Certificate no.:
TAS00004S8

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Winch - General Application

with type designation(s)
Roller Gate Winch for Roller Gate

issued to
Seaonics AS
Ålesund, **Norway**

is found to comply with
DNV standard DNV-ST-0378 – Offshore and platform lifting appliances

Application:

See page 2.

Issued at **Høvik** on **2025-03-27**
This Certificate is valid until **2030-03-26**.
DNV local unit: **Mid-North Norway FiS**

Approval Engineer: **Jan H. Hansen**

for **DNV**

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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 Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to USD 300 000.

Product description

The winch drum contains a 1600 mm wide, and ca 2 mm thick curtain/belt used to prevent seawater spay and rain/wind to enter an offshore gangway tower and hence protect people from the environment when using the elevator inside the tower. The winch is designed to provide continuous tension to the curtain/belt. Only marginal radial pressure is transferred to the drum cylinder. Two winches are typical placed in top and bottom of the gangway tower, e.g. 13m apart from each other, where one winch give out curtain and the other winch pull in the curtain at constant tension.

Application/Limitation

- Safe Working Load	1 mT
- Test load	1.25 mT
- Drum, flange diameter	380 mm
- Drum, flange thickness	10 mm
- Drum pipe diameter	171 mm
- Drum pipe thickness	16 mm
- Drum external length	1770 mm
- Drum internal length	1665 mm
- Curtain/belt width	1600 mm
- Curtain/belt thickness	1.7 mm
- Minimum number of safety wraps	3
- DNV-ST-378, hoop stress factor, C	3
- Drum, DNV material (Drwg 2166206)	D36

Type Approval documentation

Comments

Electric motor, winch gear, brakes and the control system for the cursor winch is not part of scope for this Type Approval.

Marking of product

Each winch shall be marked in accordance with DNV-ST-0378, Section 14.

Periodical assessment

For retention of he Type Approval, DNV's representative shall carry out biennial product audits in accordance with DNV-CP-0338.

END OF CERTIFICATE