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

GB/T 17465.1-2022

**Appliance couplers for household and similar general purposes
- Part 1: General requirements**

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1 Scope

This document specifies the ratings, marking, dimensional inspection, protection against electric shock, construction, electrical Energy, mechanical properties and other technical requirements.

This document applies to two-pole and two-pole earthed appliance couplers for household and similar Gas appliances are connected to the mains.

This document also applies to appliance inlets or appliance outlets which are fitted on or integral with an appliance.

The rated voltage does not exceed 250V (ac), and the rated current does not exceed 16A.

Appliance couplers complying with the requirements of this document are suitable for normal use at an ambient temperature not normally exceeding 40°C, but during a 24h period The average internal ambient temperature shall not exceed 35°C, and the lower limit of the ambient air temperature shall be -5°C.

Appendix E provides the operating voltage for accessories when the ambient temperature is higher than 35°C and does not exceed 90°C (including 90°C).

Test requirements for flow derating.

appliance coupler is not suitable for.

--- used to replace GB/T 2099.1 plug and socket system;

--- Devices used to replace GB/T 31463 (all parts) luminaire connection devices (DCLs) or luminaire supporting couplers (LSCs);

--- Used to replace GB/T 32517 mounting coupler.

2 Normative references

The contents of the following documents constitute the essential provisions of this document through normative references in the text. Among them, dated references For documents, only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to

this document.

5.1 - General requirements

Where applicable, tests shall be carried out to demonstrate compliance with the requirements specified in this document.

The test is as follows.

- a) Type tests shall be carried out on representative samples of each accessory.
- b) The manufacturer shall carry out routine tests for each accessory.
- c) Unless otherwise specified, the test shall be carried out in the order of each chapter of this document.
- d) Unless otherwise specified, appliance couplers shall be tested together with mutually matched products conforming to this document.
- e) Integral appliance couplers and combined appliance couplers are tested under the conditions of use of the equipment, appliance inlets and appliance inlets. The number of samples of the output socket should be the same as the number of equipment samples required by the relevant standards.
- f) If more than one sample fails in a certain test, the appliance coupler is considered not to comply with this document. If a specimen fails a test due to a defect in assembly or manufacture, the test and possibly the test shall be repeated with another set of specimens.

All the samples should pass the test when retested.

- g) In general, it is only necessary to repeat the test for the item that caused the failure, except.
 - 1) When tested according to Clause 19, Clause 20 or Clause 21, one of the three samples fails, in which case In this case, the test shall be repeated from Clause 16; or when the test is carried out in accordance with Clause 19, Clause 20 or Clause 21, three One of the samples fails, in which case the test shall be repeated from Clause 16; or 2) When tested in accordance with Clause 22 (except 22.3) or Clause 23, one of the three samples fails, in which case In this case, the test shall be repeated from Clause 18 onwards. When tested in accordance with Chapter 22 (except 22.3) or Chapter 23 , one of the three samples fails, in which case the test shall be repeated from Clause 18 onwards.

5.2 Specimen Unless otherwise specified, the test specimens shall be assembled and installed in accordance with the manufacturer's instructions under normal use, and shall be The conditions of use are to conduct the test with an alternating current of 50 Hz or 60 Hz at an ambient temperature of (20 +/- 5) °C. Tests should not be performed earlier than It starts at 168h postpartum.

Non-rewirable connectors and non-rewirable plug connectors, excluding those forming part

of cordsets, shall have a length of at least 1 m The soft wire is tested.

The applicant may submit additional samples at the same time as the specified number of samples, in case any sample is unqualified. so, try The laboratory can test additional samples without waiting for the applicant to request again, and only when the unqualified items appear again will it be judged as unqualified grid. If additional samples are not sent at the same time, as long as one sample fails, it will be judged as unqualified.

5.3 Routine tests Routine tests are specified in Appendix B.

6 Standard Ratings

6.1 The maximum rated voltage allowed is 250V.

6.2 The maximum rated current allowed is 16A.

Preferred current ratings for the appliance coupler are 0.2A, 2.5A, 6A, 10A and 16A.

Note. For detailed information on standard type ratings, please refer to GB/T 17465.6.

7 Classification of appliance couplers 7.1 Divided according to the maximum pin temperature at the bottom of the pin of the corresponding appliance inlet or at the socket contacts of the corresponding appliance outlet.

- a) For appliance couplers used in cold conditions, the pin temperature does not exceed 70°C;
- b) For appliance couplers used in hot conditions, the temperature of the pins does not exceed 120 °C;
- c) For appliance couplers used under extremely hot conditions, the temperature of the pins does not exceed 155°C.

NOTE. An appliance coupler for hot conditions can also be used in cold conditions; an appliance coupler for extremely hot conditions can be used in cold or hot conditions.

7.2 Classification by type of connected equipment.

- a) Appliance couplers for Class I equipment;
- b) Appliance couplers for Class II equipment.

7.3 Connectors/plug connectors are divided according to the connection method of the cord.

- a) Removable stitches;
- b) The stitches cannot be removed.

7.4 Divided by ambient temperature.

- a) Appliance couplers for use in ambient temperatures not exceeding 35°C;

b) Appliance couplers for use in ambient temperatures not exceeding 90°C. This category also needs to be classified according to 7.1b) or 7.1c).

8.7 Durability The marking required by this document shall be legible and durable. Signs should not be placed on screws, removable washers or other removable parts.

8.8 Tests and observations Check whether the requirements of 8.1~8.7 are met by observation and the following tests.

First take a piece of cloth dipped in water, and rub the sign with your hands for 15s; then take a piece of cloth dipped in gasoline solvent (n-hexane), and rub the sign with your hands for 15s.

After this test and all non-destructive tests of this document, the marking shall remain clear. Labels cannot be easily removed and are not A curl should appear.

Molded, embossed or engraved markings are not subjected to this test.

9 Dimensions and interchangeability

9.1 General requirements Appliance couplers shall be designed and constructed to prevent accidental or improper connection.

Whether it is qualified is checked by observation, and if in doubt, it is checked by the test in 9.2~9.5.

9.2 Single pole connection A single-pole connection shall not be made between the connector/appliance outlet and the appliance inlet/plug connector.

Eligibility, through the manual test.

9.3 Interchangeability Combinations that cannot occur.

---Connectors for Class II equipment and appliance inlet/plug connectors for Class I equipment;

---Plug connectors for protection class I equipment and connectors/appliance outlets for protection class II equipment;

--- Connectors for cold conditions and appliance inlets for hot or extremely hot conditions;

--- Plug connectors for cold conditions and appliance outlets for hot or extremely hot conditions;

--- Connectors for hot conditions and appliance inlets for hot conditions;

--- Plug connectors for hot conditions and appliance outlets for hot conditions;

--- Connectors and appliance input socket/plug connectors higher than the rated current of the connector;