

85.16

85.16 - Electric instantaneous or storage water heaters and immersion heaters; electric space heating apparatus and soil heating apparatus; electro-thermic hair-dressing apparatus (for example, hair dryers, hair curlers, curling tong heaters) and hand dryers; electric smoothing irons; other electro-thermic appliances of a kind used for domestic purposes; electric heating resistors, other than those of heading 85.45.

8516.10 - Electric instantaneous or storage water heaters and immersion heaters

- Electric space heating apparatus and electric soil heating apparatus :

8516.21 -- Storage heating radiators

8516.29 -- Other

- Electro-thermic hair-dressing or hand-drying apparatus :

8516.31 -- Hair dryers

8516.32 -- Other hair-dressing apparatus

8516.33 -- Hand-drying apparatus

8516.40 - Electric smoothing irons

8516.50 - Microwave ovens

8516.60 - Other ovens; cookers, cooking plates, boiling rings, grillers and roasters

- Other electro-thermic appliances :

8516.71 -- Coffee or tea makers

8516.72 -- Toasters

8516.79 -- Other

8516.80 - Electric heating resistors

8516.90 - Parts

(A) ELECTRIC INSTANTANEOUS OR STORAGE WATER HEATERS AND IMMERSION HEATERS

This group includes :

- (1) **Geysers** in which the water is heated as it flows through.
- (2) **Storage water heaters** (whether or not of the pressure type), i.e., heat-insulated tanks with immersion heating elements. In these heaters water is heated gradually.
- (3) **Dual-system heaters** in which the water is heated either electrically or by connection to a fuel-heated hot water system; they are often equipped with a thermostatic control to operate them electrically only when the alternative means is insufficient.

- (4) **Electrode hot water boilers**, in which an AC passes through the water between two electrodes.
- (5) **Immersion heaters** of different shapes and forms depending on their use, are generally used in tanks, vats, etc., for heating liquids, semi-fluid (other than solid) substances or gases. They are also designed to be used in pots, pans, tumblers, cups, baths, beakers, etc., usually with a heat-insulated handle and a hook for hanging the heater in the vessel.

They have a reinforced protective sheath which is highly resistant to mechanical stress and to seepage from liquids, semi-fluid (other than solid) substances and gases. A powder (usually magnesium oxide) with good dielectric and thermal properties holds the wire resistor (resistance) in place within the sheath and insulates it electrically.

Assemblies consisting of immersion heaters permanently incorporated in a tank, vat or other vessel are classified in **heading 84.19** unless they are designed for water heating only or for domestic use, in which case they remain in this heading. Solar water heaters are also classified in heading 84.19.

- (6) **Electric equipment for producing boiling water.**

Electric central heating boilers are classified in **heading 84.03**.

(B) ELECTRIC SPACE HEATING APPARATUS AND SOIL HEATING APPARATUS

This group includes :

- (1) **Electric storage heating apparatus**, in which electric elements heat up a solid (e.g., bricks) or a liquid which stores the heat produced and subsequently releases it, when required, to the surrounding atmosphere.
- (2) **Electric fires (fan heaters and radiant heaters)**, including portable types with parabolic reflectors and sometimes with built-in fans. Many of these fires are fitted with coloured lamps and flicker devices to imitate a coal or wood fire.
- (3) **Electric radiators**. These are apparatus in which electric elements heat up a liquid (for example, oil) which circulates in the radiator and which then radiates the heat to the surrounding atmosphere.
- (4) **Convection heaters**. These circulate air by convection currents, sometimes assisted by a fan.
- (5) **Heating panels** for mounting in the ceiling or to a wall including panels producing infra-red radiation for heating public places, streets, etc.
- (6) **Heating units for motor cars, railway coaches, aircraft, etc.**, other than defrosters and demisters.

85.16

(7) **Road heating equipment** to prevent the formation of frost and **soil heating equipment**, especially used to encourage plant growth, the elements of which are usually buried in the ground.

(8) **Engine heaters** for placing beneath a car to facilitate starting.

Electric central heating boilers are classified in **heading 84.03**.

(C) ELECTRO-THERMIC HAIR-DRESSING APPARATUS AND HAND DRYERS

These include :

- (1) **Hair dryers**, including drying hoods and those with a pistol grip and built-in fan.
- (2) **Hair curlers and electrical permanent waving apparatus**.
- (3) **Curling tong heaters**.
- (4) **Hand dryers**.

(D) ELECTRIC SMOOTHING IRONS

This group covers smoothing irons of all kinds, whether for domestic use or for tailors, dressmakers, etc., including cordless irons. These cordless irons consist of an iron incorporating a heating element and a stand which can be connected to the mains. The iron makes contact with the current only when placed in this stand. This group also includes electric steam smoothing irons whether they incorporate a water container or are designed to be connected to a steam pipe.

(E) OTHER ELECTRO-THERMIC APPLIANCES OF A KIND USED FOR DOMESTIC PURPOSES

This group includes all electro-thermic machines and appliances **provided** they are **normally used in the household**. Certain of these have been referred to in previous parts of this Explanatory Note (e.g., electric fires, geysers, hair dryers, smoothing irons, etc.). Others include :

- (1) Microwave ovens.
- (2) Other ovens and cookers, cooking plates, boiling rings, grillers and roasters (e.g., convection type, resistance type, infra-red, high frequency induction and combined gas-electric appliances).
- (3) Coffee or tea makers (including percolators).
- (4) Toasters, including toaster-ovens which are designed essentially for toasting bread but can also bake small items such as potatoes.
- (5) Kettles, saucepans, steamers; jacketed urns for heating milk, soup or the like.

- (6) Crepe makers.
- (7) Waffle irons.
- (8) Plate warmers and food warmers.
- (9) Sauté pans and chip pans (deep fryers).
- (10) Coffee roasting appliances.
- (11) Bottle heaters.
- (12) Yogurt and cheese makers.
- (13) Sterilising apparatus for preparing preserves.
- (14) Popcorn cookers.
- (15) Face dryers and the like.
- (16) Facial saunas incorporating a face mask in which water is vaporised for facial skin treatment.
- (17) Towel airers and heated towel rails.
- (18) Bed warmers.
- (19) Perfume or incense heaters, and heaters for diffusing insecticides.
- (20) Non-mechanical wash boilers.

This group **excludes** :

- (a) Electrically warmed blankets, bed pads, footmuffs or the like; electrically warmed clothing, footwear or ear pads or other electrically warmed articles worn on or about the person (classified in their appropriate heading, see Chapter Note 1).
- (b) Roller type ironing machines (**heading 84.20**) and clothes ironing or pressing machines (**heading 84.51**).
- (c) Counter-type coffee percolators, tea or milk urns, sauté pans and chip pans used, for example, in chip shops and other thermo-electric appliances which are not normally used in the household (**heading 84.19**, etc.).
- (d) Industrial microwave furnaces, ovens and equipment (for example, microwave ovens of a type designed to be used in restaurants) (**heading 85.14**).
- (e) Furniture (e.g., linen cupboards and serving trollies) equipped with heating elements (**Chapter 94**).
- (f) Cigarette lighters, gas lighters and the like (**heading 96.13**).

(F) ELECTRIC HEATING RESISTORS

With the **exception** of those of carbon (**heading 85.45**), all electrical heating resistors are classified here, irrespective of the classification of the apparatus or equipment in which they are to be used.

They consist of bars, rods, plates, etc., or lengths of wire (usually coiled), of special material which becomes very hot when current is passed through it. The material used varies (special alloys, compositions based on silicon carbide, etc.). They may be obtained in the form of individual components by a printing process.

Wire resistors are usually mounted on insulating formers (e.g., of ceramics, steatite, mica or plastics) or on soft insulating core (e.g., of glass fibres or asbestos). If not mounted, wire of this kind is classified here **only** if cut to length and coiled or otherwise formed to a shape identifying it as a heating resistor element. The same applies to bars, rods and plates which, to be classified here, **must** be cut to length or size ready for use.

Resistors remain classified here even if specialised for a particular machine or apparatus, but if assembled with parts other than a simple insulated former and electrical connections they are classified as parts of the machines or apparatus in question (e.g., base plates for smoothing irons and plates for electric cookers).

The heading also **excludes** defrosters and demisters. These consist of a resistance wire mounted in a frame for fitting to the windscreen (**heading 85.12**).

PARTS

Subject to the general provisions regarding the classification of parts (see the General Explanatory Note to Section XVI), parts of the goods of this heading are also classified here.