MODINE

GAS-FIRED UNIT HEATERS
RESIDENTIAL, COMMERCIAL & INDUSTRIAL



POWER VENTED
HD, HDB, PDP, BDP, PTP, BTP



SEPARATED COMBUSTION
HDS, HDC, PTS, BTS



HIGH-EFFICIENCY SEPARATED COMBUSTION
PTC, BTC

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GAS-FIRED, POWER-EXHAUSTED, PROPELLER

• 82% Thermal Efficiency • Horizontal or Vertical Venting • Field Convertible to Propane • 100% Shut-Off with Continuous Retry • Commercial or Residential Applications



MODEL HD



MODEL PDP



MODEL PTP

For applications requiring a low profile unit, Modine offers the Hot Dawg® unit heater. The Hot Dawg® may be installed in residential or commercial applications just one inch below the ceiling. The superior quality matched with the following features makes the Hot Dawg® unit heater an easy choice for a variety of applications:

- 82% thermal efficiency for fuel savings.
- Uses natural or propane gas (field convertible from natural to propane gas).
- Certified for residential, commercial and industrial use.
- Lightweight, easily installs 1" from ceiling with only two angle brackets (standard on 30-75, accessory for 100-125).
- Install quickly and easily with knockouts for quick access to gas and electricity.
- The standard power exhauster allows the unit to be vented vertically or horizontally and is designed to use the smallest diameter vent pipe possible.
- Permanently-lubricated motor for trouble-free dependability.
- Full 10-year warranty on heat exchanger.
- Available in both propeller fan and centrifugal blower configurations.

The PDP propeller, power vented gas-fired unit heater is a product that is inexpensive to install, easy to use, and offers excellent in-service economy. The PDP model series expands on the size range of the HD model series providing product that is certified for commercial and industrial applications in sizes from 150 through 400MBH.

For blower model data, see page 6.

Table 2.1 - Propeller Unit Model HD and PDP General Performance Data

	Model HD Sizes						Model PDP Sizes						
	30	45	60	75	100	125	150	175	200	250	300	350	400
Btu/Hr Input ①	30,000	45,000	60,000	75,000	100,000	125,000	150,000	175,000	200,000	250,000	300,000	350,000	400,000
Btu/Hr Ouput ①	24,600	36,900	49,200	31,500	82,000	102,500	123,000	143,500	164,000	205,000	246,000	287,000	328,000
Entering Airflow (CFM) @ 70°F	505	720	990	1160	1490	1980	2180	2550	2870	3700	4460	4870	5440
Air Temp. Rise (°F)	44	46	45	48	50	47	51	51	52	50	50	53	54
Max. Mounting Height (Ft.) ②	10	10	12	14	12	16	16	17	15	19	21	20	19
Heat Throw (Ft.) @ Max Mtg Ht ②	25	27	36	38	42	56	55	59	51	67	74	70	69

The PTP features a stainless steel tubular heat exchanger as STANDARD on all units with a 10-year heat exchanger warranty, providing customers with a peace of mind. Users of the PTP will also benefit from a low profile design that allows quick and easy installations.

Table 2.2 - Propeller Unit Model PTP General Performance Data

	Model PTP Sizes						
	150	175	200	250	300	350	400
Btu/Hr Input ①	150,000	175,000	200,000	250,000	300,000	350,000	400,000
Btu/Hr Ouput ①	123,000	143,500	164,000	205,000	246,000	287,000	328,000
Entering Airflow (CFM) @ 70°F	2140	2725	2870	3995	4545	5280	5995
Air Temp. Rise (°F)	53	48	52	47	50	50	51
Max. Mounting Height (Ft.) ②	15	14	15	18	19	18	21
Heat Throw (Ft.) (@ Max Mtg Ht)	51	50	53	62	69	65	74

① Ratings shown are for elevations up to 2,000 Ft. For elevations above 2,000 feet, ratings should be reduced at the rate of 4% for each 1,000 feet above sea level. (In Canada see rating plate.) Reduction of ratings requires use of a high altitude kit.

② Data taken at 55°F air temperature rise. At 65°F ambient and unit fired at full-rated input. Mounting height as measured from bottom of unit, and without deflector hoods. For units equipped with deflector hoods.

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DO NOT LOCATE ANY GAS-FIRED UNIT IN AREAS WITH CHLORINATED, HALOGENATED, OR ACIDIC VAPORS IN ATMOSPHERE.

Request Catalog 6-189 For Complete Technical Information and Specifications.

Table 7.1 - Standard Features and Factory Options

	Feature	Model					Model					Model	
		HD	HDB	PDP	BDP	PTP	HDS	HDC	PTS	BTS	BTP	PTC	BTC
Cabinet and Air Mover	Aluminized steel cabinet (gauge indicated)	22 ga.	22 ga.	20 ga.	20 ga.	20 ga.	22 ga.	22 ga.	20 ga.	20 ga.	20 ga.	20 ga.	20 ga.
	Low profile casing design	•	•				•	•					
	Baked-on polyester powder paint for durability and corrosion resistence	•	•	•	•	•	•	•	•	•	•	•	•
	Adjustable air-deflector blades	•	•	•	•	•	•	•	•	•	•	•	•
	Fans engineered for quiet operation	•	•	•	•	•	•	•	•	•	•	•	•
	Totally enclosed fan/blower motors (model sizes 100 and above)	•	•	•	•	•	•	•	•	•	•	•	•
	Fingerproof fan guard (standard on sizes 125 and below)	•	•	Opt		•	•	•	Opt			Opt	
	Two L-shaped mounting brackets (standard on 30-75, optional on 85-125)	•	•				•	•				•	
	Adjustable mounting brackets for level hanging			•	•								
	Hinged tool-less bottom pan entry			•	•								
	Adjustable motor sheaves, certified to 0.7" W.C. external static pressure				•					•	•		•
Heat Exchanger and Burner	82% minimum thermal efficiency	•	•	•	•	•	•	•	•	•	•	•	•
	93% minimum thermal efficiency											•	•
	Aluminized steel heat exchanger (409 stainless steel optional)	•	•	•	•	SS Std	•	•	•	•	SS Std	•	•
	Tubular heat exchanger	•	•			•	•	•	•	•	•	•	•
	In-shot burner on each heat exchanger tube for reliable performance, ease of serviceability, and low sound level on flame ignition/extinction	•	•			•	•	•	•	•	•	•	•
	Aluminized steel burner (409 stainless steel optional)			•	•								
	Modine Conservicore® Technology on secondary recuperative heat exchanger with AL29-4C® stainless steel material as standard											•	•
Controls	CSA or ETL certification for commericial and industrial use in the US and Canada	•	•	•	•	•	•	•	•	•	•	•	•
	CSA or ETL certification for residential use in the US and Canada	•	•				•	•				55-110	
	Factory-installed power exhauster	•	•	•	•	•	•	•	•	•	•	•	•
	Controls for natural gas (propane optional)	•	•	•	•	•	•	•	•	•	•	•	•
	Single stage gas controls (two stage optional except for PTC/BTC)	•	•	•	•	•	•	•	•	•	•	•	•
	Supply air high limit safety controls	•	•	•	•	•	•	•	•	•	•	•	•
	Differential pressure switch for proof of venting	•	•	•	•	•	•	•	•	•	•	•	•
	Flue gas high limit safety controls											•	•
	Flame roll-out safety switch	•	•				•	•				55-110	
	Direct spark ignition with continuous retry control system	•	•			•	•	•	•	•	•	•	•
	Intermittent pilot ignition with continuous retry control system			•	•								
	Control terminal board and low voltage terminal connections	•	•	•	•	•	•	•	•	•	•	•	•
	Gas control step down transformer with 24V gas controls	•	•	•	•	•	•	•	•	•	•	•	•
	Fan delay timer	•	•	•	•	•	•	•	•	•	•	•	•
	Condensate drain overflow switch											•	•
	Contractor convenience package featuring a condensate pump convenience outlet, unit on/off switch, heater function status indicator lights, and external terminals for thermostat wiring											•	•
	Factory install Building Managment Control			Opt	Opt	Opt			Opt	Opt	Opt	•	•

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