

DOMESTIC HOT WATER TEMPERATURE CONTROL with SAFEGUARD

Conforms to the following:

ASSE 1017

California Lead Free Plumbing Law

CSA B 125.3 (NSF/ANSI 61 Section 8)



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
- Domestic Hot Water Temperature Control
- Heating & 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



Why ETV Platinum Plus is Important

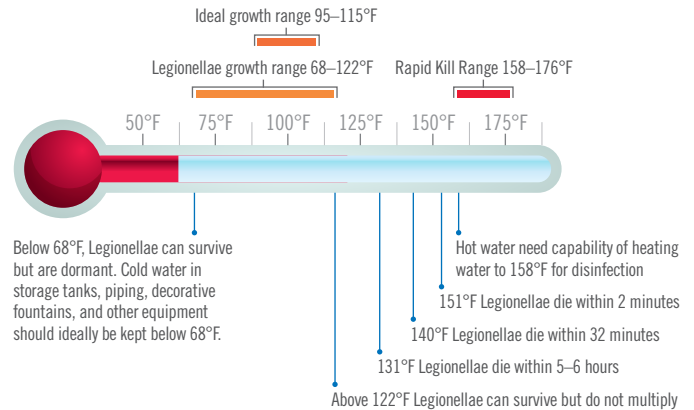
Legionella—Selection and controlling proper water temperature in domestic water storage and delivery systems is important in preventing illness from water-borne bacteria such as Legionella.

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.

Legionellae Growth Chart*



Scald Hazard

Water Temperature (°F)	Time to 3rd Degree Burn*
155°	1 second
148°	2 seconds
140°	5 seconds
133°	15 seconds
127°	1 minute
124°	3 minutes
120°	5 minutes
100°	Safe temperature for bathing

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



ETV Platinum Plus – 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



ETV Platinum Plus – 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



ETV Platinum Plus – Actuator

External Mounting to Valve Body

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

Self-Calibrating

- Prevents motor damage due to over-torque conditions

Reverse Direction Capability

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



ETV Platinum Plus – Remote Communication Options

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

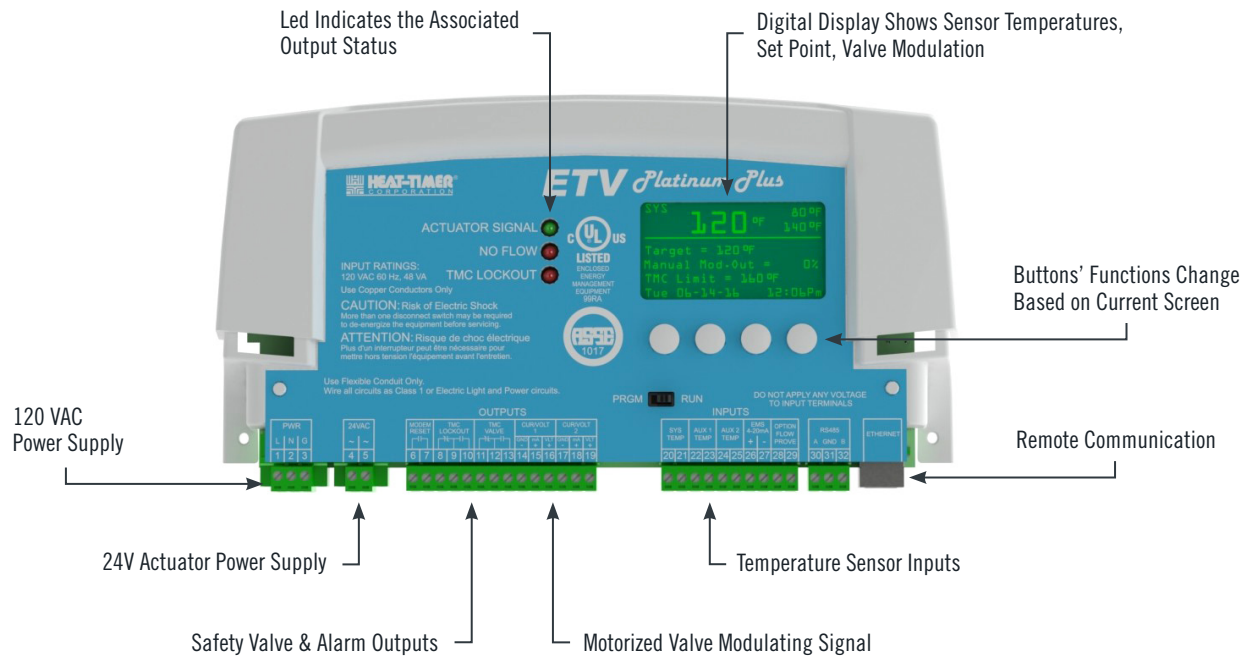
Building Automation Systems (BAS)

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



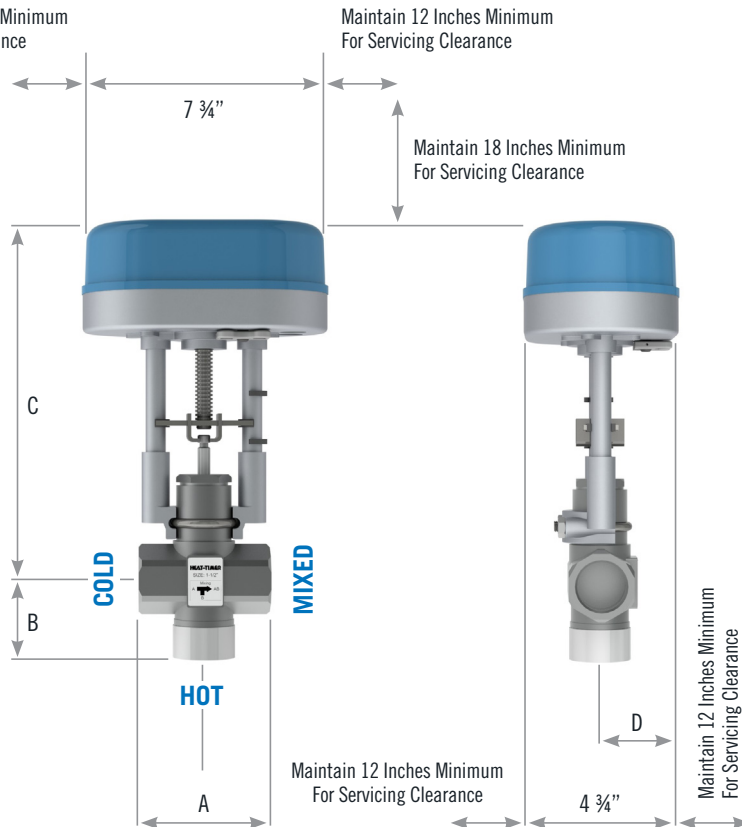


ETV Platinum Plus – Layout



ETV Platinum Plus – Dimensional

Maintain 12 Inches Minimum For Servicing Clearance



ETV Assembly	Dimension			
	A	B	C	D
1/2"	3 1/8"	2"	10 1/2"	2 3/8"
3/4"	3 1/8"	2"	10 5/8"	2 3/8"
1"	4"	2 1/8"	10 3/4"	2 3/8"
1 1/4"	4"	2 1/2"	11"	2 3/8"
1 1/2"	13 1/8"	2 1/8"	11 3/16"	2 3/8"
2"	5 1/2"	3 3/8"	11 3/8"	2 3/8"
2 1/2"	6 5/16"	4"	2 3/4"	2 3/8"

ETV Assembly	Valve Connections—NPSC		
	HOT	COLD	MIXED
1/2"	1/2"	1/2"	1/2"
3/4"	3/4"	3/4"	3/4"
1"	1"	1"	1"
1 1/4"	1 1/4"	1 1/4"	1 1/4"
1 1/2"	1 1/2"	1 1/2"	1 1/2"
2"	2"	2"	2"
2 1/2"	2 1/2"	2 1/2"	2 1/2"



ETV Platinum Plus – Specifications

ETV Platinum PLUS Control Module

Voltage Input: _____ 120 VAC 60 Hz
 Maximum Input Rating: _____ 48 VA max
 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 3/4"D
 Weight: _____ 2.5 lbs.

ETV Platinum PLUS Actuator

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

ETV Platinum PLUS Valve Body

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



ETV Platinum Plus – Sizing

ETV Platinum PLUS Stainless Steel Valve

Pressure Drop psi	Valve Size						
	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"
Cv	5	7	12	18	29	46	73
3	8	12	20	32	50	80	126
4	9	15	23	37	58	93	145
5	10	16	26	41	64	103	162
6	12	18	28	45	71	113	178
7	13	20	31	50	78	125	192
8	14	21	33	53	83	132	205
9	15	22	35	56	88	140	218
10	16	23	36	58	91	145	230
11	17	24	38	62	97	154	241
12	18	25	40	64	100	160	252

Gallons Per Minute

ETV Platinum PLUS Safety Valve

Pressure Drop	Description					
	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Cv/1 psi	15	35	60	90	125	240
2 psi	21	50	85	127	177	339
3 psi	26	61	104	156	217	416
4 psi	30	70	120	180	250	480
5 psi	34	78	134	201	280	537

Flow Rate – GPM

Sizing Recommendation: Heat Timer recommends sizing the stainless valve with a design flow as close as possible to a 5 psi pressure drop. When selecting a Safety Valve it is recommended to use no greater than a 3 psi pressure drop.



ETV Platinum Plus – Part Numbers

Valve Size	Part Numbers					
	Complete Assembly	Valve/Actuator Transformer	TMC Motorized Valve	Complete Assembly BACnet Option	Complete Assembly ModBus Option	Complete Assembly RINET Option
1/2"	915670-00	915640-00	920540-00	915670-BAC	915670-BUS	915670-RINET
3/4"	915671-00	915641-00	920541-00	915671-BAC	915671-BUS	915671-RINET
1"	915672-00	915642-00	920542-00	915672-BAC	915672-BUS	915672-RINET
1 1/4"	915673-00	915643-00	920543-00	915673-BAC	915673-BUS	915673-RINET
1 1/2"	915674-00	915644-00	920544-00	915674-BAC	915674-BUS	915674-RINET
2"	915675-00	915645-00	920545-00	915675-BAC	915675-BUS	915675-RINET
2 1/2"	915676-00	915646-00	920546-00	915676-BAC	915676-BUS	915676-RINET

Complete Assembly includes sensors, stainless valve, actuator and control module.

Valve/Actuator for multiple valve applications.



ETV Platinum Plus – Piping with Optional Safety Valve

