

Electric Heaters

Description: These electric gas heaters are designed to reduce regulator icing as gas is withdrawn from carbon dioxide or nitrous oxide cylinders. They are thermostatically controlled with set points at 165° F (on) and 185° F (off).

Units for carbon dioxide and nitrous oxide are equipped with CGA connections for assembly between the cylinder valve and pressure regulator. They are also available with 1/4" FNPT connections for use with non-reactive gases.

Note: These heaters are not suitable for use with flammable gases.

Automatic Electric Heaters

For Compressed Gas Cylinders or Cryogenic Dewars

Description: The Airgas® Automatic Electric Heaters are used to vaporize or warm gases (typically CO₂) prior to pressure regulation. Used in welding, bottling plants, wineries, foundries, food packaging, semiconductor/cleanroom applications and anywhere cold gas is a problem.

These heaters are used when the flow rate required is greater than the cylinder can support through normal vaporization. These heaters are a cost-effective solution verses using ambient vaporizers.

The Airgas® Automatic Electric Heaters are C.S.A. approved and have a one-year guarantee on materials and workmanship.

Capacity	Design Features
<p>Capacity (for Carbon Dioxide, CO₂)**</p> <p>Heating: 1,000 cfh; 17 cfm; 467 L/min; 115 lbs/hr (Heating valves are based on initial gas temperature of 0° F and outlet temperature of 170° F)</p> <p>Vaporizing: 184 cfh; 3 cfm; 84 L/min; 22 lbs/hr (Vaporizing valves are based upon initial liquid temperature of 0° F and outlet temperature of 170° F)</p> <p><small>** Capacities for other gases will vary, depending on their specific heat.</small></p>	<p>Explosion proof heater completely dry – heat exchange medium is aluminum.</p> <p>Prevents regulator freeze-up unlike ambient devices, not affected by adverse atmospheric conditions.</p> <p>Thermostatically controlled can be left on, even under no-flow conditions.</p> <p>Double protection against thermal or electrical overload heavily insulated – cabinet remains "cool".</p> <p>Continuous high-pressure tubing – no internal joints flow can be in either direction, without loss of efficiency.</p>

Ordering Information

Product Number	Voltage	Flow Rate	Connections
Y99-419000	120 VAC	1,000 cfh Max. heating; 184 cfh Max. vaporizing (outlet 170° F)	5/16" SAE Flare
Y99-419001	N/A	Manifold Block	N/A

Heaters

MISCELLANEOUS EQUIPMENT



Specifications/Materials	
Voltage	110 Volts/160 Watts
Materials	Steel Case, Brass Expansion Chamber
Weight	2 lbs

Ordering Information	
Product Number	Application
Y99-HEATER320	Carbon Dioxide
Y99-HEATER326	Nitrous Oxide
Y99-HEATERFF	Inert Gases (1/4" FNPT x 1/4" FNPT)

Heaters High Flow

MISCELLANEOUS EQUIPMENT



Y99-419001

Y99-419000

Specifications/Materials	
Maximum Operating Pressure	2,500 psig (copper); 4,600 psig (stainless steel)
Thermostat	Internal, factory set at 170° optional adjustable
Heating Elements	1000 Watt, 240/120VAC, 4.2/8.3 amps, 6'3"-wire UL/CSA Cord
Weight	13 lbs.
Dimensions (H x W x D)	11" H x 5.5" W x 4.5" D
Inlet	45° SAE flare
Outlet	45° SAE flare
Mounting	Holes 3" On Center
Body	Powder coated steel box
Fittings	1/4" MNPT Brass (standard)
Tubing	Copper – 5/16" x .049 continuous