

# **Residential Atmospheric Vent Energy Saver Gas Water Heater**



Photo is of M-I-5036FBN

FEATURING:



### Menteve Viteriae ALDA



### The Atmospheric Vent FVIR Defender Safety System<sup>®</sup> Models Feature:

- Bradford White ICON System<sup>™</sup>—Intelligent gas control with proven millivolt powered technology and built-in piezo igniter. A standard, off the shelf thermopile converts heat energy from the pilot flame into electrical energy to operate the gas valve and microprocessor. No need for external electricity.
  - Enhanced Performance—Proprietary algorithms provide enhanced First Hour Delivery ratings and tighter temperature differentials.
  - Advanced Temperature Control System—Microprocessor constantly monitors and controls burner operation to maintain consistent and accurate water temperature levels.
  - Intelligent Diagnostics—An exclusive green LED light prompts the installer during start-up and provides ten different diagnostic codes to assist in troubleshooting.
  - Pilot On Indication—Flashing green LED provides positive indication that pilot is on.
  - Separate Immersed Thermowell—High strength advanced polymer composite thermowell provides isolation between electric temperature sensor and surrounding water. No need to drain the tank when removing gas valve.
- Advanced ScreenLok<sup>®</sup> Technology Flame Arrestor Design—Flame arrestor is designed to prevent ignition of flammable vapor outside of the water heater.
- Resettable Thermal Switch—Proven and reliable bimetallic switch prevents burner and pilot operation in case of ongoing flammable vapor burn inside of the combustion chamber or restricted air flow.
- Maintenance Free—No regular cleaning of air inlet openings or flame arrestor is required under normal conditions.
- Sight Window—Offers a view into the combustion chamber to observe the operation of the pilot and burner.
- Factory Installed Hydrojet<sup>®</sup> Total Performance System—Cold water inlet sediment reducing device helps prevent sediment build up in tank. Increases first hour delivery of hot water while minimizing temperature build up in tank.
- Vitraglas<sup>®</sup> Lining—Bradford White tanks are lined with a exclusively engineered enamel formula that provides superior protection from the highly corrosive effects of hot water. This formula (Vitraglas<sup>®</sup>) is fused to the steel surface by firing at a temperature of over 1600°F.
- 1" Non-CFC Foam Insulation—Covers the sides and top of tank, reducing the amount of heat loss. This results in less energy consumption, improved operation efficiencies and jacket rigidity.
- Pedestal Base.
- Water Connections—3/4" NPT factory installed true dielectric fittings.
- Factory Installed Heat Traps.
- Protective Magnesium Anode Rod.
- 3x4 "Snap Lock" Draft Diverter—Allows either 3" or 4" vent connections with inputs of 40,000 BTU/Hr or less. Over 40,000 BTU/Hr. has the 4" "Snap Lock" Draft Diverter.
- T&P Relief Valve—Included.
- Low Restriction Brass Drain Valve—Durable tamper proof design.

6 or 10-Year Limited Tank Warranties / 6 or 10-Year Limited Warranty on Component Parts.

For more information on warranty, please visit www.bradfordwhite.com For products installed in USA, Canada and Puerto Rico. Some states do not allow limitations on warranties. See complete copy of the warranty included with the heater.

MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING U.S. PATENTS: 5,954,492; 5,761,379; 5,943,984; 5,081,696; 5,988,117; 6,142,216; 5,199,385; 5,574,822; 5,372,185; 5,485,879; 5,277,171; (B1)5,341,770; 5,660,165; 5,596,952; 5,682,666; 4,904,428; 5,023,031; 5,000,883; 4,669,448; 4,829,983; 4,808,356; 5,115,767; 5,092,519; 5,052,346; 4,416,222; 4,628,184; 4,861,968; 4,672,919; Re. 34,534; 7,270,087 B2. OTHER U.S. AND FOREIGN PATENT APPLICATIONS PENDING. CURRENT CANADIAN PATENTS: 1,272,914; 1,280,043; 1,289,832; 2,045,862; 2,112,515; 2,108,186; 2,107,012; 2,092,105; 2,409,271. Defender Safety System<sup>3</sup>, ScreenLok<sup>a</sup>, Vitraglas<sup>a</sup> and Hydrojet<sup>a</sup> are registered trademarks of Bradford White<sup>a</sup> Corporation.

## Residential Atmospheric Vent Gas Water Heater

# Energy Saver Models NATURAL GAS AND LIQUID PROPANE GAS

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed 79% Recovery Efficiency

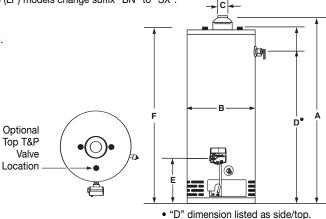
Capacity				Recovery 90°F Rise*				A Floor to Flue	B Jacket Dia.	C Vent Size	D Floor to T&P	E Floor to Gas	F Floor to Water	Approx. Shipping Weight
U.S.	Imp.	Nat. BTU/Hr.	LP BTU/Hr.	Nat. U.S.	Nat. Imp.	LP U.S.	LP Imp.	Conn.			Conn.	Conn.	Conn.	, , , , , , , , , , , , , , , , , , ,
Gal.	Gal.	Input	Input	GPH	GPH	GPH	GPH	in.	in.	in.	in.	in.	in.	lbs.
30	25	32,000	31,000	33	28	32	27	59%	16	3x4	49¾ /56¾	13	57½	104
30	25	30,000	26,000	31	26	27	23	48%	18	3x4	38¾	13	46¾	100
29	24	40,000	35,000	42	34	37	31	58	16	3x4	49¾ /55¼	13	56½	109
40	33	40,000	36,000	42	34	38	32	59%	18	3x4	50/56%	13	57¾	120
40	33	40,000	38,000	42	34	40	33	50	20	3x4	41/47¼	13	48½	128
40	33	50,000	48,000	53	44	50	42	60¾	18	4	51½/58	13	58½	127
50	42	40,000	36,000	42	34	38	32	59%	20	3x4	50/57	13	58	145
48	40	40,000	38,000	42	34	40	33	49¾	22	3x4	40½	13	48¼	153
							40	E01/	20	4	50/55¾	13	57	150
50	42	50,000	48,000	53	44	50	42	58½	20	4	50/55/4	10	57	100
	42 50	50,000 40,000	48,000 38,000	53 42	44 34	50 40	42 33	58½ 60¾	20	4 3x4	50%	13	58¼	166
50	50	40,000	38,000		34 Rec 50°C	40 overy Rise*		60¾ A Floor to Flue			50½ D Floor to T&P	13 E Floor to Gas	58¼ F Floor to Water	
50 60	50 acity	,	.,	42	34 Rec	40 overy	33	60¾ A Floor to	22 B Jacket	3x4 C Vent	50½ D Floor to	13 E Floor to	58¼ F Floor to	166 Approx. Shipping
50 60 <b>Cap</b>	50 acity ers	40,000 Nat. kW	38,000	42	34 Rec 50°C Nat. Liters/	40 overy Rise*	33	60¾ A Floor to Flue Conn.	B Jacket Dia.	3x4 C Vent Size	50½ D Floor to T&P Conn.	13 E Floor to Gas Conn.	58½ Floor to Water Conn.	166 Approx. Shipping Weight
50 60 Cap: Lit	50 acity ers 4 4	40,000 Nat. kW Input 9.4 8.8	238,000 LP kW Input 9.1 7.7	42	34 Rec 50°C Nat. Liters/ Hour 125 117	40 overy Rise* LP Liters Hour 121 102	33	60% A Floor to Flue Conn. mm. 1502 1229	22 B Jacket Dia. mm. 406 457	3x4 C Vent Size mm. 76x102 76x102	50½ D Floor to T&P Conn. mm. 1264/1432 9841	13 E Floor to Gas Conn. mm. 330 330	58½ F Floor to Water Conn. mm. 1461 1187	166 Approx. Shipping Weight kg. 47 45
50 60 Cap: Lit	50 acity ers 4 4	40,000 Nat. kW Input 9.4	38,000 LP kW Input 9.1	42	34 Rec 50°C Nat. Liters/ Hour 125	40 overy Rise* LP Liters Hour 121	33	60¾ A Floor to Flue Conn. mm. 1502	22 B Jacket Dia. mm. 406	3x4 C Vent Size mm. 76x102	50½ D Floor to T&P Conn. mm. 1264/1432	13 E Floor to Gas Conn. mm. 330	58¼ F Floor to Water Conn. mm. 1461	166 Approx. Shipping Weight kg. 47
50 60 Capa Lit 11 11 11	50 acity ers 4 4 0 51	40,000 Nat. kW Input 9.4 8.8 11.7 11.7	38,000 LP kW Input 9.1 7.7 10.3 10.6	42	34 <b>Rec</b> <b>50°C</b> Nat. Liters/ Hour 125 117 159 155	40 overy Rise* LP Liters Hour 121 102 140 140	33	60% <b>A</b> <b>Floor to</b> <b>Flue</b> <b>Conn.</b> <b>mm.</b> 1502 1229 1473 1508	22 B Jacket Dia. mm. 406 457 406 457	3x4 C Vent Size mm. 76x102 76x102	50½ D Floor to T&P Conn. mm. 1264/1432 9841 1264/1403 1270/1438	13 <b>F</b> loor to <b>Gas</b> <b>Conn.</b> <b>mm.</b> 330 330 330 330	58% F Floor to Water Conn. mm. 1461 1187 1435 1467	166Approx. Shipping Weightkg.47454954
50 60 Capa Lit 11 11	50 acity ers 4 4 0 51	40,000 Nat. kW Input 9.4 8.8 11.7	38,000 LP kW Input 9.1 7.7 10.3	42	34 <b>Rec</b> 50°C Nat. Liters/ Hour 125 117 159	40 <b>overy</b> <b>Rise*</b> LP Liters Hour 121 102 140 140 148	33	60% <b>A</b> Floor to Flue Conn. mm. 1502 1229 1473	22 <b>B</b> Jacket Dia. mm. 406 457 406 457 508	3x4 C Vent Size mm. 76x102 76x102 76x102	50½ D Floor to T&P Conn. mm. 1264/1432 9841 1264/1403	13 <b>F</b> loor to <b>Gas</b> <b>Conn.</b> <b>mm.</b> 330 330 330 330 330 330	58½ Floor to Water Conn. mm. 1461 1187 1435 1467 1232	166 Approx. Shipping Weight 47 45 49 54 58
50 60 Capa Lit 11 11 11 11 15 15 15	50 acity ers 4 4 0 51 51 51	40,000 Nat. kW Input 9.4 8.8 11.7 11.7 11.7 11.7 14.7	38,000 <b>LP</b> <b>kW</b> <b>input</b> 9.1 7.7 10.3 10.6 11.1 14.1	42	34 <b>Rec</b> <b>50°C</b> Nat. Liters/ Hour 125 117 159 155 201	40 every Rise* LP Liters Hour 121 102 140 140 148 189	33	60% A Floor to Flue Conn. mm. 1502 1229 1473 1508 1270 1543	22 <b>B</b> Jacket Dia. <b>mm.</b> 406 457 406 457 508 457	3x4 C Vent Size mm. 76x102 76x102 76x102 76x102 76x102 76x102 102	50½ D Floor to T&P Conn. mm. 1264/1432 9841 1264/1403 1270/1438 1041/1200 1308/1473	13 <b>F</b> loor to <b>Gas</b> <b>Conn.</b> <b>mm.</b> 330 330 330 330 330 330 330	58¼ Floor to Water Conn. mm. 1461 1187 1435 1467 1232 1486	166 Approx. Shipping Weight 47 45 49 54 58 58
50 60 Capa Lit 11 11 11 15 15	50 acity ers 4 4 0 51 51 51	40,000 Nat. kW Input 9.4 8.8 11.7 11.7 11.7	38,000 LP kW Input 9.1 7.7 10.3 10.6 11.1	42	34 <b>Rec</b> <b>50°C</b> Nat. Liters/ Hour 125 117 159 155 155	40 <b>overy</b> <b>Rise*</b> LP Liters Hour 121 102 140 140 148	33	60% A Floor to Flue Conn. mm. 1502 1229 1473 1508 1270	22 <b>B</b> Jacket Dia. mm. 406 457 406 457 508	3x4 C Vent Size mm. 76x102 76x102 76x102 76x102 76x102 76x102	50½ D Floor to T&P Conn. mm. 1264/1432 9841 1264/1403 1270/1438 1041/1200	13 <b>F</b> loor to <b>Gas</b> <b>Conn.</b> <b>mm.</b> 330 330 330 330 330 330	58½ Floor to Water Conn. mm. 1461 1187 1435 1467 1232	166 Approx. Shipping Weight 47 45 49 54 58
50 60 Capa Lit 11 11 11 11 15 15 15	50 acity ers 4 4 0 51 51 51 51 51 53	40,000 Nat. kW Input 9.4 8.8 11.7 11.7 11.7 14.7 11.7 11.7	38,000 <b>LP</b> <b>kW</b> <b>input</b> 9.1 7.7 10.3 10.6 11.1 14.1	42	34 <b>Rec</b> <b>50°C</b> Nat. Liters/ Hour 125 117 159 155 201	40 every Rise* LP Liters Hour 121 102 140 140 148 189	33	60% A Floor to Flue Conn. mm. 1502 1229 1473 1508 1270 1543	22 <b>B</b> Jacket Dia. <b>mm.</b> 406 457 406 457 508 457	3x4 C Vent Size mm. 76x102 76x102 76x102 76x102 76x102 76x102 102 76x102 76x102 76x102	50½ D Floor to T&P Conn. mm. 1264/1432 9841 1264/1403 1270/1438 1041/1200 1308/1473	13 <b>F</b> loor to <b>Gas</b> <b>Conn.</b> <b>mm.</b> 330 330 330 330 330 330 330	58½ Floor to Water Conn. mm. 1461 1187 1435 1467 1232 1486	166 Approx. Shipping Weight 47 45 49 54 58 58 58 66 69
50 60 Cap: Lit 11 11 11 15 15 15 15	50 acity ers 4 4 0 51 51 51 53 52 59	40,000 Nat. kW Input 9.4 8.8 11.7 11.7 11.7 14.7 11.7	38,000 <b>LP</b> <b>kW</b> <b>Input</b> 9.1 7.7 10.3 10.6 11.1 14.1 10.6	42	34 Rec 50°C Nat. Liters/ Hour 125 117 159 155 201 159	40 overy Rise* LP Liters Hour 121 102 140 140 148 189 144	33	60% A Floor to Flue Conn. mm. 1502 1229 1473 1508 1270 1543 1514	22 <b>B</b> Jacket Dia. <b>mm.</b> 406 457 406 457 508 457 508	3x4 C Vent Size mm. 76x102 76x102 76x102 76x102 76x102 102 76x102	50½ D Floor to T&P Conn. mm. 1264/1432 9841 1264/1403 1270/1438 1041/1200 1308/1473 1270/1445	13 <b>F</b> loor to <b>Gas</b> <b>Conn.</b> <b>mm.</b> 330 330 330 330 330 330 330 33	58¼ Floor to Water Conn. mm. 1461 1187 1435 1467 1232 1486 1473	166 Approx. Shipping Weight 47 45 49 54 58 58 58 66
	U.S. Gal. 30 30 29 40 40 40 50	U.S. Imp.   Gal. Gal.   30 25   30 25   29 24   40 33   40 33   50 42	Nat.   U.S. Imp. Nat.   Gal. Gal.   30 25   30 40,000   40 33   50,000   50 42	Nat. BTU/Hr. Gal. Nat. BTU/Hr. BTU/HTU/Hr. BTU/HTU/HTU/HTU/HTU/HTU/HTU/HTU/HTU/HTU/H	Nat. Gal. Nat. BTU/Hr. BTU/HT. BTU/Hr. BTU/HT.	Nat. LP BTU/Hr. Nat. LP BTU/Hr. Nat. <td>Nat. LP Nat. Nat. LP Nat. Nat. LP Nat. Nat. Nat.<td>Nat. Gal. Nat. Gal. LP Imp. Gal. Nat. Gal. LP Imp. Gal. Nat. Imput Nat. Imput Nat. Imp. GPH LP GPH Nat. U.S. LP Imp. GPH LP GPH LP GPH<td>Value LP BTU/Hr. Input Nat. Input LP U.S. GPH Nat. Imp. GPH LP GPH Structure Structure</td><td>Lapichty Nat. Input LP BTU/Hr. Input Nat. Input Nat. U.S. BPH LP Input LP GPH LP</td><td>Value LP BTU/Hr. Gal. Nat. Input LP BTU/Hr. Input Nat. Input LP BTU/Hr. SPH LP Imp. GPH LP GPH LP GPH LP GPH LP Imp. GPH LP Imp. Imp. GPH LP Imp. Imp. Imp. Imp. Imp. Imp. Imp. Imp.</td><td>Verture Nat. BTU/Hr. Gal. Gal. LP BTU/Hr. Input Nat. Nat. BTU/Hr. Input P BTU/Hr. BTU/Hr. Input Nat. Input LP GPH LP GPH</td><td>Capacity Nat. Input LP U.S. Imp. Con Nat. Input LP U.S. CPH LP GPH LP GPH</td><td>Capacity Nat. BTU/Hr. Gal. Gal. LP BTU/Hr. Input LP BTU/Hr. BTU/Hr. Input LP BTU/Hr. BPH LP BPH L</td></td></td>	Nat. LP Nat. Nat. Nat. LP Nat. Nat. Nat. <td>Nat. Gal. Nat. Gal. LP Imp. Gal. Nat. Gal. LP Imp. Gal. Nat. Imput Nat. Imput Nat. Imp. GPH LP GPH Nat. U.S. LP Imp. GPH LP GPH LP GPH<td>Value LP BTU/Hr. Input Nat. Input LP U.S. GPH Nat. Imp. GPH LP GPH Structure Structure</td><td>Lapichty Nat. Input LP BTU/Hr. Input Nat. Input Nat. U.S. BPH LP Input LP GPH LP</td><td>Value LP BTU/Hr. Gal. Nat. Input LP BTU/Hr. Input Nat. Input LP BTU/Hr. SPH LP Imp. GPH LP GPH LP GPH LP GPH LP Imp. GPH LP Imp. Imp. GPH LP Imp. Imp. Imp. Imp. Imp. Imp. Imp. Imp.</td><td>Verture Nat. BTU/Hr. Gal. Gal. LP BTU/Hr. Input Nat. Nat. BTU/Hr. Input P BTU/Hr. BTU/Hr. Input Nat. Input LP GPH LP GPH</td><td>Capacity Nat. Input LP U.S. Imp. Con Nat. Input LP U.S. CPH LP GPH LP GPH</td><td>Capacity Nat. BTU/Hr. Gal. Gal. LP BTU/Hr. Input LP BTU/Hr. BTU/Hr. Input LP BTU/Hr. BPH LP BPH L</td></td>	Nat. Gal. Nat. Gal. LP Imp. Gal. Nat. Gal. LP Imp. Gal. Nat. Imput Nat. Imput Nat. Imp. GPH LP GPH Nat. U.S. LP Imp. GPH LP GPH <td>Value LP BTU/Hr. Input Nat. Input LP U.S. GPH Nat. Imp. GPH LP GPH Structure Structure</td> <td>Lapichty Nat. Input LP BTU/Hr. Input Nat. Input Nat. U.S. BPH LP Input LP GPH LP</td> <td>Value LP BTU/Hr. Gal. Nat. Input LP BTU/Hr. Input Nat. Input LP BTU/Hr. SPH LP Imp. GPH LP GPH LP GPH LP GPH LP Imp. GPH LP Imp. Imp. GPH LP Imp. Imp. Imp. Imp. Imp. Imp. Imp. Imp.</td> <td>Verture Nat. BTU/Hr. Gal. Gal. LP BTU/Hr. Input Nat. Nat. BTU/Hr. Input P BTU/Hr. BTU/Hr. Input Nat. Input LP GPH LP GPH</td> <td>Capacity Nat. Input LP U.S. Imp. Con Nat. Input LP U.S. CPH LP GPH LP GPH</td> <td>Capacity Nat. BTU/Hr. Gal. Gal. LP BTU/Hr. Input LP BTU/Hr. BTU/Hr. Input LP BTU/Hr. BPH LP BPH L</td>	Value LP BTU/Hr. Input Nat. Input LP U.S. GPH Nat. Imp. GPH LP GPH Structure	Lapichty Nat. Input LP BTU/Hr. Input Nat. Input Nat. U.S. BPH LP Input LP GPH LP	Value LP BTU/Hr. Gal. Nat. Input LP BTU/Hr. Input Nat. Input LP BTU/Hr. SPH LP Imp. GPH LP GPH LP GPH LP GPH LP Imp. GPH LP Imp. Imp. GPH LP Imp. Imp. Imp. Imp. Imp. Imp. Imp. Imp.	Verture Nat. BTU/Hr. Gal. Gal. LP BTU/Hr. Input Nat. Nat. BTU/Hr. Input P BTU/Hr. BTU/Hr. Input Nat. Input LP GPH	Capacity Nat. Input LP U.S. Imp. Con Nat. Input LP U.S. CPH LP GPH	Capacity Nat. BTU/Hr. Gal. Gal. LP BTU/Hr. Input LP BTU/Hr. BTU/Hr. Input LP BTU/Hr. BPH LP BPH L

Propane models feature a Titanium Stainless Steel propane burner. For Propane (LP) models change suffix "BN" to "SX". For 10 year models, change suffix from "6" to "10".

\*Based on manufacturers rated recovery efficiency.

•Models feature optional top T&P location and must be specified when ordering.

Note: M-I-30S, M-I-50L and M-I-60T do not have top T&P option.



### **Meets NAECA Requirements**

#### General

All gas water heaters are certified at 300 PSI test pressure (2068 kPa) and 150 PSI working pressure (1034 kPa). All water connections are <sup>3</sup>/<sub>4</sub>" NPT (19mm) on 8" (203mm) centers. All gas connections are <sup>3</sup>/<sub>4</sub>" (13mm).

All models design certified by CSA International (formerly AGA/CGA), ANSI standard Z-21.10.1 and peak performance rated.

Dimensions and specifications subject to change without notice in accordance with our policy of continuous product improvement. Suitable for Water (Potable) Heating and Space Heating.

Toxic chemicals, such as those used for boiler treatment, shall NEVER be introduced into this system. This unit may NEVER be connected to any existing heating system or component(s) previously used with a non-potable water heating appliance.



Ambler, PA

For U.S. and Canada field service, contact your professional installer or local Bradford White sales representative. Sales 800-523-2931 • Fax 215-641-1670 / Technical Support 800-334-3393 • Fax 269-795-1089 • Warranty 800-531-2111 • Fax 269-795-1089

International: Telephone 215-641-9400 • Telefax 215-641-9750 / www.bradfordwhite.com

BRADFORD WHITE-CANADA\* INC. Sales / Technical Support 866-690-0961 / 905-238-0100 • Fax 905-238-0105 / www.bradfordwhite.com

## Built to be the Best<sup>™</sup>

©2011, Bradford White Corporation. All rights reserved.