



IN-LINE CARBON DIOXIDE VAPOR HEATER

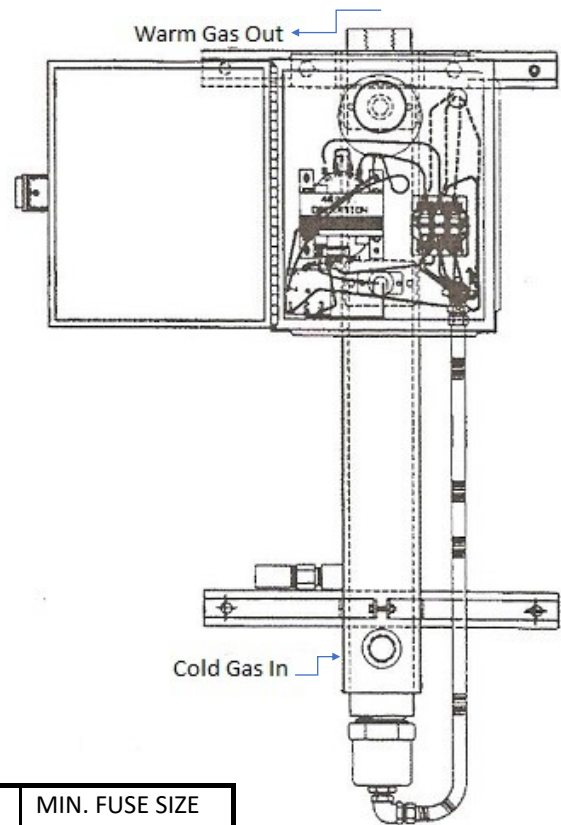
6/8KW 240/480V 3 PHASE

Part No. 204234

PURPOSE: To warm up carbon dioxide vapor coming from a low pressure bulk storage tank. The vapor heater prevents damaging pressure reducing regulators caused by expansion cooling or to prevent moisture condensation on cold uninsulated process piping.

DESCRIPTION: A three element 2" MPT immersion heater is installed in a zinc plated steel shell with a completely prewired temperature control system. The enclosure is weathertight and gasketed suitable for indoor and outdoor installation. The heater element can be field wired for 6KW at 240V or 8KW at 480V 3 phase. A fused 120V 1 phase control transformer is provided.

ELECTRICAL: Electrical connection is 1/2" knockout in rear of enclosure. Control circuit transformer is fused on high & low voltage side. Unit can operate on 208V 3 phase by changing the transformer at reduced power.



VOLTAGE	POWER CONSUMPTION	AMPERAGE	MIN. FUSE SIZE
240V 3 phase 60hz	6KW	14.4	17.5A
480V 3 phase 60hz	8KW	9.6	12A

SAFETY CONTROLS: A 450 psi safety relief valve is provided to protect the heater from excessive pressure. A field adjustable bi-metallic type temperate controller activates the contactor to maintain a uniform gas discharge temperature. A manual reset over-heat sensor will disable the unit if the temperature controller fails and the pressure vessel overheats.

TEMPERATURE CONTROLLER: The temperature controller is typically set for approximately 100°F. Midpoint of the scale is 120°F with each division equaling 20°.

DIMENSIONS: Length: 37" Width: 15" Depth: 15"

CO₂ CONNECTION: Inlet -- 1" FPT (front)
 Outlet -- 1" FPT (top)

CAPACITY:

TEMPERATURE RANGE	6KW @ 240V 3 phase	8KW @ 480V 3 phase
0° to 40°F	1,700 lbs/hr	2,280 lbs/hr
0° to 70°F	1,025 lbs/hr	1,360 lbs/hr
0° to 120°F	620 lbs/hr	830 lbs/hr
Capacity lbs/hr = $\frac{KW(12,000)}{\text{Temperature Differential}}$		

INSTALLATION: The unit should be mounted vertically with the heater down, ahead of the pressure reducing regulator. Two mounting channels are provided to attach a wall or other enclosure. Indoor installation is preferred but not required. Customer must provide a fused disconnect.

SPARE PARTS LIST:

DESCRIPTION	PART NO.
Heater Element, 6/8KW	N-204860
Temperature Controller	N-204176
Relief Valve, 450 psi	N-204213
Control Box	N-205266
Overheat Sensor, 140°F Manual Reset	N-205171
Wiring Diagram	N-205027
Contactator	N-204497
Transformer	N-204505
Timer OFF delay (set 2 seconds)	N-204905

SPECIFICATIONS:

- Par.1. CARBON DIOXIDE VAPOR HEATER: Provide _____ vapor heater(s) of 6/8KW heating capacity, for 240/480V three phase power, protected from over pressure by a 450 psi safety valve. Unit to have an adjustable temperature controller, secondary overheat sensor, and a transformer supplied fused 120V circuit for operating a magnetic contactor to switch power to the heating elements. Vapor connections to be 1 inch female pipe thread.
- Par.2. ELECTRICAL SERVICE FOR VAPOR HEATER(S): Electrical contractor to provide fused or circuit breaker protected three phase, 15amp service.