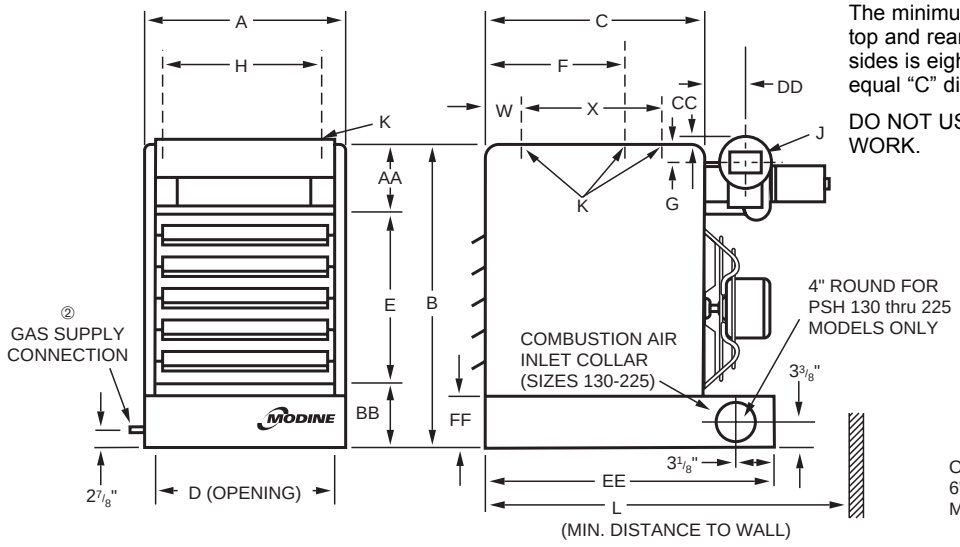
SEPARATED COMBUSTION PROPELLER UNIT HEATERS



The minimum recommended installation clearance from top and rear of unit (motor) is six inches. Clearance to sides is eighteen inches, and clearance at bottom should equal "C" dimension shown in table for each model.

DO NOT USE PROPELLER UNITS WITH DUCT WORK.

Dimensions (in inches) — PSH

Dimension	PSH 130	PSH 150	PSH 170	PSH 225	PSH 280	PSH 340
A	23-1/2	25-5/8	25-5/8	28-5/8	33-5/8	40
B	35-1/2	40-1/2	40-1/2	40-1/2	40-1/2	40-1/2
C	22	25	25	25	25	25
D	21-1/16	23-3/16	23-3/16	26-3/16	31-3/16	37-1/2
E	20	24	24	24	24	24
F	12-1/2	14-1/2	14-1/2	14-1/2	—	—
G	1	2	2	2	1-5/8	1-5/8
H	19-7/8	22	22	25	30	36-3/8
AA	8	9	9	9	9	9
BB	7 1/2	7-1/2	7-1/2	7-1/2	7-1/2	7-1/2
CC	1	1/8	1/8	1/8	1-3/8	1-3/8
DD	3-1/4	3-1/4	3-1/4	3-1/4	3-5/8	3-5/8
EE	32-9/16	36	36	36	36-1/16	36-1/16
FF	6-1/2	6-1/2	6-1/2	6-1/2	5-7/8	5-7/8
J (Round)	4	4	4	4	6	6
K ①	3/8-16	3/8-16	3/8-16	3/8-16	3/8-16	3/8-16
Natural Gas Connections ③	1/2	1/2	1/2	1/2	3/4	3/4
W	—	—	—	—	5	5
X	—	—	—	—	16	16
L	38-3/8	42	42	42	42	48
Fan Diameters	18	20	20	22	22	24
Approx. Ship. Wt.	198	244	246	272	328	422

① PSH 130 through PSH 225 — 2 holes.
PSH 280 & PSH 340 — 4 holes.
② Dimension from rear of unit burner box to center line of gas pipe connection is 6-23/32" for PSH 130 and 6-1/2" for all other models.
③ For natural gas.

Performance—PSH

Model	Btu/Hr Input ⑤	Btu/Hr Output	CFM @ 70°F	Outlet Velocity	Air Temp. Rise	Max. Mtg. Height (Ft.) ④	Heat Throw (Ft.) ④	Standard Motor Data ⑥			
								HP	Amps	RPM	Type
PSH 130	130,000	106,600	2540	940	39	12	50	1/6	2.8	1075	PSC
PSH 150	150,000	123,000	2900	810	39	16	50	1/6	2.8	1075	PSC
PSH 170	170,000	139,400	2900	820	45	16	50	1/6	2.8	1075	PSC
PSH 225	225,000	184,000	4275	1060	40	20	65	1/3	5.4	1075	PSC
PSH 280	280,000	229,600	4400	960	48	20	65	1/2	6.8	1075	PSC
PSH 340	340,000	275,400	5300	980	48	20	65	1/2	6.8	1075	PSC

④ At 65°F ambient and unit fired at full rated input. Max mounting height as measured from bottom of unit, and without deflector hoods.
⑤ Note: Ratings shown are for elevations up to 2,000 feet. 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 high altitude kit.
⑥ Data listed is for standard 115-volt, 60-Hertz, single-phase motors. All single phase motors are totally enclosed and thermal overload protected.

GAS-FIRED, SEPARATED-COMBUSTION, HIGH-EFFICIENCY UNIT HEATERS

• 80% Seasonal Efficiency • 82% Thermal Efficiency • Horizontal or Vertical Venting • 20%+ Fuel Savings Versus Gravity-Vented Products • 100% Outside Air for Combustion • Stainless-Steel Secondary Heat-Exchanger Tubes • Sealed Compartment Protects Combination Gas Control, Ignition Control, Manifold and Burner • Horizontal or Vertical Concentric Venting.

MODEL PSH

MODEL BSH

When faced with difficult applications, Modine separated-combustion, high-efficiency unit heaters are the better choice. These unit heaters are specifically designed for buildings with hostile atmospheric conditions, such as chemicals, high humidity or negative pressure.

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. To ease the installation of the separated-combusion unit heaters, Modine offers horizontal and vertical concentric venting options. Like all Modine gas-fired unit heaters, these heaters feature efficient air-foil heat-exchanger tubes and effective heat-transfer surfaces designed to maximize heat transfer from the burned fuel to the air passing over the heat exchanger. Modine's unique design also minimizes resistive losses, resulting in greater heat throw and lower motor horsepower requirements.

Modine employs a non-condensing recuperative heat-exchanger design to reclaim additional flue-gas heat prior to expelling the gases from the building. This is accomplished by collecting the flue gases and passing them twice through the secondary heat exchanger tubes.

Separated Combustion High Efficiency

Performance Data

Propeller

	Model Number					
	PSH 130	PSH 150	PSH 170	PSH 225	PSH 280	PSH 340
Btu/Hr Input	130,000	150,000	170,000	225,000	280,000	340,000
Btu/Hr Output	106,600	123,000	139,400	184,500	229,600	275,400
Vent Dia. (In.)	4	4	4	4	6	6
CFM @ 70°F	2540	2900	2900	4275	4400	5300
Air Temp. Rise (°F)	39	39	45	40	48	48
Maximum Mounting Height (Ft) ①	12	16	16	20	20	20
Heat Throw (Ft) ①	50	50	50	65	65	65
Motor HP	1/6	1/6	1/6	1/3	1/2	1/2

① At 65°F ambient temperature and unit fired at full-rated input. Mounting height is measured from floor to bottom of unit.

Blower

	Model Number					
	BSH 130	BSH 150	BSH 170	BSH 225	BSH 280	BSH 340
Btu/Hr Input	130,000	150,000	170,000	225,000	280,000	340,000
Btu/Hr Output	106,600	123,000	139,400	184,500	229,600	275,400
Vent Dia. (In.)	4	4	4	4	6	6
Motor HP (Std 115V/60Hz/1Ph)	1/4	1/2	1/2	3/4	1	1
Air Flow CFM Range	1161-1795	1340-2071	1591-2347	1985-3068	2501-3865	3000-4636
Air Temp. Rise Range (°F)	55-85	55-85	55-85	55-85	55-85	55-85

Note: Maximum mounting heights and heat throws for the BSH models without ductwork or nozzles, and at a CFM yielding a 55° temperature rise, are the same as those listed for equivalent size PSH units.

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

Request Catalog 6-190 For Complete Technical Information and Specifications.