



Low-Pressure Carbon Dioxide

CARDOX[®] LP CO₂ Fire Suppression System

Plain and Simple

The Kidde Fire Systems CARDOX[®] Low-Pressure (LP) Carbon Dioxide (CO₂) System is a cost-effective solution when used to protect areas that require multiple suppression cycles, expansion capabilities, numerous hazards or more than 5000 lbs of CO₂.

CO₂ is an odorless, colorless, inert gas that extinguishes fire primarily by diluting the oxygen that supports combustion. It is applied by either the "total flooding" or "local application" method. CO₂ is not recommended for normally occupied spaces, except when other means of fire protection are not effective.

Total flooding delivers CO₂ into an enclosure until the fire is extinguished. For open hazards, the CO₂ local application method blankets the hazard extinguishing the flames and cooling the hazard. In "total flooding", the enclosure of the hazard protected is flooded to a proper concentration. In "local application", CO₂ is directly applied in the proper amount at the rate required to cover the protected hazard.

CARDOX LP CO₂ System Benefits:

- CO₂ is fast, efficient, cost-effective and adaptable for a wide range of hazards
- Multi-hazard, high-risk protection can be designed to provide automatic, simultaneous discharge for a variety of hazards and configurations
- Non-damaging to property and electrically non-conductive
- Bulk low-pressure CO₂ storage units are suitable for indoor or outdoor placement
- Utilizes well established safety means to minimize risks to personnel



Why Choose Kidde Fire Systems?

We are a leader in the fire protection industry. We have innovated many products and extinguishing system design techniques. We offer High-Pressure CO₂, CARDOX Low-Pressure CO₂ and ECS Clean Agent fire suppression systems. Our full line of conventional and addressable electronic control panels finish the package to provide a complete system solution.

Our network of certified personnel and best-in-class distributors have the training, experience and technical skills to provide you with all of the services needed to keep your property protected. We offer the following services: application engineering; inspection and testing; emergency repairs; hazard analysis; NFPA upgrades; safety, maintenance and operation site procedure; venting analysis; room integrity testing and more.

CARDOX LP CO₂ Features:

Fast. Within seconds, CO₂ penetrates the entire hazard area to smother the fire before it can develop into a costly event.

Economical. Low-Pressure CO₂ is less expensive to replenish and requires a smaller footprint for agent storage. Multiple discharges of system are possible without switch over to the reserve.

Low Maintenance. Low-Pressure CO₂ systems do not require hydrostatic testing... ever. Fill connections are easily accessed without the involvement of plant personnel. The liquid-level gauge continuously monitors the amount of agent stored eliminating the need to verify weight.

Clean. CO₂ leaves no residue, eliminating the need for a time consuming and costly clean-up. Additionally, CO₂ is electrically non-conductive and does not cause spoilage of organic materials.

Efficient. CO₂ vapor chokes off combustion quickly. In a Low-Pressure system, reserve supply is obtained without complicated manifolds or valves.

Environmentally-Responsible. CO₂ is a basic element of the atmosphere and a naturally occurring by-product of combustion. Its use has no long-lasting environmental impact.

Adaptive. CO₂ is effective on a wide range of flammable and combustible materials in both surface and deep-seated fires. Low-Pressure systems allow multiple hazard protection from a common piping system.

Applications for CARDOX

Low-Pressure CO₂:

- Automotive Industry
- Cement Plants
- Coal Handling, Grinding and Storage Systems
- Fume Handling Systems
- High Voltage Switchgear Buildings
- Industrial Fryer Process Lines
- Manufacturing and Industrial Processes
- Power Generation Enclosures
- Printing Applications
- Rolling Mills and Metal Processing
- Warehouses and Flammable Materials Storage

Approvals & Listings:

- Factory Mutual

Certifications Available Upon Request:

- CSA
- PED

