PROVEN PATENTED TECHNOLOGY
UNPARALLELED PERFORMANCES
HEATING COST SAVINGS

- TURBOMAX® heats water instantaneously, only when needed and keeps energy consumption to a minimum.
- TURBOMAX® has a patented technology with heat transfer efficiency reaching 99%.
- TURBOMAX® reduces and scrubs the accumulation of scale deposits that diminish the efficiency of traditional water heaters.
- TURBOMAX® adapts to all thermal energy sources (gas, oil, electricity, wood, solar and recuperated heat), the one that best suits your needs.
- TURBOMAX® can reduce heating costs by up to 30%.
- TURBOMAX® is reliable and covered by a 10-year warranty* - one of the best in the industry - even for commercial applications.

*Please consult the terms of the warranty.

A quality product for energy savings

TURBOMAX
INSTANTANEOUS INDIRECT WATER HEATER

TURBOMAX 23 26 US gal. 19.6 ft² 9 guspm 1 1/4' ' Sweat M 1 1/4 po NPTM 49' '

www.thermo2000.com
1-888-854-1111
www.thermo2000.com

Output Temperature up to 200°F
Heat Transfer Efficiency = 99%

Domestic hot water produced per hour in U.S. gallons †

<table>
<thead>
<tr>
<th>BTUH</th>
<th>kW</th>
<th>110°F</th>
<th>140°F</th>
<th>180°F</th>
<th>110°F</th>
<th>140°F</th>
<th>180°F</th>
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<tr>
<td>500,000</td>
<td>146</td>
<td>907</td>
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<td></td>
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</tr>
</tbody>
</table>

Based on ASHRAE (D.O.E.) test method performed by CRIQ.
Our patented injector: reduces heating costs

99% heat transfer efficiency

The secret of the TURBOMAX®’s exceptional performance is in its patented injector, which provides optimum heat transfer. In simpler words the TURBOMAX® water heaters can produce more hot water, more rapidly. Money-wise it reduces the cost of heating by reducing the running time of the boiler or the need for a bigger water heater to do the same work.

Both ends of the TURBOMAX® contain an injector with perforated walls. The top injector creates multiple jets of boiler water swirling (creating turbulence) all over the copper coil and spreading boiler water evenly throughout the tank.

The turbulence produces convection, i.e., activates the instantaneous passage of the boiler water heat through the copper coil walls and then to the domestic water inside the coils.
The principle behind the TURBOMAX® is based on the use of boiler water to heat the fresh domestic water instantly when required.

**BOILER WATER**

In order to maintain the domestic water temperature, the system supplies hot boiler water to the TURBOMAX® tank. The boiler water enters the top of the tank through a patented injector, which creates turbulence for an even water temperature around the copper coils, ensuring maximum thermal exchange. As the boiler water descends in the tank it transfers thermal energy to the copper coils in the TURBOMAX®.

The boiler water arrives at the bottom of the tank to be collected by a second patented injector and is redirected to the boiler to be re-heated until the system has returned to its initial state.

**DOMESTIC WATER**

In contrast to the boiler water, fresh domestic water is forced up through the coil system from the bottom of the tank. As it rises, the domestic water in the coils draws energy from the ambient heat of the pre-heated tank water. This process allows domestic water to be heated from 40°F to 140°F in 7 seconds or less.

**COUNTERFLOW MOTION**

As you will note, firstly the flow of boiler water is from the top of the tank to the bottom and secondly the flow of fresh domestic water inside the copper coils is from the bottom of the heater to the top. The counterflow motion of both fluids increases the efficiency of heat transfer and prevents domestic hot water temperature swings.

**HEAT STORAGE**

The boiler water in TURBOMAX® tank constitutes a store of heat energy ready to heat fresh domestic water. The volume of boiler water stored in TURBOMAX® tank provides enough heat to keep your domestic water hot while the boiler heats up. In fact, it acts as a buffer which prevents domestic hot water or boiler water temperature swings.

**COPPER COILS**

Copper is the metal by which heat from the boiler water contained in the tank is transferred to domestic water in the coils. Copper is an excellent conductor of heat (17 times more so than stainless steel), which increases thermal efficiency. Also, copper is known to be the metal most resistant to corrosion by household water.

Copper offers great resistance to thermal stress (expansion and contraction of material due to temperature changes in the water). TURBOMAX® uses the expansion and the contraction of copper to prevent the accumulation of scale inside the tube. The copper tubes are made into coils to take advantage of the radial expansion-contraction motion of copper. This constant motion changes inner surface tension and prevents scale deposits from attaching to the inner side of the copper coils.

**TURBULENCE**

Turbulence reduces heating costs. TURBOMAX® water heaters operate at an unparalleled 99% heat transfer efficiency. TURBOMAX® uses turbulence to produce more hot water, more rapidly. First, TURBOMAX® patented injectors, provide turbulence inside the tank. Second, domestic water entering TURBOMAX® copper coils flows in a turbulent state. Thus, like the patented injectors increasing heat transfer efficiency. The turbulence also scrub accumulation of scale deposits inside the coils.
**HEATING COST SAVINGS**

- **TURBOMAX®**
- **TURBOMAX**
- **TURBOMAX®** heats water instantly and reduces and scrubs the accumulation of scale deposits that diminish the efficiency of traditional energy sources (gas, oil, electricity, wood, commercial applications).

**TURBOMAX® can reduce heating costs**
- **TURBOMAX®** has a patented efficiency reaching 99%.

**TURBOMAX®®**

*These values must be reduced on continuous flow and high temperature applications*

**Domestic hot water produced per hour in U.S. gallons†**

<table>
<thead>
<tr>
<th>Model</th>
<th>BTUH</th>
<th>kW</th>
<th>110°F</th>
<th>140°F</th>
<th>180°F</th>
<th>110°F</th>
<th>140°F</th>
<th>180°F</th>
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<td>378</td>
<td>515</td>
<td>362</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TURBOMAX® 45</td>
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<td>392</td>
<td>261</td>
<td>344</td>
<td>241</td>
<td>173</td>
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</tr>
<tr>
<td>TURBOMAX® 34</td>
<td>50 000</td>
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<td>90</td>
<td>86</td>
<td>60</td>
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</tr>
<tr>
<td>TURBOMAX® 27</td>
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<td>117</td>
<td>735</td>
<td>512</td>
<td>687</td>
<td>483</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TURBOMAX® 65</td>
<td>300 000</td>
<td>88</td>
<td>587</td>
<td>391</td>
<td>515</td>
<td>362</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TURBOMAX® 44</td>
<td>200 000</td>
<td>59</td>
<td>370</td>
<td>252</td>
<td>344</td>
<td>241</td>
<td>173</td>
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</tr>
<tr>
<td>TURBOMAX® 33</td>
<td>50 000</td>
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<td>76</td>
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<td>43</td>
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<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>TURBOMAX® 24</td>
<td>200 000</td>
<td>59</td>
<td>370</td>
<td>252</td>
<td>344</td>
<td>241</td>
<td>173</td>
<td></td>
</tr>
</tbody>
</table>

**Specifications**

- Based on ASHRAE (D.O.E.) test method performed by CRIQ. Domestic cold water at 40°F and boiler water at 180°F.

**All TURBOMAX® Models**

- Standby loss <2°F per hour
- Heat Transfer Efficiency = 99%
- Output Temperature up to 200°F
- Coil Test Pressure = 700 PSI
- Tank Test Pressure = 300 PSI
- Rated Pressure = 150 PSI

**TURBOMAX® 109**
- 119 US gal.
- 58.9 ft²
- 27 guspm

**TURBOMAX® 65**
- 72 US gal.
- 32.7 ft²
- 15 guspm

**TURBOMAX® 45**
- 48 US gal.
- 26.2 ft²
- 12 guspm

**TURBOMAX® 44**
- 48 US gal.
- 26.2 ft²
- 12 guspm

**TURBOMAX® 33**
- 36 US gal.
- 19.6 ft²
- 9 guspm

**TURBOMAX® 24**
- 26 US gal.
- 19.6 ft²
- 12 guspm

**TURBOMAX® 23**
- 26 US gal.
- 19.6 ft²
- 9 guspm

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**Standard Equipment**

- Copper heat exchanger inside high quality carbon steel tank
- Domestic cold water inlet
- Drain return
- Adjustable feet for levelling
- Boiler supply
- Temperature-pressure gauge
- Pressure relief valve set at 50 psi
- Domestic hot water outlet

**Domestic hot water outlet**

**Pressure relief valve**

**Temperature-pressure gauge**

**Boiler supply**

**Drain return**

**Adjustable feet for levelling**

**Copper heat exchanger inside high quality carbon steel tank**

**Steel jacket painted with durable epoxy**

**Fiberglass insulation**

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**Specifications**

<table>
<thead>
<tr>
<th>Model</th>
<th>Tank volume</th>
<th>Heat transfer area (sq. ft.)</th>
<th>Max. DHW flow</th>
<th>Utility connection</th>
<th>Boiler connection</th>
<th>Hgt. (in.)</th>
<th>Dia. (in.)</th>
<th>Shipping weight (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TURBOMAX® 109</td>
<td>119 US gal.</td>
<td>58.9 ft²</td>
<td>27 guspm</td>
<td>2” Sweat M</td>
<td>2 1/2” Sweat M</td>
<td>74”</td>
<td>29”</td>
<td>555 lbs</td>
</tr>
<tr>
<td>TURBOMAX® 65</td>
<td>72 US gal.</td>
<td>32.7 ft²</td>
<td>15 guspm</td>
<td>1 1/2” Sweat M</td>
<td>1 1/2” npnPTM 6”</td>
<td>74”</td>
<td>29”</td>
<td>250 lbs</td>
</tr>
<tr>
<td>TURBOMAX® 45</td>
<td>48 US gal.</td>
<td>26.2 ft²</td>
<td>15 guspm</td>
<td>1 1/2” Sweat M</td>
<td>1 1/4” npnPTM 6”</td>
<td>74”</td>
<td>29”</td>
<td>235 lbs</td>
</tr>
<tr>
<td>TURBOMAX® 44</td>
<td>48 US gal.</td>
<td>26.2 ft²</td>
<td>15 guspm</td>
<td>1 1/2” Sweat M</td>
<td>1 1/4” npnPTM 6”</td>
<td>74”</td>
<td>29”</td>
<td>210 lbs</td>
</tr>
<tr>
<td>TURBOMAX® 33</td>
<td>36 US gal.</td>
<td>19.6 ft²</td>
<td>12 guspm</td>
<td>1 1/4” Sweat M</td>
<td>1 1/4” npnPTM 6”</td>
<td>74”</td>
<td>29”</td>
<td>195 lbs</td>
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<tr>
<td>TURBOMAX® 24</td>
<td>26 US gal.</td>
<td>19.6 ft²</td>
<td>12 guspm</td>
<td>1 1/4” Sweat M</td>
<td>1 1/4” npnPTM 6”</td>
<td>74”</td>
<td>29”</td>
<td>170 lbs</td>
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<tr>
<td>TURBOMAX® 23</td>
<td>26 US gal.</td>
<td>19.6 ft²</td>
<td>9 guspm</td>
<td>1 1/4” Sweat M</td>
<td>1 1/4” npnPTM 6”</td>
<td>74”</td>
<td>29”</td>
<td>150 lbs</td>
</tr>
</tbody>
</table>

*These values must be reduced on continuous flow and high temperature applications*
• TURBOMAX® 109A/65A meet the requirements of the ASME Boiler and Pressure Vessel Code

• TURBOMAX® heats water instantaneously, only when needed and keeps energy consumption to a minimum.

• TURBOMAX® has a patented technology with heat transfer efficiency reaching 99%.

• TURBOMAX® reduces and scrubs the accumulation of scale deposits that diminish the efficiency of traditional water heaters.

• TURBOMAX® adapts to all thermal energy sources (gas, oil, electricity, wood, solar and recuperated heat), the one that best suits your needs.

• TURBOMAX® can reduce heating costs by up to 30%.

• TURBOMAX® is reliable and covered by a 10-year warranty* - one of the best in the industry.

*Please consult the terms of the warranty.
Domestic hot water heated at 140°F in 7 seconds or less

Expansion chamber

Copper coil system

Boiler water storage

Top injector

Patented in USA No 5,165,472 and in Canada No 2,038,520

Cold domestic water enters at 40°F

A quastat with adjustable temperature differential prewired for 120 or 24V

Bottom injector

Water return through the closed circuit

A closed-circuit system supplies TURBOMAX with hot boiler water when required by domestic hot water demand

Boiler, or source of heat

Top injector

Standard Equipment

Domestic hot water outlet

Pressure relief valve set at 50 psi

Temperature/pressure gauge

ASME copper heat exchanger and ASME steel tank

Steel jacket painted with durable epoxy

Adjustable feet for levelling

Fiberglass insulation

Drain valve

Visiting our website at www.thermo2000.com

Specifications

Standby loss <1/2°F per hour

Heat Transfer Efficiency = 99%

Output Temperature up to 200°F

Tube max. allowed ASME = 200 PSI at 210°F T-109A working pressure

Shell max. allowed ASME = 200 PSI at 210°F T-109A working pressure

TURBOMAX® 109A / 65A

Domestic hot water produced per hour in U.S. gallons†

<table>
<thead>
<tr>
<th>BTUH</th>
<th>kW</th>
<th>110°F</th>
<th>140°F</th>
<th>180°F</th>
<th>110°F</th>
<th>140°F</th>
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<td>400 000</td>
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</table>

† Based on ASHRAE (D.O.E.) test method performed by CRIQ.

Domestic cold water at 40°F and boiler water at 180°F.

TURBOMAX® 65A

Domestic hot water produced per hour in U.S. gallons†

<table>
<thead>
<tr>
<th>BTUH</th>
<th>kW</th>
<th>110°F</th>
<th>140°F</th>
<th>180°F</th>
<th>110°F</th>
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</tbody>
</table>

* These values must be reduced on continuous flow and high temperature applications.

Dimensions

<table>
<thead>
<tr>
<th>Model</th>
<th>Tank volume</th>
<th>Heat transfer area (sq. ft.)</th>
<th>Max. DHW flow *</th>
<th>Utility connection</th>
<th>Boiler connection</th>
<th>Hgt.</th>
<th>Diam.</th>
<th>Shipping weight</th>
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<tr>
<td>TURBOMAX 109A 110 US gal.</td>
<td>58.9 ft²</td>
<td>27 usgpm</td>
<td>2½&quot; Sweat M</td>
<td>2&quot; NPTM</td>
<td>74&quot; 29&quot;</td>
<td>755 lbs</td>
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<tr>
<td>TURBOMAX 65A 67 US gal.</td>
<td>32.7 ft²</td>
<td>15 usgpm</td>
<td>2&quot; Sweat M</td>
<td>1½&quot; NPTM</td>
<td>67 24&quot;</td>
<td>425 lbs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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