



# DET NORSKE VERITAS

## EC TYPE-EXAMINATION CERTIFICATE

Application of: Council Directive 96/98/EC of 20 December 1996 on Marine Equipment as amended by directive 2010/68/EU, issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Directorate. This Certificate is issued by Det Norske Veritas under the authority of the Government of the Kingdom of Norway.

CERTIFICATE NO. **MED-B-7757**

This is to certify that the  
**Fixed fire detection and fire alarm systems**

with type designation(s)  
**40/40I Triple IR Flame Detector**

Manufacturer  
**Spectrex Inc.**  
**Cedar Grove NJ, United States**

is found to comply with the requirements in the following Regulations/Standards:  
Annex A.1, item No. A.1/3.51 and Annex B, Module B in the Directive. SOLAS 74 as amended, Regulation II-2/7 & X/3, 2000  
HSC Code 7, FSS Code 9 and IMO MSC.1/Circ.1242


Further details of the equipment and conditions for certification are given overleaf.

**Hovik, 2012-05-25**  
for Det Norske Veritas AS




This Certificate is valid until  
**2017-05-25**

Notified Body No.: **0575**

  
**Marianne Valderhaug**  
Head of Department

DNV local office:  
**New York**

  
**Andrzej Gdaniec**  
Surveyor *5m*



The Certificate is subject to terms and conditions overleaf. Any significant changes in design or construction of the product, or amendments to the Directive or Standards referenced above may render this Certificate invalid. The product liability rests with the manufacturer or his representative in accordance with Council Directive 96/98/EC, as amended. The Mark of Conformity may only be affixed to the product and a Declaration of Conformity may only be issued when the production/product assessment module referred to in the council directive, is fully complied with.





Certificate No.: MED-B-7757  
Item No.: A.1/3.51  
Job Id.: 344.1-003320-1

### Product description

Model 40/40I is a triple IR flame detector with three sensitive infrared channels processing the signal to analyze the dynamic characteristics of all conceivable types of hydrocarbon fires.

### Application/Limitation

Ex-certification is not covered by this certificate. Application in hazardous area to be approved in each case according to the Rules and Ex-Certification/ Special Condition for Safe Use listed in valid Ex-certificate issued by a notified/recognized Certification Body.

The equipment are found to comply with following location/application dependent requirements (for definition of each of the location classes, see below the table):

MODEL	TEMPERATURE	VIBRATION	EMC	ENCLOSURE
Triple IR Flamme Detector 40/40I	TEM-D	VIB-B	EMC-B	Tested for IP66 and IP67

Definition of the location classes with reference to relevant standards:

Temperature

TEM-D Location (-25°C to +70°C) (ref. IEC 60092-504 (2001) table 1 item 6-7)

Vibration

VIB-B (ref. IEC 60092-504 (2001) table 1 item 10)

EMC

EMC-B Bridge and open deck zone (ref. IEC 60092-504 (2001) table 1 item 19-20)

### Type Examination documentation

Doc. name	Doc. no.	Doc. version
SharpEye 40/40I, Triple IR (IR3) Flame Detector data sheet	DS-F-40/40I	March 2012
SharpEye Triple IR (IR3) Flame Detector Model 40/40I User's and Maintenance Manual	TM 40/40I	November 2010
QualiTech, Environmental&Mechanical Laboratory Test Report flame detector	20080528-0944 Edition 01	28/05/2008
LPCB letter confirm. testing against EN54-10 (report No.TE243256).	SPEX/BRE/473/AJD	2008 Sept. 30
EMCTest Report for 40/40I	SPC 231008	2008 October 23
QualiTech, Environmental&Mechanical Laboratory Test Report 40/40I	20090427-0943 Edition 01	27/04/2009
QualiTech, Environmental&Mechanical Laboratory Test Report 40/40I&20/20MI	20090215-1335 Edition 01	15/02/2009

### Tests carried out

The relevant tests have been carried out according to the following standards:

- IEC 60092-504 (2001)
- IEC 60533 (1999)
- IEC 60945 (2002)
- EN54-10: (2002) / A1(2005)

### Marking of product

For identification to this type examination certificate the products shall be marked with:

- Manufacturer's name or trade mark
- Type designation
- Mark of Conformity (see below)





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### Mark of Conformity

The manufacturer is allowed to affix the Mark of Conformity according to Article 11 in the Council Directive 96/98/EC on Marine Equipment and shall issue a Declaration of Conformity, only when the module D or E or F of Annex B in the same directive is fully complied with.

- Module D: The quality system for production and testing shall be approved by the Notified Body.
- Module E: The quality system for inspection and testing shall be approved by the Notified Body.
- Module F: Compliance of the products to type as described in this EC Type-Examination Certificate must be verified by the Notified Body who also shall issue a Certificate of Conformity.

