DIN EN 16185-2:2015-03 (E)

Railway applications - Braking systems of multiple unit trains - Part 2: Test methods

Contents

Page

Foreword 3

1 Scope 4

2 Normative references 4

3 Terms and definitions 5

4 Symbols and abbreviations 6

5 Requirements 6
5.1 General 6
5.2 Test specification 7
5.2.1 General 7
5.2.2 Identification of the parts to be tested 7
5.2.3 General conditions for the tests 8

6 Static tests program 8
6.1 General 8
6.2 Reports 9
6.3 Documentation 9
6.4 Methodology (for type tests only) 10
6.4.1 Measurement of the friction application force 10
6.4.2 Measurement of the delay time 10
6.4.3 Measurement of the application force build-up time 10
6.4.4 Measurement of the application force release time 10
6.4.5 Measurement of the brake response time 10
6.4.6 Measurement of the pressure drop time in the brake pipe or the equalising reservoir of the driver's brake valve 10
6.4.7 Measurement of the pressure rise time in the brake pipe or the equalising reservoir of the driver's brake valve 11
6.4.8 Measurement of the dead time of the WSP dump valves 11
6.4.9 Measurement of the exhaust time of the WSP dump valves 11
6.4.10 Measurement of the fill time of the WSP dump valves 11
6.4.11 Measurement of air tightness 11
6.4.12 Measurement of braking and release times of EP assist brake 11
6.4.13 Evaluation of the longitudinal brake force applied to the track by Magnetic Track Brake or Eddy Current Brake 11
6.5 Test schedule 13

7 Dynamic tests schedule 42
7.1 General for dynamic tests 42
7.1.1 Preconditions 42
7.1.2 Test conditions 42
7.1.3 Measured variables to be recorded 43
7.1.4 Verification of deceleration and stopping distance 44
7.1.5 Definition of braked weight percentage () 44
7.1.6 Measurement of the brake force contribution of the different brakes 45
7.2 Test program 46

Annex A (informative) Typical format for a test report for type or routine test 56

Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2008/57/EC 57

Bibliography 59