

TYPE EXAMINATION CERTIFICATE

This is to certify:

That the Accommodation Ladder/Winch

with type designation(s)

Electric and Pneumatic winch type: "E10L/RD", "E16L/RDD", and "E20L/RDD", "P10L/RD", "P16L/RDD" and "P20L/RDD" for accommodation ladders.

Manufactured by

Taizhou Hengshun Machinery Manufacturing Factory
Jiangyan, China

is found to comply with

ISO 7364 Shipbuilding and marine structures - Deck machinery - Accommodation ladder winch

Application :

This Certificate is valid until **2019-08-31**.

Issued at **Høvik** on **2015-09-01**

DNV GL local station: **Nantong CMC**

Approval Engineer: **Finn-Roger Sørland**

for **DNV GL**

Aldo Matteucci
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Examination Certificate and not to the approval of equipment/systems installed.

Product description

Electric winches for accomodation ladders.

The winches correspond to the following nominal sizes according to ISO 7364-1983:

- Type E10L/RD
- Type E16L/RDD
- Type E20L/RDD
- Type P10L/RD
- Type P16L/RDD
- Type P20L/RDD

Application/Limitation

Type E10L/RD – P10L/RD:

Drum load:	10 kN
Holding load:	30kN
Wire diameter:	18 mm
Length of wire on drum:	40 m

The minimum rope strength according to ISO 7364-1983 is to be 150 kN (Safety Factor equal 5).

Materials as stated on the below drawings are understood to be delivered with certificates minimum equal to EN-10204 3.1.

Type E16L/RDD – P16L/RDD:

Drum load:	16 kN
Holding load:	50kN
Wire diameter:	18 mm
Length of wire on drum:	25 m

The winch is a split drum configuration and the load stated above the sum of the forces on each rope.

The minimum rope strength according to ISO 7364-1983 is to be 125 kN (Safety Factor equal 5).

Materials as stated on the below drawings are understood to be delivered with certificates minimum equal to EN-10204 3.1.

Type E20L/RDD – P20L/RDD:

Drum load:	20 kN
Holding load:	60kN
Wire diameter:	18 mm
Length of wire on drum:	30 m

The winch is a split drum configuration and the load stated above the sum of the forces on each rope.

The minimum rope strength according to ISO 7364-1983 is to be 150 kN (Safety Factor equal 5).

Materials as stated on the below drawings are understood to be delivered with certificates minimum equal to EN-10204 3.1.

Type Examination documentation

Job Id: **262.1-009275-3**
Certificate No: **TAS0000044**

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Tests carried out

Type testing was carried out on 2010-07-06.

Each unit is to be tested according to ISO 7364-1983, chapter 7.

Marking of product

The winches are to be marked according to ISO 7364-1983, chapter 6; and with the manufacturer's name or trademark and type number identification.

Periodical assessment

For retention of the Type Examination, DNV GL surveyor shall perform a survey every second year and before expire date of this certificate to verify that the conditions of the type examination are complied with.

END OF CERTIFICATE