Electronic Steam Valve Control

ESV

- *Operates 2 Valves using Parallel or First-Open-First-Close (1/3 - 2/3)*
- *Can Operate in Steam or Hot Water applications.*

Description:

Two Steam Actuator Controller. The ESV's primary advantage is its two motorized valve modulation capability. It can modulate them using either a parallel logic or a First-Open-First-Close (FOFC) logic. The FOFC logic replaces the 1/3-2/3 concept and provides a finer adjustment and better control.

- ***Simply, a Better Control.*** The ESV can be set to hold the valve marginally open for an adjustable period before starting its modulation. This gives the system enough time to gradually fill with steam on a cold start. In addition, it can leave the valve partially open when the load is satisfied. Both features are to reduce system stresses normally associated with steam and vacuum system.

- ***Different Mediums One Control.*** Even though the ESV is designed to operate two steam actuators, it can be configured to operate them in a steam-only or in steam-to-water application (I.e. steam to water heat exchanger where the valve(s) are located on the steam supply to the heat exchanger).

- ***Multiple Modulating Signals.*** Each actuator can be set to operate using a different modulating signal. The ESV can operate actuators that run on voltage (0-10V, 2-10V, 0-5V, 1-5V) or 4-20mA current signals.

- ***Remote Setback and Boost.*** The ESV can accept a remote dry-contact signal to initiate a setback for low level usage periods. After the setback, the Boost option can be activated and used to raise the heat levels faster. It does that by increasing the set point for an adjustable period.

- ***Remote Set Point.*** Using the optional 4-20 mA EMS Interface enables the ESV to accept a remote 4-20mA set point from an Energy Management System (EMS) or Building Management System (BMS).

- ***Remote Enable/Disable.*** The Enable/Disable terminals allows external controls or switches to activate/de-activate the ESV operation remotely.

Item Description	Part #
ESV Control	915040-00
Pressure Transducer 0 - 30 PSI	904310-00
Pressure Transducer 0 - 100 PSI	904312-00
Pressure Transducer 0 - 200 PSI	904311-00
Pressure Transducer 0 - 300 PSI	904313-00
Vacuum Transducer 0 - 30 Inches of Hg	904317-00
3-in-1 Temperature Sensor	904220-00
Standard Brass Tube Sensor	904250-00
Brass Well (⅜" x ½" NPT)	904011-00
4-20mA EMS Interface (used for Remote Set Point)	926741-00

c UL us LISTED

ISO 9001:2008 CERTIFIED

HT# 056182-00A

HEAT-TIMER® CORPORATION
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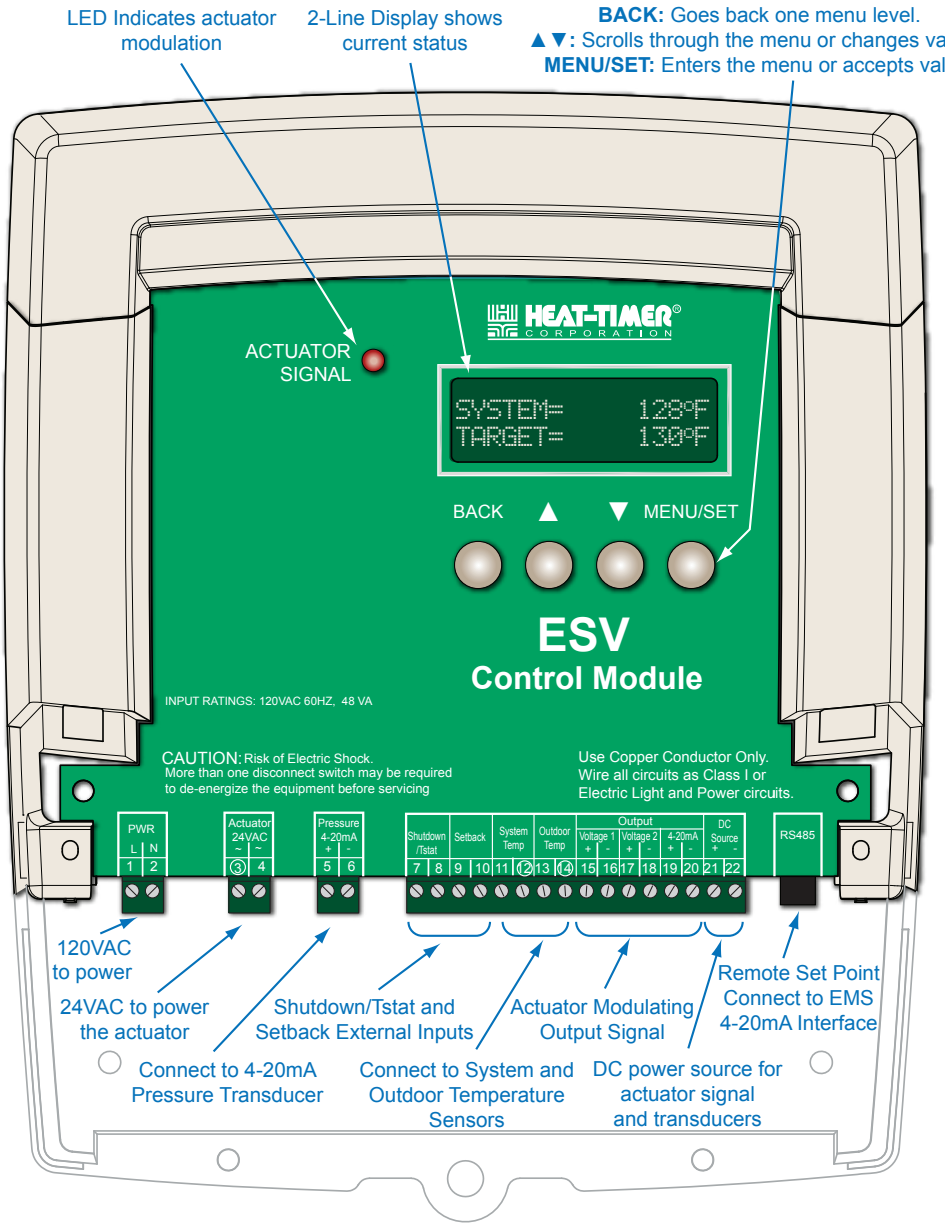
ESV Control



Voltage Input:	120 VAC 60 Hz
Maximum Input Rating:	48 VA Max
Fuse:	20 mm 2.5 Amp
Display:	Back Lite 2 Line Alphanumeric LCD Display
Display Units:	Temperature (ºF and ºC), Pressure (PSI), Vacuum (In Hg), Humidity (%RH)
Set Point:	Varies by Sensor Type. See Manual
Setback:	Varies by Sensor Type. See Manual
Gain:	from -10 to +10
Modulation Output Signal:	0-10V, 2-10V, 0-5V, 1-5V, 4-20mA
Valve Operation:	Single Valve, 2-Valve Parallel, or 2-Valve Sequence
Valve Start Position:	from 0% to 100%
Valve Start Delay:	from 0 to 60 minutes
Valve Close Position:	from 0% to 100%
LED:	1 Actuator Signal
Inputs:	System Temperature, Outdoor Temperature, Pressure input, Shutdown/Tstat Input, Setback Input
Buttons:	4 (BACK, ▲, ▼, MENU/SET)
Dimensions:	8 ⅝”W x 10”H x 3 ½”
Weight:	2 pounds

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