
Changes to legislation: There are outstanding changes not yet made to Commission Regulation (EU) No 582/2011. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

ANNEX V

VERIFYING EMISSIONS OF CRANKCASE GASES

1. INTRODUCTION

1.1. This Annex sets out the provisions and test procedures for verifying emissions of crankcase gases.

2. GENERAL REQUIREMENTS

2.1. No crankcase emissions shall be discharged directly into the ambient atmosphere, with the exception given in point 3.1.1.

3. SPECIFIC REQUIREMENTS

[^{F1}3.1. Point 3.1.1. and 3.1.2. shall apply to compression-ignition engines, dual-fuel engines and to positive-ignition engines fuelled with natural gas/biomethane or LPG.

3.1.1. Engines equipped with turbochargers, pumps, blowers, or superchargers for air induction may discharge crankcase emissions to the ambient atmosphere if the emissions are added to the exhaust emissions (either physically or mathematically) during all emission testing in accordance with paragraph 6.10 of Annex 4 to UNECE Regulation No 49.]

3.1.2. Crankcase emissions that are routed into the exhaust upstream of any exhaust after-treatment device during all operation are not considered to be discharged directly into the ambient atmosphere.

Textual Amendments

F1 Substituted by Commission Regulation (EU) No 133/2014 of 31 January 2014 amending, for the purposes of adapting to technical progress as regards emission limits, Directive 2007/46/EC of the European Parliament and of the Council, Regulation (EC) No 595/2009 of the European Parliament and of the Council and Commission Regulation (EU) No 582/2011 (Text with EEA relevance).

3.2. Points 3.2.1 and 3.2.2 shall apply to positive-ignition engines fuelled with petrol or E85.

[^{F1}3.2.1. The pressure in the crankcase shall be measured over the emission test cycles at an appropriate location. It shall be measured at the dip-stick hole with an inclined-tube manometer.]

[^{F2}3.2.1.1. The pressure in the intake manifold shall be measured to within ± 1 kPa.

Textual Amendments

F2 Inserted by Commission Regulation (EU) No 133/2014 of 31 January 2014 amending, for the purposes of adapting to technical progress as regards emission limits, Directive 2007/46/EC of the European Parliament and of the Council, Regulation (EC) No 595/2009 of the European Parliament and of the Council and Commission Regulation (EU) No 582/2011 (Text with EEA relevance).

3.2.1.2. The pressure measured in the crankcase shall be measured to within $\pm 0,01$ kPa.]

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- 3.2.2. Compliance with point 2.1 shall be deemed satisfactory if, in every condition of measurement set out in point 3.2.1, the pressure measured in the crankcase does not exceed the atmospheric pressure prevailing at the time of measurement.

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Changes and effects yet to be applied to the whole legislation item and associated provisions

- Signature words omitted by [S.I. 2022/1273 reg. 65\(19\)](#)
- Annex list words substituted by [S.I. 2022/1273 reg. 65\(20\)](#)
- Annex 1 Appendix 4Pt. 3 omitted by [S.I. 2022/1273 reg. 66\(3\)\(g\)](#)
- Annex 1 Appendix 8 image substituted by [S.I. 2022/1273 reg. 66\(7\)\(b\)](#)
- Annex 1 Appendix 4Pt. 1 table words inserted by [S.I. 2022/1273 reg. 66\(3\)\(e\)\(i\)](#)
- Annex 1 Appendix 4Pt. 2 table words inserted by [S.I. 2022/1273 reg. 66\(3\)\(f\)\(i\)](#)
- Annex 1 Appendix 4 words omitted by [S.I. 2022/1273 reg. 66\(3\)\(b\)](#)
- Annex 1 Appendix 4 words omitted by [S.I. 2022/1273 reg. 66\(3\)\(c\)\(ii\)\(bb\)](#)
- Annex 1 Appendix 4 words omitted by [S.I. 2022/1273 reg. 66\(3\)\(c\)\(iii\)\(aa\)](#)
- Annex 1 Appendix 4 table words omitted by [S.I. 2022/1273 reg. 66\(3\)\(d\)\(i\)](#)
- Annex 1 Appendix 4 words omitted by [S.I. 2022/1273 reg. 66\(3\)\(d\)\(iii\)](#)
- Annex 1 Appendix 8 words omitted by [S.I. 2022/1273 reg. 66\(7\)\(c\)](#)
- Annex 1 Appendix 1 point 2.2 words omitted by [S.I. 2022/1273 reg. 66\(10\)\(e\)](#)
- Annex 1 Appendix 4 words substituted by [S.I. 2022/1273 reg. 66\(3\)\(a\)](#)
- Annex 1 Appendix 4 words substituted by [S.I. 2022/1273 reg. 66\(3\)\(c\)\(i\)](#)
- Annex 1 Appendix 4 words substituted by [S.I. 2022/1273 reg. 66\(3\)\(c\)\(ii\)\(aa\)](#)
- Annex 1 Appendix 4 words substituted by [S.I. 2022/1273 reg. 66\(3\)\(c\)\(iii\)\(bb\)](#)
- Annex 1 Appendix 4 table words substituted by [S.I. 2022/1273 reg. 66\(3\)\(d\)\(ii\)](#)
- Annex 1 Appendix 4Pt. 1 table words substituted by [S.I. 2022/1273 reg. 66\(3\)\(e\)\(ii\)](#)
- Annex 1 Appendix 4Pt. 2 table words substituted by [S.I. 2022/1273 reg. 66\(3\)\(f\)\(ii\)](#)
- Annex 1 Appendix 5 heading words substituted by [S.I. 2022/1273 reg. 66\(4\)\(a\)](#)
- Annex 1 Appendix 5 words substituted by [S.I. 2022/1273 reg. 66\(4\)\(a\)](#)
- Annex 1 Appendix 5s. 2 point 000.5 words substituted by [S.I. 2022/1273 reg. 66\(4\)\(b\)](#)
- Annex 1 Appendix 6 heading words substituted by [S.I. 2022/1273 reg. 66\(5\)\(a\)](#)
- Annex 1 Appendix 6 heading words substituted by [S.I. 2022/1273 reg. 66\(5\)\(b\)](#)
- Annex 1 Appendix 6 heading words substituted by [S.I. 2022/1273 reg. 66\(5\)\(c\)](#)
- Annex 1 Appendix 7 heading words substituted by [S.I. 2022/1273 reg. 66\(6\)](#)
- Annex 1 Appendix 7 words substituted by [S.I. 2022/1273 reg. 66\(6\)](#)
- Annex 1 Appendix 7 Addendum words substituted by [S.I. 2022/1273 reg. 66\(6\)](#)
- Annex 1 Appendix 8 heading words substituted by [S.I. 2022/1273 reg. 66\(7\)\(a\)](#)
- Annex 1 Appendix 9 heading words substituted by [S.I. 2022/1273 reg. 66\(8\)](#)
- Annex 1 Appendix 9 words substituted by [S.I. 2022/1273 reg. 66\(8\)](#)
- Annex 1 Appendix 10 words substituted by [S.I. 2022/1273 reg. 66\(9\)](#)
- Annex 10 Appendix 5 point 2.4.1 words omitted by [S.I. 2022/1273 reg. 66\(12\)\(f\)\(i\)](#)
- Annex 10 Appendix 5 point 6 heading words omitted by [S.I. 2022/1273 reg. 66\(12\)\(f\)\(iii\)](#)
- Annex 10 Appendix 5 point 6 words omitted by [S.I. 2022/1273 reg. 66\(12\)\(f\)\(iii\)](#)
- Annex 10 Appendix 5 point 5.2.4 words substituted by [S.I. 2022/1273 reg. 66\(12\)\(f\)\(ii\)](#)
- Annex 11 Appendix 1 point 2-2.3 omitted by [S.I. 2022/1273 reg. 66\(13\)\(k\)\(ii\)](#)
- Annex 11 Appendix 2 words inserted by [S.I. 2022/1273 reg. 66\(13\)\(l\)\(ii\)](#)
- Annex 11 Appendix 1 point 000.7 words substituted by [S.I. 2022/1273 reg. 66\(13\)\(k\)\(i\)](#)
- Annex 11 Appendix 2 words substituted by [S.I. 2022/1273 reg. 66\(13\)\(l\)\(i\)](#)
- Annex 11 Appendix 2 words substituted by [S.I. 2022/1273 reg. 66\(13\)\(l\)\(iii\)](#)
- Annex 11 Appendix 3 point 2.4.2.11 words substituted by [S.I. 2022/1273 reg. 66\(13\)\(m\)\(i\)](#)

- Annex 11 Appendix 3 point 2.4.6.5 words substituted by [S.I. 2022/1273 reg. 66\(13\)\(m\)\(ii\)](#)
- Art. 2(44) omitted by [S.I. 2022/1273 reg. 65\(2\)](#)
- Art. 5(4)(d) omitted by [S.I. 2022/1273 reg. 65\(6\)\(c\)](#)
- Art. 5(4)(g) omitted by [S.I. 2022/1273 reg. 65\(6\)\(c\)](#)
- Art. 6(1a)(a) words substituted by [S.I. 2022/1273 reg. 65\(7\)\(c\)\(ii\)](#)
- Art. 6(1a)(b) omitted by [S.I. 2022/1273 reg. 65\(7\)\(c\)\(iii\)](#)
- Art. 7(4)(c) omitted by [S.I. 2022/1273 reg. 65\(8\)\(c\)](#)
- Art. 7(4)(d) omitted by [S.I. 2022/1273 reg. 65\(8\)\(c\)](#)
- Art. 8(1a)(a) word substituted by [S.I. 2022/1273 reg. 65\(9\)\(d\)\(i\)](#)
- Art. 8(1a)(b) omitted by [S.I. 2022/1273 reg. 65\(9\)\(d\)\(ii\)](#)
- Art. 8(1a)(e) words substituted by [S.I. 2022/1273 reg. 65\(9\)\(d\)\(iii\)](#)
- Art. 10(1a)(a) word substituted by [S.I. 2022/1273 reg. 65\(11\)\(a\)](#)
- Art. 10(1a)(b) omitted by [S.I. 2022/1273 reg. 65\(11\)\(d\)\(ii\)](#)
- Art. 10(1a)(e) words substituted by [S.I. 2022/1273 reg. 65\(11\)\(d\)\(iii\)](#)