HEAT-TIMER CORPORATION

ETV Platinum Plus

Electronic Tempering Valve

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 Plus (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 ºF
- Domestic hot water temperature control
- Heating and cooling or industrial applications
- Outdoor installation with optional actuator having IP 65 “Rain Proof” approval

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
- Automatic closure of hot water on power failure

REMOTE COMMUNICATION OPTIONS

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

20 New Dutch Lane, Fairfield, NJ 07004 | Phone: 973-575-4004 | Fax: 973-575-4052 | www.heat-timer.com

WHY ETV PLATINUM PLUS IS IMPORTANT

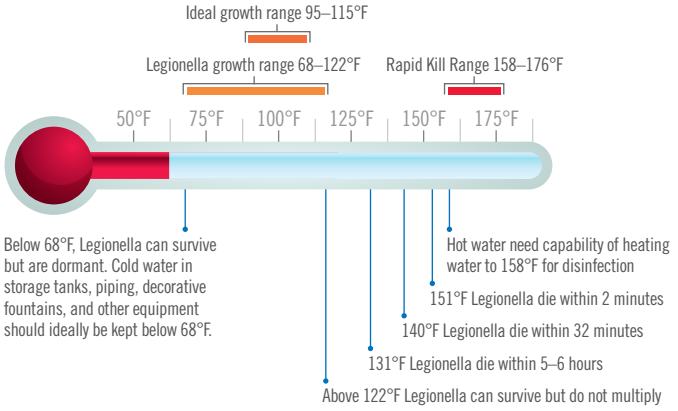
Legionella—Selection and controlling proper water temperature in domestic water storage and delivery systems is important in preventing illness from water-borne bacteria such as Legionella.

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.

Legionella 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

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

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**

ACTUATOR

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

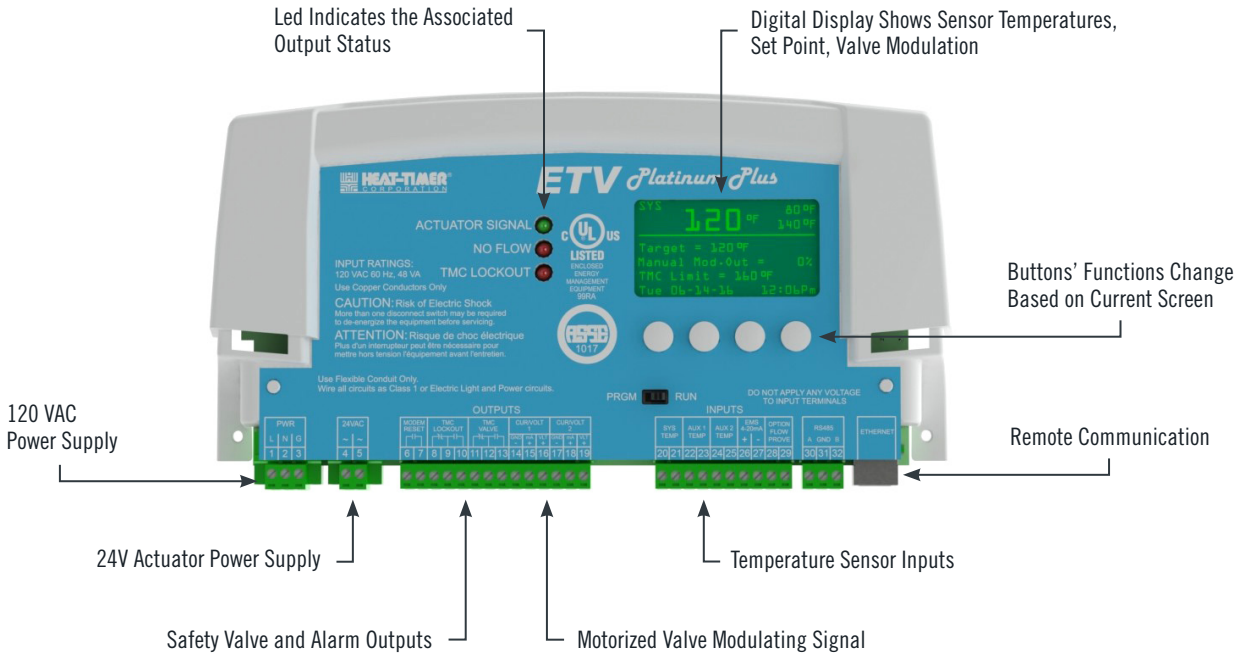
INTERNET ACCESS

- 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

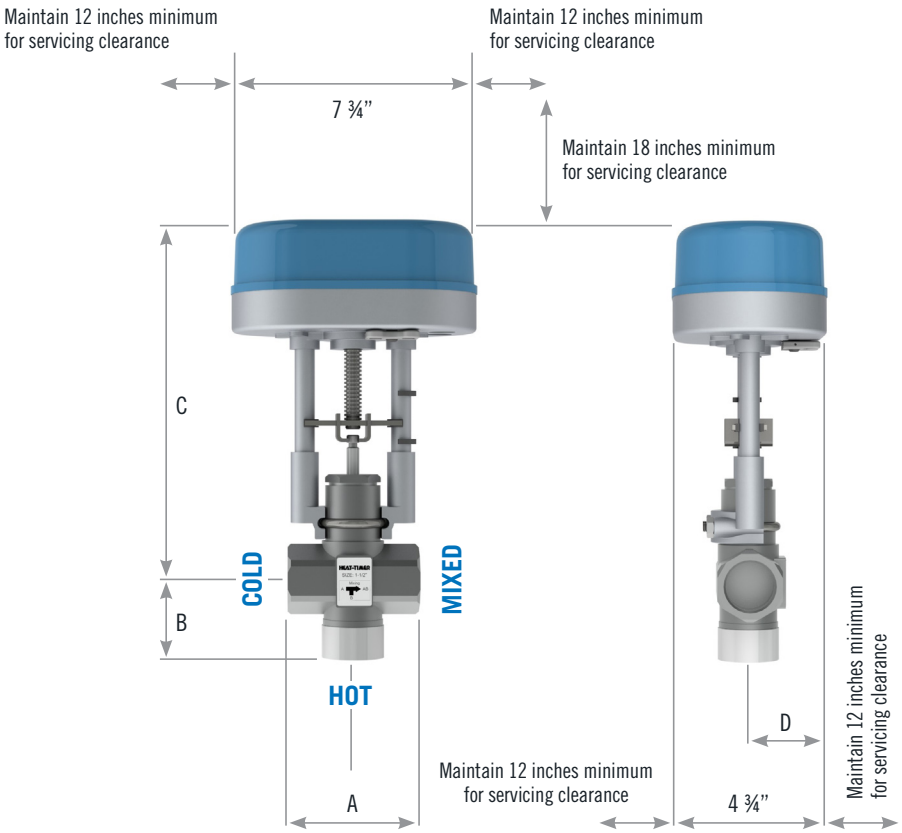
BUILDING AUTOMATION SYSTEMS (BAS)

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

LAYOUT



DIMENSIONAL



ETV ASSEMBLY	DIMENSION			
	A	B	C	D
½"	3 ⅛"	2"	10 ½"	2 ⅜"
¾"	3 ⅛"	2"	10 ⅝"	2 ⅜"
1"	4"	2 ⅛"	10 ¾"	2 ⅜"
1 ¼"	4"	2 ½"	11"	2 ⅜"
1 ½"	4 ⅘"	2 ⅘"	11 3⁄16"	2 ⅜"
2"	5 ½"	3 ⅜"	11 ⅜"	2 ⅜"
2 ½"	6 5⁄16"	4"	11 3⁄4"	2 ⅜"

ETV ASSEMBLY	VALVE CONNECTIONS—NPSC		
	HOT	COLD	MIXED
½"	½"	½"	½"
¾"	¾"	¾"	¾"
1"	1"	1"	1"
1 ¼"	1 ¼"	1 ¼"	1 ¼"
1 ½"	1 ½"	1 ½"	1 ½"
2"	2"	2"	2"
2 ½"	2 ½"	2 ½"	2 ½"

SPECIFICATIONS

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

PRESSURE DROP PSI	VALVE SIZE						
	½"	¾"	1"	1 ¼"	1 ½"	2"	2 ½"
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
BUILDING RECIRC	GALLONS PER MINUTE						
	5 GPM			10 GPM		15 GPM	

SAFETY VALVE

VALVE SIZE	PART NUMBERS	
	SAFETY MOTORIZED VALVE NO BATTERY BACKUP	SAFETY MOTORIZED VALVE WITH BATTERY BACKUP
½"	920540-00	920550-00
¾"	920541-00	920551-00
1"	920542-00	920552-00
1 ¼"	920543-00	920553-00
1 ½"	920544-00	920554-00
2"	920545-00	920555-00
2 ½"	920546-00	920556-00
3"	920547-00	920557-00

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.

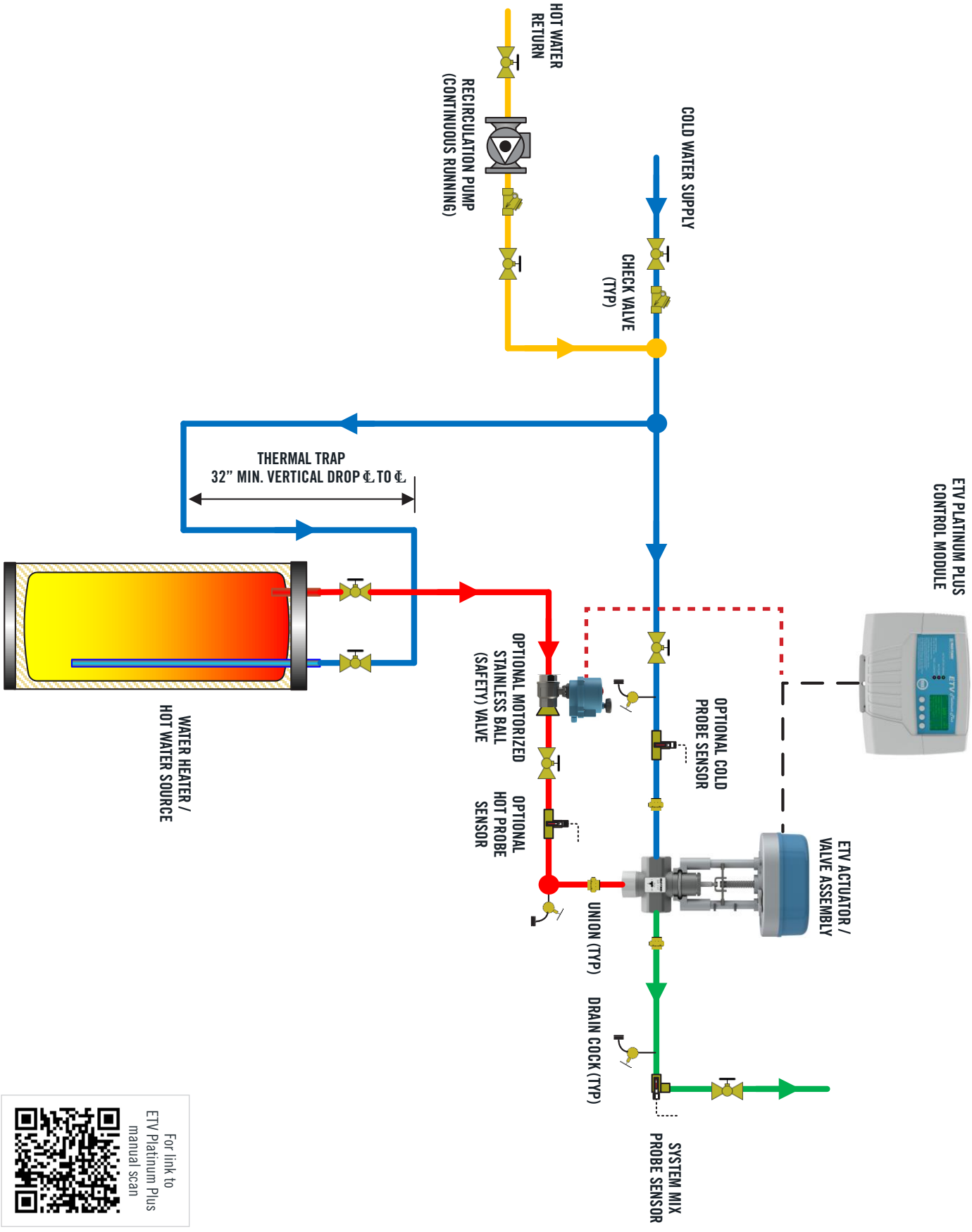
VALVE SIZE	PART NUMBERS				
	COMPLETE ASSEMBLY	VALVE/ACTUATOR TRANSFORMER	COMPLETE ASSEMBLY BACNET OPTION	COMPLETE ASSEMBLY MODBUS OPTION	COMPLETE ASSEMBLY RINET OPTION
½"	915670-00	915640-00	915670-BAC	915670-BUS	915670-RINET
¾"	915671-00	915641-00	915671-BAC	915671-BUS	915671-RINET
1"	915672-00	915642-00	915672-BAC	915672-BUS	915672-RINET
1 ¼"	915673-00	915643-00	915673-BAC	915673-BUS	915673-RINET
1 ½"	915674-00	915644-00	915674-BAC	915674-BUS	915674-RINET
2"	915675-00	915645-00	915675-BAC	915675-BUS	915675-RINET
2 ½"	915676-00	915646-00	915676-BAC	915676-BUS	915676-RINET

COMPLETE ASSEMBLY
Includes: immersion sensor, stainless valve, actuator and control module.

VALVE/ACTUATOR
For multiple valve applications.

Includes: Stainless valve, actuator and external transformer.

PIPING WITH OPTIONAL SAFETY VALVE



For link to ETV Platinum Plus manual scan