

DIN EN 15734-2:2022-04 (E)

Railway applications - Braking systems of high speed trains - Part 2: Test methods (includes Amendment A1:2021)

Contents		Page
Foreword		4
1	Scope	5
2	Normative references	5
3	Terms and definitions	6
4	Symbols, units and abbreviations	6
5	Requirements	7
5.1	General	7
5.2	Test procedure	8
5.2.1	General	8
5.2.2	Identification of the parts to be tested	8
5.2.3	General conditions for the tests	8
5.2.4	Specification of the test equipment	8
5.2.5	Test program	9
5.2.6	Reports	9
5.2.7	Documentation	10
5.3	Methodology	10
5.3.1	Measurement of the application time at the brake cylinder	10
5.3.2	Measurement of the release time at the brake cylinder	10
5.3.3	Measurement of the pressure drop time in the brake pipe or the equalising reservoir of the driver's brake valve	10
5.3.4	Measurement of the pressure rise time in the brake pipe or the equalising reservoir of the driver brake valve	10
5.3.5	Measurement of the dead time of the WSP dump valves	11
5.3.6	Measurement of the exhaust time of the WSP dump valves	11
5.3.7	Measurement of the fill time of the WSP dump valves	11
5.3.8	Measurement of air tightness	11
5.3.9	Measurement of lowering time of the MTB	11
5.3.10	Measurement of rising time of the MTB	11
5.3.11	Measurement of application and release times of EP assist brake	11
5.3.12	Measurement of the contribution of the different brakes	11
5.3.13	Evaluation of the longitudinal brake force applied to the track by Magnetic Track Brake or Eddy Current Brake	12
6	Static tests programme	13
6.1	Test on vehicle (Level 1)	13
6.2	Test on Single Unit (Level 2)	30
6.3	Test on Multiple Unit maximum consist (Level 3)	39
7	Dynamic tests programme	44
7.1	General for dynamic tests	44
7.1.1	Preconditions	44
7.1.2	Test conditions	44
7.1.3	Measured variables to be recorded	45
7.1.4	Verification of deceleration and braking distance	46
7.1.5	Definition of braked weight	46
7.2	Test program	47

7.2.1	Test on Single Unit (Level 2)	47
7.2.2	Test on Multiple Unit maximum consist (Level 3)	59
Annex A (normative) Typical format for a test report for type or routine test		65
Annex B (informative) Principle of the automatic function test		66
B.1	Purpose of the automatic function	66
B.2	Adjustment of the driver's brake valve feed choke to comply with the automatic function	66
Bibliography		68