

Refrigerated Area Sprinkler Systems

A refrigerated area sprinkler system affords fire protection in refrigerated rooms or buildings and includes special safeguards against accidental filling with water and subsequent freezing of the system. A fire detection system shall actuate and one or more automatic sprinklers in the piping shall operate before water will enter the sprinkler system. An alarm sounds if the detection system only is actuated while pneumatic pressure is maintained in the sprinkler piping. An alarm also sounds if the pneumatic pressure in the sprinkler piping is not properly maintained. In either case, water does not enter the system piping. These systems should be installed in accordance with FM Global Loss Prevention Data Sheet 8-29, "Refrigerated Storage". System calculations regarding required system air capacity should be performed if only one air maintenance device is contemplated for several sprinkler systems.

Refrigerated area sprinkler systems which are operated pneumatically/hydraulically are FM Approved as complete systems. Only the listed components for a given system may be used in combination.

Fire detection systems which are operated electrically are FM Approved on a component basis. Only compatible components may be used in combination. Compatible FM Approved Release Control Panels for use with electric release refrigerated area sprinkler system(s) are listed under RELEASE CONTROL PANEL COMPATIBILITY.

Double Interlock Preaction System - Pneumatic/Electric

Double Interlock Preaction System – Pneumatic/Electric. Consists of a 2 inch (50 mm) NPS Model G2000 or 3 inch (75 mm) NPS Model G3000 or 4 inch (100 mm) NPS Model G4000 or 6 inch (150 mm) NPS Model G6000 automatic water control valve. Grooved end connections. The Pressure Operated Relief Valve (PORV) prevents the valve from resetting after tripping. Vertical installations only. The rated working pressure of the Double Interlock Preaction Sprinkler System is 250 psi (1725 kPa). Major trim components consist of the following:

- Normally Closed Solenoid Valve, Viking part numbers: 11601(24VDC 9W), 11602 (24VDC 9W), 13843 (24VDC 2W), 13844 (24VDC 2W), 11591 (24VDC 10W) or 11592 (24VDC 10W)
- Model H-1 or R-1 Pneumatic Actuator
- Model D-3 or D-4 PORV
- Alarm test trim
- Water supply pressure gauge
- Supervisory air pressure gauge
- Priming chamber supply connections
- Emergency release ball valve
- 2 inch NPS System Main Drain Valve
- Model D-1 or D-4 Drip Check Valve
- 1/16 inch (1.5 mm) Prime Line Restricted Orifice

Optional system components include:

- Butterfly or OS&Y water supply control valve
- System Air pressure supervisory switch
- System alarm pressure switch
- Viking Model D-2 pressure maintenance device
- Model E-1 and D-2 accelerator
- Any compatible FM Approved Fire Alarm/Releasing Control Panel and associated batteries
- Model LD-1 Anti-Water Column device

Company Name:	The Viking Corporation
Company Address:	5150 Beltway Dr SE, Caledonia, Michigan 49316, USA
Company Website:	http://vikingcorp.com
New/Updated Product Listing:	No
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