Certificate Number Report Reference Date EX4674 EX4674-20050217 2023-April-13

Issued to: Kidde-Fenwal Inc 400 MAIN ST ASHLAND MA, 01721-2150 US Kidde-Fenwal Inc 400 MAIN ST ASHLAND MA, 01721-2150 US

This is to certify that	CLEAN-AGENT EXTINGUISHING SYSTEM UNITS	
representative samples of	See Addendum Page for Product Designation(s).	
	Have been evaluated by UL in accordance with the Standard(s) indicated on this Certificate.	

Standard(s) for Safety:	ANSI/CAN/UL/ULC 2166, Halocarbon Clean Agent Extinguishing System Unit
Additional Information:	See the UL Online Certifications Directory at https://iq.ulprospector.com for additional information

This Certificate of Compliance indicates that representative samples of the product described in the certification report have met the requirements for UL certification. It does not provide authorization to apply the UL Mark. Only the Authorization Page that references the Follow-Up Services Procedure for ongoing surveillance provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.

Oebrah Jennings- Corner Deborah Jennings-Conner, VP Regulatory Services

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This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements

Fenwal Engineered Clean Agent Extinguishing System Units, stored pressure type, charged with 3MTM NovecTM 1230 Fire Protection Fluid (FK-5-1-12).

Kidde Fire Systems ECS[™] Suppression System stored pressure type, charged with 3MTM NovecTM 1230 or Fluoro-KTM Fire Protection Fluid (FK-5-1-12).

These ECSTM system units are super-pressurized to 360 psig with operating temperatures of 0 to 130 F. The units are designed for total flooding protection against Class A surface burning, Class B flammable liquid and Class C fires occurring within an enclosure. These system units consist of the components included below and as indicated in the manuals in the illustration section of this procedure. Components are identical to the components covered in Volume 1 of this Procedure unless otherwise noted in the illustrations.

Pressure Vessels - 10-20 lb DOT-4BW-500 cylinders manufactured by Worthington Cylinders.

Component Recognized (GMJJ2.EX4003) 10-900 lb TPED or DOT cylinders (as indicated on label drawing and cylinder markings) manufactured by Manchester Tank.

As an alternate, the 40 & 70 lb (9 in. diameter) and 125 & 200 lb (12.75 in. diameter), may be Component Recognized DOT 4BW-500 cylinders manufactured and painted with Dupont Red WCJ (PFR654S9) by Worthington Industries.

TPED cylinders may also be provided by Beijing Tian Industry Co., LTD (BTIC) and identified with TPED Stamping (Pi Mark) along with the Notifying body number (TUV). Painting coat: Red Epoxy Primer and RAL3020 Acrylic Polyurethane Topcoat made by Shi Jia Zhuang Paint Company.

As an alternate, the 200 and 350 lb assemblies (p/n's 45-10020X-001, 45-10035X-001, 44-10020X-001, and 44-10035X-001) may be assembled utilizing the ADS cylinder (substituting p/n 06-236050-000 for WK-486679-100 and 06-236049-000 for WK-296095-000) with unused extra cylinder ports plugged. See Vol. 6, Sec. 1 for details.

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PRODUCT COVERED (CONT'D):

Nominal Size, lb	Part No.	Fill Range, lb	Valve Size, in
X UI X UI X U	Standard Vertical As	semblies	
10	XX-100010-001 (V)	6-11	1-1/2
20	XX-100020-001 (V)	12-23	1-1/2
40	XX-100040-001 (V)	20-40	1-1/2
70	XX-100070-001 (V)	35-70	1-1/2
125	XX-100121-001 (V) (L)	63-125	1-1/2
125	XX-100125-001 (V)	63-125	1-1/2
200	XX-100200-001 (V)	100-200	2
200	XX-100201-001 (V) (L)	100-200	2
350	XX-100350-001 (V)	175-350	2
350	XX-100351-001 (V) (L)	175-350	2
450	XX-100451-001 (V) (L)	260-425	2
600	XX-100600-001 (V)	300-600	3
600	XX-100601-001 (V) (L)	300-600	3
900	XX-100900-001 (V)	455-910	3
900	XX-100901-001 (V) (L)	455-910	3

Nominal Size, L	Part No.	Fill Range, lb	Valve Size, in.
Cylinder	and Valve Assemblies for Ve	ertical Installatio	n Only
< $>$ $>$ $>$	European Union (EU)) Market	imes $ imes$ $ imes$ $ imes$
5	45-990010-001 (V)	6-11	1-1/2
8	45-990020-001 (V)	12-23	1-1/2
16	45-990040-001 (V)	20-40	1-1/2
28	45-990070-001 (V)	35-70	1-1/2
51	45-990121-001 (V) (L)	63-125	1-1/2
51	45-990125-001 (V)	63-125	1-1/2
81	45-990200-001 (V)	100-200	2
81	45-990201-001 (V) (L)	100-200	2
142	45-990350-001 (V)	175-350	2
142	45-990351-001 (V) (L)	175-350	2
180	45-990450-001 (V)	260-425	2
180	45-990451-001 (V) (L)	260-425	2
243	45-990600-001 (V)	300-600	3
243	45-990601-001 (V) (L)	300-600	3
368	45-990900-001 (V)	455-910	3
368	45-990901-001 (V) (L)	455-910	3

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PRODUCT COVERED (CONT'D):

Nominal Size, lb	Part No.	Fill Range, lb	Valve Size, in.
	Bottom Discharge	Assemblies	
350	44-192041-001 (V)	178-354	3
350	44-192041-002 (V) (L)	178-354	3
560	44-192040-001 (V)	284-567	3
560	44-192040-002 (V) (L)	284-567	3
850	44-192042-001 (V)	427-854	3
850	44-192042-002 (V) (L)	427-854	3
ינאינאינא	Spherical Ass	emblies	~~~~~
15	44-120250-001 (V)	7.7-15.5	1-1/2
30	44-120251-001 (V)	15.5-31.0	1-1/2
44	44-110201-001 (V)	23-45	1-1/2
63	44-110202-001 (V)	33-65	1-1/2
101	44-110203-001 (V)	53-104	1-1/2
196	44-110204-001 (V)	99-196	1-1/2

Notes: XX - 44 for Fenwal models, 45 for Kidde models

(V) - Vertical Installation only

(L) - Liquid Level Indicator

Discharge Nozzles

Size, in.	Stainless Steel Part No.		Brass Part No.	
	180°	360°	180°	360°
3/8	XX-194612-YYY	XX-194622-YYY	XX-194712-YYY	XX-194722-YYY
1/2	XX-194613-YYY	XX-194623-YYY	XX-194713-YYY	XX-194723-YYY
3/4	XX-194614-YYY	XX-194624-YYY	XX-194714-YYY	XX-194724-YYY
1	XX-194615-YYY	XX-194625-YYY	XX-194715-YYY	XX-194725-YYY
1-1/4	XX-194616-YYY	XX-194626-YYY	XX-194716-YYY	XX-194726-YYY
1-1/2	XX-194617-YYY	XX-194627-YYY	XX-194717-YYY	XX-194727-YYY
2	XX-194618-YYY	XX-194628-YYY	XX-194718-YYY	XX-194728-YYY

Notes: XX – 44 for Fenwal models, 45 for Kidde models

YYY - See illustrations in this section for details of nozzles and all applicable dash numbers

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