



GAQF. EX4674

Clean Agent Extinguishing System Units

See General Information for Clean Agent Extinguishing System Units

KIDDE-FENWAL INC

EX4674

400 MAIN ST
ASHLAND, MA 01721 USA

PRE-ENGINEERED, Fenwal Modular Spherical, Pre- Engineered, Models 93- 120250-001, 93-120251-001, 93-120253-001, 93-120351-001, 93-120353-001, 93-110201-001, 93-110202-001, 93-110203-001, 93-110204-001, 96-110204-001, HFC-227ea Clean Agent, designated as FM-200, Extinguishing System Units, stored pressure type, having nominal charging capacities of 15, 30, 30, 30, 30, 44, 63, 101, 130 and 196 lbs., respectively. The units are super-pressurized with Nitrogen to 360 psig with an operating temperatures of 32 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.

A description of these extinguishing system units and the design and installation limitations are contained in the Listee's installation manual Part No. 93-FM200M- 004 dated February 2004 Rev. AB.

Kidde ECS Series Pre-Engineered, Models 90- 100010-001, 90-100011-001, 90- 100020-001, 90- 100021-001, 90-100040-001, 90-100041-001, 90-100070-001, 90-100071-001, 90-100121-001, 90-100125-001, 90-100200-101, 90-100201-101, 90-100201-001, 90-100200-001, 90-100350-001, 90-100351-001, 90-100600-001, 90-100601-001 HFC-227ea Clean Agent, designated as FM-200, Extinguishing System Units, stored pressure type, having nominal charging capacities of 10, 10, 20, 20, 40, 40, 70, 70, 125, 125, 200, 200, 200, 200, 350, 350, 500 and 500 lbs, respectively. The units are super-pressurized with Nitrogen to 360 psig with an operating temperatures of 32 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.

A description of these extinguishing system units and the design and installation limitations are contained in the Listee's installation manual Part No. 90-FM200M-011 dated February 2004 Rev. AB.

Fenwal 9300 Modular Pre-Engineered, Models 93-100010-001, 93-100011-001, 93-100020-001, 93-100021-001, 93-100040-001, 93-100041-001, 93-100070-001, 93-100071-001, 93-100121-001, 93-100125-001, 93-100200-101, 93-100201-101, 93-100201-001, 93-100200-001, 93-100350-001, 93-100351-001, 93-100600-001, 93-100601-001 HFC-227ea Clean Agent, designated as FM-200, Extinguishing System Units, stored pressure type, having nominal charging capacities of 10, 10, 20, 20, 40, 40, 70, 70, 125, 125, 200, 200, 200, 200, 350, 350, 500 and 500 lbs, respectively. The units are super-pressurized with Nitrogen to 360 psig with an operating temperatures of 32 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.

A description of these extinguishing system units and the design and installation limitations are contained in the Listee's installation manual Part No. 93-FM200M-013 dated February 2004 Rev. AB.

Kidde FE-13 Modular Pre-Engineered, Models 96-100065-001, 96-100112-001, HFC-23 Clean Agent Extinguishing System Units, stored pressure type, having nominal charging capacities of 65, 112 lb of HFC-23 Clean Agent, respectively. The units have an operating temperatures of -40 F 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. A description of these extinguishing system units and the design and installation limitations are contained in the Listee's installation manual P/N 96-FE13MA- 000 dated October 2002.

Kidde "In Cabinet" Models 90-410103-00X, 90-410105-00X, 90-410107-00X, 90-410110-00X, 90-410112-00X, 90-410115-00X, 90-410117-00X and 90-410120-00X, HFC-227ea Clean Agent, designated as FM-200, Extinguishing System Units, stored pressure type, having nominal charging capacities of 3, 5, 7, 10, 12, 15, 17 and 20 lbs., respectively. The units are super-pressurized with Nitrogen to 360 psig with an operating temperatures of 32 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.

A description of these extinguishing system units and the design and installation limitations are contained in the Listee's installation manual Part No. 90-FM200M- 040 dated September 2004.

Fenwal "In Cabinet" Models 93-410103-00X, 93-410105-00X, 93-410107-00X, 93-410110-00X, 93-410112-00X, 93-410115-00X, 93-410117-00X and 93-410120-00X, HFC-227ea Clean Agent, designated as FM-200, Extinguishing System Units, stored pressure type, having nominal charging capacities of 3, 5, 7, 10, 12, 15, 17 and 20 lbs., respectively. The units are super-

pressurized with Nitrogen to 360 psig with an operating temperatures of 32 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.

A description of these extinguishing system units and the design and installation limitations are contained in the Listee's installation manual Part No. 93-FM200M- 040 dated September 2004.

ENGINEERED UNITS, Kidde ECS Series Engineered, Models 90-100010-001, 90-100020-001, 90- 100040-001, 90-100070-001, 90-100121-001, 90-100125-001, 90-100200-001, 90-100201-001, 90-100350-001, 90-100351-001, 90-100600-001, 90-100601-001, 90-100600-100, 90-100601-100, 90-100900-001, 90- 100901- 001, HFC- 227ea Clean Agent Extinguishing System Units, stored pressure type, having nominal charging capacities of 10, 20, 40, 70, 125, 125, 200, 200, 350, 350, 600, 600, 600, 600, 900, 900 lb of HFC-227ea Clean Agent, respectively. The units are super-pressurized to 360 psig with operating temperatures of 32 F 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.

A description of these extinguishing system units and the design and installation limitations are contained in the Listee's installation manual P/N 90FM200M-000 dated February 2004 Rev. AD. These installations require the use of the Listee's flow calculation software KID Version 3.03 (reference flow calculation manual P/N 90-FM200M- 110 dated February 2004). Copies are available from the above Listee.

Fenwal 9300 Series Engineered, Models 93-100010-001, 93-100020-001, 93-100040-001, 93-100070-001, 93- 100121-001, 93-100125-001, 93-100200-001, 93- 100201-001, 93-100350-001, 93-100351-001, 93- 100600-001, 93-100601-001, 93-100600-100, 93-100601-100, 93-100900-001, 93-100901-001, HFC-227ea Clean Agent Extinguishing System Units, stored pressure type, having nominal charging capacities of 10, 20, 40, 70, 125, 125, 200, 200, 350, 350, 600, 600, 600, 600, 900, 900 lb of HFC-227ea Clean Agent, respectively. The units are super-pressurized to 360 psig with operating temperatures of 32 F 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.

A description of these extinguishing system units and the design and installation limitations are contained in the Listee's installation manual P/N 93-FM200M-007 dated February 2004 Rev. AD. These installations require the use of the Listee's flow calculation software FEN Version 3.03 (reference flow calculation manual P/N 93-FM200M- 110 dated February 2004). Copies are available from the above Listee.

Fenwal Sphere and Bottom Discharge Engineered, Models 93-120250-001, 93-120251-001, 93-120253-001, 93-120351-001, 93-120353-001, 93-110201-001, 93-110202-001, 93-110203-001, 93-110204-001, 93- 192041-001, 93-192041-002, 93-193040-001, 93-192040-002, 93-192042-001, 93-192042-002, HFC-227ea Clean Agent Extinguishing System Units, stored pressure type, having nominal charging capacities of 15, 30, 30, 30, 30, 44, 63, 101, 196, 350, 560, 560, 850, 850 lb of HFC-227ea Clean Agent, respectively. The units are super-pressurized to 360 psig with operating temperatures of 32 F 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.

A description of these extinguishing system units and the design and installation limitations are contained in the Listee's installation manual P/N 93-FM200M-012 dated February 2004 Rev. AD. These installations require the use of the Listee's flow calculation software FEN Version 3.03 (reference flow calculation manual P/N 93-FM200M- 110 dated February 2004). Copies are available from the above Listee.

Kidde ADS Series Engineered, Models 90-100225-001, 90-100221-001, 90-100395-001, 90-100391-001, 90-100675-001, 90-100671-001, 90-101010-001, 90-101011-001 , HFC-227ea Clean Agent Extinguishing System Units, having nominal charging capacities of 225, 225, 395, 395, 675, 675, 1010, 1010 lb of HFC-227ea Clean Agent, respectively. The units have an operating temperatures of 32 F 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.

A description of these extinguishing system units and the design and installation limitations are contained in the Listee's installation manual P/N 90-FM200M-030 dated February 2004 Rev. AD, and Addendum 1 dated May 2004. These installations require the use of the Listee's flow calculation software ADS Version 3.02 (reference flow calculation manual P/N 90-FM200M - 130 dated February 2004). Copies are available from the above Listee.

Fenwal Phoenix Series Engineered, Models 93-100225-001, 93-100221-001, 93- 100395-001, 93-100391-001, 93-100675-001, 93-100671-001, 93-101010-001, 93- 101011-001 HFC-227ea Clean Agent Extinguishing System Units, having nominal charging capacities of 225, 225, 395, 395 lb of HFC-227ea Clean Agent, respectively. The units have an operating temperatures of 32 F 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.

The description of these extinguishing system units and the design and installation limitations are contained in the Listee's installation manual P/N 93-FM200M-030 dated February 2004 Rev. AD, and Addendum 1 dated May 2004. These Installations require the use of the Listee's flow calculation software PNX Version 3.02 (reference flow calculation manual P/N 93-FM200M-130 dated February 2004). Copies are available from the above Listee.

Kidde FE-13 Engineered, Models 96-100065-001, 96- 100112-001, HFC-23 Clean Agent Extinguishing System Units, stored pressure type, having nominal charging capacities of 65, 112 lb of HFC-23 Clean Agent, respectively. The units have an operating temperatures of -40 F 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. A description of these extinguishing system units and the design and installation limitations are contained in the Listee's installation manual P/N 96-FE13MA-002 dated October 2002. These installations require the use of the Listee's flow calculation software KID Version 3.50 (reference flow calculation manual

P/N 96-FE13MA-013 dated March 2002).

Kidde Novec™ 1230™ Engineered Series, Models 45-100010-001, 45- 100020-001, 45- 100040-001, 45-100070-001, 45-100121-001, 45-100125-001, 45-100200-001, 45-100201-001, 45-100350-001, 45-100351-001, 45-100600-001, 45-100601-001, 45-100900-001, 45- 100901-001 Clean Agent Extinguishing System Units, stored pressure type having nominal charging capacities of 10, 20, 40, 70, 125, 125, 200, 200, 350, 350, 600, 600, 900, 900 lb of Novec™ 1230™ Clean Agent, respectively. The units are super-pressurized to 360 psig with operating temperatures of 0°F 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.

A description of these extinguishing system units and the design and installation limitations, are contained in the Listee's Design, Installation, Operation and Maintenance Manual, P/N 45-N1230M-001, dated August 2005. These installations require the use of the Listee's Design and Flow Calculation Software, Version 1.0.X* (reference the Users Manual for Kidde Novec 1230 Design and Flow Calculation Software, P/N 45-N1230M-100, dated March 2006). Copies are available from the above Listee.

Kidde Novec™ 1230™ Engineered Series (EU Compliant), Models 45-990010- 001, 45 -990020-001, 45-990040-001, 45-990070-001, 45-990121-001, 45-990125-001, 45-990200-001, 45-990201-001, 45-990350-001, 45-990351-001, 45-990600-001, 45-990601-001, 45-990900-001, 45-990901-001 Clean Agent Extinguishing System Units, stored pressure type having nominal charging capacities of 10 (4.5), 20 (9.1), 40 (18.1), 70 (31.7), 125 (56.7), 125 (56.7), 200 (90.7), 200 (90.7), 350 (158.8), 350 (158.8), 600 (272.1), 600 (272.1), 900 (408.2), 900 (408.2) lb (kg) of Novec™ 1230™ Clean Agent, respectively. The units are super-pressurized to 360 psig with operating temperatures of 0°F 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. A description of these extinguishing system units and the design and installation limitations, are contained in the Listee's Design, Installation, Operation and Maintenance Manual, P/N 45-N1230M-001, dated August 2005. These installations require the use of the Listee's Design and Flow Calculation Software, Version 1.0.X* (reference the Users Manual for Kidde Novec 1230 Design and Flow Calculation Software, P/N 45-N1230M-100, dated March 2006). Copies are available from the above Listee.

Fenwal Novec™ 1230™ Engineered Series, Models 44-100010-001, 44-100020-001, 44- 100040-001, 44-100070-001, 44-100121-001, 44-100125-001, 44-100200-001, 44-100201-001, 44-100350-001, 44-100351-001, 44-100600-001, 44-100601-001, 44-100900-001, 44- 100901-001 Clean Agent Extinguishing System Units, stored pressure type having nominal charging capacities of 10, 20, 40, 70, 125, 125, 200, 200, 350, 350, 600, 600, 900, 900 lb of Novec™ 1230™ Clean Agent, respectively. The units are super-pressurized to 360 psig with operating temperatures of 0°F 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.

A description of these extinguishing system units and the design and installation limitations, are contained in the Listee's Design, Installation, Operation and Maintenance Manual, P/N 44-NV1230-001, February 2005. These installations require the use of the Listee's Design and Flow Calculation Software, Version 1.0.X* (reference the Users Manual for Fenwal Novec 1230 Design and Flow Calculation Software, P/N 44-NV1230-100, February 2005). Copies are available from the above Listee.

Fenwal Novec™ 1230™ Sphere and Bottom Discharge Engineered Series, Models 44-120250-001, 44-120251- 001, 44-110201-001, 44-110202-001, 44-110203-001, 44-110204-001, 44-192041-001, 44-192041-002, 44-193040-001, 93-192040-002, 44-192042-001, 44-192042-002, Clean Agent Extinguishing System Units, stored pressure type, having nominal charging capacities of 15, 30, 44, 63, 101, 196, 350, 350, 560, 560, 850, 850 lb of Novec™ 1230™ Clean Agent, respectively. The units are super-pressurized to 360 psig with operating temperatures of 0°F 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.

A description of these extinguishing system units and the design and installation limitations, are contained in the Listee's Design, Installation, Operation and Maintenance Manual, P/N 44-NV1230-001, February 2005. These installations require the use of the Listee's Design and Flow Calculation Software, Version 1.0.X* (reference Users Manual for Fenwal Novec 1230 Design and Flow Calculation Software, P/N 44-NV1230-100, February 2005). Copies are available from the above Listee.

* Numeric version code, where X may be 0-9.

Last Updated on 2006-03-14

Copyright © 2007 Underwriters Laboratories Inc.®

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL's Follow-Up Service. Only those products bearing the UL Mark should be considered to be Listed and covered under UL's Follow-Up Service. Always look for the Mark on the product.

UL permits the reproduction of the material contained in the Online Certification Directory subject to the following conditions: 1. The Guide Information, Designs and/or Listings (files) must be presented in their entirety and in a non-misleading manner, without any manipulation of the data (or drawings). 2. The statement "Reprinted from the Online Certifications Directory with permission from Underwriters Laboratories Inc." must appear adjacent to the extracted material. In addition, the reprinted material must include a copyright notice in the following format: "Copyright© 2007 Underwriters Laboratories Inc.®"