

KS

KOREAN INDUSTRIAL STANDARD

Home interphones

KS C 5518 : 1989

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KS C 5518-1989

(Confirmed: In 1994)

Home interphones

1. Scope

This standard specifies home inter-phones (*abbreviated as inter-phones in what follows*) in which call paths are established by master-slave type.

Note - Units and dimensions enclosed by { } are in SI units and are expressed together for reference purpose.

2. Definition of terms

The meaning of the terms mainly used in this standard are in accordance with **KS C 5515**(General rules and testing methods for intercommunication equipments).

3. Rated values

The rated voltages for inter-phones are 220 V and 110 V(100 V)/220 V combined for AC type, and 6 V, 9 V and 12 V for battery type. The rated frequency shall be 60 Hz in case of AC type.

4. Performance

4.1 tolerance of consumed power

The tolerance of rated consumed power in AC type, when consumed power is tested in accordance with methods in **6.3**, shall comply with **Table 1**.

Table 1

rated consumed power [W]	tolerance rate [%]
10 or less	+ 25
from 10 up to 30	± 25 (+25, -30)
more than 30	± 20 (+20, -25)

Note - Values in parentheses apply when normal temperature test is performed with equivalent load method.

4.2 insulation performance

4.2.1 insulation resistance

For AC type and AC-battery combined type, the insulation resistance, when tested in accordance with **6.4.1**, shall be 2 M Ω or more.

Related standard : **KS C 5515** General rules and testing methods for intercommunication equipments

4.2.2 withstand voltage

For AC type and AC-battery combined type, the withstand voltage, when tested in accordance with 6.4.2, shall withstand it.

4.2.3 insulation under water spray

Insulation under water spray for slave, when tested in accordance with 6.4.3, shall comply with 4.2.1 and 4.2.2.

4.2.4 wetproof insulation

Wetproof insulation for equipments, except for outdoor usage, when tested in accordance with 6.4.4, shall be 0.3 M Ω or more.

4.3 operation

When tested in accordance with 6.5, the operation shall be normal.

4.4 intensity of noise**4.4.1 electric field strength of noise**

The electric field strength of noise, when tested in accordance with 6.6.1, shall be appropriate.

4.4.2 terminal voltage of noise

The terminal voltage of noise, when tested in accordance with 6.6.1, shall be less than or equal to 65 dB. In this case, the decibel value is calculated with 1 μ V being 0 dB.

4.5 endurance

For endurance, when tested in accordance with methods in 6.7, there shall not be any abnormalities in unit installation state, or problems such as fixture defects, looseness, missing parts, etc., and there shall not be any abnormalities in operation of each part.

4.6 vibration

For vibration, when tested in accordance with methods in 6.8, there shall not be any abnormalities in unit installation state, or problems such as fixture defects, looseness, missing parts, etc., and there shall not be any abnormalities in operation of each part.

4.7 dropping

For dropping, when tested in accordance with methods in 6.9, there shall not be any abnormalities in unit installation state, or problems such as fixture defects, looseness, missing parts, etc., and there shall not be any abnormalities in operation of each part. In addition, the insulation resistance shall be 2 M Ω or more.

4.8 impedance

Impedance, when tested in accordance with methods in 6.10, shall be within $\pm 0.5\%$ of the nominal value.

4.9 power amplification degree

Power amplification degree, when tested in accordance with methods in 6.11, shall 50 dB or more.

4.10 frequency characteristic

For frequency characteristic, when tested in accordance with methods in 6.12, the mean of measured values for each signal frequency shall be 70 dB or more.

4.11 distortion factor

Distortion factor, when tested in accordance with methods in 6.13, shall be 3% or less.

4.12 SN ratio

SN ratio, when tested in accordance with methods in **6.14**, shall be 50 dB or more.

4.13 call sound pressure level

Call sound pressure level, when tested in accordance with methods in **6.15**, shall be 70 dB or more.

4.14 output sound pressure level

Output sound pressure level, when tested in accordance with methods in **6.16**, shall be 70 dB or more.

5. Structure, dimensions and materials

5.1 general structure

- (1) There shall not be any possibility of danger in normal operation condition, the shape shall be correct, assembly condition shall be fine, and operation shall be smooth.
- (2) For parts which may be affected by an arc with switching on or off on the cover of a metal or in the box, anti-arc electrical insulator shall be fitted.
- (3) Charging part, with easily detachable units (excluding those that can be detached with a force of 2 kg or more) removed, shall not be touched by the test finger as in **Figure 1**. In this case, the force applied to test finger shall be 1 kg on the bottom side for desk type or on the back and bottom sides for box type (only hanging type), or 3 kg on the outer side and opening part for other types.

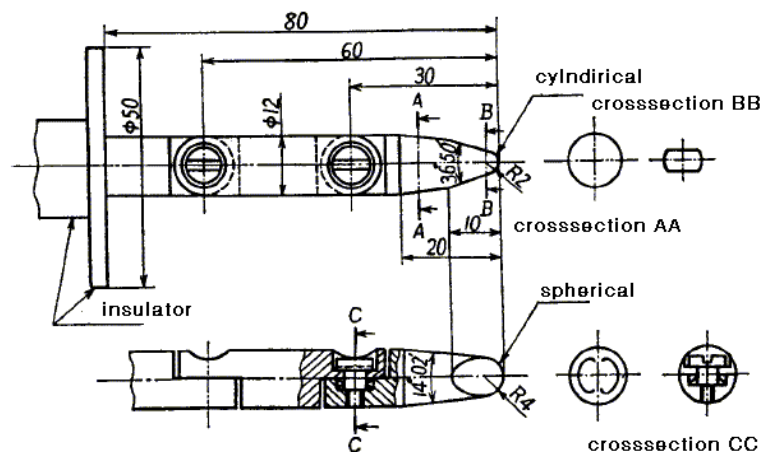


Figure 1 - Test finger

- (4) The spatial distance (including consecutive side distance) between charging parts with different polarities, between charging part and non-charging part, and between charging part and non-metal part that can be touched with human body shall comply with **Table 2** for each part of the body.