Medium Mass  

316L Stainless Steel, Fire Tube Heat Exchanger  

10 to 1 Turndown Ratio  

Advanced Modulating Gas Condensing Boiler; up to 96% AFUE  

Universal Piping Location: Installer Connection Can Easily be Moved from Left to Right Side of Floor Units  

Venting: 2” or 3” PVC, CPVC or Polypropylene  

No Primary / Secondary Piping Needed  

Supply and Return Connections on Either Top, Left or Right  

High Efficiency  

Wall & Floor Units
MULTIPLE VENTING CONFIGURATIONS

Intake Pipe

10 to 1 Mixer

Modulating Gas Valve

Turbo Fan
Modulating fan provides significant power for long vent runs

Intake

Exhaust

Turbo Fan

Ceramic Fiber Burner
The Eco Pre-Mixed burner offers high combustion efficiency and low CO and NOx emissions

Modulating fan provides significant power for long vent runs

DHW sensor

0-10 volt

Outdoor sensor

Optional low water cutoff wiring connection

Main Control
- Multiple safety functions
- Built in dual stage anti-freezing mechanism

- Cascade sensor
- DHW sensor
- 0-10 volt
- Outdoor sensor
- Optional low water cutoff wiring connection

- Multiple safety functions
- Built in dual stage anti-freezing mechanism

- Cascade sensor
- DHW sensor
- 0-10 volt
- Outdoor sensor
- Optional low water cutoff wiring connection

Line Voltage Terminal Strip
- DHW pump
- CH pump
- Optional low water cutoff wiring connection

- DHW pump
- CH pump
- Optional low water cutoff wiring connection

Heat Exchanger
- Hi-fin heat exchanger
- Higher efficiency
- Lower pressure drop
- Compact storage size

CH Pressure Gauge

Optical Flame Sensor

Heat Exchanger
- Hi-fin heat exchanger
- Higher efficiency
- Lower pressure drop
- Compact storage size

CH Pressure Gauge

Low Voltage Terminal Strip
- Cascade sensor
- DHW sensor
- 0-10 volt
- Outdoor sensor
- Optional low water cutoff wiring connection

Condensate Trap

Low Voltage Terminal Strip
- Cascade sensor
- DHW sensor
- 0-10 volt
- Outdoor sensor
- Optional low water cutoff wiring connection

Optical Flame Sensor

Ceramic Fiber Burner
The Eco Pre-Mixed burner offers high combustion efficiency and low CO and NOx emissions

Optical Flame Sensor

Heat Exchanger
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Condensate Trap

Low Voltage Terminal Strip
- Cascade sensor
- DHW sensor
- 0-10 volt
- Outdoor sensor
- Optional low water cutoff wiring connection

Optical Flame Sensor
MULTIPLE VENTING CONFIGURATIONS

DIRECT POWER VENT 2 PIPE SEALED COMBUSTION

POWER VENT SINGLE PIPE

MULTIFUNCTION CONTROL PANEL

Display
Setting/Current Temp
Current Status

Temperature Control Button

Power ON/OFF

Current Status

Control/Setting for Hot water, Timer & Temperature

Clock
Control/Setting for Time and Date

CONNECTIONS

Supply / Return  1 1/4” NPT
Gas Inlet  3/4” NPT
Condensate Drain  3/4” PVC

All the bottom connections (Supply/Return/Condensation/Gas) can be located on either side of the boiler (Left or Right) to make installation easier.
### Wall Units

**HOT WATER SUPPLY UNIT**

Gas Inlet Adapter: 3/4” NPT

CH Supply Adapter: 1-1/4” NPT

Condensate Adapter: 1/2” NPT

CH Return Adapter: 1-1/4” NPT

Intake Pipe Connection: 3”

Exhaust Pipe Connection: 3”

### MODELS

<table>
<thead>
<tr>
<th>MODELS</th>
<th>Description</th>
<th>Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>UFT-80</td>
<td>UFT-100</td>
<td>1-1/4”NPT</td>
</tr>
<tr>
<td>UFT-120</td>
<td>UFT-140</td>
<td>1-1/4”NPT</td>
</tr>
<tr>
<td>UFT-175</td>
<td>UFT-199</td>
<td>1-1/4”NPT</td>
</tr>
</tbody>
</table>

### Wall Units

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<tbody>
<tr>
<td>CH Supply Adapter</td>
<td>1-1/4” NPT</td>
</tr>
<tr>
<td>CH Return Adapter</td>
<td>1-1/4” NPT</td>
</tr>
<tr>
<td>Gas Connection Adapter</td>
<td>3/4” NPT</td>
</tr>
<tr>
<td>Condensate Drain Adapter</td>
<td>1/2” NPT</td>
</tr>
<tr>
<td>Air Intake Pipe Connection</td>
<td>3”</td>
</tr>
<tr>
<td>Exhaust Pipe Connection</td>
<td>3”</td>
</tr>
</tbody>
</table>

All the bottom connections (boiler, domestic, condensation & gas) can be located on either side of the unit. Fittings are shipped on the left side of the boiler.

### Models

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<tr>
<th>Description</th>
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</tr>
</thead>
<tbody>
<tr>
<td>UFT-80*</td>
<td>95.4</td>
</tr>
<tr>
<td>UFT-100*</td>
<td>96.0</td>
</tr>
<tr>
<td>UFT-120*</td>
<td>95.6</td>
</tr>
<tr>
<td>UFT-140*</td>
<td>95.0</td>
</tr>
<tr>
<td>UFT-175*</td>
<td>95.9</td>
</tr>
<tr>
<td>UFT-199*</td>
<td>94.0</td>
</tr>
</tbody>
</table>

### Installation

Indoor, Wall Mounted Model or Floor Model, Fully Condensing

### AFUE

95.4
95.1
95.6
95.0
95.9
96.0

### Input Rate (Btu/h)

8,000 – 80,000
10,000 – 100,000
12,000 – 120,000
14,000 – 140,000
19,900 – 175,000
19,900 – 199,000

### Flue System

Sealed Combustion Direct Vent, Power Vent

### Vent Run

2”(50ft), 3”(100ft) / Schedule 40 PVC, CPVC, PP

### Weight

**Wall Mount Model**

<table>
<thead>
<tr>
<th>Model</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>90 lbs.</td>
<td>100 lbs.</td>
</tr>
<tr>
<td>120 lbs.</td>
<td>130 lbs.</td>
</tr>
</tbody>
</table>

### Gas Supply Pressure

Natural Gas: 3.5”W.C ~ 14”W.C

Propane Gas: 3.5”W.C ~ 14”W.C

### Power Supply

Main Supply: 120V 60 Hz, 6A

### Maximum Power

160W

### Ignition System

Direct Electronic Ignition / Automatic Flame Sensing

### Burner System

Premixed Fuel Modulation / Ceramic Fiber Infrared

### Gas Valve System

Combination Modulation (Current Proportional)

### Wall Mount Model Dimensions (W x H x D)

- W 17.5” x H 34” x D 15.4”
- W 19.7” x H 37” x D 16.8”

### Floor Model Dimensions (W x H x D)

- W 19” x H 45” x D 17”
- W 22” x H 48” x D 18”

### Heat Exchanger

316L Stainless Steel - 3 Gallon Water Capacity

### Water Pressure

12 min - 30 max PSI

### Connection Sizes

- Supply/Return: 1 1/4” NPT
- Gas Inlet: 3/4” NPT

### Cabinet Materials

- Wall Mount Model: Painted Cold Rolled Carbon Steel
- Floor Model: Galvanneal

### Warranty

Limited 10 Year Residential Warranty

In accordance with our company policy of ongoing product improvement, HTP Comfort Solutions LLC. reserves the right to make changes without prior notice.

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