

Gas extinguishing systems



FM200 (HFC-227 EA)

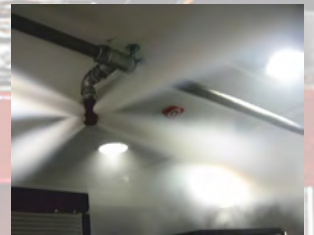
For many years, Halon 1301 gas, known as the best extinguishing gas, has been used in automatic extinguishing systems. However, due to the damage to the ozone layer of the atmosphere by the Halon gas and the high heating capacity of the atmosphere, the Montreal Protocol, which was signed in 1992 and signed in 1994 and valid since 1994, has been discontinued and prohibited to be used in new systems. Later, gases that were alternative to Halon 1301 gas but did not cause any damage to ozone, came out on the market. The most effective is the FM200 fire extinguisher.

For Class A surface fires including 30% safety factor, the FM200 concentration is 7.9%. Other design modifications are based on the latest dated ISO 14520 standards. The FM200 concentration is assumed to be 8.5% for environments with a high cable density and / or an energy consumption exceeding 5 kW. This includes almost all small, medium and large IT centers and centers.



NOVEC 1230

Novec 1230; The extinguishing agent has become an alternative extinguishing agent that is preferred for storage and transport in liquid form. Novec 1230 is a proven clean gas extinguishing system that is environmentally friendly. Atmospheric life is short compared with other HFC (Hydrofluorocarbon) class gases. Novec 1230 is pressurized with nitrogen (N₂) for the quench fluid, and thanks to the nitrogen (N₂) used to pressurize the stream of the nozzle from the cylinder of the agent.



CARBONDIOXIDE (CO₂)

The oldest and most common extinguishing agent used in gaseous fixed fire extinguishing systems is carbon dioxide (CO₂) gas. Carbon dioxide (CO₂) at atmospheric pressures is a colorless, odorless and non-conductive gas that can penetrate quickly and effectively to maintain space or volume. Its density is one and a half times the density of the air. It is not recommended to use it in the places where there are people with the reason that it is both a suffocating effect and heavy air. Due to the sudden cooling effect, it should not be used in the places where delicate electrical and electronic devices are located and also in the human places due to the effect of suffocation. It is the only extinguishing agent allowed for use in local (regional) applications. Carbon dioxide (CO₂) gas extinguishing system can be applied in low pressure and high pressure classes. Low pressure carbon dioxide systems are used due to the high storage capacity in systems that require a high amount of extinguisher.

INERT GASES GROUP

The inert gas agents are obtained by mixing the nitrogen and argon gases, which are present in their own right, alone or in a certain ratio with both of them and with carbon dioxide. These extinguishing agents reduce the oxygen content in the area below the combustion limit and extinguish the fire. It can be used in volumes where humans and humans are found to have choking effects on the human breathing limits. It is also allowed to be used in places with delicate electrical and electronic equipment since it does not cause condensation or heat shocks. Gases in the energetic group are not toxic and do not dissociate from toxic and corrosive parts during extinguishing.