

# Domestic Hot Water Tanks Indirect Fired

# Buderus



## Clean, Pure, Reliable Hot Water.

- Efficient and Economical
- Excellent Recovery Rates
- Superior Insulation
- Easy Access Cover for Cleaning
- Three Styles with Capacities of 32 to 103 Gallons

**Comfortable. Efficient. Intelligent Heating.**

# Indirect Fired Domestic Hot Water Tanks

## The Buderus Thermoglaze® Hot Water Advantage



In North America the average household spends around 30% of energy costs on their domestic hot water. With this in mind Buderus designs its hot water tanks to work more economically and efficiently. Buderus pioneered new methods of producing and storing domestic hot water, so you are assured of greater operating efficiencies, lower fuel consumption and consistent hot water, all while saving money.

Buderus' patented Thermoglaze® is a ceramic material which is thermally bonded to the internal components of the tank to provide a glass-like coating. This unique coating

protects against the corrosive affects of minerals that naturally appear in water, maximizing the life of the tank, while minimizing the number of service calls. Constructed of the highest quality materials, including the Thermoglaze® coating on all the interior surfaces, Buderus tanks also have excellent insulation resulting in less than a 1/4°F loss of heat per hour. The larger surface area of the heat exchanger in a Buderus tank delivers excellent recovery rates.

### Features and Benefits

- Economical – better insulation. High density fluoro-carbon free bonded-foam insulation for better maintenance of stored hot water temperature.
- Large surface area heat exchanger for excellent recovery rates.
- Corrosion Protection – the Buderus Thermoglaze® process protects the interior of the tank from corrosion caused by most types of water.
- Easy access cover for cleaning of coil and tank interior.
- Horizontal tanks for small footprint, vertical tanks for improved recovery rates.
- Standard magnesium anode rod for active corrosion protection.

| Horizontal Models                       |                          | LT-160  | LT-200   | LT-300  |
|---|--------------------------|---------|----------|---------|
| <b>Performance Data</b>                 |                          |         |          |         |
| Continuous Rating (2nd Hr.)             | BTU/Hr.                  | 93,000  | 109,000  | 161,000 |
| Inlet Temp = 50 °F Outlet Temp = 140 °F | Gallons/Hr. <sup>3</sup> | 124     | 145      | 215     |
| Boiler Water Temp. °F                   |                          | 194     | 194      | 194     |
| Boiler Water Flow Rate (GPM)            |                          | 15.4    | 17.6     | 22.1    |
| Coil Pressure Drop (Feet of Head)       |                          | 3.1     | 4.4      | 8.0     |
| <b>Physical Dimensions</b>              |                          |         |          |         |
| Contents (gallons)                      |                          | 42      | 53       | 79      |
| Dimension W                             |                          | 25 3/4" | 25 3/4"  | 25 3/4" |
| Dimension H <sup>1</sup>                |                          | 25 3/4" | 25 3/4"  | 25 3/4" |
| Dimension L                             |                          | 36 1/4" | 42 7/16" | 57 3/4" |
| Weight (approx lbs.) <sup>2</sup>       |                          | 220     | 246      | 363     |

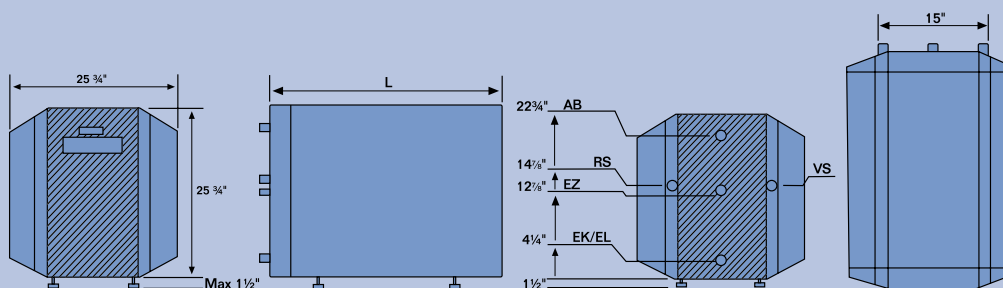
<sup>1</sup> Excluding screw-on feet.

<sup>2</sup> All weights are 5% higher with packing material.

<sup>3</sup> Required boiler output to achieve stated continuous ratings. Size the pump in order to get rated tank outputs.



## LT Tanks



| Models            | All LT                           |
|-------------------|----------------------------------|
| <b>Dimensions</b> |                                  |
| AB                | DHW Outlet 1"                    |
| EZ                | P&T/Recirculation Return 3/4"    |
| VS                | Boiler Water Supply 1"           |
| RS                | Boiler Water Return 1"           |
| EK/EL             | Cold Water Feed/DHW Drain 1 1/4" |

Buderus domestic hot water tanks offer features that provide for ease of installation, simple maintenance and reliable operation. All models are equipped with a magnesium anode rod for protection against corrosion, a P&T valve and drain for quick installation, and use adjustable screw-on feet for leveling. An easy-access cover aids in cleaning and maintaining the coil and tank interior. Standard on the S120, a Honeywell aquastat an be ordered separately for the other tanks.

Buderus domestic hot water tanks are designed with features that allow them to fit all needs. Short on space? The LT horizontal tanks are designed to fit under a Buderus boiler resulting in a smaller footprint. For domestic hot water priority add a Buderus Logamatic control. With this option, even on cold mornings when the boiler is working hard, you will always have plenty of hot water for showers. Equipped with a recirculation option Buderus tanks work more efficiently so that hot water is not wasted.

Buderus water tanks are a reliable and clean way to store hot water. From small residences to large commercial operations, there is a Buderus domestic hot water tank that is just right for your application.



| Vertical Models                       |                             | S-120   | ST-150  | ST-200  | SM-300                   |                   |                                    | SM-400                   |                   |                                    |
|---------------------------------------|-----------------------------|---------|---------|---------|--------------------------|-------------------|------------------------------------|--------------------------|-------------------|------------------------------------|
| <b>Performance Data</b>               |                             |         |         |         | Lower/ Coil <sup>1</sup> | Upper/Boiler Coil | High Output Dual Coil <sup>2</sup> | Lower/ Coil <sup>1</sup> | Upper/Boiler Coil | High Output Dual Coil <sup>2</sup> |
| Continuous Rating (2nd Hr.)           | BTU/Hr.                     | 116,000 | 119,000 | 149,000 | 140,500                  | 117,100           | 238,980                            | 141,200                  | 117,100           | 249,200                            |
| Inlet Temp = 50°F Outlet Temp = 140°F | Gal./Hr. <sup>5</sup> (GPM) | 155     | 159     | 199     | 267 (4.45)               | 223 (3.71)        | 455 (7.58)                         | 268 (4.48)               | 223 (3.71)        | 474 (7.91)                         |
| Boiler Water Temp. °F                 |                             | 194     | 194     | 194     | 194                      |                   |                                    | 194                      |                   |                                    |
| Boiler Water Flow Rate (GPM)          |                             | 9.5     | 15.9    | 17.6    | 22                       | 22                | n/a                                | 26                       | 22                | n/a                                |
| Coil Pressure Drop (Feet of Head)     |                             | 6.5     | 3.9     | 4.3     | 5.5                      | 6.7               | n/a                                | 7.4                      | 6.7               | n/a                                |
| <b>Physical Dimensions</b>            |                             |         |         |         |                          |                   |                                    |                          |                   |                                    |
| Contents (gallons)                    |                             | 32      | 40      | 53      | 77                       |                   |                                    | 103                      |                   |                                    |
| Dimension D                           |                             | 20"     | 27 1/4" | 27 1/4" | 27"                      |                   |                                    | 34"                      |                   |                                    |
| Dimension H <sup>3,6</sup>            |                             | 37"     | 34 5/8" | 42 5/8" | 59"                      |                   |                                    | 62"                      |                   |                                    |
| Weight (approx. lbs.) <sup>4</sup>    |                             | 158     | 238     | 286     | 342                      |                   |                                    | 445                      |                   |                                    |

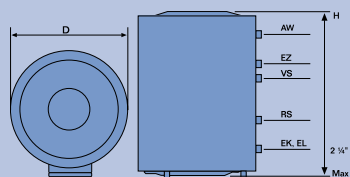
- <sup>1</sup> Lower coil continuous rating is based on connection to a boiler not applicable to connection to a solar panel.
- <sup>2</sup> Dual coil rating are calculated based on the heating surface of the coils tied in series when being used with a boiler only.
- <sup>3</sup> Excluding screw-on feet.
- <sup>4</sup> All weights are 5% higher with packing material.
- <sup>5</sup> Required boiler output to achieve stated continuous ratings. Size the pump in order to get rated tank outputs.
- <sup>6</sup> Allow 15" above tank for anode rod removal.

| Operating Data       |                     |                           |
|----------------------|---------------------|---------------------------|
|                      | Boiler Water (coil) | Domestic Hot Water (tank) |
| Max Pressure (psi)   | 232                 | 145 <sup>1</sup>          |
| Max Temperature (°F) | 312                 | 203                       |
| Heating Medium       | Hot Water           | Hot Water                 |

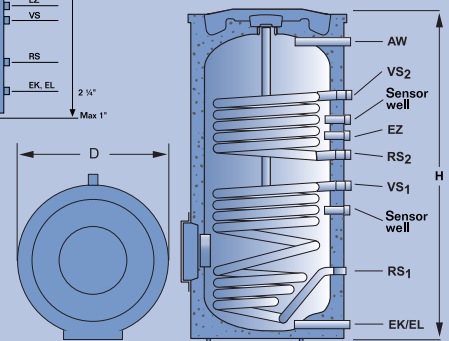
<sup>1</sup> 100PSI in Massachusetts

| Models            |                            | S-120 | ST-150 | ST-200 | ST-500 | SM 300 | SM 400 |
|-------------------|----------------------------|-------|--------|--------|--------|--------|--------|
| <b>Dimensions</b> |                            |       |        |        |        |        |        |
| AW                | DHW Outlet                 | 3/4"  | 1"     | 1"     | 1 1/4" | 1"     | 1 1/4" |
| EZ                | P&T/Recirculation Return   | 3/4"  | 3/4"   | 3/4"   | 3/4"   | 1"     | 1"     |
| VS                | Boiler Water Supply        | 3/4"  | 1"     | 1"     | 1 1/4" | 1"     | 1"     |
| RS                | Boiler Water Return        | 3/4"  | 1"     | 1"     | 1 1/4" | 1"     | 1"     |
| EK/EL             | Cold Water Feed/ DHW Drain | 3/4"  | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/4" |

## S and ST Tanks



## SM Tanks



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## Options for stacking LT Tanks and Boilers

|                   | LT160                    | LT200                    | LT300                    |
|-------------------|--------------------------|--------------------------|--------------------------|
| <b>G124X/18</b>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>G124X/25</b>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>G124X/32</b>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>G115WS/3</b>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>G115WS/4</b>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>G115WS/5</b>   |                          | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>G125BE/21</b>  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>G125BE/28</b>  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>G125BE/34</b>  |                          | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>GB125BE/22</b> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>GB125BE/30</b> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>GB125BE/35</b> |                          | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>G215/3</b>     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>G215/4</b>     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>G215/5</b>     |                          | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>G215/6</b>     |                          |                          | <input type="checkbox"/> |

Indicates stacking is possible

Buderus Thermoglaze® is a permanent protective coating bonding to the interior of the tank, including the coil.

# Buderus

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