

EC CERTIFICATE TYPE EXAMINATION (MODULE B)

DNV·GL

This is to certify that:

DNV GL SE, a Notified Body under the terms of the Marine Equipment Directive 96/98/EC of 20 December 1996, notified by the German Federal Ministry of Transport, Building and Urban Development, did undertake the relevant type approval procedures for the equipment identified below which was found to be in compliance with the requirements of Marine Equipment Directive (MED) 96/98/EC as amended, subject to any conditions in the schedule attached hereto.

Certificate No. **18 909 - 11 HH**

Applicant **Jiangsu Huayan Marine Equipment Co., Ltd.
No. 8 Huangjintang West Road
Danyang Economic Development Zone
212314 Danyang, P.R. CHINA**

Manufacturer **Jiangsu Huayan Marine Equipment Co., Ltd.
No. 8 Huangjintang West Road
Danyang Economic Development Zone
212314 Danyang, P.R. CHINA**

Product Description **Dual-purpose type nozzles (spray/jet type)**

Product Name **MACHINO**

Trade Name **MACHINO**

Specified Standards **- EN 15182-1 (2007), incl. A1(2009)
- SOLAS 2014, II-2/10
- 1994 HSC Code, chapter 7
- 2000 HSC Code, chapter 7**

Related Directive **2014/93/EU**

Equipment Section **Fire protection**

Annex A.1 Item No. **A.1/3.55**

Date of Issue **2016-01-25**

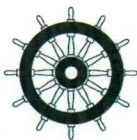
Expiry Date **2021-01-24**

DNV GL SE

Notified Body No.: 0098

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Christine Mydlak-Röder

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Schedule of Approval

Additional Standards

EN 15182-3 (2007), incl. A1(2009)

Approval Documentation

- Test report no. 2010-6673 dated 2010-12-31, issued by CNCF
- Manufacturer's drawings and data sheets

Technical Data

Types of dual-purpose spray/jet nozzles:

- QLD40BJ/12
- QLD40BJ/16
- QLD40BJ/19
- QLD50BJ/12
- QLD50BJ/16
- QLD50BJ/19
- QLD65BJ/12
- QLD65BJ/16
- QLD65BJ/19

Performance data confirmed under the conditions of EN 15182-3, items 4.3.3 / 5.3:
(min. nozzle inlet pressure 6 bar, nozzle in jet position, discharge angle 30°)

Type	Flow rate [ltr/min]	Effective throw [m]
QLD40BJ/12	237.5	30.5
QLD40BJ/16	301.6	30.8
QLD40BJ/19	330.3	32.0
QLD50BJ/12	276.1	28.0
QLD50BJ/16	305.7	36.1
QLD50BJ/19	411.9	35.9
QLD65BJ/12	219.5	27.5
QLD65BJ/16	405.0	37.9
QLD65BJ/19	552.5	38.8

Remarks

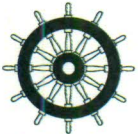
None

Notes:

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL SE, as the Notified Body, of any modifications or changes to the approved equipment. Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

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The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body.

Limitations on the acceptance or use of the product

None

