



## Preaction sprinklers – Two times the security

*Cool down.  
Fire Protection by*

**MINIMAX**

### ► Product ► Use + Advantages

Our patented preaction sprinklers minimise the risk of false triggering, thus providing double protection.

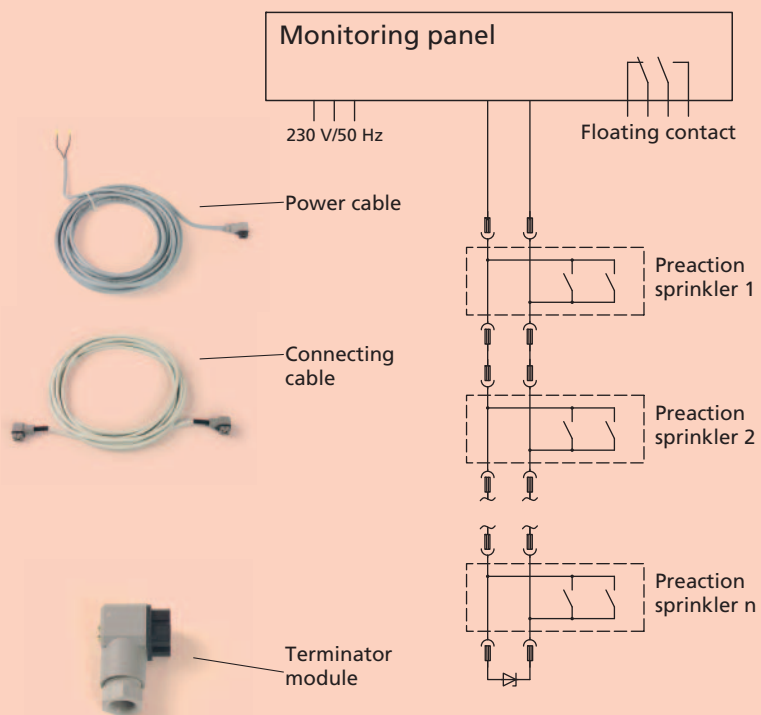
- In a conventional sprinkler system each individual sprinkler head is sealed with a glass bulb. If this bulb is damaged by accident, e.g. during construction work, water is sprayed over the area, damaging the building, fixtures and furniture.
- The Minimax preaction sprinklers have been specifically developed to prevent such damage. Each preaction sprinkler unit consists of two separate sprinkler heads. Before extinguishing water is released, both sprinkler heads of the unit must be triggered.

This makes the Minimax preaction sprinkler a cost-effective alternative to dry pipe sprinkler systems using an additional electronic fire detection system to give the preaction functionality. Therefore the Minimax preaction sprinkler is particularly suitable for small areas.

- Preaction sprinklers are particularly appropriate for the protection of areas where extinguishing water is likely to cause considerable damage. Both wet and dry sprinkler systems can be upgraded to preaction systems.
- The Minimax preaction sprinkler system is especially suitable for:
  - IT rooms
  - PC workstations
  - Test benches
  - IT and telecommunications equipment
  - Switch gears
  - Archives
  - Galleries
  - Libraries
  - Production equipment
  - Pharmaceutical production facilities
- We also offer a special model for saunas with sprinkler heads that are set to respond at a higher temperature.

- + Protects valuable and sensitive objects and rooms against water damage.
- + No need for additional sprinkler groups with separate alarm valves and pipework.
- + Existing sprinkler systems can be easily upgraded.
- + Low minimum operating pressure of 3 bar.
- + Coded connector plugs enable fast and simple cabling between the individual preaction sprinklers.
- + Automatic alarm upon damage of one of the sprinkler heads and in the event of a cable rupture or short-circuit.
- + Low-cost panel for the remote monitoring of the system available.

## Function



The Minimax preaction sprinkler unit consists of a housing with two separate sprinkler heads. Before water is released, both sprinkler heads in the unit must be triggered.

If only one sprinkler head is triggered, an acoustic or visual alarm signal is generated at the monitoring panel. This allows the operator to respond quickly and repair the damaged sprinkler head, avoiding the risk of water damage.

### How does the Minimax preaction sprinkler work?

▶ **When only the sprinkler head to the left (A) has been triggered**, the inner tube drops down, allowing the water to flow into the cast metal housing. The lower end of the tube is closed, sealing the sprinkler orifice the sprinkler orifice and preventing water from escaping from the sprinkler head. The water flowing into the housing lifts the float, which triggers a visual and audible alarm signal at the monitoring panel.

▶ **When only the sprinkler head to the right (B) is triggered**, the float drops down, activating a switch. Again, an alarm signal is generated at the monitoring panel.

▶ **When both sprinkler heads are triggered**, extinguishing water is sprayed from the right sprinkler head (B). The alarm valve activates the alarm pressure switch and an alarm signal is sent to a continuously manned control desk.

The Minimax preaction sprinkler for dry systems is equipped with an additional pressure switch. When the left sprinkler head is triggered, compressed air flows into the preaction sprinkler housing and activates the pressure switch generating an alarm signal at the monitoring panel.

### ▶ Approvals

For the standard version DS1 for wet systems the Preaction Sprinkler is VdS approved.

## Technical data

Type	Protected area per Preaction sprinkler unit	K value	Operating pressure	Nominal release temperature	Orientation	Sensitivity	Sprinkler body	Power supply of control desk
Preaction Sprinkler DS 21 - 24 for wet systems	max. 9 m <sup>2</sup>	57	min. 3 bar	68 °C	suspended	Fast response RTI < 50	brass, chrome plated	230 V AC
Preaction Sprinkler DS 21 - TR-24 for dry pipe systems	max. 9 m <sup>2</sup>	64	min. 3 bar	68 °C	suspended	Fast response RTI < 50	brass, chrome plated	230 V AC
Preaction Sprinkler DS 21 - Sauna-24 for sauna areas	max. 9 m <sup>2</sup>	57	min. 3 bar	141 °C and 182 °C	suspended	Fast response RTI < 50	brass, chrome plated	230 V AC

Please see corresponding technical data sheets for detailed information.

Subject to technical alterations.

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