



November 25, 2013

CONTEXT PLUS LTD
175 MAULDETH RD.
MANCHESTER, ENGLAND M14 6SG
UNITED KINGDOM

Attention: Charbel Faddoul

Our Reference: File EX16138

Subject: Conformance Test Report for UL Listing Context Plus HFC-227ea
Engineered Clean Agent Extinguishing System Units

Dear Mr. Faddoul,

This is to certify that representative samples of the Context Plus' HFC-227ea Clean Agent Extinguishing System Units, as indicated below and constructed as described herein, have been investigated by UL in accordance with the Standards indicated in this letter.

To retrieve an up-to-date list of UL's Certified Products, you may check our website at www.ul.com/database. Information on the subject Clean Agent Extinguishing System Units can be requested using the above referenced File Number, or all UL Listed Clean Agent Extinguishing System Units can be viewed under the category code GAQF. This category covers clean agent extinguishing system units, which are assembled in a system to discharge an extinguishing agent through fixed piping and nozzles for the extinguishment of fires. These units include actuating assemblies designed for automatic and manual operation, tank assemblies for storing the extinguishing agent, discharge assemblies, manifold check valves, selector valves, discharge nozzles and other miscellaneous devices.

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 Listing Mark should be considered as being covered under UL's Listing and Follow-Up Service. The UL Listing Mark for these products includes the UL in a circle symbol together with the word "LISTED," a control number, and the product name "Clean Agent Extinguishing System Unit" or "Clean Agent Extinguishing System Unit Assembly." Always look for the UL Listing Mark on the product.

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Product Covered:

Please reference the applicable manual for a complete list of components and installation limitations for use with Context Plus' UL Listed Clean Agent Extinguishing System Units. The following list is a summary only:

Description	Model/Part No.
Cylinder/Valve System Unit Assembly	See Page 2
3 lb. Cylinder Bracket	CP10120-A
6 lb. Cylinder Bracket	CP10120-B
12 lb. Cylinder Bracket	CP-0050
18 lb. Cylinder Bracket	CP-0051
35/70 lb. Cylinder Bracket	CP50139
140 lb. Cylinder Bracket	CP60780
240/360 lb. Cylinder Bracket	CP60760
520 lb. Cylinder Bracket	CP90770
1200 lb. Cylinder Wall Bracket	CP60790
1200 lb. Cylinder Floor Bracket	CP60772
Shuttle Valve, 1 inch	CP 50123
Shuttle Valve, 1.5 inch	CP 60619
Main/Reserve Selector Switch	CP 50195-1
Pressure Operated Switch	CP-27
Manual Control – Electric Pull Station	CP-BG-12LR
Pre-Engineered/Engineered 180 Degree Discharge Nozzle, 0.5 inch	CP60704-2
Pre-Engineered/Engineered 360 Degree Discharge Nozzle, 0.5 inch	CP60704-3
Pre-Engineered/Engineered 180 Degree Discharge Nozzle, 0.75 inch	CP60705-2
Pre-Engineered/Engineered 360 Degree Discharge Nozzle, 0.75 inch	CP60705-3
Pre-Engineered/Engineered 180 Degree Discharge Nozzle, 1 inch	CP60706-2
Pre-Engineered/Engineered 360 Degree Discharge Nozzle, 1 inch	CP60706-3
Engineered 180 Degree Discharge Nozzle, 1.25 inch	CP60707-2
Engineered 360 Degree Discharge Nozzle, 1.25 inch	CP60707-3
Pre-Engineered/Engineered 180 Degree Discharge Nozzle, 1.5 inch	CP60708-2
Pre-Engineered/Engineered 360 Degree Discharge Nozzle, 1.5 inch	CP60708-3
Pre-Engineered/Engineered 180 Degree Discharge Nozzle, 2 inch	CP60709-2
Pre-Engineered/Engineered 360 Degree Discharge Nozzle, 2 inch	CP60709-3
Cylinder Supervisory Pressure Switch (NC)	CP 50138-1
Cylinder Supervisory Pressure Switch (NO)	CP 50138-2
Electric Solenoid, 12V	CP 50025-21
Electric Solenoid, 12V, Haz-Loc	CP 50025-1E
Electric Solenoid, 24V	CP 50025-2
Electric Solenoid, 24V, Haz-Loc	CP 50025-2E
Electric Solenoid, 6V	CP 50025-4
Electric Solenoid, 6V, Haz-Loc	CP 50025-2E
Electric Solenoid, 12V	CP 50025-5

Description	Model/Part No.
Electric Solenoid, 24V	CP 50025-6
Local Manual Control	CP 61033
Piston Actuator	CP 61041
Manual Control – Electric Pull	CP-AR-10
Liquid Level Indicator, 150/250 lb. Cylinders	CP60020
Liquid Level Indicator, 370/560 lb. Cylinders	CP60020-1
Liquid Level Indicator, 1200 lb. Cylinders	CP60020-2
Check Valve, 1 inch	CP 60261
Check Valve, 1.5 inch	CP 60262
Check Valve, 2.5 inch	CP 60263
Flexible Discharge Hose, 1 inch	CP60255
Flexible Discharge Hose, 1.5 inch	CP60256
Flexible Discharge Hose, 2.5 inch	CP60257
Flexible Discharge Hose, 4 inch	CP91230
Check Valve and Flexible Hose Assembly, 4 inch	CP91231
Flexible Actuation Hose, 20 inch	CP 50192
Flexible Actuation Hose, 24 inch	CP 50192-1
Flexible Actuation Hose, 36 inch	CP 50192-2
Pneumatic Actuation Elbow	CP 50194
Pneumatic Actuation Tee	CP 50194-1
Pressure Gauge (360 psi)	CP 50140
Pressure Gauge (240 psi)	CP 27-15-17

PRE-ENGINEERED UNIT, Models CP-3, -6, -12, -18 Clean Agent Extinguishing System Units, stored pressure type, having nominal charging capacities of 3, 6, 12, 18 lb of HFC-227ea Clean Agent, respectively. These units are super-pressurized to 240 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.

Models CP-35, -70, -140, -240, -360, -520 Clean Agent Extinguishing System Units, stored pressure type, having nominal charging capacities of 70, 140, 240, 360, and 520 lb of HFC-227ea Clean Agent, respectively. These 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.

These system units are intended to be designed and installed in accordance with the Listee's Design and Installation Operation and Maintenance Manual, P/N CP - LP - SYS1 dated September 13, 2010.

AGENT STORAGE CONTAINER ASSEMBLY

Weight of Agent (lbs)	Part No.
1-3	CP-3
3-6	CP-6
6-12	CP-12
12-18	CP-18
16-35	CP-35

31-70	CP-70
66-140	CP-140
109-240	CP-240
163-360	CP-360
241-520	CP-520

ENGINEERED UNIT, Models CP90035-E, -90070-E, -90150-E, -90250-E, -90375-E, -90560-E and -91200-E HFC-227ea Clean Agent Extinguishing System Units, stored pressure type, having nominal charging capacities of 35, 70, 150, 250, 375, 560 and 1200 lb HFC-227ea Clean Agent, respectively. These 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.

These above system units are intended to be designed and installed in accordance with the Listee's Design and Installation Operation and Maintenance Manual, P/N CP-90225-D-4 dated September 13, 2010. These installations require the use of the Listee's Flow Calculation Software, Version CP3.10 (Reference Software User's Manual dated September 13, 2010). Copies of the software and manuals may be obtained from the above Listee.

AGENT STORAGE CONTAINER ASSEMBLY

Weight of Agent (lbs)	Part No.
16-35	CP90035-E
31-71	CP90070-E
66-152	CP90150-E
109-253	CP90250-E
163-379	CP90375-E
241-561	CP90560-E
519-1211	CP91200-E

Component Evaluation:

Please reference the applicable manual for a complete list of components and installation limitations for use with Context Plus' UL Listed HFC-227ea Clean Agent Extinguishing System Units. The following list is a summary only:

Pertinent Requirements:

The investigation of the Engineered and Pre-Engineered Clean Agent Extinguishing System Units consisted of conducting a product conformance evaluation and performance testing as described in The Standard for Halocarbon Clean Agent Extinguishing System Units, UL 2166, First Edition, revised March 22, 2001.

Construction Details:

The devices have been examined and found to comply with the Standard for Halogenated Agent Extinguishing System Units, UL 2166, in effect as of the date of this letter.

Use:

The products covered by this letter are for use in accordance with the National Fire Protection Association Standards on Clean Agent Extinguishing Systems, NFPA 2001, and the manufacturer's installation instructions

Prescribed Test(s):

Representative sample extinguishing system units and components were tested at limitations based on information submitted by the manufacturer and as detailed in the manufacturer's manual(s).

Based on a review of the construction features of the extinguishing system units and components only the following tests were conducted and considered necessary, as applicable. Test results relate only to the items tested.

Test	UL2166 Section Reference
Discharge	23
Valve Leakage	24
Hydrostatic Pressure	25
30-Day Elevated Temperature	26
Temperature Cycling	27
Salt Spray Corrosion	28
500 Cycle Operation	29
One-Year Time Leakage	32
Nozzle Distribution Verification	35
Verification of Flow Calculation Method	37
Equivalent Length	38
High Pressure Discharge	39
Flexible Hose Low Temperature	40
Operation Test Of Manual Actuators And Manual Pull Stations	41
Pneumatic Operation	42
Elastomeric Parts	51
Liquid Level Indicators	50
10 Day Moist Ammonia-Air Stress Cracking	53
Indoor Corrosion	UL 38, Sec. 22
65% Under-voltage Operation (Variable Voltage)	UL 864, Sec. 59

Summary:

The results were in compliance with the applicable requirements noted above and, therefore, such products are judged eligible to bear UL's Mark as described in this letter. The description and test result in this letter are only applicable to the samples investigated by UL and does not signify UL certification or that the products described are covered under UL's Follow-Up Service Program. When covered under UL's Follow-Up Service Program, the manufacturer is authorized to use the UL Listing Mark on such products which comply with UL's Follow-Up Service Procedure and any other application requirements of UL LLC.

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Should you have any questions or comments concerning the above, please feel free to contact the undersigned.

Sincerely,

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Reviewed By:

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