Job:				
Engineer:				
Contractor:				
Prepared By:	Date:			
Indoor/Outdoor:				

# Raytherm®- Type WH

Water Heaters Commercial Model 133

#### **EFFICIENT**

 82% thermal efficiency – highest of any atmospheric water heater available today

#### THERMAL SHOCK PROOF

- Twenty-year warranty against thermal shock damage up to 150°F differential
- Maximum operating temperature: 210°F

#### **LIGHTWEIGHT**

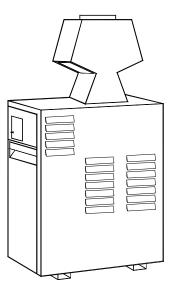
A floor load of 70 lbs./sq. ft. or less

#### **HIGH RECOVERY**

 Cuts fuel costs substantially because the standby and radiation losses associated with tank-type water heaters are eliminated

# LOW WATER OPERATING TEMPERATURE

 Operates with water temperature as low as 105°F without condensing



INDOOR MODEL ILLUSTRATED

#### **Heat Exchanger**

- ASME Inspected and Stamped 160 PSIG
- National Board Approved
- Bronze Headers
- Copper Fin Tubing
- ASME Steel Tube Sheet
- Silicone O-Rings
- 125 PSIG ASME Pressure Relief Valve
- Temperature and Pressure Gauge, Shipped Loose
- Four-pass Heat Exchanger
- Pump Optional
  - ☐ Mounted, 1/8 HP, 120 VAC, 1∅, 60 Hz

#### **Controls**

- 120V, 60Hz, 1 Ph Power Supply
- 120/24V Transformer
- 100% Pilot Shut-off/Lockout
- Electronic, Intermittent Ignition (IID) Pilot
- High Limit Control, Auto Reset 200 °F
- On/Off Switch
- Flue Gas Spillage Switch
- Economaster II Pump Time Delay
- Flame Roll-out Sensor

#### **Gas Control Train**

- Manual Main Gas Shut-off Cock
- Main Gas Pressure Regulator
- Redundant Safety Shut-off Valve
- Control Valve
- Firing Mode
  - On/Off (WH1)
- Fuel
- ☐ Natural Gas
- ☐ Propane Gas
- Design Certified ANSI Z21.10.3

# Construction

- Front Controls
- Stainless Steel Burners
- PolyTuf Powder Coat Finish
- Vent Selection
  - ☐ Drafthood (Indoor) Option D-10
  - Stackless Top (Outdoor) Option D-11
  - High-Wind Top (Outdoor) Option D-13
- Base Optional
  - ☐ Combustible Floor Shield –
    Option J-1
- CSA Low Lead Certified ≤ .25 Pb

# **Temperature Controls**

- ☐ B-2 Single-Stage Tankstat (100-180°F)
- ☐ B-3 2-Stage Tankstat (100-180°F)
- ☐ B-26 2-Stage Digital (Loose)
- ☐ B-21 4-Stage Digital (Loose)

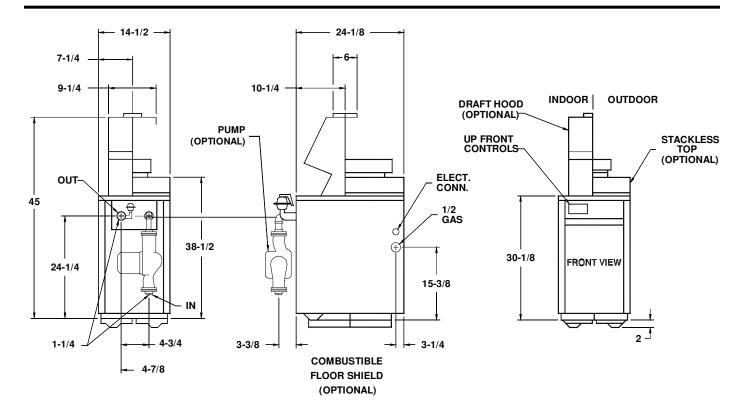
# Additional Safety Controls







# Raytherm – Type WH Model 133



Model	INDOOR		OUTDOOR	Approx. Shipping Weight (Lbs.)		
No.	Input MBTUH	Output MBTUH	Output MBTUH	Without Pump	With Pump	
WH-133 136		112	109	160	186	

NOTES: Dimensions are in inches.

Ratings shown are for elevations up to 2,000 feet. For elevations over 2,000 feet, reduce ratings 4% for each 1,000 feet above sea level.

## **HEATER RATES OF FLOW AND PRESSURE DROPS**

10°∆T		20°∆T		30°∆T		40°∆T	
GPM	ΔP (ft)						
22	14.7	11	3.8	N/A	N/A	N/A	N/A

## **HEATER RECOVERY RATES (GPH)**

	Temperature Rise						
	20°F	30°F	40°F	50°F	60 <i>°</i> F	80 °F	100 <i>°</i> F
INDOOR	669	446	335	268	223	167	134
OUTDOOR	653	435	327	261	218	163	131

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