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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 32349-2015

**Railway applications -- Electric traction -- Short-primary type
linear induction motors (LIM) fed by power converters**

轨道交通 电力牵引 变流器供电的短初级直线感应电动机

(English Translation)

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules.

This standard uses redrafted law revision adopted IEC 62520:2011 "Rail electric traction converter powered short straight primary Line induction motor. " this standard and IEC 62520:2011 as compared to the presence of the technical differences, these differences involve the provision of a single vertical line in the margin (-) Were marked. This standard and IEC 62520:2011 as compared to the technical differences and their reasons exist as follows.

--- On normative references, this standard has been adjusted technical differences, in order to adapt our technical conditions, the adjusted situation Focus is reflected in the status of Chapter 2, "Normative references" on. Specific adjustments are as follows.

- Modify with international standards of GB/T 1402 instead of IEC 60850 (see Appendix C);
- equivalents adoption of international standards GB 1971 instead of IEC 60034-8 (see 6.1, Appendix D);
- equivalents adoption of international standards GB/T 2900.25 instead of IEC 60050-411 (see Chapter 3);
- Modify with international standards of GB/T 2900.36 instead of IEC 60050-811 (see Chapter 3);
- Modify with international standards of GB/T 2900.74 instead of IEC 60050-131 (see Chapter 3);
- equivalents adoption of international standards GB/T 2900.83 instead of IEC 60050-151

(see Chapter 3);

- equivalents adoption of international standards GB/T 11021 instead of IEC 60085 (see 8.1.5);

- equivalents adoption of international standards GB/T 21563 instead of IEC 61373 (see 8.3);

- increased GB 755, reference has been modified (see Chapter 4);

- increase the GB/T 22715, has been modified reference (see 9.1.3.3).

--- Modify some of the terms and definitions, as follows.

- modify the terms name, so the name of the corresponding term of 3.17 (see 3.16, IEC 62520:2011 3.19);

- Remove the body of the term is not applied (see IEC 62520:2011 is 3.6,3.13,3.18,3.26,3.37 ~ 3.42);

- modify some of the terms defined to further refine the content in order to facilitate understanding (see 3.1,3.15,3.16,3.17,3.34 and 3.35, IEC 62520:2011 and the 3.1,3.17,3.19,3.20,3.44 3.45).

--- Modify the elevation requirements to meet our requirements for traction equipment elevation (see Chapter 4, IEC 62520:2011, Chapter 4);

--- Increasing the content of the nameplate requirements (see 6.1, IEC 62520:2011 6.1);

--- Revised 6.1 Note 1 to the body, which contains the requirements (see 6.1, IEC 62520:2011 6.1);

--- Modify the "special characteristics" secondary logo, the words "manufacturer name" in order to avoid ambiguity (see 6.2, IEC 62520:2011 6.2);

--- Delete a simplified type of tests to ensure the integrity of type testing (see 7.1.2, IEC 62520:2011 7.1.2);

--- Added footnote table, because the relevant test is destructive and should not be carried out for each (see Table 3, IEC 62520:2011 Table 3);

--- Increased water immersion test, improve product requirements (see Table 2 and 8.4);

--- Modify the test current voltammetry The contents of the description and A.3.2 inconsistent (see 9.1.2.2, IEC 62520:2011 is 9.1.2.2);

--- Modify the insulation test, adding "9.1.3.1 Primary winding insulation resistance measurement" and "9.1.3.3 primary coil voltage shock water Flat "in order to improve product requirements (see 9.1.3, IEC 62520:2011 9.1.3);

--- Modify the noise test requirements to improve the operability (see 10.2, IEC 62520:2011

10.2).

This standard also made the following editorial changes.

- Revised IEC 62520:2011 Location paragraph 3 of Chapter 1, moved to 5.1, because the requirement is not included in the scope;
- Remove the IEC 62520:2011 chapter 9.1.2.2.1 article number to comply with the provisions of GB/T 1.1-2009 of;
- Modify 9.1.2.2 The "standard value" with "typical" because the two terms the same content can be unified;
- Remove the IEC 62520:2011 in 9.1.2.2 and 9.1.1 of duplicate content standard value resistor value;
- Remove the IEC 62520:2011 in 9.1.2.3 and 9.1.1 of duplicate content impedance standard value value;
- Revised Appendix D layout, to form, to meet the Chinese diet;
- Revised IEC 62520:2011 Appendix D 7.1.3 Description 9.1.4.1 and numbers to be consistent with the text;
- Revised reference.

Please note that some of the content of this document may involve patents. Release mechanism of the present document does not assume responsibility for the identification of these patents.

This standard was proposed by the State Railway Administration.

This standard by the national electric traction equipment and systems Standardization Technical Committee (SAC/TC278) centralized.

This standard is mainly drafted by. Zhuzhou CSR Times Electric Co., Ltd., CSR Zhuzhou Electric Co., Ltd..

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1 Scope

This standard applies to early short drive rail vehicle attached to the body of the primary, secondary and only mounted on the rail coupling of the primary magnetic field Level linear induction motor.

This standard is determined by a linear induction motor performance test and evaluation of the motor for a specified operating system with adaptability and Other linear induction motor to provide a basis to compare.

This standard relates to linear induction motor powered by the inverter.

NOTE: When drafting this standard, just a short primary linear induction motor - a voltage source converter combination for traction systems, but this standard also applies to the future Other combinations may be used.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB 755 rotary motor fixed and performance (GB 755-2008, IEC 60034-1:2004, IDT) GB/T 1402 rail traction power supply system voltage (GB/T 1402-2010, IEC 60850:2007, MOD) GB 1971 rotary motor Terminal markings and direction of rotation (GB 1971-2006, IEC 60034-8:2002, IDT) GB/T 2900.25 Electrotechnical terminology rotary motor (GB/T 2900.25-2008, IEC 60050-411:1996, IDT) GB/T 2900.36 Electrotechnical terminology electric traction (GB/T 2900.36-2003, IEC 60050-811:1991, MOD) GB/T 2900.74 Electrotechnical terminology Circuit Theory (GB/T 2900.74-2008, IEC 60050-131:2002, MOD) GB/T 2900.83 Electrotechnical terminology of electrical and magnetic devices (GB/T 2900.83-2008, IEC 60050-151:2001, IDT) GB/T 11021 heat-resistant electrical insulation classification (GB/T 11021-2014, IEC 60085:2007, IDT) GB/T 21563 rail rolling stock equipment - Shock and vibration tests (GB/T 21563-2008, IEC 61373.

1999, IDT)

GB/T 22715 AC motor stator coil forming impact resistance voltage level (GB/T 22715-2008, IEC 60034-15:1995, IDT) GB/T 28806-2012 made after rail rolling stock rolling stock put into use before the test (IEC 61133.

2006, IDT)

3 Terms and Definitions

GB/T 2900.25, GB/T 2900.36, GB/T 2900.74 and GB/T 2900.83 define the following terms and definitions apply in this document.

Linear induction motor fixed linearinductionmotorrating A set of electrical and mechanical parameters specified by the manufacturer of the parameters measured simultaneously, including the order of their duration and load.