
- Commercial Certified

Note: Model BTS is a separated combustion

\*Accessory for BTS and BTP models.



25,000 Btu/hr ling with n unit	BURNER CONTRACTOR
310,000 Btu/hr	Effinity
100,000 Btu/hr It Systems such	
unit	MODINE

### SEPARATED COMBUSTION HDC AND BTS BLOWER MODELS PERFORMANCE DATA ①②

Model	Model Size	Btu/hr Input	Btu/hr Output	Temperature Rise (°F)	CFM Range	
	60	60,000	49,200	40 - 70	635 - 1,111	
	75	75,000	61,500	40 - 70	794 - 1,389	
HDC	100	100,000	82,000	35 - 65	1,140 - 2,116	
	125	125,000	102,500	45 - 75	1,235 - 2,058	
	150	150,000	123,000	40 - 70	1,587 - 2,778	
	175	175,000	143,500	40 - 70	1,852 - 3,241	
	200	200,000	164,000	40 - 70	2,116 - 3,704	
BTS	250	250,000	205,000	40 - 70	2,646 - 4,630	
	300	300,000	246,000	40 - 70	3,175 - 5,556	
	350	350,000	287,000	40 - 70	3,704 - 6,481	
	400	400,000	328,000	40 - 70	4,233 - 7,407	

① Ratings are shown for elevations up to 2,000 feet.

② Units approved for use in California by CEC.

Do Not Locate ANY Gas-Fired Unit in Areas with Chlorinated, Halogenated or Acidic Vapors in Atmosphere.

For complete technical information and specifications reference catalog 6-175

### SEPARATED COMBUSTION BTC BLOWER MODELS PERFORMANCE DATA ①②

Model	Model Size	Btu/hr Input	Btu/hr Output	Temperature Rise (°F)	CFM Range
	215	215,000	199,950	40 - 70	2,645 - 4,628
BTC	260	260,000	241,800	40 - 70	3,198 - 5,597
	310	310,000	288,300	40 - 70	3,813 - 6,674

① Ratings are shown for elevations up to 2,000 feet.
② Units approved for use in California by CEC.

Do Not Locate ANY Gas-Fired Unit in Areas with Chlorinated, Halogenated or Acidic Vapors in Atmosphere.

For complete technical information and specifications reference catalog 6-170

### POWER-EXHAUSTED HDB AND BDP BLOWER MODELS PERFORMANCE DATA ①②

Model	Model Size	Btu/hr Input	Btu/hr Output	Temperature Rise (°F)	CFM Range
	60	60,000	49,200	40 - 70	635 - 1,111
ממוו	75	75,000	61,500	40 - 70	794 - 1,389
HDB	100	100,000	82,000	35 - 65	1,140 - 2,116
	125	125,000	102,500	45 - 75	1,235 - 2,058
	150	150,000	123,000	40 - 70	1,587 - 2,778
	175	175,000	143,500	40 - 70	1,852 - 3,241
	200	200,000	164,000	40 - 70	2,116 - 3,704
BDP	250	250,000	205,000	40 - 70	2,646 - 4,630
	300	300,000	246,000	40 - 70	3,175 - 5,556
	350	350,000	287,000	40 - 70	3,704 - 6,481
	400	400,000	328,000	40 - 70	4,233 - 6,584

① Ratings are shown for elevations up to 2,000 feet. ② Units approved for use in California by CEC.

### Do Not Locate ANY Gas-Fired Unit in Areas with Chlorinated, Halogenated or Acidic Vapors in Atmosphere.

For complete technical information and specifications reference catalog 6-189

### POWER-EXHAUSTED BTP BLOWER MODEL PERFORMANCE DATA ①②

Model	Model Size	Btu/hr Input	Btu/hr Output	Temperature Rise (°F)	CFM Range
	150	150,000	123,000	40 - 70	1,587 - 2,778
	175	175,000	143,500	40 - 70	1,852 - 3,241
	200	200,000	164,000	40 - 70	2,116 - 3,704
BTP	250	250,000	205,000	40 - 70	2,646 - 4,630
	300	300,000	246,000	40 - 70	3,175 - 5,556
	350	350,000	287,000	40 - 70	3,704 - 6,481
	400	400,000	328,000	40 - 70	4,233 - 7,407

 $\odot$  Ratings are shown for elevations up to 2,000 feet. ② Units approved for use in California by CEC.

### Do Not Locate ANY Gas-Fired Unit in Areas with Chlorinated, Halogenated or Acidic Vapors in Atmosphere.

For complete technical information and specifications reference catalog 6-189



### LOW-PROFILE DESIGN • FLEXIBLE MOUNTING OPTIONS • SIZE ACCESS PIPING

Hot Dawg® H<sub>2</sub>O is the only low-profile residentially-certified hot water heater in North America. Available in two sizes, the Hot Dawg<sup>®</sup> H<sub>2</sub>O offers a one of a kind heating solution for your garage or workshop, as well as commercial, industrial and institutional applications. With side access piping and all moving parts enclosed, this unit has the versatility to be mounted vertically or horizontally and is designed to work wherever you need it.

- Available in 2 model sizes from 11,900 to 46,000 Btu/hr
- Low-profile design with flexible mounting options (parallel, perpendicular or recessed between joints) allows for horizontal or vertical air delivery
- Easy, versatile installation options due to the electrical and piping connections ability to easily be reversed in the field
- No external parts twin centrifugal blowers keep all moving parts inside the cabinet
- The side panel air inlet opening has factory-installed figure guards
- Includes two mounting brackets with vibration isolators to reduce noise and vibration
- The internal coil can handle water pressures up to 150 PSI and temperature up to 200°F
- Constructed of heavy gauge steel for long-lasting durability

### **PERFORMANCE DATA ①**②

		Madal					Entering W	ater Temp	perature (60	)°F Enter	ing Air Tem	perature)	)	
Model	Model Size	CFM Range	GPM	WPD (ft. Water)	120	°F	140	°F	160	°F	180	°F	200	°F
	0120				Btu/hr	WTD	Btu/hr	WTD	Btu/hr	WTD	Btu/hr	WTD	Btu/hr	WTD
			1	0.6	11,900	25	15,800	33	19,800	41	23,700	49	27,700	58
			2	2.2	15,500	16	20,600	22	25,800	27	30,900	32	36,100	38
	30	405	3	4.7	17,200	12	22,900	16	28,600	20	34,400	24	41,100	28
			4	7.9	18,200	10	24,200	13	30,300	16	36,300	19	42,400	22
				5	12	19,600	8	26,100	11	32,600	14	39,200	16	45,700
		425	1	0.6	11,900	25	15,900	33	19,900	41	23,900	50	27,900	58
			2	2.2	15,600	16	20,700	22	25,900	27	31,100	33	36,300	38
HHD			3	4.7	17,300	12	23,000	16	28,800	20	34,600	24	40,300	28
			4	7.9	18,300	10	24,400	13	30,500	16	36,600	19	42,700	22
	45		5	12	19,700	8	26,300	11	32,800	14	39,400	16	46,000	19
	40		1	0.6	17,200	36	22,900	48	28,600	60	34,400	72	40,100	84
			2	2.2	22,400	23	29,900	31	37,300	39	44,800	47	52,300	55
		710	3	4.7	24,900	17	33,200	23	41,500	29	49,800	35	58,100	40
			4	7.9	26,400	14	35,100	18	43,900	23	52,700	27	61,500	32
			5	12	28,400	12	37,800	16	47,300	20	56,800	24	66,300	28

① For conditions other than shown above, please refer to the Modine Breeze<sup>®</sup> AccuSpec program for detailed performance data. ② Allowable water temperature range is 100°F to 200°F. Allowable indoor air temperature range is 40°F to 100°F. If temperatures below freezing are expected, provisions should be made to either drain the unit heater coil or utilize a continually circulating glycol solution.

For complete technical information and specifications reference catalog 1-115

### SMALL FOOTPRINT • EFFICIENT HEATING • QUIET OPERATION

Unlike other hydronic unit heaters on the market, the Lodronic<sup>™</sup> low-temperature hot water unit heater was designed and engineered specifically for use with high-efficiency boilers. The typical, oversized, hydronic unit heater overworks the high-efficiency boiler system resulting in poor system performance and lower temperature output. By using the Lodronic<sup>™</sup> unit heater with the high-efficiency boiler system, there will be a significant performance improvement when compared to the HC165.

- High-efficiency 4-row coil with low water pressure drop
- Smaller fan and motor for a lower system amp draw
- Designed for lower entering hot water temperatures
- High-temperature output vs old traditional systems
- UL1995 Certified

### HCH/LODRONIC® STEAM/HOT WATER MODELS PERFORMANCE DATA 02

		Steam	Hot Water				
Model	Model Size	Btu/hr Input	Btu/hr Input	Temperature Rise (°F)	CFM Range	Maximum Mounting Height (ft.)	Heat Throw (ft.)
	22	22,000	21,688	60	370	8	27
	39	39,000	38,547	60	660	8	28
	67	67,000	66,875	60	1,150	9	33
НСН	104	104,000	104,204	60	1,830	11	39
	170	170,000	169,564	60	2,780	11	42
	195	195,000	194,917	60	3,200	11	40

① Ratings are shown for elevations up to 2,000 feet. © Deflector blades pitched 45° toward the floor. Mounting height is measured from floor to bottom of unit.

For complete technical information and specifications reference catalog 1-150



**MODEL HHD** 





### WIDE PRODUCT SELECTION • APPLICATION FLEXIBILITY • EASE OF INSTALLATION AND MAINTENANCE

Steam/Hot Water unit heaters are offered in both horizontal and vertical air delivery models, used to counter heat loss along outside building walls, especially where windows are present. Horizontal unit heaters are ideal for heating buildings with large open areas and low ceilings. Vertical unit heaters are ideal for heating buildings with high ceilings or areas that require the heater to be mounted above obstructions such as crane ways.

- Horizontal, Vertical and Power-Throw<sup>™</sup> (high-velocity horizontal air delivery) models offer maximum application flexibility
- Quiet operation is assured through the use of carefully selected motors, fans and scientifically designed venturi fan shrouds
- Casings are treated for corrosion resistance and finished with a neutral gray-green baked-on, electrostatically applied polyester powder coat paint finish
- All units include electrical junction box
- Component tested for proper motor function
- Fins are vertical to limit build-up of foreign particles

### MODEL HSB/HC Horizontal Unit Heater

- Available in 13 model sizes from 18,000 to 340,000 Btu/hr
- Recommended for use in buildings where ceilings are low with few obstructions
- Copper tubes with mechanically bonded aluminum fins for maximum heat transfer performance
- Motors are totally enclosed with thermal overload protection

### **MODEL PT/PTN** Power-Throw<sup>™</sup> High-Velocity Horizontal Unit Heater

- Available in 6 model sizes from 279,000 to 952,000 Btu/hr
- Recommended where there is a requirement for greater heat throw and hard to heat areas such as docks and large warehouses
- Powerful, high-velocity air delivery distributes heat over a wide area
- PT models have copper tubes while PTN models have copper/ nickel tubes for high temperature and/or pressure
- Low outlet temperature models for higher steam pressures or dirty atmospheres

### MODEL V/VN Vertical Unit Heater

- Available in 15 model sizes from 42,000 to 952,000 Btu/hr
- Recommended for areas where ceilings are high or where obstructions do not permit good horizontal movement of air
- V models have copper tubes while VN models have copper/ nickel tubes for higher temperature and/or pressure
- Low outlet temperature models for higher steam pressures or dirty atmospheres
- Optional cone-jet, truncone, or louver air deflectors for a variety of heat patterns







### HSB/HC AND PT/PTN STEAM/HOT WATER MODELS PERFORMANCE DATA ①②

Model	Model Size	Ste Btu/hr Input	Temperature Rise (°F)	Btu/hr Input	Vater Temperature Rise (°F)	CFM Range	Maximum Mounting Height (ft.)	Heat Throw (ft.)
	18	18,000	107	12,600	94	340	8	17
	24	24,000	119	16,300	100	370	9	18
	33	33,000	108	21,700	91	630	10	21
	47	47,000	119	30,900	98	730	12	28
	63	63,000	111	45,600	97	1,120	14	29
	86	86,000	118	60,200	101	1,340	15	31
HSB/HC	108	108,000	109	83,700	98	2,010	17	31
	121	121,000	122	93,000	108	1,775	16	25
	165	165,000	106	130,900	97	3,240	19	40
	193	193,000	121	143,000	105	2,900	18	38
	258	258,000	111	202,000	100	4,560	19	44
	290	290,000	117	228,600	105	4,590	20	46
	340	340,000	120	271,100	108	5,130	20	46
	279	279,000	111	192,400	94	5,460	16	100
	333	333,000	116	238,500	99	5,980	17	110
PTN	385	385,000	110	276,100	95	7,680	17	115
	500	500,000	108	358,000	93	10,390	18	130
	610	610,000	112	450,400	97	11,750	20	140
PT	952	952,000	139	721,600	120	12,170	21	145

V/VN STEAM/HOT WATER MODELS PERFORMANCE DATA 02

		Ste	am	Hot V	Vater			
Model	Model Size	Btu/hr Input	Temperature Rise (°F)	Btu/hr Input	Temperature Rise (°F)	CFM Range	Maximum Mounting Height (ft.)	Heat Throv (ft.)
	42	42,000	103	30,100	90	950	15	11
	59	59,000	111	42,600	96	1,155	19	14
	78	78,000	109	57,000	95	1,590	20	15
	95	95,000	118	69,300	101	1,665	20	15
	139	139,000	112	106,600	99	2,660	24	18
	161	161,000	115	123,200	101	2,940	27	20
VAN	193	193,000	116	147,200	101	3,500	30	22
V/VN	212	212,000	120	161,700	104	3,610	30	22
	247	247,000	111	188,700	98	4,820	34	26
	279	279,000	111	212,700	98	5,460	37	30
	333	333,000	116	260,100	103	5,980	37	30
	385	385,000	110	302,100	98	7,680	36	30
	500	500,000	108	391,700	97	10,390	44	37
	610	610,000	112	450,400	97	11,750	43	36
V	952	952,000	139	721,600	120	12,170	45	56

① Ratings are shown for elevations up to 2,000 feet.
 ② Deflector blades pitched 45° toward the floor. Mounting height is measured from floor to bottom of unit.

For complete technical information and specifications reference catalog 1-150

For complete technical information and specifications reference catalog 1-150



### EFFECTIVE HEAT THROW • EFFICIENT COMBUSTION • EASY TO SERVICE

Oil-fired unit heaters are built to last with time-tested and field-proven components to provide optimum heating comfort. This unit offers an efficient and reliable means of heating, particularly in regions where natural gas may be unavailable or undependable. The lightweight, preformed, ceramic fiber firepot resists both mechanical and thermal shocks, and is made from corrosion-resistant aluminum steel and roll-formed to eliminate thermal stress. In addition, the heat exchanger is equipped with an inspection port, two clean-out ports and a large service door for removing fire pot for ease of service when necessary.

- Available in 3 model sizes from 100,000 to 185,000 Btu/hr
- Effective heat throw from 39 to 51 feet
- Up to 84% thermal efficiency for fuel savings
- Corrosion-resistant
- Pressure-atomizing gun-type burner
- Beckett-microprocessor based ignition controller
- Interrupted-duty ignition that disables the mark once ignition begins
- Electric oil igniter
- Finger-proof fan guard
- Beckett CleanCut burner pump
- UL Listed

### **OPTIONAL FEATURES**

- Single-stage 24-volt low-voltage thermostat
- Thermostat guard
- Booster pump relay
- Oil safety valve
- Fuel oil filter
- Vertical louvers
- Draft regulator
- Outside combustion air kit

### **PERFORMANCE DATA** ①②

Model	Model Size	Btu/hr Input	Btu/hr Output	Temperature Rise (°F)	CFM Range	Maximum Mounting Height (ft.)	Heat Throw (ft.)			
	100	119,000	100,000	49	1,890	12	39			
POR	145	175,000	145,000	56	2,400	13.5	50			
	185	231,000	185,000	54	3,200	12	51			
0	① Ratings are shown for elevations up to 2,000 feet.									

<sup>②</sup> Deflector blades pitched 45° toward the floor. Mounting height is measured from floor to bottom of unit.

For complete technical information and specifications reference catalog 4-112





**MODEL POR** 





21

### LOW INSTALLATION COST • REDUCED MAINTENANCE • LONG HEAT THROW

Electric unit heaters are ideal for most industrial plants, commercial and recreational buildings that provide a variety of options in solving comfort-heating problems. Each unit is designed for long heat throw, uniform heat delivery and reduced maintenance.

- Factory assembled and wired for specific power supply ordered
- Fin tube sheathed nichrome wire heating elements
- Enclosed motor with thermal overload protection
- Statistically and dynamically balanced fans
- Fan and motor exposed and can be removed without lowering unit
- Corrosion-resistant
- Easy access to heating-element terminals
- Automatic reset overheat control

### **PERFORMANCE DATA** ①②

Model	Model Size	Btu/hr	CFM Range	Temperature Rise (°F)	Maximum Mounting Height (ft.)	Heat Throw (ft.)
	30	10,200	380	25	8	12
	50	17,100	380	42	8	12
	75	25,600	530	45	8	14
	100	34,100	830	38	9	20
HER	125	42,700	830	38	10	20
	150	51,200	830	57	10	20
	200	68,300	1,300	49	11	25
	250	85,400	1,300	61	11	25
	300	102,000	2,575	40	17	75
PTE	400	137,000	2,575	54	15	60
	500	171,000	2,575	70	14	45
	50	17,100	800	21	13	20
	75	25,600	800	31	11	17
	100	34,100	940	36	12	18
	150	51,200	1,340	38	17	26
VE	200	64,900	1,600	41	20	30
	250	85,400	1,600	55	17	26
	300	102,000	2,575	40	20	31
	400	137,000	2,575	54	18	27

② Deflector blades pitched 45° toward the floor. Mounting height is measured from floor to bottom of unit.

### **MODEL HER** Horizontal Unit Heater

- Available in 8 model sizes from 10,200 to 85,400 Btu/hr
- Effective heat throw from 12 to 25 feet
- Recommended for use in buildings where ceilings are low with few obstructions
- Normally placed around perimeter of building
- Standard horizontal air deflector blades
- Feature hinged bottom panels for easy control access

### **MODEL PTE** Power-Throw<sup>™</sup> High-Velocity Horizontal Unit Heater

- Available in 3 model sizes from 102,000 to 171,000 Btu/hr
- Effective heat throw from 45 to 75 feet
- Recommended for hard to heat areas such as loading docks or large warehouses
- Standard horizontal air deflector blades
- Offered in single and two-stage controls

### **MODEL VE** Vertical Unit Heater

- Available in 8 model sizes from 17.100 to 137.000 Btu/hr
- Effective heat throw from 17 to 30 feet
- Recommended for high ceiling areas
- Motor heat shield protects motor from heated air passing through
- Offered in single and two-stage controls





### EXPLOSION-PROOF ELECTRIC MOTOR • SEALED HEAT EXCHANGER CORE • LONG HEAT THROW

Explosion-proof electric unit heaters are designed for hazardous industrial applications where potential for explosion exists due to the presence of flammable gases, vapors and powered-metals or dusts.

- Available in 9 model sizes from 10,250 to 119,450 Btu/hr
- Effective heat throw from 30 to 70 feet
- Liquid to air, finned tube heat exchanger core
- Ethylene glycol water mixture used as heat-transfer fluid in the heater core, providing -49°F (-45°C) freeze damage protection
- Thermally protected, automatic reset, explosion-proof, motor driven fan moves air across finned tubes for even heat distribution
- Automatically reset, bimetal high limit provides over temperature protection and is rated for 100,000 cycles of service
- Pressure relief valve provides over-pressure protection
- Epoxy coated, 14 gauge steel cabinet contains heater core, motor, and fan assembly
- Narrow-gap, two-piece fan-guard shields all moving parts
- Adjustable extruded aluminum louvers allow directional control of air
- Copper conductor wires enclosed in steel conduits carry all electrical power
- UL Listed

### MODEL HEX ELECTRIC UNIT HEATER PERFORMANCE DATA ①②

Model	kW	Btu/hr Input	Temperature Rise (°F)	Maximum Mounting Height (ft.)	Heat Throw (ft.)
	3	10,250	11.2	10	30
	5	17,050	18.6	10	30
	7.5	25,600	27.9	10	30
	10	34,100	37.2	10	30
HEX	15	51,200	27.1	10	40
	20	68,250	36.1	10	40
	25	85,300	45.2	20	70
	30	102,350	26.4	20	70
	35	119,450	30.7	20	70
① Ratings are shown for ele	vations up to 2 000 feet				

© Deflector blades pitched 45° toward the floor. Mounting height is measured from floor to bottom of unit.

For complete technical information and specifications reference catalog 2-116





### UNVENTED OPERATION • SIMPLE MOUNTING ABILITY • LOW INSTALLATION COST

Gas-Fired high-intensity infrared heaters are approved for indoor unvented installation where as low-intensity infrared heaters are certified for both indoor and outdoor residential or commercial applications. Both high-intensity and low-intensity infrared heaters do not utilize a fan, eliminating noise and draft distractions. There are no moving parts to maintain for inexpensive maintenance.

### MODEL IHR FEATURES

### **OPTIONS**

- Available in 5 model sizes from 30.000 to 160.000 Btu/hr
- Uses natural or propane gas, field convertible from natural to propane gas
- Rugged aluminized steel frame
- Exclusive ceramic burner provides maximum infrared radiation
- Stainless steel rods increase heat temperature and efficiency
- Highly polished aluminum reflector design
- Direct spark or pilot ignition
- Potted circuitry for protection in high-moisture environments
- 5-year limited ceramic burner warranty
- CSA Design Certified
- CE Certified
- UL Listed

### **MODEL OHP FEATURES**

- Available in 2 model sizes from 31,000 to 34,000 Btu/hr
- Uses natural or propane gas, field convertible from natural to propane gas
- Rugged aluminized steel frame
- Decorative stainless steel widescreen eggcrate grille
- Wind and rain protected design
- Reliable direct spark ignition
- Potted (water resistant) 24-volt circuitry
- Black coated aluminized steel or brushed stainless steel housing
- ETL Design Certified

- Direct spark ignition
- Self-generating Millivolt
- Intermittent pilot (non-100% shut-off)



MODEL IHR

### MODEL IHR LOW-INTENSITY INFRARED HEATER PERFORMANCE DATA ①

			Recommended Mo			
Model	Model Size	Btu/hr Input	Standard Reflector	Parabolic Reflector	Radiating Surface (sq. in.)	
			30°	30°	( · · · · /	
	30	30,000	12 - 14	12 - 15	85	
	60	60,000	14 - 16	18 - 21	170	
IHR	90	90,000	16 - 18	21 - 25	255	
	130	130,000	21 - 24	26 - 32	340	
	160	160,000	24 - 28	29 - 35	425	

① Ratings are shown for elevations up to 2,000 feet.

### Do Not Locate ANY Gas-Fired Unit in Areas with Chlorinated, Halogenated or Acidic Vapors in Atmosphere.

For complete technical information and specifications reference catalogs 9-122

### MODEL OHP HIGH-INTENSITY INFRARED HEATER PERFORMANCE DATA ①

Model	Model Size	Btu/hr Input	Maximum Mount Height (ft.)	Approximate Area (ft.)	Control Voltage					
OHP	31	31,000	8 - 12	8 x 8	24					
	34	34,000	8.5 - 13	9 x 9	24					
① Ratings are shown for ele	D Ratings are shown for elevations up to 2,000 feet.									

### Do Not Locate ANY Gas-Fired Unit in Areas with Chlorinated, Halogenated or Acidic Vapors in Atmosphere.

For complete technical information and specifications reference catalogs 5-157





### SIMPLE CHAIN MOUNTING • AVAILABLE IN NATURAL OR PROPANE GAS • 20 - 70 FOOT LENGTHS

Gas-fired low-intensity infrared heaters are approved for vented or unvented commercial and industrial applications. The water-resistant control compartment provides weatherproof protection and allows either indoor or outdoor installation.

- Available in 8 model sizes from 50,000 to 200,000 Btu/hr
- Uses natural or propane gas, field convertible from natural to propane gas
- Heat-treated 16 gauge aluminized steel heat exchanger enhances corrosion resistance and radiant heat transfer
- Durable 16 gauge aluminized steel combustion chamber
- Blocked intake/exhaust shut-off switch
- Controls located in enclosed, water-resistant compartment for indoor or outdoor installation
- 180° rotatable gas valve, accessible from either side of burner box
- Durable polyester powder paint maintains life-long appearance
- Side access panels for servicing either side of the burner box
- Improved serviceability with sight window for flame viewing
- Indicator lights for combustion blower operation and a removable cover

### MODEL IPT LOW-INTENSITY INFRARED HEATER PERFORMANCE DATA 02

Model	Model Size	Btu/hr Input	System Lengths (ft.)	Recommended Mount Height (ft.)	
	50	50,000	20, 30	10 - 12	
	60	60,000	20, 30, 40	10 - 12	
	75	75,000	20, 30, 40	12 - 14	
IPT	100	100,000	30, 40, 50	12 - 14	
IPI	125	125,000	40, 50, 60	15 - 22	
	150	150,000	50, 60	15 - 25	
	175	175,000	50, 60, 70	18 - 28	
	200	200,000	50, 60, 70	20 - 30	

① Ratings are shown for elevations up to 2,000 feet.
② Consult factory for propane operation at 50 ft. system lengths.

Do Not Locate ANY Gas-Fired Unit in Areas with Chlorinated, Halogenated or Acidic Vapors in Atmosphere.

For complete technical information and specifications reference catalog 9-117



**MODEL IPT** 





### DESIGNED FOR HEATING AND/OR MAKE-UP AIR • LOW INITIAL COST • LOW MAINTENANCE • EASY TO SERVICE

Modine duct furnaces are an economical choice for superior quality and dependability in most applications. Offering three types of indoor indirect gas-fired duct furnaces that cover a wide range of applications in building heating and make-up air systems.

### **STANDARD FEATURES**

- Available in 11 model sizes from 75,000 to 400,000 Btu/hr
- Airflow range 556 to 14,815 CFM
- All models feature 82% minimal thermal efficiency for fuel savings
- Natural or propane gas (select indoor units field convertible from natural to propane gas)
- Certified for upstream or downstream placement from cooling coils; Indoor units include a drain pan that allows connection to a condensate drain line, outdoor units drain to the roof
- Certified to 3.0" W.C. external static pressure for high static applications
- Wide range of controls, options, and accessories for unit customization

### **OPTIONAL FEATURES**

- Aluminized steel heat exchanger and burner
- Aluminized steel drip pan
- Two-stage and electronic modulation controls
- Building management compatible gas controls using 0 10 Vdc or 4 20 mA input
- High and/or low gas pressure switches



### MODEL DFG Indoor Gravity Vented

• Relies on a natural draft to vent properly Note: Power vented units should be considered if the vent system is horizontal or if the space the unit is located is generally under a negative pressure

### MODEL DFP Indoor Power Vented

Similar to Model DFG, with the addition of an integral power exhauster for:

- Vertical or horizontal venting with the smallest diameter vent pipe possible
- The ability to overcome reasonable negative pressures seen in buildings with inadequate make-up air
- Reduction of off-cycle vent losses improves building efficiency

### P

PERFORMANCE DATA ①②③			Low Air Tempe without Air		High Air Temperature Rise with Air Baffle		
Model	Model Size	Btu/hr Input	Btu/hr Output	Temperature Rise (°F)	CFM Range	Temperature Rise (°F)	CFM Range
	75	75,000	61,500	20 - 60	926 - 2,778	20 - 100	556 - 2,778
	100	100,000	82,000	20 - 60	1,235 - 3,704	20 - 100	741 - 3,704
	125	125,000	102,500	20 - 60	1,543 - 4,630	20 - 100	926 - 4,630
	150	150,000	123,000	20 - 60	1,852 - 5,556	20 - 100	1,111 - 5,556
	175	175,000	143,500	20 - 60	2,160 - 6,481	20 - 100	1,296 - 6,481
DFG/DFP	200	200,000	164,000	20 - 60	2,469 - 7,407	20 - 100	1,481 - 7,407
	225	225,000	184,000	20 - 60	2,778 - 8,333	20 - 100	1,667 - 8,333
	250	250,000	205,000	20 - 60	3,086 - 9,259	20 - 100	1,852 - 9,259
	300	300,000	246,000	20 - 60	3,704 - 11,111	20 - 100	2,222 - 11,111
	350	350,000	287,000	20 - 60	4,321 - 12,963	23 - 100	2,593 - 11,111
	400	400,000	328,000	20 - 60	4,938 - 14,815	27 - 100	2,963 - 11,111

① Ratings are shown for elevations up to 2,000 feet.

② DFP is approved for use in California by CEC.

③ For DFG or DFP models in high CFM applications, the air distribution baffle may be removed to reduce the pressure drop through the duct furnace.

For complete technical information and specifications reference catalog 5-174





Do Not Locate ANY Gas-Fired Unit in Areas with Chlorinated, Halogenated or Acidic Vapors in Atmosphere.



### Modine Manufacturing Company

1500 DeKoven Avenue Racine, Wisconsin 53403-2552 Phone: 1.800.828.4328 (HEAT) www.modinehvac.com ©2020 Modine Manufacturing Co.

75-136.51

Follow us @ModineHVAC
 See us at YouTube.com/ModineHVAC
 www.facebook.com/ModineHVAC/
 www.linkedin.com/company/modinehvac/