

## Report of Materials and Equipment Acceptance Division

NYC Department of Buildings 280 Broadway, New York, NY 10007 Patricia Lancaster, FAIA, Commissioner (212) 566-5000, TTY: (212) 566-4769

Pursuant to Administrative Code Section 27-131, the following equipment or material has been found acceptable for use subject to the terms and conditions contained herein.

**MEA 7-06-E** 

Manufacturer: Kidde-Fenwal, Inc., 400 Main Street, Ashland, MA

01721

**Trade Name(s):** Kidde Fire Systems and Fenwal Protection Systems

**Product:** Advanced Delivery Systems (ADS) series fire

suppression system and Phoenix fire suppression

system

**Pertinent Code Section(s):** Chapter 17 and Reference Standard 17-3

Prescribed Test(s): UL Standard 2166

**Laboratory:** Underwriters Laboratories, Inc.

Test Report(s): UL File Ex4674, Projects 00NK12767, 02NK36457

and 04NK07725, issued August 5, 2002, revised

May 21, 2004

**Description:** The ADS and Phoenix Series fire suppression systems are advanced delivery systems that are UL listed per NFPA 2001 for Total Flooding applications that have Class A, B or C hazards. The ADS and Phoenix Series systems use a unique method of propelling the agent (i.e. FM-200 or HFC-227 ea) nozzles. Nitrogen gas pressure from a separate storage cylinder is introduced into the vapor space of the agent cylinder at a controlled rate. The separate stored pressure acts to propel the liquid agent through the network at a much higher mass rate than most conventional suppression systems. ADS and Phoenix Series systems are extremely well-suited to applications involving remote agent storage and re-use of existing Halon 1301 piping for retro-fit and replacement to new alternative clean agents. This system requires the use of an engineered hydraulic software computer program to aid in the final design by the system installer/designer.

All system components and system design limitations are outlined in the UL approved manual, P/N 06-236068-001 and 06-236069-0002. Main system components are listed below with all others outlined in the system manual referenced above.

Description	Parts Number	
225 lb. capacity cylinder and valve assembly	90-10022X-001	93-10022X-001
395 lb. capacity cylinder and valve assembly	90-10039X-001	93-10039X-001
675 lb. capacity cylinder and valve assembly	90-10067X-001	93-10067X-001
1010 lb. capacity cylinder and valve assembly	90-10101X-001	93-10101X-001
2300 cuin. nitrogen driver	90-102300-X01	93-102300-X01
4070 cuin. nitrogen driver	90-104070-X01	93-104070-X01
4890 cuin. nitrogen driver	90-104890-X01	93-104890-X01
Actuation assembly kit – 225 and 395 lb.	06-129882-001	
Actuation assembly kit – 675 and 1010 lb.	06-129985-001	
Orifice fitting	90-194129-XXX	93-194129-XXX
Manifold actuation arrangement kits – 225 and 395 lb. cyls.	06-129944-X0X	
Manifold actuation arrangement kits – 675 and 1010 lb. cyls.	06-129986-X0X	
3/16 inch actuation flex hoses	06-118193-00X	
Grooved-nut discharge head	81-872442-000	
Plain nut discharge head	WK-872450-000	
Nitrogen transfer hoses	06-118207-00X	
Combined cylinder strap – 225 lb.	06-236127-001	
Combined cylinder strap – 395 lb.	06-236126-001	
Dual cylinder strap – 4070 cuin. driver	06-236173-001	
Dual cylinder strap – 4890 cuin. driver	06-236174-001	
Pressure-operated control head	82-878737-000	
Electric control head, 24VDC	WK-890181-000	
EXP proof – electric control head	81-100000-001	
3-way directional valves – carbon steel	90-220030-00X	93-220030-00X
3-way directional valves – carbon steel	90-220031-00X	93-220031-00X
3-way directional valves – carbon steel	90-220032-00X	93-220032-00X
3-way directional valves – stainless steel	90-118325-00X	93-118235-00X
3-way directional valves – stainless steel	90-118327-00X	93-118327-00X
Pneumatic solenoid	06-118329-001	
Pressure regulator	06-118334-001	
ADS brass fan nozzle – 180°	90-19441X-1XX	93-19441X-1XX
ADS brass fan nozzle – 360°	90-19442X-1XX	93-19442X-1XX
ADS stainless steel fan nozzle – 180°	90-19441X-2XX	93-19442X-2XX
ADS stainless steel fan nozzle – 360°	90-19442X-2XX	93-19442X-2XX

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Pursuant to "Promulgation of the Rules relating to Material and Equipment Application Procedures" dated November 5, 1992, the Bureau of Fire Prevention has no objections Letter dated April 13, 2006, F.P. Index #0512035B.

## **Terms and Conditions:** The above units are accepted on condition that:

- 1. All uses and installation comply with the applicable New York City codes, rules, regulations, etc., and in particular with 3RCNY 15-08 of the 1996 "Clean Agent Extinguishing Systems," except as modified by conditions of this letter and RS 17-3 requirements.
- 2. Systems may be used for <u>Class A and C fire applications with a minimum FM-200 design concentration of 6.25%</u>.
- 3. Systems may be used for <u>Class B fire applications with a minimum design concentration as indicated in NFPA 2001, and Table 4-1 of Fenwal design manual (UL Ex4674)</u>.
- 4. Underwriters Laboratories, Inc.'s requirements and limitations shall be complied with.
- 5. Manufacturer's installation, maintenance procedures and limitations shall be complied with.
- All shipments and deliveries of such equipment shall be provided with a metal tag, suitably placed, certifying that the equipment shipped or delivered is equivalent to that tested and acceptable for use, as provided in Section 27-131 of the New York City Building Code.

Final Acceptance

Examined By

MEA 7-06-E