Technical Specifications

Troublesome cooling circuit leaks in processes can result in serious production losses. The leaks may be due to small stress cracks, which leak under pressure. Our Positive/Negative Pressure TCU uses a liquid venturi to draw cooling water through the mold under negative pressure.

Precise temperature control is provided by the operation of a solid state or microprocessor controller, which activates a heater or a cooling water solenoid as required.

Features

Standard Features
- Off-the-shelf microprocessor-based PID temperature control with Process and Set Value LED readout
- Graphic control panel with indicating and warning status lights
- Operating range of 32°F to 180°F (0°C to 82°C)
- Open reservoir vented to atmosphere
- Single stage Incoloy™ immersion heater with IEC mechanical contactors
- 1/4” cooling solenoid valve (Cv=0.85)
- Hi/low level sensor with 3/8” makeup solenoid valve
- Low supply water pressure switch
- 150 psi (10.3 bars) pressure relief valve
- 2” (5 mm) casters
- 3/4” cooling water connections
- Manually-operated 3-way valve for changeover to negative pressure mode
- Centrifugal pump
- 1-year warranty on parts and labor at factory
- 5-year warranty on controller
- Lifetime warranty on pump housing, impeller, heater tube, piping
- 460/3/60 or 230/3/60 standard operating voltage
- 9 kW heater
- High temperature safety switch

Optional Features
- Remote control enclosure (see next page for details)
- Remote thermocouple (10 ft), remote sensor must be sold with the high temperature safety switch option
- Rubber feet in lieu of casters
- High/low temperature audible and visual alarm, no heater contactor interlock, visual alarm is a strobe
- Crash cool, holds cooling solenoid on, turns heater off regardless of control setting
- 208/230/460 volt 60 Hz, 380/415 50 Hz, consult factory for de-rated heater and pump capacities.
- Pressure gauge (specify locations)
- Power cord, 10 ft., no plug
- Closed circuit with open reservoir
- 0.375” solenoid valve (Cv=1.5) in lieu of 0.25” valve
- Modulating valve, 0.5” (Cv=4.4), 0.75” (Cv=7.5), 1” (Cv=10 or 14), or 1.25” (Cv=20), includes VDC actuator. mA actuator is also available. Consult factory for maximum operating /EP for cooling water
- External communications, types RS-232C, -422, -485, single point
- Cooling water in strainer
- Side-by-side (2 zone) w/casters, valving not included
- Severe duty EPDM silicon carbide, 2-3 hp
- NEMA 1 or NEMA 3R disconnect with fuses
# Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Pump, HP</th>
<th>Flow, GPM</th>
<th>Pressure, PSIG</th>
<th>Heater, kW</th>
<th>Depth in. (cm)</th>
<th>Height in. (cm)</th>
<th>Width in. (cm)</th>
<th>Shipping Wt., lbs. (kgs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9012 (2hp)</td>
<td>2</td>
<td>50</td>
<td>30</td>
<td>9</td>
<td>40 (102)</td>
<td>26 (66)</td>
<td>15 (38)</td>
<td>260 (118)</td>
</tr>
<tr>
<td>9012 (3hp)</td>
<td>3</td>
<td>60</td>
<td>40</td>
<td>9</td>
<td>40 (102)</td>
<td>26 (66)</td>
<td>15 (38)</td>
<td>270 (122)</td>
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