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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 32271-2015

Energy feedback devices for lifts

电梯能量回馈装置

Issued on: December 10, 2015 **Implemented on: July 1, 2016**

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Standardization Administration of the PRC

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules. This standard by the National Standardization Technical Committee elevator (SAC/TC196) and focal points. This standard is drafted by: Shanghai Institute of Special Equipment Inspection. Participated in the drafting of this standard. Kone Elevator Co., Ltd., Shanghai Mitsubishi Elevator Co., Ltd., China Academy of Building Research Building Machinery Research Branch, West Otis Elevator Co., Schindler (China) Elevator Co., Otis Elevator (China) Investment Co., Ltd., Japan Li Elevator (China) Co., Ltd. Yongda Elevator Equipment (China) Co., Ltd., Shanghai STEP Electric Co., Canny Elevator Shares Ltd., Guangdong Province Special Equipment Inspection Institute, Shenzhen Special Equipment Safety Inspection Institute, Jiangsu Province Special Equipment Safety Supervision and Inspection Institute Suzhou Branch of the Academy study, Giant Kone Elevator Co., Ltd., Guangzhou Elevator Industry Co., Ltd. Huasheng Fujitec Elevator Co., Ltd., Suzhou Dili Austrian Elevator Co., Thyssen Elevator Co., Ltd., Ling Wang Elevator Co., Ltd., Shanghai Hyundai Elevator Co., Ltd., West elevator set Group Co., Ltd., Tianjin Xin Baolong Elevator Group Co., Ltd., Guangzhou, foreshore Technology Development Co., Suzhou Monarch Control Technology Co., Secretary, Ray Foote, Energy Technology (Shanghai) Co., Ltd., Hangzhou, Zhejiang Electric Co., Ltd. Yang. The main drafters of this standard. Xue Ji love, often Xiaoqing, money Guorong, Wu Zhu standard, Chenfeng Wang, Wen Aimin, Ma Guanghua, Sun Yuting, Zhang Wenjun, Shen Yi Jun, Songji Bo, Meng Qingdong, He Yongsheng, following the Huai, Lu Rongfeng, Qian Bin, Yin Zheng, Wen-ying, Lin Tang Zhong, Zhang Weijie, Yin Jianfeng, Caoling Yan, Yongxin Xi, Jiang Qing, Huang Liming, Liu Chunkai, Liang Guangyao, Mei Ye.

Applications elevator energy feedback device 0.1, is one of the energy-saving measures in the elevator, the energy saving effect of the basic parameters of the elevator itself and make Closely associated with the case.

0.2 Before using the device, assumed to have been communicated with the user.

a) Consider the impact of this device on the elevator safety performance and grid and other peripheral equipment;

b) for the relevant risk assessment. Elevator energy feedback device

1 Scope

China's national standard for lift energy feedback devices. It specifies the technical requirements, the test methods, the inspection rules and the marking and delivery of the devices that return a lift's regenerated energy to the supply, and it applies to the energy feedback devices used with lifts. A lift spends a large part of its working life being driven by its own load. A car descending full, or ascending empty against a heavier counterweight, drives the motor rather than being driven by it, and the motor becomes a generator. In a conventional drive that generated energy is dumped into a braking resistor and leaves the machine room as heat, which is wasted twice over - once as the energy itself and again as the air conditioning needed to remove it. An energy feedback device inverts that energy and returns it to the building supply instead. The saving is real but it is not universal, and the standard is unusually careful to say so: its introduction states plainly that the effect depends closely on the basic parameters of the lift and on how it is used, and that before the device is applied the supplier must have discussed with the user the effect on the lift's safety performance and on the grid and other equipment around it, and must have carried out a risk assessment. That caution is warranted. The device connects to the same supply that feeds the lift's own control and safety circuits, it injects current into it, and a fault in it must not be able to affect the operation of the lift. Issued on 10 December 2015 and in force since 1 July 2016.

This standard specifies the technical requirements for elevator energy feedback devices, test items and methods, inspection rules and signs, packaging, transport and Storage. This standard is suitable for connection to a rated voltage of 400V AC power lift and below TN-S system feedback device. This standard does not apply to controlled rectifier inverter device having a function of the elevator.

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/T 191 Packaging - Pictorial signs

GB/T 2423.1 Environmental testing for electric and electronic products Part 2. Test methods Test A. Cold

GB/T 2423.2 Environmental testing for electric and electronic products Part 2. Test methods Test B. Dry heat

GB/T 2423.3 Environmental testing for electric and electronic products Part 2. Test methods - Test Cab. Damp heat test

GB 4208 housing protection (IP Code)

GB 4824 industrial, scientific and medical (ISM) radio frequency equipment disturbance characteristics - Limits and methods of measurement

GB 7588 elevator manufacturing and installation of safety norms

GB 14048.1-2012 Low-voltage switchgear and control equipment - Part 1. General

GB/T 14549-1993 power quality utility grid harmonic

GB/T 15543-2008 power quality three-phase voltage unbalance

GB/T 15945-2008 power quality power system frequency deviation

GB/T 17626.2 Electromagnetic compatibility Testing and measurement techniques - Electrostatic discharge immunity test

GB/T 17626.3 electromagnetic compatibility test and measurement technology RFEMS test

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 The elevator is generated when the state of renewable energy in line with the direct current is converted into alternating current power quality requirements of the post back to the grid