



Certificate of Compliance

Clean Agent Fire Extinguishing Systems

This certificate is issued for the following equipment:

FIRETRACE Pre-Engineered, Automatic Indirect, Fire Detection and Extinguishing System, Models ILP-300, ILP-600, and ILP-1200

This is to certify that the company indicated below is listed in the FM Approvals Fire Protection Approval Guide and is eligible to use the FM Approved Mark on the FIRETRACE Pre-Engineered, Automatic Indirect, Fire Detection and Extinguishing System, Models ILP-300, ILP-600, and ILP-1200, in agent storage capacities of 3, 6, and 12 pounds (1.4, 2.7 and 5.5 kg) respectively of Great Lakes Chemical FM-200® Clean Extinguishing Agent for the total flooding protection of an enclosed volume where the likely hazard is flammable liquids. For use in ambient temperatures between 0 and 130°F (-18 and 54°C). Automatic actuation of FIRETRACE tubing by direct flame impingement. Maximum protected volume 250 cubic feet (7 cubic meters). Must be installed in accordance with FIRETRACE Manual P/N: 800022, November 2001.

Manufactured by:

**Firetrace International LLC
15690 N. 83rd Way, Suite B
Scottsdale, Arizona 85260**

FM Approvals Standard Class 5612

Project Identifier: 3009890

Date of Approval: November 29, 2001



Member of the FM Global Group

A handwritten signature in black ink, appearing to read 'Richard B. Dunne'.

Richard B. Dunne, Group Manager
FM Approvals – Hydraulics Group

December 23, 2008
Date



Certificate of Compliance

Model IHP Pre-Engineered, Automatic Indirect
Carbon Dioxide Detection and Extinguishing Systems

Model	Agent Weight lb (kg)	Protected Volume ¹ ft ³ (m ³)
IHP-500	5 (2.3)	Up to 70 (Up to 2.0)
IHP-1000	10 (4.5)	71 – 140 (2.0 – 4.0)
IHP-2000	20 (9.1)	141 – 300 ² (4.0 – 8.5)

¹ Carbon dioxide design concentration of 34 percent at maximum protected volume.

² At least one dimension (length, width, or height) must not exceed 2 ft (0.6 m).

Systems must be installed in accordance with Firetrace International Manual P/N 800024, April 2007. A complete description of these systems is included in the latest edition of the FM Approvals Fire Protection Approval Guide

Manufactured by:

**Firetrace International
15690 N. 83rd Way, Suite B
Scottsdale AZ 85260**

FM Approvals confirms that the items have been found to comply with the following standard:

UL 2127, Standard for Inert Gas Clean Agent Extinguishing System Units, March 31, 1999

Project Identifier: 3016202

Date of Approval: July 27, 2007



Member of the FM Global Group

A handwritten signature in black ink, appearing to read 'Richard Dunne'.

Richard Dunne, Group Manager
FM Approvals – Hydraulics Group

March 3, 2008
Date



Certificate of Compliance

Dry Chemical Fire Extinguishing Systems

This certificate is issued for the following equipment:

FIRETRACE Pre-Engineered, Automatic Indirect, Dry Chemical Fire Detection and Extinguishing System, Models ILP ABC-250, ABC-500, ABC-1000, and ABC-2000

System Type:	Pre-engineered for the protection of Class B flammable liquid hazards
Agent Identification:	Multi-purpose dry chemical (monoammonium phosphate)
Ambient Temperature Installation Range:	0 to 130°F (-18 to 54°C)
Maximum Nozzle Heights:	ILP ABC-250: 6 ft (1.8 m) ILP ABC-500, ILP ABC-1000, and ILP ABC-2000: 9 ft (2.7 m)
Maximum Area of Coverage per Unit:	ILP ABC-250: 31.36 ft ² (2.91 m ²) ILP ABC-500: 42.25 ft ² (3.93 m ²) ILP ABC-1000: 84.5 ft ² (7.85 m ²) ILP ABC-2000: 169 ft ² (15.7 m ²)
Design, Installation, Operation, and Maintenance Manual:	<i>Design, Installation, Operation, and Maintenance Manual for Pre-Engineered Automatic Indirect Dry Chemical Extinguisher Unit, part number 800010, October 2008, revision 1</i>

Manufactured by: **Firetrace International LLC**
15690 N. 83rd Way, Suite B
Scottsdale, Arizona 85260

FM Approvals Standard Class 5320

Project Identifier: 3026042 Date of Approval: January 16, 2009

A handwritten signature in black ink, appearing to read 'Richard B. Dunne'.

Richard B. Dunne, Group Manager
FM Approvals – Hydraulics Group

1/16/09
Date



Member of the FM Global Group



Certificate of Compliance

FIXED EXTINGUISHING SYSTEMS, CLEAN AGENT EXTINGUISHERS, AUTOMATIC OR MANUAL-AUTOMATIC

This certificate is issued for the following product:

System Designation:	Models 940205, 940505, and 941005 Automatic Indirect Fire Detection and Extinguishing Systems
System Type:	Pre-Engineered for the Protection of Class B Hazards
Agent Identification:	3M™ NOVEC™ 1230
Design, Installation, Operation, and Maintenance Manual:	<i>Design, Installation, Operation, and Maintenance Manual for Pre-Engineered Automatic Indirect NOVEC™ 1230 Clean Agent Extinguisher Unit, P/N 800025, Rev 00, May 18, 2009</i>

Approved for: FIRETRACE INTERNATIONAL
15690 N. 83RD WAY, SUITE B
SCOTTSDALE, AZ
85260

FM Approvals confirms that the system has been found to comply with the following standard:

UL 2166 – Halocarbon Clean Agent Extinguishing System Units

Project Identifier: 3026082

Date of Approval: May 20, 2009



Member of the FM Global Group

A handwritten signature in black ink, appearing to read 'Richard B. Dunne'.

Richard B. Dunne
Manager – Hydraulics Group, FM Approvals

5/20/09

Date