

ENGINE INTERNATIONAL AIR POLLUTION PREVENTION CERTIFICATE



Sweden

Certificate No: 42867

**Issued under the provisions of the
Protocol of 1997 to amend the International Convention for the Prevention of
Pollution from Ships, 1973, as modified of the Protocol of 1978 related thereto
(hereinafter referred to as "the Convention") under the authority of the
Government of Sweden by the Swedish Transport Agency**

Engine manufacturer	Model number	Serial number	Test cycle(s)	Rated power (kW) and speed (rpm)	Engine approval number
VOLVO PENTA	TAMD122A	1101018822	D2,E2	247 kw / 1500 rpm	21001741
VOLVO PENTA	TAMD122A	1101018810	D2,E2	247 kw / 1500 rpm	21001741

THIS IS TO CERTIFY:

1. That the above-mentioned marine diesel engine has been surveyed for pre-certification in accordance with the requirements of the Technical Code on Control of Emission of Nitrogen Oxides from Marine Diesel Engines made mandatory by Annex VI of the Convention; and
2. That the pre-certification survey shows that the engine, its components, adjustable features, and technical file, prior to the engine's installation and/or service on board a ship, fully comply with the applicable regulation 13 of Annex VI of the Convention.

This certificate is valid for the life of the engine, subject to surveys in accordance with regulation 5 of Annex VI of the Convention, installed in ships under the authority of this Government.

Issued at Malmö

Date of issue 2012-04-26

By order of the Swedish Transport Agency


Rolf Lindström
Chief Surveyor
SWEDISH TRANSPORT AGENCY

This certificate has been issued and endorsed on the condition that the deficiencies, noted at the survey preceding the issue and endorsement of the certificate, are rectified and reported within the stipulated time frame. If the deficiencies are not properly rectified and reported the certificate may be withdrawn.

1.8 If applicable, the engine is a parent engine or a member engine
of the following engine family or engine group

1.9 Test cycle(s) (see chapter 3 of the NO_x Technical Code) D2,E2

1.10 Rated power (kW) and speed (rpm) 247 kw 1500 rpm

1.11 Engine approval number 57978-05 HH

1.12 Specification(s) of test fuel CEC RF-03-A-84, (ISO 8178 part 5)

1.13 NO_x-reducing device designated approval number (if installed) -

1.14 Applicable NO_x emission limit (g/kW h) (regulation 13 of Annex VI) 10 g/kWh

1.15 Engine's actual NO_x emission value (g/kW h) D2=8,71g/kWh, E2=8,37g/kWh

2 Particulars of the technical file

2.1 Technical file identification/approval number 21001741

2.2 Technical file approval date 2000-09-15

2.3 The technical file, as required by chapter 2 of the NO_x Technical Code, is an essential part of the EIAPP Certificate and must always accompany an engine throughout its life and always be available on board a ship.

3 Specifications for the On-board NO_x verification procedures for the engine parameter survey

3.1 On-board NO_x verification procedures identification/approval number -

3.2 On-board NO_x verification procedures approval date -

3.3 The specifications for the on-board NO_x verification procedures, as required by chapter 6 of the NO_x Technical Code, are an essential part of the EIAPP Certificate and must always accompany an engine through its life and always be available on board a ship.

THIS IS TO CERTIFY that this Record is correct in all respects.

Issued at Malmö

Date of issue 2012-04-26

By order of the Swedish Transport Agency:


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Rolf Lindström
Chief Surveyor
SWEDISH TRANSPORT AGENCY



SUPPLEMENT TO ENGINE INTERNATIONAL AIR POLLUTION PREVENTION CERTIFICATE (EIAPP CERTIFICATE)



Sweden

RECORD OF CONSTRUCTION, TECHNICAL FILE AND MEANS OF VERIFICATION

In respect of the provisions of Annex VI of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocols of 1978 and 1997 relating thereto (hereinafter referred to as “the Convention”) and of the Technical Code on Control of Emission of Nitrogen Oxides from Marine Diesel Engines (hereinafter referred to as the “NO_x Technical Code”).

Notes:

1. This Record and its attachments shall be permanently attached to the EIAPP Certificate. The EIAPP Certificate shall accompany the engine throughout its life and shall be available on board the ship at all times.
2. If the language of the original Record is neither English nor French, the text shall include a translation into one of these languages.
3. Unless otherwise stated, regulations mentioned in this Record refer to regulations of Annex VI of the Convention and the requirements for an engine’s technical file and means of verifications refer to mandatory requirements from the NO_x Technical Code.

1 Particulars of the engine

- 1.1 Name and address of manufacturer Volvo Penta AB, Gothenburg, Sweden
- 1.2 Place of engine build Gothenburg, Sweden
- 1.3 Date of engine build 2001
- 1.4 Place of pre-certification survey Gothenburg
- 1.5 Date of pre-certification survey 2000-09-15
- 1.6 Engine type and model number Volvo Penta TAMD122A-AUX
- 1.7 Engine serial number 1101018822,1101018810