



U. S. Department of Homeland Security
United States Coast Guard
Certificate of Approval

Coast Guard Approval Number: 162.161/A10/0

Expires: 06 July 2014

ENGINEERED HALOCARBON FIRE EXT. SYSTEM

FIREBOY-XINTEX, INC
0-379 LAKE MICHIGAN DRIVE NW
GRAND RAPIDS MI 49544

Fireboy-Xintex HFC 227ea Clean Agent Engineered Total Flooding Fixed Fire Extinguishing System.

Total flooding clean agent fire extinguishing systems for the protection of machinery spaces, cargo pump rooms, and other enclosed spaces with flammable liquid hazards. Acceptable for use as an equivalent to total flooding carbon dioxide systems required by Title 46 of the Code of Federal Regulations. Complies with IMO MSC/Circ.848 and MSC.1/Circ.1267. Not acceptable for cargo hold protection.

Identifying data: USCG R&D Report CG-D-02-99; UL test reports Project 97NK18593/99BA523833 and Project 99NK34095, File EX5104, revised 24 September 1999; Project 97NK18593 through Project 05CA34751, File EX5104, revised 10 August 2005; Project 03CA05373 through Project 04CA39139, File EX4510, revised 26 April 2003; Project 10NK15376, File EX4510, revised 31 March 2011; Fireboy-Xintex Marine HFC-227ea System Design, Installation, Recharge, and Maintenance Manual 91044 Rev.0; and USCG letters dated 30 July 2009 and 9 May 2011.

Production Control Program: UL.

Valid for products manufactured at facility at above address and at Tyco Fire Protection Products, Marinette, Wisconsin.

Supersedes certificate dated 6 July 2009 to add revised design manual with new flush and surface mounted manual pull boxes, and to acknowledge compliance with IMO MSC.1/Circ.1267 amendments to guidelines of MSC/Circ.848.

*** END ***

THIS IS TO CERTIFY THAT the above named manufacturer has submitted to the undersigned satisfactory evidence that the item specified herein complies with the applicable laws and regulations as outlined on the reverse side of this Certificate, and approval is hereby given. This approval shall be in effect until the expiration date hereon unless sooner canceled or suspended by proper authority.



GIVEN UNDER MY HAND THIS 9th DAY OF
MAY 2011, AT WASHINGTON D.C.

R. J. HEINZ
R. J. HEINZ
Chief, Lifesaving and Fire Safety Division
BY DEFECTION OF THE COMMANDANT