

Control Valve



- This valve is designed with a bulb and capillary assembly that automatically regulates fuel flow to a Cata-Dyne™ heater from 100% when heat is required to approximately 30% when the thermostat is satisfied
- This unit is used to control building temperature for spot and space heating applications
- The sensing bulb is filled with a temperature sensitive liquid. Changes in the temperature at the bulb expand and contract the liquid on temperature rise and fall causing the internal mechanism to modulate the flow of fuel
- Temperature control range of 0°C to 44°C (32°F to 110°F)
- Maximum inlet pressure of 1/2 psi
- Each unit has a connection size of 3/8" NPT female and a capillary length of 5 ft (1.5 m)
- No electrical power is required to operate this unit
- Controls are factory set to specific Btu and fuel ratings for specific heater types and sizes. Contact factory for the appropriate thermostat control valve.
- Certifications
 - CSA approved

Part No.	Description
AC-TC	0°C to 44°C (32°F to 110°F)

Manual Shut-Off Ball Valve



- The ball valve is installed upstream of all auxiliary heater controls to manually shut-off the fuel supply to the Cata-Dyne™ heater, see installation instructions for correct configuration for each fuel type
- A 3/8" NPT shut-off ball valve, with female NPT inlet and outlets in forged brass which increases the strength of the body
- Supplied with all manually controlled Cata-Dyne™ heaters
- The hard chrome-plated ball has Teflon seats and an anti-corrosion Dacromet treated handle
- Certifications
 - CSA approved and UL listed

Thermocouples



- The Type K Thermocouple is a probe made from two dissimilar metals that monitors the temperature of both the electrical start-up element and the underside of the catalyst pad inside the Cata-Dyne™ heater
- Certifications
 - Thermocouples are CSA approved

Gas Pressure Regulators

- All regulators are designed to ensure there is a precise control of gas or propane flow
- The regulators are part of the piping system connecting to the Cata-Dyne™ units, see installation and operating instructions for precise configuration
- The following three types of regulators are available: Appliance Regulators, Service or Low Pressure Regulators and High Pressure Regulators

Standard Appliance Regulator (AC-R-ES404-7)

- The appliance regulator is used for controlling the manifold pressure on all natural gas Cata-Dyne™ heaters and is supplied with all CSA certified models
- It is a spring type, nonadjustable appliance regulator with a maximum inlet pressure ½ psig
- Available pressure outlet settings are: 3.5", 4.5" and 7.0" w.c.
- Maximum flow capacity: 65,000 Btu/hr
- Certifications
 - Appliance regulators are CSA approved



Standard Service or Low Pressure Regulator (AC-R-2511)

- Used as an appliance regulator for all model sizes of Cata-Dyne™ heaters operating on LPG, and serves as a natural gas low pressure line regulator when used in conjunction with the ES-404 gas appliance regulator
- Self-operated, spring loaded device that is field adjustable
- It has a maximum inlet pressure of 250 psig and is factory set at 11" w.c. or 4.5" w.c. outlet pressure, with a connection size of 1/4" NPT inlet by 3/8" NPT outlet
- For gas applications with inlet gas less than 25 PSI use service regulator AC-R-HSR or AC-R-325
- Ambient temperature range: -40°C to 55°C (-40°F to 130°F) or -29°C to 70°C (-20°F to 160°F) (Fisher regulator only)
- 1/8" NPT screwed vent connection is provided
- Certifications
 - Low pressure regulators are CSA approved

Table 17 – Other Service Regulators Available

Part No.	Description
AC-R-325-3	Low Pressure Regulator 5 psig - 11" wc (2.7 kPa)
AC-R-325-US	Low Pressure Regulator - CSA Approved 5 psig - 4-12" wc (1.0 to 3.0 kPa)
AC-R-HSR-11	Low Pressure Regulator 125 psig - 11" wc (1.1 kPa)
AC-R-HSR-5	Low Pressure Regulator 125 psig - 4.5" wc (1.1 kPa)

High Pressure Regulator (AC-R-1301F)

- Maximum pressure of 6,000 psig inlet pressure and is factory set at 50 psig outlet pressure
- Connection size is 1/4" NPT (one inlet and two outlets)
- Certifications
 - High pressure regulators are UL listed