# TLC-900 Liquid Chiller

**Air Cooled**

**Bench Top**

**100-240 VAC and 24 VDC Input**

**350 Watts**

## Standard Features
- 90-265 VAC universal integrated power supply
- Heats and cools 0 to 50 °C or -20 to 90 °C
- 750 mL uncooled reservoir
- Low pressure drop 3/8 ID fluid quick connects
- PWM controlled fan for quieter operation
- User friendly front fill design
- Easy prime/pump reset feature
- Wide process fluid temperature range
- Multiport bottom to top air flow for easier bench use
- Over temperature protection
- No compressor, fluorocarbons or filters
- Virtually maintenance free operation

## Control Features
- Integral “tunable” PWM temperature control
- PWM, Bi-directional temperature control
- 4 Programable temperature zones with 4 independent PID settings
- Multi-segment ramp and soak programs with loops
- Internal RTD sensor, built into the fluid circuit
- Remote Sensibility™ switchable to exterior accessory RTD sensor
- USB communication with easy to use software
- Labview VI examples available

## Pump Options
- Option #1 - Standard Magnetic Drive, Can Pump, 0 to 50 °C process temperature
- Option #2 - Low Temperature Magnetic Drive, Impeller Pump, -20 to 90 °C process temperature
- Option #3 - Gear pump, 3.75 Liter/Min, -20 to 90 °C process temperature
- Option #4 - High Flow Magnetic Drive, Can Pump, 0 to 50 °C process temperature

## Specifications

<table>
<thead>
<tr>
<th>MODEL</th>
<th>PART NUMBER</th>
<th>PUMP OPTION</th>
<th>PERFORMANCE RATING BTU/HR</th>
<th>VOLTAGE VAC 50/60 HZ</th>
<th>CURRENT AMPs.</th>
<th>WEIGHT LBS. (KG)</th>
<th>MAX OPERATING AMBIENT</th>
<th>FLUID TEMP. RANGE °C</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLC-900</td>
<td>6-E5KB-1-0A1</td>
<td>1</td>
<td>1260-1330</td>
<td>100-240</td>
<td>4.0†</td>
<td>42 (19)</td>
<td>50 °C (+122 F)</td>
<td>0 to 50</td>
</tr>
<tr>
<td>TLC-900</td>
<td>6-E5KB-1-0A2</td>
<td>2</td>
<td>1260-1330</td>
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<td>TLC-900</td>
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<td>6-E4K5-1-0A1</td>
<td>1</td>
<td>1050-1100</td>
<td>24 VDC</td>
<td>22</td>
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* This part number is ready for use with a low temperature cascade option and includes power input and control provisions to the cascade. For other pump options for cascade unit consult the factory. Refer to accessory pages for cascades and other options available for liquid chillers.

† Reflects the current draw @ 120 VAC, 60 Hz input
**TLC-900**

**ENVIRONMENTS**
- Bench top
- Laboratory
- Industrial

**COOLING CAPACITY**
- 310 Watts @ 0 °C ∆T (24 VDC)
- 350 Watts @ 0 °C ∆T (100-240 VAC)

**DIMENSIONS**

**PERFORMANCE CURVE**
Curves below represent performance of TLC-900 with pump option 1

**PUMP CURVE**

**Ambient Temp**

<table>
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<tr>
<th>Ambient Temp</th>
<th>25°C</th>
<th>50°C</th>
</tr>
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<tr>
<td>24 VDC</td>
<td>y=0.102x-30.3</td>
<td>y=0.102x-31.2</td>
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<tr>
<td>100-240 VAC</td>
<td>y=0.105x-36.2</td>
<td>y=0.105x-38.7</td>
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</tbody>
</table>

**Equation of line:** y=∆T(°C) x=Capacity (Watts)