

**ENGINE INTERNATIONAL AIR POLLUTION PREVENTION
CERTIFICATE**

No CSB0/MDO/20251219090045

Issued under the provisions of the Protocol of 1997,
as amended by resolution MEPC.176(58)
to amend International Convention for the Prevention of Pollution from Ships,
1973 as modified by the Protocol of 1978 relating thereto
(hereinafter referred to as "the Convention")
under the authority of the Government of

ROYAUME DU MAROC

By BUREAU VERITAS MARINE & OFFSHORE

Engine manufacturer	Model number	Serial number	Test cycle(s)	Rated power (kW) and Speed (rpm)	Engine approval number
Caterpillar Inc	3512	RL200221	E3	1902 kW 1800 rpm	EC24171

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 (2008) 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 LAAYOUNE, Morocco, on the 18 December 2025

Reference of the initial EIAPP Certificate or SoC: Certificate No: EC24171 Date of issue: 2025-01-23 .



**BUREAU VERITAS
MARINE & OFFSHORE
M.DOUBLALI**

By Order of the Secretary

**SUPPLEMENT TO ENGINE INTERNATIONAL
AIR POLLUTION PREVENTION CERTIFICATE**

(EIAPP CERTIFICATE)

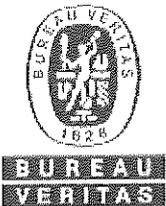
**RECORD OF CONSTRUCTION, TECHNICAL FILE
AND MEANS OF VERIFICATION**

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. The Record shall be at least in English, French or Spanish. If an official language of the issuing country is also used, this shall prevail in case of a dispute or discrepancy.
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 revised NOx Technical Code (2008).

1. PARTICULARS OF THE ENGINE

- | | |
|--|--|
| 1.1 Name and address of manufacturer: | Caterpillar Inc.
100 N.E. Adams Street Peoria IL 61629-0002 USA |
| 1.2 Place of engine build: | Tianjin, The People's Republic of China |
| 1.3 Date of engine build: | 2024 |
| 1.4 Place of pre-certification survey: | Tianjin, The People's Republic of China |
| 1.5 Date of pre-certification survey: | 2024 |
| 1.6 Engine type and model number: | 3512 |
| 1.7 Engine serial number: | RL200221 |



1. PARTICULARS OF THE ENGINE (ctd)

1.8 If applicable, the engine is a parent engine or a Member Engine of the following Engine Family or Engine Group
3500PA10001

1.9 Individual engine or engine family / engine group details:

1.9.1 Approval reference: 97436-10 HH

1.9.2 Rated power (kW) and speed (rpm) values or ranges: 1902 kW - 1800 rpm

1.9.3 Test cycles: E3

1.9.4 Parent engine(s) test fuel oil specification(s): ISO-F-DMA

1.9.5 Applicable NOx emission limit (g/kW h) (regulation 13.3, 13.4): 9.9, 7.8 g/kWh

1.9.6 Parent engine(s) emission value (g/kW h): 7.7, 7.7 g/kWh

2. PARTICULARS OF THE TECHNICAL FILE

The technical file, as required by chapter 2 of the NOx 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.

2.1 Technical file identification/approval number: 97436-10 HH-PA:0507167

2.2 Technical file approval date: 2025-01-23

3. SPECIFICATIONS FOR THE ON-BOARD NOx VERIFICATION PROCEDURES

The specifications for the on-board NOx verification procedures, as required by chapter 6 of the NOx 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.

3.1 Engine parameter check method:

3.1.1 Identification/approval number: 97436-10 HH-PA:0507167

3.1.2 Approval date: 2025-01-23

3.2 Direct Measurement and monitoring method:

3.2.1 Identification/approval number: --

3.2.2 Approval date: --

Alternatively the simplified measurement method in accordance with 6.3 of the NOx Technical Code may be utilized.

Issued at LAAYOUNE, Morocco, on the 18 December 2025



BUREAU VERITAS
MARINE & OFFSHORE

M.DOUBLALI



By Order of the Secretary

ENGINE INTERNATIONAL AIR POLLUTION PREVENTION CERTIFICATE

No CSB0/MDO/20251219101252

Issued under the provisions of the Protocol of 1997,
as amended by resolution MEPC.176(58)
to amend International Convention for the Prevention of Pollution from Ships,
1973 as modified by the Protocol of 1978 relating thereto
(hereinafter referred to as "the Convention")
under the authority of the Government of

ROYAUME DU MAROC

By BUREAU VERITAS MARINE & OFFSHORE

Engine manufacturer	Model number	Serial number	Test cycle(s)	Rated power (kW) and Speed (rpm)	Engine approval number
Caterpillar Inc.	3512	RL200227	E3	1902 kW 1800 rpm	EC24170

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 (2008) 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 LAAYOUNE, Morocco, on the 18 December 2025

Reference of the initial EIAPP Certificate or SoC: Certificate No: EC24170 Date of issue: 2025-01-23



**BUREAU VERITAS
MARINE & OFFSHORE**
M.DOUBLALI

By Order of the Secretary

**SUPPLEMENT TO ENGINE INTERNATIONAL
AIR POLLUTION PREVENTION CERTIFICATE**

(EIAPP CERTIFICATE)

**RECORD OF CONSTRUCTION, TECHNICAL FILE
AND MEANS OF VERIFICATION**

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. The Record shall be at least in English, French or Spanish. If an official language of the issuing country is also used, this shall prevail in case of a dispute or discrepancy.
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 revised NOx Technical Code (2008).

1. PARTICULARS OF THE ENGINE

- | | |
|--|--|
| 1.1 Name and address of manufacturer: | Caterpillar Inc.
100 N.E. Adams Street Peoria IL 61629-0002 USA |
| 1.2 Place of engine build: | Tianjin, The People's Republic of China |
| 1.3 Date of engine build: | 2024 |
| 1.4 Place of pre-certification survey: | Tianjin, The People's Republic of China |
| 1.5 Date of pre-certification survey: | 2024 |
| 1.6 Engine type and model number: | 3512 |
| 1.7 Engine serial number: | RL200227 |



1. PARTICULARS OF THE ENGINE (ctd)

1.8 If applicable, the engine is a parent engine or a Member Engine of the following Engine Family or Engine Group
3500PA10001

1.9 Individual engine or engine family / engine group details:

1.9.1 Approval reference: 97436-10 HH

1.9.2 Rated power (kW) and speed (rpm) values or ranges: 1902 kW - 1800 rpm

1.9.3 Test cycles: E3

1.9.4 Parent engine(s) test fuel oil specification(s): ISO-F-DMA

1.9.5 Applicable NOx emission limit (g/kW h) (regulation 13.3, 13.4): 9.9, 7.8

1.9.6 Parent engine(s) emission value (g/kW h): 7.7, 7.7

2. PARTICULARS OF THE TECHNICAL FILE

The technical file, as required by chapter 2 of the NOx 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.

2.1 Technical file identification/approval number: 97436-10 HH-PA:0507166

2.2 Technical file approval date: 2025-01-23

3. SPECIFICATIONS FOR THE ON-BOARD NOx VERIFICATION PROCEDURES

The specifications for the on-board NOx verification procedures, as required by chapter 6 of the NOx 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.

3.1 Engine parameter check method:

3.1.1 Identification/approval number: 97436-10 HH-PA:0507166

3.1.2 Approval date: 2025-01-23

3.2 Direct Measurement and monitoring method:

3.2.1 Identification/approval number: --

3.2.2 Approval date: --

Alternatively the simplified measurement method in accordance with 6.3 of the NOx Technical Code may be utilized.

Issued at LAAYOUNE, Morocco, on the 18 December 2025



BUREAU VERITAS
MARINE & OFFSHORE

M.DOUBLALI

By Order of the Secretary