

Beacon Morris

THE BRUTII



MODEL "BRT"

GAS-FIRED UNIT HEATER

**INDUSTRIAL, COMMERCIAL
AND RESIDENTIAL
GARAGE CERTIFIED**

ETL LISTED

**DIRECT
SPARK IGNITION**

RELIABLE BURNER IGNITION

**TWO
STAGE GAS**

AVAILABLE ON SIZES 60-120

**TUBULAR
HEAT EXCHANGER**

ALUMINIZED STEEL

Stainless Steel Option Available

**SINGLE
ORIFICE BURNER**

ONE BURNER TO SERVICE
ONE BURNER TO CONVERT
321 STAINLESS STEEL BURNER BOX

DUAL VENTING

STANDARD UNIT CAN BE FIELD
CONVERTED TO SEPARATED
COMBUSTION WITH OPTIONAL
COMBUSTION AIR INLET

**GAS CONVERSION
KIT INCLUDED**

STANDARD WITH EVERY UNIT

PERFORMANCE AND DIMENSIONAL DATA

UNIT CAPACITY (MBH)	30	45	60	75	90	105	120
PERFORMANCE DATA†							
Input - BTU/Hr	30,000	45,000	60,000	75,000	90,000	105,000	120,000
(kW)	(8.8)	(13.2)	(17.6)	(22.0)	(26.4)	(30.8)	(35.2)
Output - BTU/Hr	24,900	37,350	49,800	61,500	73,800	86,100	98,400
(kW)	(7.2)	(10.9)	(14.5)	(18.0)	(21.6)	(25.2)	(28.8)
Thermal Efficiency - %	83	83	83	82	82	82	82
Free Air Delivery - CFM	370	550	740	920	1,100	1,300	1,475
(cu. m/s)	(.175)	(.260)	(.349)	(.434)	(.519)	(.614)	(.696)
Air Temperature Rise - °F	60	60	60	60	60	60	60
(°C)	(15)	(15)	(15)	(15)	(15)	(15)	(15)
Full Load Amps at 120V	3.2	3.2	4.1	4.1	6.4	6.4	6.4
Minimum Circuit Ampacity at 120V	3.7	3.7	4.8	4.8	7.5	7.5	7.5
MOTOR DATA:							
Motor HP	1/20	1/20	1/12	1/12	1/10	1/10	1/10
Motor (kW)	(0.04)	(0.04)	(0.06)	(0.06)	(0.075)	(0.075)	(0.075)
Motor Type ODP††	SP	SP	SP	SP	SP	SP	SP
RPM	1650	1650	1050	1050	1050	1050	1050
Motor Amps @ 115V	1.9	1.9	2.6	2.6	4.2	4.2	4.2
DIMENSIONAL DATA - Inches (mm)							
"A" Jacket Height	12-3/8 (314)	12-3/8 (314)	15-7/8 (403)	15-7/8 (403)	22-5/8 (574)	22-5/8 (574)	22-5/8 (574)
"B" Overall Height	13-1/4 (337)	13-1/4 (337)	16-13/16 (427)	16-13/16 (427)	23-9/16 (598)	23-9/16 (598)	23-9/16 (598)
"C" Overall Depth	25-7/8 (632)	25-7/8 (632)	26-3/16 (665)	26-3/16 (665)	26-3/8 (670)	26-3/8 (670)	26-3/8 (670)
"D1" Center Line Height of Flue*	8-1/2 (216)	8-1/2 (216)	10-3/8 (263)	10-3/8 (263)	13-5/8 (346)	13-5/8 (346)	13-5/8 (346)
"D2" Center Line Height of Air Intake	8-1/2 (216)	8-1/2 (216)	8 (203)	8 (203)	8-5/8 (219)	8-5/8 (219)	8-5/8 (219)
"E" Fan Diameter	10 (254)	10 (254)	14 (356)	14 (356)	16 (406)	16 (406)	16 (406)
"F" Discharge Opening Height	10-13/16 (275)	10-13/16 (275)	14-7/16 (367)	14-7/16 (367)	21-3/16 (538)	21-3/16 (538)	21-3/16 (538)
"G" Vent Connection Diameter	4 (102)	4 (102)	4 (102)	4 (102)	4 (102)	4 (102)	4 (102)
"H1" Center Line of Flue Connection From Side	7-1/4 (184)	7-1/4 (184)	7-1/4 (184)	7-1/4 (184)	7-3/4 (197)	7-3/4 (197)	7-1/4 (184)
"H2" Center Line of Air Intake From Side	2-3/4 (70)	2-3/4 (70)	2-3/4 (70)	2-3/4 (70)	3-1/2 (89)	3-1/2 (89)	3-1/2 (89)
VENT SIZE REQUIREMENTS - STANDARD COMBUSTION							
Category III Horizontal - Inches (mm)	4 (102)	4 (102)	4 (102)	4 (102)	4 (102)	4 (102)	4 (102)
Category I & III Vertical - Inches (mm)	4 (102)	4 (102)	4 (102)	4 (102)	4 (102)	4 (102)	4 (102)
VENT SIZE REQUIREMENTS - SEPARATED COMBUSTION							
Exhaust Diameter - Inches (mm)	4 (102)	4 (102)	4 (102)	4 (102)	5 (127)	5 (127)	5 (127)
Intake Air Diameter - Inches (mm)	4 (102)	4 (102)	4 (102)	4 (102)	5 (127)	5 (127)	5 (127)
Unit Weight - Lbs	60	65	80	85	95	105	110
(kgs)	(27)	(29)	(36)	(39)	(43)	(48)	(50)
Shipping Weight - Lbs	70	75	90	95	110	115	120
(kgs)	(32)	(34)	(41)	(43)	(50)	(52)	(54)

*For all installations, the flue collar is included with the unit and should be field installed per the instructions included with the unit.

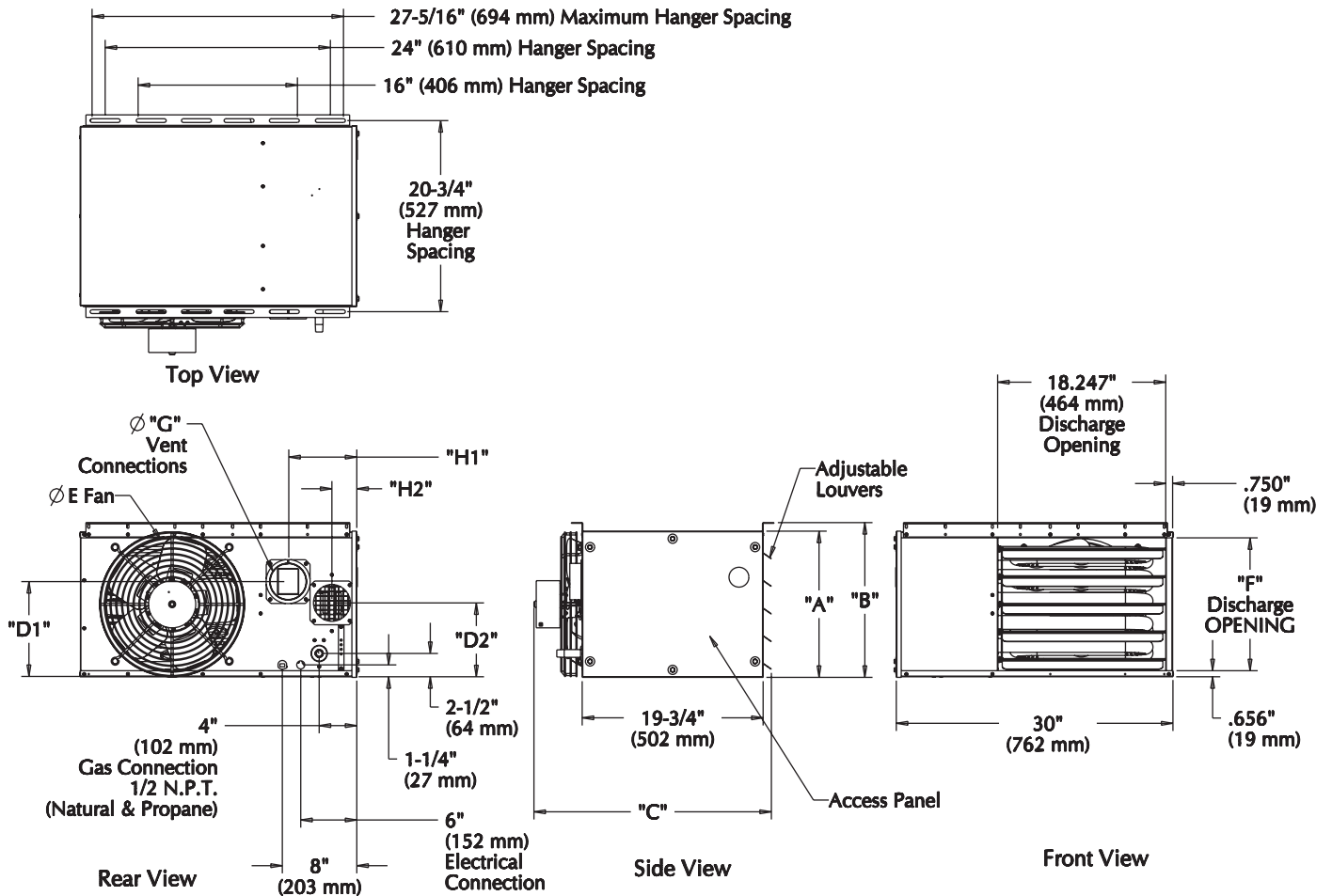
† Ratings shown are for unit installations at elevations between 0 and 2,000 feet (0 to 610m). For unit installations in USA above 2,000 feet (610m), the unit input must be field derated 4% for each 1,000 feet (305m) above sea level; refer to local codes, or in absence of local codes, refer to the latest edition of the National Fuel Gas Code, ANSI Standard Z223.1 (NFPA No. 54).

For installations in Canada, any reference to deration at altitudes in excess of 2,000 feet (610m) are to be ignored. At altitudes of 2,000 feet to 4,500 feet (610 to 1372m), the unit must be field derated and be so marked in accordance with the ETL certification. See unit installation, operation and maintenance manual for deration information.

†† LEGEND: ODP = OPEN DRIP PROOF SP = SHADED POLE



DIMENSIONAL DATA



D8597

DIMENSIONS - XXX STANDARD UNITS
DIMENSIONS IN PARENTHESIS (XXX) MILLIMETERS

PRODUCT FEATURES



STANDARD FEATURES

- ▶ Up to 83% Thermal Efficiency
- ▶ Redundant Single Stage Gas Valve
- ▶ Residential Certification
- ▶ 20GA Aluminized Heat Exchanger
- ▶ 120/24V Control Transformer
- ▶ 115/1/60 Fan Motor with Internal Overload Protection
- ▶ Power Vented
- ▶ Direct Spark Ignition
- ▶ 20GA Baked Enamel Cabinet
- ▶ 10 Year Heat Exchanger Warranty
- ▶ OSHA Fan Guard
- ▶ Right Hand Control Access
 - Field Convertible to Left Hand
- ▶ High Limit Switch
- ▶ Air Pressure Switch
- ▶ Natural or Propane Gas
- ▶ Gas Conversion Kit Included
- ▶ Field Convertible to Separated Combustion
- ▶ Easy Access Control Panel
- ▶ 321 Stainless Steel Burner Box

OPTIONAL EQUIPMENT

- ▶ 409 Stainless Steel Heat Exchanger
- ▶ Two Stage Gas Control (Sizes 60-120 Only)
- ▶ Supply Voltage (Field Mounted Transformers):
 - 208/1/60
 - 230/1/60
 - 208/3/60
 - 230/3/60
 - 460/3/60
 - 575/3/60
- ▶ Totally Enclosed Motors (Sizes 60-120 Only)
- ▶ 409 Stainless Steel Flue Collector
- ▶ Pressure Regulator (1/2 – 2 psi)
- ▶ Single & Two Stage Mercury Free Thermostats
- ▶ Line Volt Thermostat
- ▶ Locking Thermostat Cover
- ▶ 24V SPST Relay
- ▶ Vent Caps
- ▶ Concentric Vent Kits
(For All Separated Combustion Installations)



Model BRT045



Model BRT045



Model BRT120



Model BRT120



260 North Elm Street • Westfield, MA 01085
Tel: (413) 562-5423 Fax: (413) 572-3764
www.beacon-morris.com