

APPROVED Data Sheet UFS-110A Rev 3.00 Page 1 of 2





# **PREACTION-PAC GENERATION 2**

#### **FEATURES**

- FM Approved
- FDNY Certificate of Approval #6148
- CSFM Listing No. 7080-2143.0100
- Includes preaction valve with optional control panel and supervisory pressure source
- Fully factory assembled, programmed, and tested
- No field assembly required
- Just connect water supply, drain, sprinkler piping, power, and electrical devices

#### **BENEFITS**

- · Saves assembly, programming, and installation time
- Installation drawings available
- Quicker commissioning just place, connect, and it's ready
- Easy inspection and maintenance

#### DESCRIPTION

The FM Approved UNITED Fire Systems PREACTION-PAC<sup>™</sup> is a fully assembled preaction fire suppression system, including preaction valve, trim, and optional control panel, providing one complete zone of preaction water sprinkler fire protection. All components are contained in two (2) red powder-coated steel enclosures assembled one above the other. The system pressure gauges are mounted on the front of the valve enclosure. The system detection and control panel is mounted behind a door on the electrical enclosure with a clear polycarbonate window allowing examination of the system visual indicators. Lockable latches on both doors permit restricted access to connections and components. A manual release valve is located behind a non-locking door on the valve enclosure. Gasketing provides sealing of the enclosure doors. Knockouts permit easy attachment of external electrical raceways.

## **Preaction Valve**

The preaction valve assembled in the **PREACTION-PAC** is a lowdifferential, latched clapper valve using a unique direct acting diaphragm to separate the system water supply from the system piping. The positive latching system uses the supply water pressure to hold the clapper shut. When the water pressure in the diaphragm chamber is released, the latch retracts from the clapper and the valve opens. The low differential and unique latch and actuator design allows the valve to be self-resetting.

## Piping

Water inlet and drain connections are located on the lower left and right side of the valve enclosure. The unused inlet is left plugged. The outlet connection is on the top surface of the valve enclosure, behind the electrical enclosure. Grooved pipe is used for the inlet and outlet connections.

## **Detection & Control Panel**

Optional control panels allow for a simple, full-featured system with conventional detection, or a fully programmable and networkable addressable system. All necessary internal wiring connections are factory-assembled and tested.

- · Lower left or right side water inlet and drain connections
- Attractive, rugged, powder-coated metal enclosures
- Separate, lockable valve and electrical enclosures
- Easy-to-see pressure gauges on enclosure front
- Manual actuation valve behind separate non-locking door
- Space for required spare sprinkler heads and wrench
- Easy-to-follow instructions on enclosure front
- 1-1/2 through 6 inch valve options
- Addressable or conventional control panel options
- · Finished appearance allows placement in or near protected space
- Rapid access to manual release handle without a key
- Reliable, dependable protection that functions as designed
- Expert in-house field and technical support



## UNITED Fire Systems

Division of United Fire Protection Corporation 1 MARK ROAD KENILWORTH, NJ 07033 USA PHONE: 908-688-0300 FAX: 908-688-0218 unitedfiresystems.com This literature is provided for informational purposes only. United Fire Protection Corporation assumes no responsibility for the product's suitability for a particular application. The product must be properly applied to perform as intended. The information in this document is believed to be correct at the time of publication. UNITED Fire Systems reserves the right to add to, delete, or revise any information in this document without notice,





**Ordering Information** 



Wiring

Power for the control panel is factory-connected to come from the same 115 VAC 60 Hz single-phase source as the built-in compressor, or jumpers may be removed to permit two (2) separate power sources to be used. External wiring is brought to a terminal strip in the electrical enclosure. No access to the inside of the valve enclosure is necessary to complete the wiring installation. All necessary internal wiring for waterflow, tamper, and supervisory switches, plus solenioid activation, is factory-installed and tested.

# **Options (refer to Ordering Information)**

- Choice of preaction valve size (1-1/2 inch through 6 inch available)
- Choice of compressor size Refer to Table B
- Choice of control panel (2 conventional and 3 addressable panels available)
- Installed FM Approved Model NAMD-1 pressure maintenance device, making the assembly ready for external supervisory pressure source
- Integrated nitrogen-based corrosion inhibiting system (refer to Data Sheet UFS-110B)

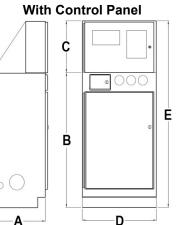
## **Specifications**

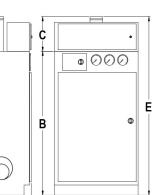
- Maximum Service Pressure: 300 PSIG (2065 kPa gauge)
- Valve Test Pressure: Factory hydrostatically tested to 600 PSIG (4135 kPa gauge)
- Minimum Supervisory Pressure: 13 PSIG (90 kPa gauge)
- Maximum Supervisory Pressure: 18 PSIG (124 kPa gauge)
- Electrical Enclosure: 14 gauge steel with continuous welded seams
- Valve Enclosure: 12 gauge steel with continuous welded seams
- Access Doors: Full hinge with oil-resistant gaskets
- External Power Requirement: 115 VAC, 60 Hz, single-phase, (1) or (2) circuits. Maximum current draw 7.2 A

#### GENERATION VALVE SIZE PRESSURE SOURCE CONTROL PANE GX - XX - XX - X - X POTTER 4410-RC Α NOTIFIER NFS2-640 в NOTIFIER RP-2001 С D FENWAL FN-6000 Е KIDDE ARIES-SLX Ν NO PANEL 1/6 HP COMPRESSOR 1 1/3 HP COMPRESSOR 2 3 1/2 HP COMPRESSOR MODEL NAMD-1 PREACTION SINGLE INTERLOCK P1 P2 PREACTION DOUBLE INTERLOCK 1-1/2 INCH 15 20 2 INCH 2-1/2 INCH 25 30 3 INCH 40 4 INCH 6 INCH 60 G2 GEN 2 - VICTAULIC \*\* 6 Inch valve is not FM Approved.

## Dimensions - Refer to Table A ith Control Panel Without Control Panel

Dimension	With or Without Control Panel	With 1-1/2" thru 3" Valves	With 4" and 6" Valves	
A - Depth	Both	22	24	
B - Valve Enclosure	Both	52	52	
C - Electrical	With	20	20	
Enclosure	Without	12	12	
D - Width	Both	30	30	
E - Height	With	72	72	
	Without	62	62	
NOTE: All dimensions are in inches.				





D

Front

Table A - Dimensions

Maxi

<u>Left S</u>	ide <u>Front</u>	Left Side		
Compressor HP	Maximum Sprinkler Pipe	Volume - Gallons		
1/6	220			
1/3	430			
1/2	670			
mum sprinkler pipe volume is for initial-fill to 18 PSIG in 30 minutes to satisfy				
NFPA 13 - 2015 sections 7.2 and 7.3				

Table B - Built-In Compressor Capacity

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