Experts in fire protection

MINIMAX

# CPS 1230
# Extinguishing Systems for Cabinet Protection

TECHNOLOGIES

COMPACT SUPPRESSION SYSTEMS

# Cabinet Protection - complete and compact

Switch and control cabinets, along with vending machines, contain electronic and electric components in very confined spaces. CPS 1230 extinguishing systems protect this type of cabinet in case a fire occurs inside them as a result of a short circuit, overload, overheating or a component error.

CPS 1230 extinguishing systems fight fires in the cabinets that are to be protected, using the Novec™ 1230 extinguishing agent by 3M™. The extinguishing agent extracts heat from the fire and thus stops the combustion reaction. The Novec 1230 extinguishing agent is stored in a liquid state in an extinguishing agent tank. The extinguishing agent is transformed into a gaseous state only when it is released from the extinguishing nozzles into the cabinets that are to be protected. Novec 1230 is neither corrosive nor electrically conductive, leaves no residues and is highly environmentally friendly.

A CPS 1230 extinguishing system can protect up to two cabinets with electronic and electric components. Thanks to prefabricated component sets, it is easy and quick to install new systems or to retrofit existing ones. CPS 1230 extinguishing systems protect in the case of fire not only the actual cabinets, but also prevent the fire spreading to other devices in their vicinity.

They are an ideal fire protection solution in many cases, e.g. for:

- Switch cabinets in low-voltage switch systems
- Control cabinets for production systems
- Vending machines for goods and services in connection with commuter transportation systems

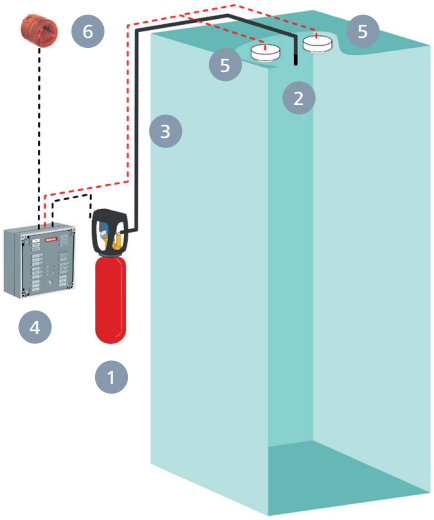
CPS 1230 extinguishing systems for cabinet protection not only protect property, but also prevent energy supply and production facilities from longer downtimes.

The CPS 1230 extinguishing system consists of the extinguishing nozzles with the associated supply lines, the extinguishing tank as well as the fire detection and extinguishing control system. One system protects up to two cabinets with electronic and electric components.

**Extinguishing nozzles with supply lines**
A CPS 1230 extinguishing nozzle is installed in the upper section of each protected cabinet. The special geometry of the CPS 1230 nozzles with a spraying angle of 210° ensures that the extinguishing agent is homogeneously distributed throughout the entire cabinet in the event of fire. The appropriate supply lines connect the extinguishing nozzles with the extinguishing agent tank.

**Extinguishing agent tank**
Two differently sized CPS 1230 extinguishing agent tanks provide protection for all common cabinet sizes. The extinguishing agent container is placed either directly in the protected cabinet or on the outside, on or next to the cabinet. Inside the extinguishing agent tank, a cushion of nitrogen covers the extinguishing agent and thus generates an operational pressure of 42 bar. The extinguishing agent tank is fitted with a valve with an integrated electrical triggering device.

Fire detection and extinguishing control panel




| | |
|---|---|
| 1 | Extinguishing agent supply |
| 2 | Extinguishing agent nozzle |
| 3 | Extinguishing agent line |
| 4 | Fire detection and extinguishing control panel |
| 5 | Smoke detector |
| 6 | Electric horn |

**Fire detection and control technology**
Tried and tested Minimax fire detection and extinguishing control technology ensures dependable fire detection as well as control and function monitoring of the system. Each protected cabinet is monitored by smoke detectors. Unlike heat detectors, these already transmit a signal to the fire detection and extinguishing control panel in the initial stages of a fire. The control panel then initiates the shut-down of the energy supply of the cabinet and controls the electric triggering device of the extinguishing agent tank to ensure that the extinguishing agent can flow into the cabinet. At the same time, it triggers an alarm and optionally transmits a signal to a permanently manned post.

## Advantages at a glace

There are many reasons to choose Minimax CPS 1230 extinguishing systems for cabinet protection:

- CPS 1230 extinguishing systems protect cabinets with electronic and electric components.
- The system prevents the fire from spreading to other facilities in the vicinity of the protected cabinets.
- No extended downtimes in energy supply and production facilities.
- One system can protect up to two cabinets.
- The Novec 1230 extinguishing agent is neither corrosive nor electrically conductive and does not leave any residues.
- New systems can be easily and quickly installed or retrofitted, in the case of existing ones.

| System variant | CPS 1230 1.3m³ | CPS 1230 3.3m³ |
|---|---|---|
| | | |
| Nominal filling volume | 2.0 litres | 5.3 Liter |
| Max. protected cabinet volume | 1.3 m³ | 3.3 m³ |
| Total weight extinguishing agent tank* | approx. 9 kg | approx. 17.5 kg |
| Diameter extinguishing agent tank | approx. 100 mm | approx. 140 mm |
| System pressure at 20°C | 42 bar | 42 bar |

* including extinguishing agent, valve, valve protection cap, contact pressure gage and wall bracket.

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**Photos**
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