

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:**That the Lifeboats: Davit-launched lifeboats: partially enclosed/totally enclosed**with type designation(s)
PLT-EVO 170 (150 persons)

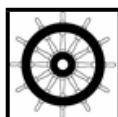
Issued to

Fr. Fassmer GmbH & Co. KG
Berne/Motzen, Germany

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2017/306**,
item No. MED/1.17a. SOLAS 74 as amended, Regulation III/4, III/21, III/31, III/34 & X/3,
LSA Code, IMO MSC/Circ. 1006 & 1423, and 2000 HSC Code 8

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

This Certificate is valid until **2022-11-14**.Issued at **Hamburg** on **2017-11-15**DNV GL local station:
BremerhavenApproval Engineer:
Roland PriebeNotified Body
No.: **0098**for **DNV GL SE****Sven Dudzus**
Head of Notified Body

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. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU. This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL SE of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled. 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.



Job Id: **344.1-007647-1**
Certificate No: **MEDB00003G3**

Product description

"PLT-EVO 170 (150 persons)"

is a partly enclosed davit launched lifeboat for 150 persons. It is based on the approved lifeboat type PLL 1099 (MEDB00001X5) and is fitted with a raised roof.

Length hull: 10,99 m
Length over all, including fender: 11,20 m
Beam hull: 4,40 m
Beam over all, including fender: 5,00 m
Height: 4,00 m

Weight (empty): 8.475 kg
Weight (fully equipped): max. 13.750 kg
Weight (fully manned): max. 25.000 kg

Release mechanism: Duplex 140E2, DNVGL-cert. MEDB00001X9, SWL 14 t
Hull material: GRP: polyester laminating resin reinforced with E-glass fibres
Buoyant material: Built-in polyurethane foam

Engine type: 2 x Bukh-Steyr 144 hp each / Bollard pull: 25.5 kN
or 2 x Bukh-Steyr 164 hp each / Bollard pull: 24.0 kN
or 2 x NANNI T4.205 147 kW each / Bollard pull: 26.98 kN
or 2 x NANNI T4.230 169 kW each / Bollard pull > 27 kN
or 2 x NANNI T4.270 195 kW each / Bollard pull > 27 kN

Application/Limitation

Max. number of persons (75 kg each) 150

The lifeboat is designed and limited for the use on passenger ships only.

This certificate is based on the previous MED-B certificate 47043-12 HH.

If this lifeboat is installed on ships with keellaying date after 2012-05-21, MSC.1/Circ.1423 (lifeboat exterior colour) is to be observed.

The design assessment is based on IMO Res. MSC.48(66) as amended by IMO Res. 218(82) and IMO Res. MSC.320(98).

Production and installation testing shall be carried out according to IMO Res. MSC.81(70), part 2, for each life boat.

Type Examination documentation

The following drawings have been submitted:

DWG Number	DWG Date	Title
33.1099-011.00.00.0	2010-01-29	Lines Drawing Hull
33.1099-013.20.01.0	2011-09-06	General Arrangement PLT - EVO 170
33.1099-013.20.04.0	2012-09-20	General Arrangement PLT - EVO 170
33.1099-014.00.02.0	2010-10-01	Strength Calculation
33.1099-131.00.00.1	2009-11-25	Lamination Hull Outside
33.1099-131.01.00.1	2009-10-19	GRP Frame / Bulkhead
33.1099-131.02.00.2	2010-01-14	Lamination Cross Bearer at Hull
33.1099-135.00.00.1	2011-01-25	Lamination Hull Inside
33.1099-136.02.00.1	2009-12-09	Mounting Hull Inner Shell

Job Id: **344.1-007647-1**
Certificate No: **MEDB00003G3**

33.1099-151.00.00.1	2010-04-27	Laminate Canopy Aft
33.1099-151.01.00.0	2010-04-28	Laminate Canopy Front
33.1099-151.02.00.0	2010-05-27	Laminate Canopy Aft Vakuum Process
33.1099-151.03.00.0	2010-05-26	Laminate Canopy Front Vacuum Process
33.1099-151.20.02.0	2011-08-18	Laminate Canopy Enlargement Vakuum Process
33.1099-200.00.00.0	2010-01-18	Equipment Hull Outside
33.1099-200.01.00.0	2010-02-01	Equipment Canopy Outside
33.1099-300.00.00.0	2010-01-18	Equipment Hull Inside
33.1099-353.20.01.1	2011-08-08	Arrangement High-Seats PLT-EVO 170
33.1099-353.20.02.4	2011-09-02	Seat 3 Persons - Foldable with Foot Tray
33.1099-353.20.03.2	2011-09-02	Seat - Foldable 2 Persons for High Seat
33.1099-353.20.04.2	2011-08-01	Ladder for High Seats
33.1099-353.20.05.3	2011-09-02	Stanchion for High Seats
33.1099-353.20.06.1	2011-08-25	Armrest for High Seats
33.1099-364.00.00.3	2010-10-01	Hoisting Anchor
33.1099-364.10.00.2	2011-04-12	Hoisting Anchor with Lashing
33.1099-365.00.00.0	2009-12-02	Central Release Unit with Hydrostatic Locking Device
33.1099-377.00.00.1	2010-01-14	GRP Insert Hoisting Recess
33.1099-500.01.00.0	2017-03-16	Engine Room Equipment Nanni T4-Series
33.1099-502.00.00.0	2009-10-08	Engine Room Equipment
33.1099-520.00.00.0	2009-08-06	Fuel System
33.1099-570.00.00.0	2009-07-22	Rudder Plant
WN.0000-710.22.06.0	2006-02-28	Wiring Scheme for Lifeboats

Material tests acc. MSC/Circ. 1006 from SINTEF NBL as (Trondheim) dated 2004-11-03 and 2007-10-31

The following tests have been witnessed by GL Bremerhaven:

- PLL1099-LIFEBOAT TEST REPORT-Annex B-bench test dated 2010-04-12
- PLL1099-LIFEBOAT TEST REPORT-Annex-D-list of upgrades dated 2010-06-24
- PLL1099-LIFEBOAT TEST REPORT-msc-circ-980-add1+Steyr164 dated 2010-06-25
- PLL1099-LIFEBOAT TEST REPORT-msc-circ-980-add1-AMENDMENT-PLT-EVO170 dated 2011-07-06
- PLL1099-LIFEBOAT TEST REPORT-ANNEX 10-2017-Nanni T4.205-230-270 dated 2017-10-25

Tests carried out

The product has been tested in accordance with the Revised Recommendation on Testing of Life-Saving Appliances, IMO Res. MSC.81(70) part 1, as amended by IMO Res. MSC.226(82), IMO Res. MSC.274(85), IMO Res. MSC.323(89) and IMO Res. MSC.321(89).

Marking of product

The lifeboat shall be indelibly marked with name of manufacturer, type designation, dimensions and date of manufacture in accordance with LSA code 4.4.1.2. Further it shall be marked with the max. number of persons, the name and port of registry of the mother ship and means of identifying according to LSA code 4.4.9.