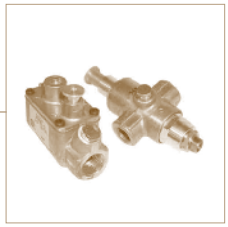
Accessories

In many typical oil & gas applications that are classified as Class I hazardous locations, the Cata-Dyne™ heater must be installed in accordance with CSA, FM and ATEX codes and regulations. As a result, the Cata-Dyne™ product line is supported with essential accessories required to ensure the safe and efficient operation of the units.



Safety Shut-off Valves

- The safety shut-off valve works in conjunction with the thermocouple to monitor the catalytic reaction to ensure that it is well established before the fuel supply remains on unattended.
- It is also designed to automatically shut off the gas supply to the heater if the thermocouple senses that the catalyst pad has dropped below the activation temperature.
- Three styles are available to suit your heating application needs:

ASV375 – Safety Shut-off Valve

- 3/8" NPT connections and a maximum inlet pressure of 1/2 psi.
- Designed with a pilot test port located at the base of the valve that can be used to measure operating pressure.

TABLE 14 ASV375

Part #	Description
Valve - ASV375	Safety Shut-off Valve and Thermostat

ASV375NT – Safety Shut-off Valve

- The ASV375NT valve includes an additional tamper-resistant design that discourages mechanical attempts to fix the valve open and override the valve's safety feature.
- 3/8" NPT connections and a maximum inlet pressure of 1/2 psi

TABLE 15 ASV375NT

Part #	Description
Valve - ASV375NT	Tamper-Proof Safety Shut-Off Valve

Mertik Combination Gas Control/Valve

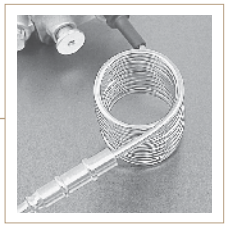
- Designed as a non-electric combination of the safety shut-off valve and a thermostat control.
- Includes a tamper-resistant thermocouple connection that cannot be mechanically fixed open.

TABLE 16 Mertik

Part #	Description
AC-GV33	Combination Gas Control/Valve

Certifications

- Mertik - CSA and CE
- ASV375 and ASV375NT - CSA



Thermocouple

- 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

- 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 Regulator

- 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 1/2 psi.
- The available pressure outlet settings are: 3.5", 4.5" and 7.0" w.c.
- Maximum flow capacity: 65,000 Btu/hr.

Service or Low Pressure Regulator

- 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 psi (1.7 MPa) and is factory set at 11 in. w.c. (2.7 kPa) outlet pressure, with a connection size of 1/4 in. NPT inlet by 3/8 in. NPT outlet.
- Maximum rating for propane: 140,000 Btu/hr (41 kW).
- Ambient temperature range: -20°F to 160°F (-29°C to 70°C).
- Maximum rating for natural gas: 70,000 Btu/hr (20.5 kW).
- A 1/8" NPT screwed vent connection is provided.

High Pressure Regulator

- Maximum pressure of 6,000 psi (41 MPA) inlet pressure and is factory set at 50 psi (345 kPa) outlet pressure.
- Connection size is 1/4 in. NPT (one inlet and two outlets).

Certifications

- Appliance Regulator - CSA
- Low Pressure Regulator - UL listed

TABLE 17 Pressure Regulators

Part #	Description
AC-R-ES404-7	Maxi Appliance Regulator 1/2 psi – 7 in. w.c (1.7 kPa)
AC-R-912	Low Pressure 250 psi – 11 in. w.c. (2.7 kPa)
AC-R-1301F	High Pressure 6000 psi inlet 50 psi outlet

Battery Cables / Electric Start up Leads

- Are used for starting a 12 V Cata-Dyne™ heater from a battery or other power supply.
- Each set of cables comes with heavy duty spring loaded serrated jaw clamps at one end and closed loop terminal ends at the other.
- A strain relief connector is attached at the terminal end to enable the user to seal the connection between the cable and the junction box.
- Lengths are available in 25 ft. (7.6 m), 30 ft. (9.14 m), and 40 ft. (12.19 m).

TABLE 18 Start Up Leads — 12 V

Part #	Description
AC-LEAD-25	25 ft. Lead
AC-LEAD-30	30 ft. Lead
AC-LEAD-40	40 ft. Lead

Battery Cable Cabinet

- This mountable storage cabinet is a convenient solution for storing battery start-up leads, offering protection from adverse weather conditions.
- Each cabinet is manufactured from heavy duty 20 gauge stainless steel, and can be used with all lengths of battery cables from 25 ft.-40 ft. (7.6-12.2 m).
- The units are lockable and easy to install.

TABLE 19 Battery Cable Cabinet

Part #	Description
IN-BATBOX	Battery Cable Cabinet

Fuel Gas Hose

- Versatile braided rubber fuel hose.
- These hoses have a 350 psi maximum working pressure, and are available in lengths of 5, 10, 15, 20 ft. (7.6 -12.2 m). Other custom sizes are available.
- The connection size at each end is 3/8 in. NPT male.

Certifications

- CSA approved Type 1 natural and propane gas hose

TABLE 20 Propane Hoses

Part #	Description
IN-P-H-3/8 x 18 in.	18 in. Hose
IN-P-H-3/8 x 5 ft.	5 ft. Hose
IN-P-H-3/8 x 10 ft.	10 ft. Hose
IN-P-H-3/8 x 15 ft.	15 ft. Hose
IN-P-H-3/8 x 20 ft.	20 ft. Hose
IN-P-H-3/8 x 25 ft.	25 ft. Hose
IN-P-H-3/8 x 30 ft.	30 ft. Hose

Vent Hood Assembly

- A light weight galvanized steel construction venting system for use with the Cata-Dyne™ heater to vent the by-products of reaction (carbon dioxide and water vapour) outside the building.
- Each assembly consists of 1 exhaust hood, 1 length of vent pipe (30 in.), 1 elbow, 1 flashing, and 1 snowcap.
- These assemblies are available for both standard Cata-Dyne™ heaters (6, 8, 12, 24, 36 in.) and MKII models (12, 24 in.).
- The above parts can be ordered individually.

TABLE 21 Vent Hood Assemblies

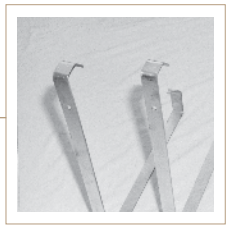
Part #	Width
AC-VHASSY-6	6 in.
AC-VHASSY-8	8 in.
AC-VHASSY-12	12 in.
AC-VHASSY-24	24 in.
AC-VHASSY-36	36 in.
AC-VHASSY-48	48 in.
AC-MKIIVHASSY-12	MKII 12 in.
AC-MKIIVHASSY-24	MKII 24 in.

Wall Mounting Brackets

- Stainless steel or mild steel constructed mounting brackets and hardware.
- Standard wall brackets can mount Cata-Dyne™ heaters 7.5 in. (190 mm) away from the wall to allow access to the back of the heater.
- MKII model bracket sizes are half the length of our standard wall mounting brackets allowing the heater to be installed closer to the wall.
- Brackets for large units over 8,000 BTU/hr (2.3kW) are manufactured from heavy gauge mild steel flat bar.

TABLE 22 Wall Mount Brackets

Part #	Heater Size
AC-WBRK-0808	8 x 8
AC-WBRK-0624	6 x 24
AC-WBRK-1212	12 x 12
AC-WBRK-1224	12 x 24
AC-WBRK-1236	12 x 36
AC-WBRK-1248	12 x 48
AC-WBRK-1260	12 x 60
AC-WBRK-1272	12 x 72
AC-WBRK-1824	18 x 24
AC-WBRK-1836	18 x 36
AC-WBRK-1848	18 x 48
AC-WBRK-1860	18 x 60
AC-WBRK-1872	18 x 72
AC-WBRK-2424	24 x 24
AC-WBRK-2430	24 x 30
AC-WBRK-2436	24 x 36
AC-WBRK-2448	24 x 48
AC-WBRK-2460	24 x 60
AC-WBRK-2472	24 x 72
AC-WBRK-MK12	12 x 12 and 12 x 24



45° Wall Mount Brackets

- Specialized mounting angle brackets used to simplify the installation of all 18 in. and 24 in. Cata-Dyne™ heaters.
- Brackets are manufactured from mild rolled steel with a zinc plated finish.

TABLE 23 45° Wall Mount Brackets

Part #	Description
AC-WBRIC-1824-45	Mounting Angle Bracket, 18 x 24, Short Side
AC-WBRIC-1836-45	Mounting Angle Bracket, 18 x 36, Long Side
AC-WBRIC-1848-45	Mounting Angle Bracket, 18 x 48, Long Side
AC-WBRIC-1860-45	Mounting Angle Bracket, 18 x 60, Long Side
AC-WBRIC-872-45	Mounting Angle Bracket, 18 x 72, Long Side
AC-WBRIC-2424-45	Mounting Angle Bracket, 24 x 24, Long Side
AC-WBRIC-2436-45	Mounting Angle Bracket, 24 x 36, Long Side
AC-WBRIC-2448-45	Mounting Angle Bracket, 24 x 48, Long Side
AC-WBRIC-2460-45	Mounting Angle Bracket, 24 x 60, Long Side
AC-WBRIC-2472-45	Mounting Angle Bracket, 24 x 72, Long Side

Floor Stands

- 12 gauge galvanized steel constructed floor stand and hardware.
- Allows the heater to be placed closer to the object being heated than the wall mounting system.
- Floor stands are adjustable, allowing the unit to be moved to the optimum height for the required heating application.

TABLE 24 Floor Mount Brackets

Part #	Heater Size
AC-FSS-8	8 x 8
AC-FSS-24	6 x 24
AC-FSS-12	12 x 12
AC-FSS-24	12 x 24
AC-FSL	12 x 36
AC-FSL	12 x 48
AC-FSL	12 x 60
AC-FSL	12 x 72
AC-FSL	18 x 24
AC-FSL	18 x 36
AC-FSL	18 x 48
AC-FSL	18 x 60
AC-FSL	18 x 72
AC-FSL	24 x 24
AC-FSL	24 x 30
AC-FSL	24 x 36
AC-FSL	24 x 48
AC-FSL	24 x 60
AC-FSL	24 x 72

Thermostatic Temperature Control Valve

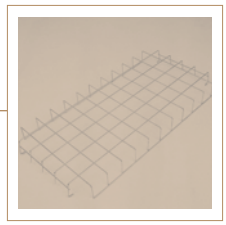
- Designed with a bulb and capillary assembly that automatically regulates the fuel flow to the Cata-Dyne™ heater from 100% when heat is required to approximately 30% when the thermostat is satisfied.
- This unit is used to control building temperature for spot and space heating applications.
- The sensing 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 32°F (0°C) to 110°F (44°C).
- 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. (1.5m).
- No electrical power is required to operate this unit.
- The controls are factory set to specific BTU and fuel ratings.

Certifications:

- CSA

TABLE 25 Temperature Control Valve

Part #	Description
AC-TC	0˚C - 44˚C (32°F - 110°F)



Protection Grills

- Two types of protection grills are available to protect personnel and objects from coming into direct contact with the face of the Cata-Dyne™ heater.

Strap-On Grills

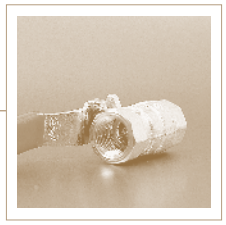
- Comes with four straps on all corners so the grill can be bolted to the heater box.
- Can be bolted to a variety of standard Cata-Dyne™ heaters.
- The bolting hardware is included in the purchase.

  Note: Cannot be used with MKII units

Snap-On Grills

- These grills snap on to the bezel of the Cata-DyneTM heater.
- Available in a variety of sizes.
- They do not require any additional hardware or tools to install.
- MKII units accept this style only.

  Note: Can only be used with units manufactured after Sept 1, 2002.



Manual Shutoff Ball Valve

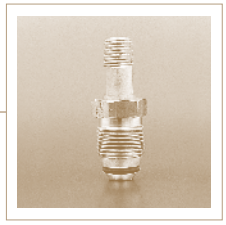
- The ball valve is installed upstream of all auxiliary heater controls to manually shut-off the fuel supply to the Cata-Dyne™ heater, see installation instructions for correct configuration for each fuel type.
- A 3/8” NPT shut-off ball valve, with female NPT inlet and outlets in forged brass which 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.

Certification:

- CSA approved and UL listed.

Gas Pressure Test Kit

- Pressure gauge and PVC tube used to accurately test and measure the gas pressure going into a Cata-Dyne™ heater by connecting the tube end to the gas test port of the Safety Shut-off Valve.
- Portable kit, ideal for all heater sizes.
- Eliminates the need to fit test ports on pipelines used for heater operation.
- Includes a 15” w.c. (3.7 kPa) pressure gauge, a 6 ft. (1.8 m) PVC tube and the connection to the SSOV.
- It is compatible with both natural gas and propane heaters.



P.O.L. Adapters

Product description:

- Propane fitting adapter used as a straight adapter that reduces a propane cylinder adapter to 1/4” NPT.
- Full flow brass fitting with a 7/8” hex nut.