THE ETV PLATINUM PLUS CAN OPERATE IN ONE OF THE FOLLOWING MODES:
- ETV (temperature control)
- TMC (alarm condition safeguard)
- ETV Combo (temperature control with alarm condition safeguard)

DESIGNED FOR CRITICAL TEMPERATURE APPLICATIONS
- Accurately maintains set point from 0.5 gpm domestic draw to full flow
- Accurately maintains set point within +/-2 °F
- Domestic hot water temperature control
- Heating and cooling or industrial applications

STAINLESS STEEL VALVE BODIES
- Conforms to lead free requirements
- Rugged body design
- Minimizes scale build up
- External mounted actuator

SAFEGUARD AGAINST HIGH TEMPERATURE CONDITIONS
- Optional safety valve output
- Dual alarm outputs

REMOTE COMMUNICATION OPTIONS
- Internet (Heat-Timer RINET)
- BACnet (IP or MSTP)
- ModBus

CONFORMS TO THE FOLLOWING
ASSE 1017
California Lead Free Plumbing Law
CSA B 125.3 (NSF/ANSI 61 Section 8)
Legionella—Selection and controlling proper water temperature in domestic water storage and delivery systems is important in preventing illness from water-borne bacteria such as Legionella.

Scald Hazard—Scald hazards can be created in domestic water distribution systems when not properly controlled or monitored.

Fluctuations—Is the rapid and uncomfortable change in water temperature experienced at the faucet or shower by the end-user, which can lead to a fall or serious injury due to the thermal shock.

The ETV Platinum PLUS allows the domestic water system to be stored at higher temperatures to prevent the growth of Legionella, while being able to control and deliver a consistent tempered water out to the building.

ADVANTAGE

DIGITAL TEMPERATURE CONTROL
- Accurately maintains set point from 0.5 gpm domestic draw to full flow per ASSE 1017

QUICK STARTUP
- Single set point input, no multiple valve settings or balancing required

MULTIPLE VALVE SIZES
- 7 Valve Sizes allow proper size selection for desired flow rates
- Multiple valves setup option for larger systems

MAINTENANCE FREE
- The stainless valve body design reduces scale build up
- The external mounting of the actuator provides easy access
- There are no gaskets to maintain or replace as there are no motor to water contact concerns

CONTROL SETTINGS & MENU FIELD ACCESSIBLE
- No laptop or dedicated software required

FLEXIBILITY OF INSTALLATION
- HOT and COLD valve connections are interchangeable

SINGLE CONTROL—MULTIPLE VALVES
- A single control module can control multiple valves in high flow applications

7 DAY SCHEDULING WITH 4 DAILY SETBACKS
- Capability to lower outlet set point during low usage periods
- Weekly schedule with 4 daily setbacks for maximum energy efficiency

REMOTE COMMUNICATION OPTIONS
- Internet (Heat-Timer RINET)
- BACnet (IP or MSTP)
- ModBus

---

Legionella Growth Chart*

<table>
<thead>
<tr>
<th>Water Temperature (°F)</th>
<th>Time to 3rd Degree Burn*</th>
</tr>
</thead>
<tbody>
<tr>
<td>155°</td>
<td>1 second</td>
</tr>
<tr>
<td>148°</td>
<td>2 seconds</td>
</tr>
<tr>
<td>140°</td>
<td>5 seconds</td>
</tr>
<tr>
<td>133°</td>
<td>15 seconds</td>
</tr>
<tr>
<td>127°</td>
<td>1 minute</td>
</tr>
<tr>
<td>124°</td>
<td>3 minutes</td>
</tr>
<tr>
<td>120°</td>
<td>5 minutes</td>
</tr>
<tr>
<td>100°</td>
<td>Safe temperature for bathing</td>
</tr>
</tbody>
</table>

*As per www.asse-plumbing.org and www.osha.gov

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Scald Hazard

Below 68°F Legionella can survive but are dormant. Cold water in storage tanks, piping, decorative fountains, and other equipment should ideally be kept below 68°F.

Hot water need capability of heating water to 138°F for disinfection.

151°F Legionella die within 2 minutes

140°F Legionella die within 32 minutes

131°F Legionella die within 5–6 hours

Above 122°F Legionella can survive but do not multiply
INTERNET ACCESS

- Internet access through Heat-Timer’s Internet Communication Management System (ICMS)
- Receive system critical alarms as an email or text message
- No license fees or special software required

BUILDING AUTOMATION SYSTEMS (BAS)

- Supports BACnet and ModBus protocols
- Read and write access to control setting and temperature readings

APPLICATIONS

- Hospitals and Nursing Facilities
- Hotels and Resorts
- Correctional | Prison Facilities
- Military Installation | Barracks
- School | Educational Buildings | Dorms
- Multi Family Buildings
- Office Buildings
- Industrial Processes

EXTERNAL MOUNTING TO VALVE BODY

- Eliminates the potential of motor to water contact
- Eliminates the need for gasket maintenance or replacement

SMART CALIBRATION

- Prevents motor damage due to over-torque conditions
- One motor fits all sizes

REVERSE DIRECTION CAPABILITY

- Allows the HOT and COLD inlets of the valve to be interchangeable

REMOTE COMMUNICATION OPTIONS
Maintain 12 inches minimum for servicing clearance

Maintain 18 inches minimum for servicing clearance

**ETV ASSEMBLY**

<table>
<thead>
<tr>
<th>DIMENSION</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td>¼&quot;</td>
<td>3 ⅛&quot;</td>
<td>2&quot;</td>
<td>10 ⅜&quot;</td>
<td>2 ⅜&quot;</td>
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<tr>
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<td>3 ⅛&quot;</td>
<td>2&quot;</td>
<td>10 ⅜&quot;</td>
<td>2 ⅜&quot;</td>
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<tr>
<td>⅝&quot;</td>
<td>4&quot;</td>
<td>2 ⅜&quot;</td>
<td>10 ⅜&quot;</td>
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<tr>
<td>1⅛&quot;</td>
<td>4 ⅛&quot;</td>
<td>2 ½&quot;</td>
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<td>2 ½&quot;</td>
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<tr>
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<td>6 ⅜&quot;</td>
<td>4&quot;</td>
<td>11 ⅛&quot;</td>
<td>2 ⅜&quot;</td>
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**ETV ASSEMBLY**

<table>
<thead>
<tr>
<th>VALVE CONNECTIONS—NPSC</th>
<th>HOT</th>
<th>COLD</th>
<th>NPSC</th>
<th>MIXED</th>
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<tr>
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</tbody>
</table>

**Digital Display**

- Shows sensor temperatures, set point, valve modulation

**Buttons’ Functions**

- Change based on current screen

**120 VAC**

- Power Supply

**24V Actuator Power Supply**

- Safety Valve and Alarm Outputs

**Temperature Sensor Inputs**

- Motorized Valve Modulating Signal

**Remote Communication**

- 120 VAC Power Supply

**120 VAC Power Supply**

**Digital Display**

- Led indicates the associated output status

**Temperature Sensor Inputs**

- Motorized valve modulating signal

**Buttons’ Functions**

- Change based on current screen
**CONTROL MODULE**

- **Voltage Input:** 120 VAC 60 Hz
- **Maximum Input Rating:** 48 VA maximum
- **Display:** Graphic Display
- **Display/Temperature Units:** °F and °C
- **Modes of Operation:** ETV, TMC, ETV+TMC Combo
- **ETV Set Point:** 40°F / 4°C to 200°F / 93°C
- **Alarm Set Point:** 40°F / 4°C to 200°F / 93°C
- **Modulation Output Signal:** 0–10V, 2–10V, 0–5V, 1–5V, 4–20mA
- **LED Indicators:** 3 (Actuator Signal, No Flow, Alarm Status)
- **Inputs:** Sensors (Hot, Cold, Mixed), Flow Prove, EMS 4–20mA
- **Dimensions:** 11”W x 9”H x 3 ¾”D
- **Weight:** 2.5 lbs.

**ACTUATOR**

- **Voltage Input:** 24 VAC 60 Hz
- **Power Consumption:** 18 VA maximum
- **Input Signal:** 0–10 V
- **Weight:** 2.6 lbs.

**VALVE BODY**

- **Body & Trim:** 304 Stainless
- **Maximum Operating Temperature:** 300°F / 149°C
- **Maximum Working Pressure:** 225 PSI
- **Stem Material:** 640 Stainless

---

**SIZING AND PART NUMBERS**

### STAINLESS STEEL VALVE

<table>
<thead>
<tr>
<th>PRESSURE DROP PSI</th>
<th>VALVE SIZE</th>
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<th>3/4&quot;</th>
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<th>1 1/2&quot;</th>
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</table>

**BUILDING RECIRC**

- 5 GPM
- 10 GPM
- 15 GPM

### SAFETY VALVE

<table>
<thead>
<tr>
<th>VALVE SIZE</th>
<th>PART NUMBERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAFETY MOTORIZED VALVE NO BATTERY BACKUP</td>
<td>SAFETY MOTORIZED VALVE WITH BATTERY BACKUP</td>
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<td>920546-00</td>
</tr>
<tr>
<td>3&quot;</td>
<td>920547-00</td>
</tr>
</tbody>
</table>

**Sizing Recommendation:** Heat Timer recommends sizing the stainless valve with a design flow as close as possible to a 5 PSI pressure drop. Match safety valve size to ETV hot port size.

**Building Recirc:** The minimum building recirc flow rate shown is based on valve size and a flow velocity of 4 ft. per sec.

### COMPLETE ASSEMBLY

- Includes sensor, stainless valve, actuator and control module.

### VALVE/ACTUATOR

- for multiple valve applications.
PIPING WITH OPTIONAL SAFETY VALVE

Thermal Trap
32” Min. Vertical Drop TO

Optional Sensor
Optional Solenoid or Motorized Valve

Optional Cold Immersion Sensor
System Mixed Immersion Sensor

COLD Water Supply

Building Loop Return
Recirculation Pump (Continuous Running)

ETV Actuator / Valve Assembly

ETV Platinum PLUS Control Module

WATER HEATER / HOT WATER SOURCE

DRAIN COCK (TYP)
UNION (TYP)

OPTIONAL COLD PROBE SENSOR

OPTIONAL STAINLESS BALL (SAFETY) VALVE

EVT PLATINUM PLUS MANUAL SCANNER

For link to ETV Platinum Plus manual scan

056305-00 C

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