

CERTIFICATE OF COMPLIANCE

Certificate Number EX27850
Report Reference EX27850
Issue Date 2023-FEBRUARY-20
Issued to: Fire & Hazard Control Equipment Co. Ltd.
Manufacturer Company: 69th Street
P.O. Box 8401
Dammam II Industrial Area
Dammam 31482 SA

Listed Company: GEM
Burlingham House
Hewett Rd
Gapton Hall Ind Estate
Great Yarmouth NR31 0NN GB

This is to certify that Clean-Agent Extinguishing System Units
representative samples of

See Addendum for Model information

Have been investigated 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 Units

Additional Information: See the UL Online Certifications Directory at
www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's
Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.

Deborah Jennings-Conner

Deborah Jennings-Conner, VP Regulatory Services

UL LLC

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contact UL Customer Service at <http://ul.com/aboutul/locations>



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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.

GEM Engineered Sapphire® Models Clean Agent Extinguishing System Units, stored pressure type, having nominal charging capacities as shown below of 3M™ Novec™ 1230 Fire Protection Fluid (FK-5-1-12) Clean Agent.

The units are super-pressurized to 360 psig (25 bar) with operating temperatures of 32°F (0°C) to 130°F (54.4°C). The units are designed for total flooding protection against Class A surface burning, Class B flammable liquid and C fires occurring within an enclosure.

These system units are intended to be designed and installed in accordance with the Listee's Engineered System Installation, Recharge and Maintenance Manual - p/n 14A-11G, dated September 14, 2020 (Rev. 05), Manual Bulletin 16426 dated December 15, 2021, the Manual Bulletin p/n 16446, Halocarbon ATEX Components (Electrical Actuator & Low-Pressure Switch), dated December 2021, and the Sapphire Engineered System Flow Calculation Software Version HYG3.61b or TYCO4.00, or Software Design Center(SDC) online interface utilizing Version 4.18W. Copies are available from the above Listee.

GEM Engineered Sapphire® Models Clean Agent Extinguishing System Units, stored pressure type, having nominal charging capacities as shown below of FK-5-1-12 extinguishing agent.

The units are super-pressurized to 360 psig (25 bar) with operating temperatures of 32°F (0°C) to 130°F (54.4°C). The units are designed for total flooding protection against Class A surface burning, Class B flammable liquid and C fires occurring within an enclosure.

These system units are intended to be designed and installed in accordance with the Listee's Engineered System Installation, Recharge and Maintenance Manual - 14A-53G , Rev. 00, dated August 17, 2022, and the Sapphire Engineered System Flow Calculation Software Version TYCO4.00. Copies are available from the above Listee.

AGENT STORAGE CONTAINER ASSEMBLY

Weight of Agent (lbs)	Part No.
5-11	303.207.010
9-21	303.207.001
17-39	303207300, 303207310
18-42	303.207.002
33-79	303207301, 303207311
36-84	303.207.003
38-89	442639

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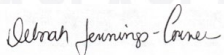
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50-119	303207302, 303207312
58-137	303.207.004
67-158	303207303, 303207313
88-211	570839
117-280	303.207.005
133-317	442640, 570840, 303207304, 303207314
154-370	442641
163-338	303.207.006
166-396	303207305, 303207315
199-459	442642, 303207306, 303.207.007
379-851	303.207.008



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