

ISO 24478:2023-08 (E)

Railway applications - Braking - General vocabulary

Contents

Page

| | |
|--|-----------|
| Foreword..... | iv |
| Introduction..... | v |
| 1 Scope..... | 1 |
| 2 Normative references..... | 1 |
| 3 Terms and definitions..... | 1 |
| 3.1 Basic definitions..... | 1 |
| 3.2 Brake system compatibility..... | 1 |
| 3.3 Performance..... | 2 |
| 3.4 Purposes of braking..... | 2 |
| 3.5 Mechanics of braking..... | 3 |
| 3.6 Kinematics and dynamics of braking..... | 4 |
| 3.7 Types and characteristics of brakes..... | 9 |
| 3.8 Brake application and release..... | 11 |
| 3.9 Brake control..... | 12 |
| 3.9.1 General definitions..... | 12 |
| 3.9.2 Types of control..... | 13 |
| 3.9.3 Types of combined control..... | 14 |
| 3.10 Brake system components..... | 14 |
| 3.10.1 Components used for the command and control of braking..... | 15 |
| 3.10.2 Sensors/indicators..... | 16 |
| 3.10.3 Control assemblies..... | 16 |
| 3.10.4 Brake control and/or system energy lines..... | 17 |
| 3.10.5 Friction brake system components..... | 19 |
| 3.10.6 Brake system energy storage..... | 21 |
| 3.10.7 Compressed air supply..... | 21 |
| 3.10.8 Ancillary air system equipment..... | 22 |
| 3.10.9 Hydraulic pressure supply..... | 22 |
| 3.10.10 Hand brake equipment..... | 22 |
| 3.10.11 Parking brake equipment..... | 22 |
| 3.11 Wheel slide protection (WSP)..... | 23 |
| 3.12 Types of brake test..... | 23 |
| 4 Symbols and abbreviated terms..... | 24 |
| Annex A (informative) Delay time and build-up time for brake application..... | 25 |
| Annex B (informative) Delay time and release time for brake release..... | 26 |
| Annex C (informative) Brake chart..... | 27 |
| Annex D (informative) Overview of relationship between brake devices and signals..... | 30 |
| Annex E (informative) System set up and components..... | 31 |
| Bibliography..... | 34 |