

BRITISH STANDARD 546 : 1950

UDC 621.316.541

CONFIRMED JANUARY 1988

**TWO-POLE AND EARTHING-PIN
PLUGS, SOCKET-OUTLETS
AND SOCKET-OUTLET
ADAPTORS**

AMD 5809

Amendment No. 6
published and effective from 23 December 1987
to BS 546 : 1950

Two-pole and earthing-pin plugs, socket-outlets
and socket-outlet adaptors

Revised and additional text

Table 7. Dimensions of plug pins (as amended by Amendment No. 4)

In column 5 delete:

'Tolerance
on all
projections
 $\left. \begin{array}{l} +0.030 \\ -0.005 \end{array} \right\} \text{ in.}'$

and substitute:

'Tolerance
on projections
2 and 30 amp.
rating
 $\left. \begin{array}{l} +0.041 \\ -0.005 \end{array} \right\} \text{ in.}$
5 and 15 amp.
rating
 $\left. \begin{array}{l} +0.030 \\ -0.005 \end{array} \right\} \text{ in.}'$

New supplement No. 2. Insert the attached new supplement at the end of the
existing text.

**SUPPLEMENT No. 2 (1987) to
BRITISH STANDARD 546 : 1950
Two-pole and Earthing-pin Plugs, Socket-outlets
and Socket-outlet Adaptors**

**SPECIFICATION FOR
SWITCHED SOCKET-OUTLETS**

FOREWORD

This supplement has been prepared to cover fixed socket-outlets complying with B.S. 546 which incorporate an integral switch in their construction, for use in a.c. circuits only. Such accessories, although in general use, are not covered by the scope of B.S. 546 as written.

SPECIFICATION

SCOPE

1. This supplement relates to 2 ampere, 5 ampere, 15 ampere and 30 ampere socket-outlets which contain a switch connected between the current carrying contact(s) of the socket-outlet and the relevant supply terminal(s), for use in a.c. circuits only.

DEFINITIONS

2. In addition to the definitions of Clause 2 of B.S. 546 : 1950, the following definitions apply:

a. Switched socket-outlet. A socket-outlet with an associated switch to disconnect the supply to the line socket contact or to both line and neutral socket contacts.

b. Actuating member. That part which is moved, e.g. pulled, pushed or turned by the user to operate the switch mechanism.

GENERAL REQUIREMENTS

3. Switched socket-outlets conforming to this supplement shall comply with all the Clauses of B.S. 546 relating to socket-outlets except where stated below:

Clause 8, Engagement of pins and contacts. The following additional requirement applies.

Any part of the actuating member in any position it may occupy shall not lie within the circle having a radius given in Table 3. For 15 ampere switched socket-outlets the radius of engagement circle as shown in Table 3 shall be reduced to 1.160 inches.

Compliance shall be checked by inspection and measurement.

Clause 11, Clearance and creepage. The following additional requirement applies.

The minimum clearance between switch contacts in the open position shall be 0.047 inches (1.2 millimetres).

Compliance shall be checked by inspection and measurement.

Table 5, Materials for component parts. The following amendment applies.

Item 2 in Column 1 should read:

Socket-outlet cover (or plate) and actuating member.

Clause 21, Construction of socket contacts and terminals.

Clause 4 'Terminals' of this supplement replaces Clause 21 of B.S. 546.

Clause 30, Marking.

Clause 10 'Marking' of this supplement replaces Clause 30 of B.S. 546.

Clause 32, Interchangeability. The following additional note applies.

NOTE. For switched socket-outlets, although the switch actuating member is outside the radius of engagement (see Clause 8) it may still prevent full engagement of the gauge specified in Clause 41: in this circumstance the projecting switch actuating member may be removed.

Clause 33, Effectiveness of contact. The following additional requirement applies.

For switched socket-outlets the voltage drop in a switched pole measured from the terminal of the switched socket-outlet to the corresponding plug pin shall not exceed 60 millivolts at rated current.

Clause 35, Insulation resistance. The following additional requirement applies.

Across switch contacts with the switch open (for switched socket-outlets) the value shall be not less than 50 megohms.

Clause 36, High-voltage test. The following additional requirement applies.

For switched socket-outlets, switches shall be tested in the closed position, followed by tests with the switch contacts in the open position.

Clause 38, Current-breaking. The following additional requirement applies.

Switched socket-outlets shall be tested in a substantially non-inductive a.c. circuit as follows:

a. For socket contacts, as described in Clause 38 as modified above.

b. For switch contacts, with the switched socket-outlet plates in position and with all metal parts not in contact with live contacts connected to the earthed pole of the test circuit, the switch shall make and break the specified current in a substantially non-inductive a.c. circuit ten times in succession at intervals of 30 seconds. After the tests the switched socket-outlet shall be in a serviceable condition.

Clause 41, 'Go' gauges for plugs and socket-outlets. The following additional note applies.

NOTE. When checking the requirements of Clause 41, providing the switch actuating member lies outside the radius of engagement circle specified in Table 3, the projecting switch operating member may be removed.

TERMINALS

4. Terminals shall be of such design and dimensions that under normal conditions of use they do not overheat.

In pillar-type terminals the screws shall be of sufficient length to ensure that the screws or intermediate clamping members extend to the far side of the terminal hole. The screws and the surface on which the conductor is clamped shall be so shaped that the conductor may be securely held and not unduly deformed. The sizes of the conductor hole and the clamping screw shall be such that the clearance between the sides of the major diameter of the clamping screw and the conductor hole does not exceed 0.6 millimetres.

Terminals, unless of a form which will prevent conductor strands from spreading, shall be fitted with special washers or other suitable devices to control such spreading and shall be suitable for repeated use.

Terminals shall accept two conductors appropriate to the rated current of the accessory, except for a 30 ampere switched socket-outlet which shall accept a minimum of one appropriate size conductor. The clearance of any live part of the terminal from any non-current carrying metal part shall comply with the dimensions given in Clause 11 of B.S. 546 when the terminal is fitted with the maximum size or number of conductors which it will accommodate when effectively clamped.

Terminal screws used in making electrical connections shall have a root area not less than that of the appropriate screws in Table A of this supplement. The terminals and screws shall withstand the torques detailed in Table A of this supplement. If ISO metric screws are used they shall be in accordance with B.S. 3643.

Pillar terminals may, as an alternative, meet the requirements given in Clause 21 and Table 12 of B.S. 546 : 1950.

Compliance shall be checked by inspection and the temperature rise test of Clause 7.

TABLE A. TERMINAL SCREWS : SIZE AND TORQUE

Current rating of accessory	Minimum nominal diameter of ISO metric screws and torques							
	Single screw with head		Two screws with head		Single screw without head*		Two screws without head*	
	Size	Torque	Size	Torque	Size	Torque	Size	Torque
amp.	mm	N·m	mm	N·m	mm	N·m	mm	N·m
Up to 5	2.5	0.4	—	—	2.5	0.2	—	—
Over 5 and up to 15	3	0.5	2.5	0.4	3	0.25	2.5	0.2
Over 15 and up to 20	3.5	0.8	2.5	0.4	3.5	0.4	2.5	0.2
Over 20 and up to 30	4	1.2	3	0.5	4	0.7	3	0.25

* These values only apply if the screw, when tightened, does not protrude from the hole, otherwise the values for screws with head apply.

PRECAUTIONS AGAINST REVERSAL OF POLARITY

5. Internal connections shall be so arranged that correct polarity is maintained.

Compliance shall be checked by inspection.

SWITCH ACTION

6. The actuating member of a switch shall not remain at rest in the off position whilst the switch contacts remain closed.

The actuating mechanism shall be so constructed that when operated the switch can remain only in a position giving adequate contact or adequate separation of the contacts.

Switches shall be so constructed that undue arcing cannot occur when the switch is operated slowly.

Switches shall disconnect at least the supply to the line socket contact.

Double pole switches shall make or break each pole with one movement of the actuator.

Compliance shall be checked by inspection and by the following test.

Following the test described in Clause 38, the circuit is broken a further 10 times, each time moving the actuating member by hand over a period of 2 seconds in a manner such as to attempt to stop the moving contact in an intermediate position causing arcing. The actuating member shall be released after 2 seconds and any arcing shall cease.

TEMPERATURE RISE

7. Switched socket-outlets shall not attain excessive temperatures in normal use.

Compliance shall be checked by a temperature rise test at rated current with the switched socket-outlet mounted and wired as in normal use in surroundings free from external drafts. The temperature rise of any terminal shall not exceed 35 K when measured at 4 hours and 8 hours after the commencement of the test.

For the purpose of the test, wiring shall be of PVC insulated (non-sheathed) cable with a cross-sectional area of 1 square millimetre (up to 10 ampere) or 2.5 square millimetres (over 10 amperes and up to 16 amperes) or 6 square millimetres (over 16 amperes and up to 30 amperes). The cables shall be bunched together for a distance of 1 metre from the cable entry which shall be plugged to prevent the free circulation of air.

The load shall be connected using a non-fused plug complying with B.S. 546 fitted with 1 metre of appropriately sized cord complying with Table 16 of B.S. 6500 : 1984.

ELECTRICAL ENDURANCE OF SWITCHES

8. The electrical endurance of switches shall be adequate.

Compliance shall be checked by testing the capacity to make and break rated current at 250 volts, 15,000 times (30 000 movements) in a substantially non-inductive a.c. circuit at a rate of six complete cycles per minute at regular intervals. The periods during which the switches are ON and OFF shall be approximately equal.

Metallic switched socket-outlet plates and all non-current-carrying metal parts that are normally exposed when the switched socket-outlet plate is not in position and that may become live in the event of failure of insulation, shall be connected to the earthed pole of the test circuit. The connection to earth may be through a fine wire fuse.

The means used for operating the switches shall be such as to move the actuating member at a speed of approximately 12 inches (305 millimetres) per second both in making and in breaking the circuit and shall be so disposed in relation to the actuating member that the normal action of the mechanism as a whole is not interfered with in any way.

At the end of the test the switch shall be capable of making and breaking its rated current at rated voltage and furthermore the voltage drop across each pole at rated current shall not exceed 75 millivolts. In addition the switch shall comply with the requirements of Clauses 35 and 36 of B.S. 546 : 1950 as modified in Clause 3 of this supplement. However, the values of insulation resistance shall be reduced from 100 megohm to 5 megohm and 50 megohm to 2 megohm respectively.

MOISTURE RESISTANCE

9. Switched socket-outlets shall be proof against humid conditions which may occur in normal use.

Compliance shall be checked by the following humidity treatment.

Vitrified ceramic material, which after 24 hours immersion in water has not increased in weight by more than 0.5 per cent after all the moisture has been removed from its surface, shall not be subjected to further tests, providing the resistance to water of the material does not depend on glaze or varnish.

To suit the ambient conditions at the time of test, a convenient temperature T (in °C) between 20 °C and 30 °C, shall be chosen as a reference temperature. The samples shall be brought to a temperature of between T and $T + 4$ °C and placed in a humidity cabinet containing air with a relative humidity maintained between 91 per cent and 95 per cent. The temperature of the air at all positions within the cabinet where samples can be placed shall be kept within 1 °C of the chosen value T .

The sample shall be kept in the cabinet for 48 hours.

NOTE. In most cases samples may be brought to the chosen reference temperature by keeping them at this temperature for at least 4 hours before the humidity treatment.

A relative humidity of between 91 per cent and 95 per cent can be obtained by placing in the humidity cabinet a saturated solution of potassium nitrate (KNO_3) or sodium sulphate (Na_2SO_4) in water having sufficiently large contact surface with the air.

In order to achieve the specified conditions within the cabinet it is necessary to ensure constant circulation of the air within the cabinet and, in general, to use a cabinet which is thermally insulated.

Immediately after this treatment, samples shall not show any appreciable damage, within the meaning of the specification, and, in addition, the switch shall comply with the requirements of Clause 35 and Clause 36 which shall be made in the humidity cabinet or in a room where the specified temperature is maintained. However, the values of insulation resistance shall be reduced from 100 megohm to 5 megohm and from 50 megohm to 2 megohm respectively.

MARKING

10. Switched socket-outlets shall be clearly marked with the following information which shall not be placed on screws, removable washers or other removable parts, or upon parts intended for separate sale.

- a. The name or trade mark of the manufacturer or responsible vendor.
- b. The rated current in amperes, e.g. 5 amperes.
- c. The rated voltage in volts, i.e. 250 volts.
- d. Nature of supply, i.e. $\sim$ (preferred) or a.c.
- e. The terminals for the connection of line and neutral conductors shall be identified by their respective symbols L and N. The symbol used for the protective conductor terminal shall be $\oplus$ (which is preferred) or $\perp$ or E.

NOTE. The continued use of the symbols $\perp$ and E is under consideration.

For the marking of the rated current and rated voltage, figures alone may be used. The rated current shall be placed before or above that for the rated voltage and separated from the latter by a line. The nature of supply shall be placed next to the marking for rated current and rated voltage. E.g.:

$$15\text{A } 250\text{V a.c.} \quad \text{or} \quad 15/250 \sim \quad \text{or} \quad \frac{15}{250} \sim$$

AMD 6144

Amendment No. 7
published and effective from 31 January 1989
to BS 546 : 1950

Two-pole and earthing-pin plugs, socket-outlets
and socket-outlet adaptors

Revised text

Clause 30. Marking. In paragraph 1 delete lines 1 to 3 and substitute the following.

‘30. All plugs and socket-outlets and socket-outlet adaptors shall be clearly and indelibly marked with the manufacturer’s name or identifying mark, the number of this British Standard, i.e. BS 546*, and, in addition, with the following:—’

At the foot of the page insert the following footnote.

‘*Marking BS 546 on or in relation to a product represents a manufacturer’s declaration of conformity, i.e. a claim by or on behalf of the manufacturer that the product meets the requirements of the standard. The accuracy of the claim is therefore solely the responsibility of the person making the claim. Such a declaration is not to be confused with third party certification of conformity, which may also be desirable.’

Supplement No. 2 (1987)

Clause 10. Marking. In paragraph 1, at the end of the list, insert the following.

‘f. The number of this British Standard, i.e. BS 546*.’

At the foot of the page insert the following footnote.

‘*Marking BS 546 on or in relation to a product represents a manufacturer’s declaration of conformity, i.e. a claim by or on behalf of the manufacturer that the product meets the requirements of the standard. The accuracy of the claim is therefore solely the responsibility of the person making the claim. Such a declaration is not to be confused with third party certification of conformity, which may also be desirable.’

**SUPPLEMENT No. 1 (1960) to
BRITISH STANDARD 546 : 1950
Two-pole and Earthing-pin Plugs, Socket-outlets, and
Socket-outlet Adaptors for circuits up to 250 volts**

**SPECIFICATION FOR
PLUGS MADE OF
RESILIENT MATERIAL**

**PD 4007
UDC 621.316.541 : 678**

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**Supplement No. 1 (1960) to
B.S. 546 : 1950**

THIS BRITISH STANDARD, having been approved by the Electrical Industry Standards Committee and endorsed by the Chairman of the Engineering Divisional Council, was published under the authority of the General Council on 30th December, 1960.

The Institution desires to call attention to the fact that this British Standard does not purport to include all the necessary provisions of a contract.

In order to keep abreast of progress in the industries concerned, British Standards are subject to periodical review. Suggestions for improvements will be recorded and in due course brought to the notice of the committees charged with the revision of the standards to which they refer.

A complete list of British Standards, numbering over 5000, indexed and cross-indexed for reference, together with an abstract of each standard, will be found in the Institution's Yearbook.

This standard makes reference to the following British Standards:

- B.S. 546.** Two-pole and earthing-pin plugs, socket-outlets and socket-outlet adaptors for circuits up to 250 volts.
- B.S. 903.** Methods of testing vulcanized rubber.
- B.S. 2719.** Pocket type rubber hardness meters.
Methods of use and calibration tests.

British Standards are revised, when necessary, by the issue either of amendment slips or of revised editions. It is important that users of British Standards should ascertain that they are in possession of the latest amendments or editions.

The following B.S.I. references relate to the work on this standard:
Committee references ELE/4, ELE/4/2
Draft for comment A (ELE) 4403

CO-OPERATING ORGANIZATIONS

The Electrical Industry Standards Committee under whose supervision this British Standard Supplement was prepared, consists of representatives from the following Government departments and scientific and industrial organizations:

- *Admiralty
- *Air Ministry
 - Associated Offices' Technical Committee
- *Association of Consulting Engineers (Incorporated)
- *Association of Supervising Electrical Engineers
- *British Electrical and Allied Industries Research Association
- *British Electrical and Allied Manufacturers' Association
 - British Electrical Development Association
 - British Railways, The British Transport Commission
 - Cable Makers' Association
- *Crown Agents for Oversea Governments and Administrations
 - Electric Lamp Industry Council
- *Electric Light Fittings Association
- *Electrical Contractors' Association (Incorporated)
 - Electrical Contractors' Association of Scotland
- *Electricity Council, Generating Board and the Area Boards in England and Wales
 - Electronic Engineering Association
 - Engineering Equipment Users' Association
 - Independent Cable Makers' Association
- *Institution of Electrical Engineers
- *Ministry of Aviation
- *Ministry of Labour (Factory Inspectorate)
- *Ministry of Power
- *Ministry of Works
 - National Inspection Council for Electrical Installation Contracting
- *National Physical Laboratory (D.S.I.R.)
 - Oil Companies Materials Association
- *Post Office
 - Public Transport Association (Incorporated)
 - South of Scotland Electricity Board
 - War Office

The Government departments and scientific and industrial organizations marked with an asterisk in the above list, together with the following, were directly represented on the committee entrusted with the preparation of this standard:

- British Plastics Federation
- Conduit Fittings Manufacturers' Association
- Electrical Association for Women
- E.D.A. Testing House
- Fire Offices Committee
- Lloyds Register of Shipping
- National Union of Manufacturers
- Women's Advisory Committee of the B.S.I.

BRITISH STANDARD SPECIFICATION FOR PLUGS MADE OF RESILIENT MATERIAL

FOREWORD

This supplement has been prepared to cover plugs made substantially of rubber or other suitable resilient material which are not included in the main specification.

It includes material requirements and tests designed to ensure that such plugs shall be manufactured to adequate standards of quality.

In B.S. 546 the provision of shutters is not mandatory and many surface mounted socket-outlet covers have dimensions which only prevent overhang by a small margin of interference.

Plugs complying with this supplement may have a slight degree of flexibility of mounting of all contact pins, but they will have sufficient rigidity to render overhang of any plug in any socket-outlet of the same rating difficult to achieve without the user being aware that misuse by incorrect insertion is being attempted.

SPECIFICATION

SCOPE

1. This supplement relates to 2 ampere, 5 ampere, 15 ampere and 30 ampere plugs, fused or unfused, in which the base and cover, or either of these components, are constructed of rubber or other suitable resilient material.

DEFINITIONS

2. In addition to the definitions of Clause 2 of B.S. 546, the following definitions have been adopted for the purposes of this supplement:

a. Rubber. The word rubber, where used, refers to mouldings made partly or entirely of rubber or other suitable resilient material which will meet the requirements and tests of this supplement.

b. Overhang. The term overhang defines the condition arising when a multi-pin plug is inserted into a socket-outlet in such a way that at least one pin can enter a current-carrying socket-contact while the other pin or pins are exposed.

GENERAL REQUIREMENTS

3. Plugs conforming to this supplement shall, unless otherwise specified, comply with the following Clauses of B.S. 546:

Section Two. General requirements. Clauses 3 to 6 and 8 to 12.

Section Three. Special requirements for plugs. Clauses 13 and 17 to 19.

Section Six. Marking. Clause 30.

Section Seven. Sampling tests. Clauses 31 to 36.

Section Eight. Type tests. Clauses 37 to 39.

Section Nine. Gauges. Clause 41. 'go' gauge for plug.

For the purpose of this supplement, the following amendments to the clauses of B.S. 546 indicated are applicable:

Clause 12, Materials.

Where the base and cover of the plug, or either of these components, are constructed of rubber, as defined in Clause 2 and specified in Clause 4 of this supplement, then the requirements of Clause 12 of B.S. 546 for the base and cover shall not apply to such components.

Clause 35, Insulation resistance.

Clause 13, 'Insulation resistance test' of this supplement replaces Clause 35 of B.S. 546 for plugs having live metal in contact with rubber.

MATERIALS

4. Rubber, when used for the cover or base shall be free from blisters, cracks, embedded foreign matter and other physical properties and defects likely to affect insulating and mechanical protecting properties and shall have a hardness not less than 85 British Standard degrees when tested in an ambient temperature of $20^{\circ}\text{C} \pm 5^{\circ}\text{C}$.

NOTE. The hardness may be checked by a meter specified in B.S. 2719, 'Pocket type rubber hardness meters. Methods of use and calibration tests'. Attention is also drawn to the requirements of B.S. 903, 'Methods of testing vulcanized rubber'.

CONSTRUCTION OF PLUGS

5. *a. General.* Plugs shall be so designed and constructed that they cannot readily be deformed to allow access to live parts, nor shall it be possible for separated metal parts to be brought into contact with each other. The construction of the plug shall be such as to provide the user with adequate protection against shock. The plug shall be sufficiently strong to resist mechanical damage under normal service conditions and shall comply with the 'Plug pin deflection test' specified in Clause 15 of this supplement.

b. Plugs with integral flexible cord. Where a flexible cord is moulded integrally with a plug, the size of the flexible cord shall be appropriate to the current rating of the plug. Such a plug is not subject to the provisions of Clause 18 of B.S. 546.

c. Fused-plugs with integral flexible cord. If a flexible cord is moulded integrally with a fused plug, the current rating of the fuse appropriate to the flexible cord shall be clearly marked on the plug.

PRECAUTIONS AGAINST ACCIDENTAL CONTACT

6. No part of the current-carrying pins, line or neutral shall be less than the minimum distance given in Table 1 from the periphery of the face of the plug measured when the plug is inserted into the appropriate socket outlet as far as the first point of contact of the current carrying pins.

TABLE 1

Current rating	Minimum distance
amps	inches
2	0.250
5	0.312
15	0.375
30	0.500

PLUG PINS

7. Plug pins shall be substantially cylindrical in form, and shall have radiused ends to facilitate entry into corresponding socket outlets. They shall not be split or slotted. The dimensions shall be as given in Table 7 of B.S. 546.

CONSTRUCTION OF PLUG PINS AND TERMINALS

8. Each plug pin of a non-fused plug, each earthing plug pin, and each neutral plug pin of a fused plug, shall be formed in one piece with the fixed part of its terminal.

Each terminal shall be of substantial construction, and the terminals of a non-fused plug, and the earthing terminal and the neutral terminals of a fused plug, shall each provide for clamping and securing of its flexible conductor so that efficient electrical connection is made directly with an integral part of the plug pin.

That contact for the fuse-link which is connected to the line terminal of a fused plug shall be formed in one piece with the fixed part of the terminal or connected to it in such a way that it cannot work loose under normal service conditions, and the other contact shall be similarly connected to the corresponding plug pin. The line terminal shall also provide for clamping and securing of the conductor so that efficient electrical connection is made with the contact for the fuse-link.

If the plug pins are removable from the plug base, the pin and/or the plug base shall be so designed that it is impossible to assemble them in such a way that the fuse is connected to the neutral terminal.

When pillar terminals are used they shall be of the dimensions given in Table 9 of B.S. 546, and shall have cheese-headed clamping-screws long enough under the head to extend to the far side of the conductor holes and with slightly rounded ends to minimize damage to conductors.

CONNECTION BETWEEN COVER AND BASE OF PLUG

9. The plug cover and base shall be firmly secured to one another. Any screws or other devices used for securing the plug cover and the plug base shall only be accessible from the under side of the base of the plug.

AGEING

10. Plugs shall be sufficiently resistant to ageing as proved by the type test specified in Clause 14 of this supplement.

MARKING

11. Plugs complying with this supplement if marked in any way identifying them with it, shall be marked ' B.S. 546/A '.

For the marking of fused plugs with integral flexible cord, attention is drawn to the requirements of Clause 5c.

TESTS

12. In addition to the tests of Sections Seven and Eight of B.S. 546, the tests specified in Clauses 14 and 15 of this supplement shall be type tests.

INSULATION RESISTANCE TEST

13. Every plug having live metal in contact with rubber shall pass the following tests in lieu of the test specified in Clause 35 of B.S. 546, before being subjected to a high voltage test as required by Clause 36.

The insulation resistance between line and neutral terminals and earth terminal shall be not less than 50 megohms and the test shall be made at not less than 500 volts d.c. applied for a sufficient length of time for the reading of the measuring instrument to become steady, the supply being obtained from an independent source or generated in the measuring instrument.

AGEING TEST

14. An accelerated ageing test is made in an atmosphere having the composition and pressure of the ambient air. The samples are suspended freely in a heating cabinet in which the air is renewed by natural draught. They are kept at a temperature of $70^{\circ}\text{C} \pm 2^{\circ}\text{C}$ for 240 hours.

It is recommended that an electrically heated cabinet is used. The temperature may be measured by means of a thermometer. The natural air circulation may be provided by holes in the walls of the cabinet.