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**GB/T 17626.18-2016**

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**Electromagnetic compatibility -- Testing and measurement  
techniques -- Damped oscillatory wave immunity test**

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### Foreword

GB/T 17626 "Electromagnetic compatibility test and measurement technology" currently includes the following parts.

Electromagnetic compatibility (EMC) - Test and measurement techniques - Tests for immunity test; GB/T 17626.1-2006;

Electromagnetic compatibility - Testing and measurement techniques - Electrostatic discharge immunity test; GB/T 17626.2-2006;

Electromagnetic compatibility - Testing and measurement techniques - Radiofrequency electromagnetic field radiation immunity test; GB/T 17626.3-2006;

Electromagnetic compatibility (EMC) - Testing and measurement techniques - Electrical fast transient burst immunity test; GB/T 17626.4-2008;

Electromagnetic compatibility - Testing and measurement techniques - Surge (impact) immunity test; GB/T 17626.5-2008;

Electromagnetic compatibility (EMC) - Testing and measurement techniques - Radio disturbance - induced conducted disturbance immunity;

Electromagnetic compatibility (EMC) - Test and measurement techniques - Measurement of harmonics and interharmonics between power supply systems and connected equipment  
GB/T 17626.7-2008

Quantities and measuring instruments;

Electromagnetic compatibility (EMC) - Testing and measurement techniques - Power frequency magnetic field immunity test; GB/T 17626.8-2006;

GB/T 17626.9-2011 Electromagnetic compatibility test and measurement techniques - Pulse magnetic field immunity test;

Electromagnetic compatibility - Test and measurement techniques - Damping oscillations - Magnetic field immunity test; GB/T 17626.10-1998;

--- GB/T 17626.11-2008 Electromagnetic compatibility test and measurement technology  
Voltage sags, short interruptions and voltage variations

Disturbance test

Electromagnetic compatibility - Testing and measurement techniques - Ringing wave  
immunity test; GB/T 17626.12-2013;

GB/T 17626.13-2006 Electromagnetic compatibility test and measurement technology AC  
power port Harmonics, interharmonics and power networks

Low frequency immunity test;

Electromagnetic compatibility - Testing and measurement techniques - Voltage fluctuation  
immunity test; GB/T 17626.14-2005;

Electromagnetic compatibility - Testing and measurement techniques - Scintillator functions  
and design specifications; GB/T 17626.15-2011;

GB/T 17626.16-2007 Electromagnetic compatibility test and measurement technology 0Hz  
~ 150kHz Common mode conducted disturbance immunity

test;

Electromagnetic compatibility - Testing and measurement techniques - DC power input -  
port ripple immunity test; GB/T 17626.17-2005;

Electromagnetic compatibility test and measurement techniques - Transmissive and  
immunity in transverse electromagnetic wave (TEM) waveguides GB/T 17626.20-2014

Degree test

Electromagnetic compatibility test and measurement techniques - Mixing chamber test  
method; GB/T 17626.21-2014;

GB/T 17626.24-2012 Electromagnetic compatibility test and measurement technology  
HEMP conducted harassment protection device test

method;

Electromagnetic compatibility - Testing and measurement techniques - Three - phase  
voltage unbalance immunity test; GB/T 17626.27-2006;

Electromagnetic compatibility (EMC) - Test and measurement techniques - Frequency  
immunity - Frequency immunity test;

--- GB/T 17626.29-2006 Electromagnetic compatibility test and measurement technology  
DC power input port voltage sag, short time

Breaking and voltage changes in the immunity test;

Electromagnetic compatibility - Testing and measurement techniques - Power quality measurement methods; GB/T 17626.30-06;

--- GB/T 17626.34-2012 Electromagnetic compatibility test and measurement technology Main power supply per phase current greater than 16A

Voltage sags, short interruptions, and voltage variations immunity tests.

This part is part 18 of GB/T 17626.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

This part uses the translation method equivalent to IEC 61000-4-18..2011 (version 1.1) "Electromagnetic compatibility (EMC) Part 4-18. Test

Test and Measurement Technology Damping Oscillation Wave Immunity Test ".

In this part of the normative reference to the international documents have a consistent correspondence between the following documents.

GB/T 4365-2003 Electrotechnical terminology Electromagnetic compatibility [IEC 60050 (161)..1990, IDT]

GB/T 17626.4-2008 Electromagnetic compatibility test and measurement technology Electrical fast transient burst immunity test

(IEC 61000-4-4..2004, IDT)

--- GB/T 17799.5-2012 Electromagnetic compatibility General standard Indoor equipment High-altitude electromagnetic pulse (HEMP) Immunity

(IEC 61000-6-6..2003, IDT)

This part of the National Electromagnetic Compatibility Standardization Technical Committee (SAC/TC246) proposed and centralized.

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Electromagnetic compatibility test and measurement technology

Damping oscillatory wave immunity test

## 1 Scope

This part of GB/T 17626 relates to the immunity requirements and test methods of electrical and electronic equipment under operating conditions, which includes.

a) Repeated resistance in power cables, control cables and signal cables installed primarily in high voltage and medium voltage (HV/MV) substations

Nepalese oscillations.

b) Mainly in air-insulated substations (GIS) and in some cases air-insulated substations (AIS) or due to high-altitude electromagnetic pulses

(HEMP) under any of the facilities of the power cable, control cables and signal cables appear in the repeated damping oscillations.

The purpose of this section is to establish immunity requirements in the laboratory for evaluating the performance of residential, commercial and industrial electrical and electronic equipment

And common reference, when applicable, can also be used for power plants and substation equipment.

Note. This part is the basic standard for electromagnetic compatibility for use by the product committee, as specified in IEC Guide 107. IEC Guide 107 also states that the Product Committee is negative

To determine whether to apply this immunity test standard, if used, should also be responsible for determining the appropriate test level and performance criteria. National Electromagnetic Compatibility Standard

The Technical Committee and its subcommittee are willing to cooperate with the Product Committee to assess the specific immunity requirements of their products.

The purpose of this section is to provide that.

--- test voltage and current waveform;

--- test level range;

--- test equipment;

--- test arrangement;

--- test procedure.

The purpose of this section is to establish a common criterion for evaluating the immunity of electrical and electronic equipment when subjected to damped oscillations. This part

The specified test method describes a method of determining the consistency of the device