ISO 362-1:2007-07 (E)

Measurement of noise emitted by accelerating road vehicles - Engineering method - Part 1: M and N categories

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Terms and definitions 2

4 Symbols and abbreviated terms 7

5 Specification of the acceleration for vehicles of categories M1 and M2 having a maximum authorized mass not exceeding 3 500 kg, and of category N1 9
5.1 General 9
5.2 Calculation of acceleration 9
5.3 Calculation of the target acceleration 10
5.4 Calculation of the reference acceleration 10
5.5 Partial power factor kP 11

6 Instrumentation 11
6.1 Instruments for acoustical measurement 11
6.2 Instrumentation for speed measurements 11
6.3 Meteorological instrumentation 12

7 Acoustical environment, meteorological conditions and background noise 12
7.1 Test site 12
7.2 Meteorological conditions 13
7.3 Background noise 13

8 Test procedures 14
8.1 Microphone positions 14
8.2 Conditions of the vehicle 14
8.3 Operating conditions 17
8.4 Measurement readings and reported values 20
8.5 Measurement uncertainty 22

9 Test report 22

Annex A (informative) Technical background for development of vehicle noise test procedure based on in-use operation in urban conditions 24

Annex B (informative) Measurement uncertainty -- Framework for analysis according to ISO Guide 98 (GUM) 44

Annex C (informative) Flowchart of the procedure for categories M1 and M2 having a maximum authorized mass not exceeding 3 500 kg, and category N1 47

Annex D (informative) Flowchart for vehicles of category M2 having a maximum authorized mass exceeding 3 500 kg, and categories M3, N2 and N3 51

Annex E (informative) Indoor test operation 52

Bibliography 55