


EC TYPE EXAMINATION (MODULE B) CERTIFICATE

This is to certify that :

LLOYD'S REGISTER VERIFICATION LIMITED (LRV), specified as a "notified body" under the terms of The Merchant Shipping (Marine Equipment) Regulations S.I. 1999 No. 1957, did undertake the relevant type approval procedures for the equipment identified below which was found to be in compliance with the essential Fire protection)/(Navigation)/ requirements of Marine Equipment Directive (MED) 96/98/EC as modified by Commission Directives 98/85/EC, 2001/53/EC, 2002/75/EC, 2002/84/EC, 2008/67/EC and 2009/26/EC subject to any conditions in the Design Appraisal Document attached hereto.

Manufacturer	3M Fire Protection Products
Address	3M Center Building 207-1S-02 St. Paul MN 55144 United States of America (USA)
Annex A1 Item USCG Category Number	A.1/3.26 - PENETRATIONS THROUGH "A" CLASS DIVISIONS (a) ELECTRIC CABLE TRANSITS 164.138 - PENETRATIONS THROUGH 'A' CLASS DIVISIONS BY ELECTRIC CABLES, PIPES, TRUNKS, DUCTS etc.
Type	CABLE PENETRATION (STANDARD FIRE TEST)
Description	Multiple Cable Penetration - Type: "3M Marine Fire Barrier System"
Specified Standard	IMO Res. MSC.61(67)-(FTP Code) Annex 1, Part 3 IMO MSC/Circ. 1120

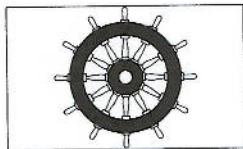
The attached Design Appraisal Document (schedule) forms part of this certificate.
This certificate remains valid unless cancelled or revoked, provided the conditions in the attached schedule are complied with and the equipment remains satisfactory in service.

Date of issue	19 August 2010	Expiry date	18 August 2015
Certificate No.	MED 1050210	Signed	
Sheet No	1 of 3	Name	M. Farrier For and on behalf of Lloyd's Register Verification LRV EC Distinguishing No. 0038



Note:

This certificate is not valid for equipment; the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify the notified body named on this certificate of any modification or changes to the equipment in order to obtain a valid Certificate.



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Subject to compliance with the conditions in the attached Design Appraisal Document (schedule), which forms part of this certificate, and those of Articles 10.1(i) and 11 of the Directive, the Manufacturer is allowed to affix the "Mark of Conformity" to the Product described herein.

yy = Last two digits of year mark affixed.

This product has been assigned a U.S. Coast Guard Module B number:

USCG Module B number: 164.138/EC0038

USCG-EU MRA

to note type approval to Module B only as it pertains to obtaining U. S. Coast Guard approval as allowed by the "Corrigendum to Council Decision 2004/425/EC of 21 April 2004 on the conclusion of an Agreement between the European Community and the United States of America on the mutual recognition of certificates of conformity for marine equipment."

This certificate is issued under the authority of the MCA.

Lloyd's Register Verification is the business name of Lloyd's Register Verification Limited, a member of the Lloyd's Register Group. Registration number 4929226. Registered office 71 Fenchurch Street, London EC3M 4BS, England.

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DESIGN APPRAISAL DOCUMENT

Date 19 August 2010	Quote this reference on all future communications LDSO/TA/SFS/MF
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ATTACHMENT TO EC TYPE EXAMINATION (MODULE B) CERTIFICATE No. MED 1050210

The undernoted documents have been appraised for compliance with the relevant requirements of International Conventions and European Union legislation for the EC Type Examination of Marine Equipment for use on Merchant Ships Registered in the European Economic Area.

This Design Appraisal Document (schedule) forms part of the Certificate.

APPROVAL DOCUMENTATION

Warrington Fire Research Centre, WFRC, Warrington, United Kingdom, Test Report WARRES No. 125109, dated 13 January 2003 and WARRES No. 126014, dated 15 December 2002.

CONDITIONS OF CERTIFICATION

- For applications in A-60 Class Bulkheads or Decks with approved insulation arrangements. For applications in A-0, A-15 or A-30 Bulkheads or Decks the penetrations must be insulated as-tested and both sides of the bulkhead or the underside of deck is to be insulated with an approved A-60 insulation system for 200mm around the penetration.
- The cable penetration seal comprises:
Two layers of 3M Marine Fire Wrap intumescent self adhesive sheet, lining the inside face of the transit frame (6.4mm thick per layer);
Rockwool Firebatt 825 (density 110kg/m³) friction fitted within the transit after cables are fitted;
10mm thick layer of 3M 1000 NS silicone sealant installed between the cables and on the Rockwool on each face of the seal.
- The transit frames are either circular or rectangular with a minimum 25mm radius rounded corners.
- Penetration types for Deck applications:

Penetration size (mm)	Coaming length (mm)	Coaming position in Deck	Maximum Rating
510mm x 210mm	150mm	At least 100mm above deck	A-60
50mm dia.	100mm	Any position in deck	A-60
510mm x 210mm	100mm	Any position in deck	A-30
50mm dia.	100mm	Any position in deck	A-30

- Penetration types for Bulkhead applications:

UNRESTRICTED APPLICATIONS - Where there is a fire risk on BOTH sides of the bulkhead.

Penetration size (mm)	Coaming length (mm)	Coaming position in Bulkhead	Maximum Rating
510mm x 210mm	200mm	Mid position in bulkhead	A-30
50mm dia.	200mm	Mid position in bulkhead	A-30

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RESTRICTED APPLICATIONS - Where there is a fire risk on ONE side of the bulkhead only.

Penetration size (mm)	Coaming length (mm)	Coaming position in Bulkhead	Maximum Rating
510mm x 210mm	200mm	Maximum of 50mm on fire risk side	A-60
50mm dia.	200mm	Maximum of 50mm on fire risk side	A-60
510mm x 210mm	125mm	Fitted on non-fire risk side	A-30
50mm dia.	125mm	Fitted on non-fire risk side	A-30

- Insulation specification for deck applications: the transit steel coaming is to be insulated on the underside with Rockwool Firebatt 825 (nominal density 110kg/m³, thickness 50mm).
- Insulation specification for bulkhead applications: the transit steel coaming is to be insulated on one side with Rockwool Firebatt 825 (nominal density 110kg/m³, thickness 75mm).
- The insulation material used should be approved in accordance with IMO Fire Test Procedures Code, Annex 1, Part 1.
- Production items of the subject equipment are to be manufactured in accordance with either an approved Production Quality Assurance system (Module D), a Product-Quality assurance system (Module E) or a Product Verification Process (Module F). The wheelmark cannot be affixed to the product until a conformity assessment module is in place.
- This product has been assigned a U.S. Coast Guard Module B number USCG Approval Category 164.138/EC0038 to note type approval to Module B only as it pertains to obtaining U. S. Coast Guard approval as allowed by the "Corrigendum to Council Decision 2004/425/EC of 21 April 2004 on the conclusion of an Agreement between the European Community and the United States of America on the mutual recognition of certificates of conformity for marine equipment".

In those instances where the Notified Body conducting the conformity assessment in accordance with either Module D, E or F of the Marine Equipment Directive is not Lloyd's Register Verification Ltd., such Notified Body would use the above U.S. Coast Guard Module B number to provide the manufacturer with the U.S. Coast Guard approval number by noting it on the Certificate of Conformity, thereby authorizing the manufacturer to mark the product accordingly.

Note: For products placed on board U.S. flagged ships there is no declaration of conformity required to meet U.S. Coast Guard requirements.

- Each item, batch or lot of the equipment is to be issued with a "Declaration of Conformity" and have the "Mark of Conformity" affixed after a conformity assessment module is in place.

PLACE OF PRODUCTION

3M
3M Cottage Grove
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Cottage Grove
MN 55016
United States of America



M. Farrier
Lead Specialist
For and on behalf of Lloyd's Register Verification
LRV EC Distinguishing No. 0038

