

Job: _____

Engineer: _____

Contractor: _____

Preparer: _____ Date: _____

Model: _____ Indoor/Outdoor: _____

Hi Delta® FlexGas® - Type H

Dual-Fuel Hot Water Boilers
Models 302BD-902BD

MBTUH Input: _____

Fast, Economical Natural-to-Propane Gas Switchover

100% Factory Fire Tested

84% Efficiency

Maximum Outlet Temperature: 230°F

Minimum Non-Condensing Inlet Temperature: 105°F

Thermal Shock Proof Heat Exchanger

Limited Twenty-Year Thermal Shock Warranty

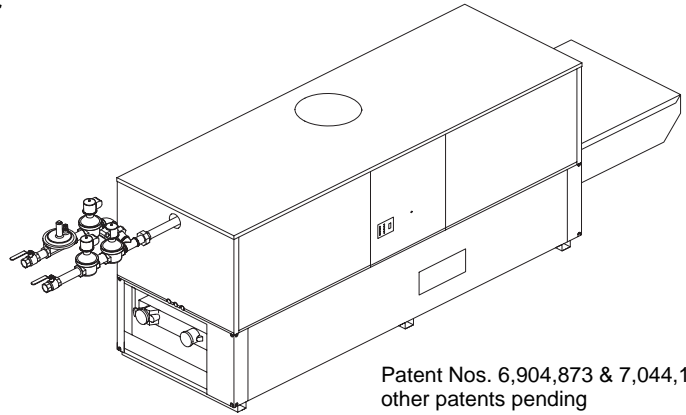
Diagnostic Center with Fault History

PolyTuf Powder Coated Cabinet

No Combustible Floor Shield Required

Fan-Assisted Low NOx Burners

Patented Burner Security Blanket



Patent Nos. 6,904,873 & 7,044,124;
other patents pending

Heat Exchanger

- H Stamp
- Headers
 - Glass-Lined Cast Iron – Standard
 - Bronze – Option A-1
- ASME Inspected and Stamped
160 PSIG Working Pressure
- National Board Approved
- Fin Tubing
 - Copper – Standard
 - Cupro Nickel – Option A-3
- ASME Steel Tube Sheet
- Silicone High Temp. O-Rings
- ASME Pressure Relief Valve
 - 45 PSIG – Standard on Models 302BD and 402BD
 - 60 PSIG – Standard on Models 502BD-902BD
 - _____ PSIG – Optional
- Temperature and Pressure Gauge
- Water Connections
 - Left – Standard
 - Right – Option A-6

Controls

- 120V, 60Hz, 1∅ Power Supply
- 120/24V 60Hz Transformer
- 100% Shut-Off/Lockout
- Hot Surface Ignition
- Remote Flame Sensor
- High Limit Control, Manual Reset
- On/Off Power Switch
- Manual Shut-Off, Front-Mounted
- Flow Switch
- Blocked Vent Pressure Switch
- Combustion Air Proving Switch
- Economaster Pump Time Delay
- Enable/Disable

Gas Train

- Manual Gas Shut-Off Valve(s)
- Gas Pressure Regulator
- Safety Shut-Off Valve
- Firing Control Valve
- Firing Mode
 - On/Off (H8): Models 302BD, 402BD
 - 2-Stage (H9): Models 302BD-902BD
- Natural/Propane Gas
- Design Certified ANSI Z21.13/
CSA 4.9
- Gas Connection
 - Left – Standard
 - Right – Option Z-1
- Construction
- Indoor/Outdoor Construction
- Enclosed Front Controls

Venting

- Vent Location
 - Top – Standard
 - Rear – Option D-14
- Vent Termination Cap
 - Outdoor D-11
 - Indoor, Horizontal D-15
 - Indoor, Vertical (by others)
- Combustion Air
 - In-Line Filter Kit (TruSeal only) D-17
 - Air Intake Elbow D-16
- Extractor – Optional
 - By others
 - Not required

Burner

- Ultra-Low NOx: Less than 30 PPM

Temperature Controls

- B-2 Tankstat, Single-Stage (100-200°F)
- B-3 Tankstat, 2-Stage (100-200°F)
- B-6 Aquastat, 2-Stage (100-200°F)
- B-__ TempTracker Digital Controller, 2-Stage
- B-__ TempTracker Digital Controller, 4-Stage
- Y-241 Electronic Sequencer, 4-Stage
- Y-281 Electronic Sequencer, 8-Stage

Options

- C-6 Ignition Module, Manual Reset
- D-21 TruSeal® Direct Vent
- F-10 Low Water Cut-Off, Remote Probe
- I-1 High Limit Control, Auto Reset
- P-__ Pump: _____ HP, 120V, 1∅, 60Hz
Water Hardness: _____ GPG
 - Cast Iron Bronze
 - Mounted Loose
 - Front Rear
- P-26 Cold Water Start (See 2000.48)
- S-1 Low Gas Pressure Switch, Manual
- S-2 High Gas Pressure Switch, Manual
- X-1 SureRack™ Kit
- X-2 SureRack Add-on

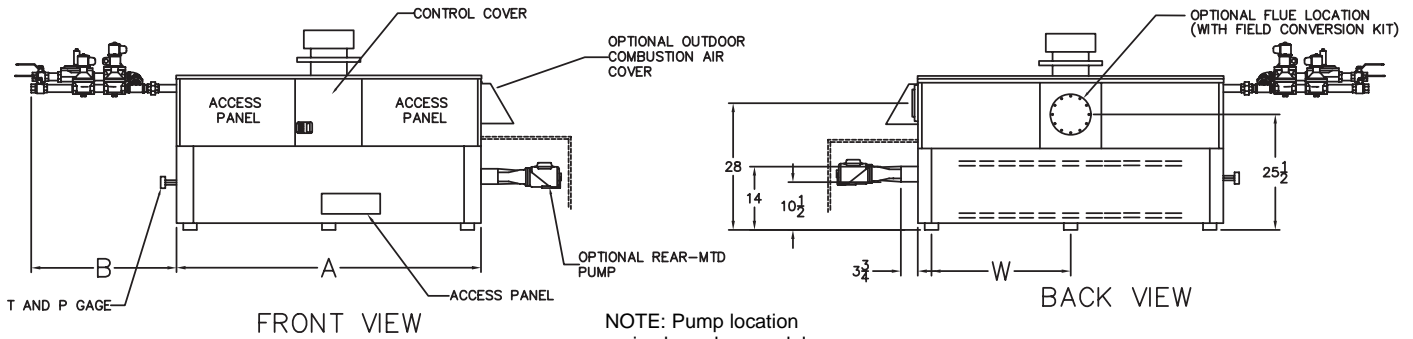
Regulatory Agency Requirements



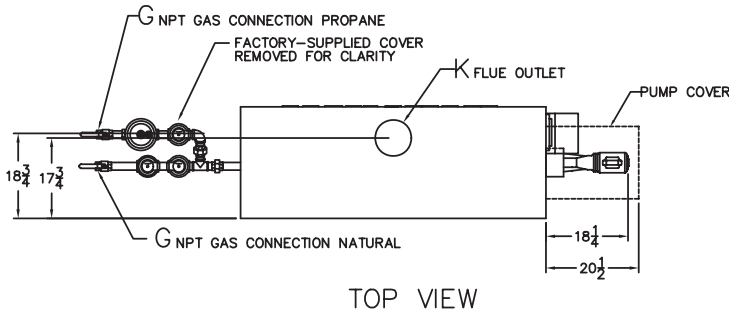
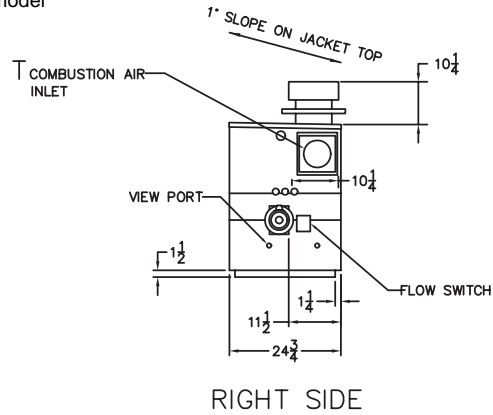
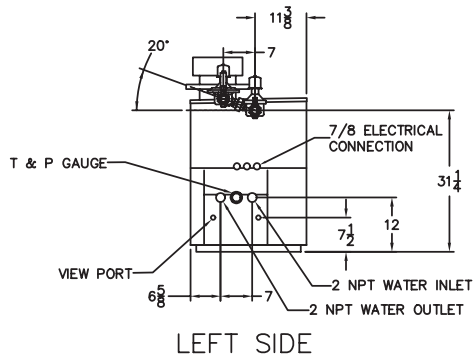
Raypak
A Rheem Company

Hi Delta FlexGas – Type H Models 302BD-902BD

Model _____



NOTE: Pump location varies based on model and application



SPECIFICATIONS

Model	MBTUH		A Width	B	G		H NPT	K	T	W	Amp. Draw*	Approx. Shipping Wt. (Lbs)
	Input	Output			Nat	Pro						
302BD	300	252	36	41	1-1/4	3/4	2	5	6	18	6	405
402BD	399	335	43	41	1-1/4	3/4	2	6	6	18-1/2	6	470
502BD	500	420	50	35-1/2	1-1/4	3/4	2	6	6	22	6	570
652BD	650	546	60-1/2	30-1/2	1-1/4	3/4	2	8	6	27-1/4	6	615
752BD	750	630	67-1/2	27-1/2	1-1/4	1-1/4	2	8	6	30-3/4	6	700
902BD	900	756	78	34-1/2	1-1/4	1-1/4	2	8	6	36	7	765

* Without pump

RATES OF FLOW AND PRESSURE DROPS

Model	10°F ΔT		20°F ΔT		30°F ΔT		Min. Flow			Max. Flow		
	GPM	ΔP (ft)	GPM	ΔP (ft)	GPM	ΔP (ft)	GPM	ΔP (ft)	ΔT	GPM	ΔP (ft)	ΔT
302BD	51	3.2	25	<1.0	N/A	N/A	20	<1	25	90	9.8	6
402BD	68	5.4	34	1.5	22	<1	20	<1	34	90	10.0	7
502BD	85	9.2	42	2.3	28	1.1	21	<1	40	90	10.5	9
652BD	N/A	N/A	55	4.0	36	1.8	28	1.1	40	90	10.7	12
752BD	N/A	N/A	64	5.5	42	2.5	32	1.6	40	90	11.0	14
902BD	N/A	N/A	76	8.5	51	3.8	38	2.2	40	90	11.8	17

Basis is 20 GPM or 40°F ΔT for minimum flow, 90 GPM for maximum flow.

NOTES:

- Dimensions are in inches
- Rates shown are for natural or propane gas, and elevations up to 5,000 feet. For installation above 5,000 feet, please contact manufacturer.
- Required natural gas supply pressure is 7 - 10.5" WC. Required propane gas supply pressure is 11 - 13" WC.

Raypak, Inc. ▪ 2151 Eastman Avenue, Oxnard, CA 93030 ▪ (805) 278-5300 ▪ Fax (800) 872-9725 ▪ www.raypak.com

Free Manuals Download Website

<http://myh66.com>

<http://usermanuals.us>

<http://www.somanuals.com>

<http://www.4manuals.cc>

<http://www.manual-lib.com>

<http://www.404manual.com>

<http://www.luxmanual.com>

<http://aubethermostatmanual.com>

Golf course search by state

<http://golfingnear.com>

Email search by domain

<http://emailbydomain.com>

Auto manuals search

<http://auto.somanuals.com>

TV manuals search

<http://tv.somanuals.com>