

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Separator for Primary Refrigerant Side

with type designation(s)
T61

Issued to

SES International BV
DELDEN, Netherlands

is found to comply with
DNV GL rules for classification – Ships Pt.4 Ch.7 Pressure equipment

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Temperature range: 0/100 °C

Operating media: Group 1 refrigerant + oil

Design pressure: -1/22 barg

Issued at **Høvik** on **2017-09-18**

This Certificate is valid until **2021-06-30**.

DNV GL local station: **Rotterdam, Product Certification /Verification**

for **DNV GL**

Approval Engineer: **Morten Engnestangen**

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



Job Id: **262.1-026009-1**
Certificate No: **TAP00000ZG**

Product description

Oil separator for refrigerating units.

DNV GL pressure vessel class I.

Joint efficiency, $v = 1,0$ (NDT according to DNV GL ship rules Pt.4 Ch.7 Sec.7 [4.1.1])

Materials:

Main shell:	ASTM A106 Gr.B
End flat plate	P265GH, EN-10028-2
Nozzle flanges and couplings:	P250GH, EN-10273
Nozzle tubes:	P235GH, EN-10216

Application/Limitation

Approved for refrigerant group 1 (See DNV GL Pt.4 Ch.6 Sec.6).

Each separator is to be certified by a DNV GL surveyor and is to be delivered with a product certificate.

For drawing 9012070 rev B the bottom vessel (item 40) connected at N20 oil outlet is not covered by the type approval.

For drawing 80800030308 rev A the bottom vessel (item 34) connected at N20 oil outlet is not covered by the type approval.

Type Approval documentation

General:

9005270	A	General Arrangement WRV163-145	2013-06-04	For information
9005272	A	Oilseparator T61H, 5 elements	2013-05-13	For information

Marking of product

Each pressure vessel shall be permanently and legibly marked on the pressure part or on a nameplate permanently attached to a principal pressure part to show its identity and origin.

The marking of pressure vessels shall show at least the following particulars:

- manufacturer's name and address
- type designation and serial number
- year of manufacture
- maximum allowable working pressure
- hydrostatic test pressure.

Periodical assessment

For retention of the type approval, a DNV GL Surveyor shall perform a survey at least every second year and before the expiry date of this certificate to verify that the conditions for the type approval are complied with.