

26.5 Material of current-carrying parts

Current-carrying parts, including those of terminals (as well as earthing terminals), shall be of metal having, under the conditions occurring in the accessory, mechanical strength, electrical conductivity and resistance to corrosion adequate for their intended use.

Compliance is checked by inspection and, if necessary, by chemical analysis.

Examples of metals that are deemed to comply with the requirements of 26.5, when used within the permissible temperature range and under normal conditions of chemical pollution, are as follows:

- copper;
- an alloy containing at least 58 % copper for parts made from cold-rolled sheet or at least 50 % copper for other parts;
- stainless steel containing at least 13 % chromium and not more than 0,09 % carbon;
- steel provided with an electroplated coating of zinc according to ISO 2081, the coating having a thickness of at least:
 - 5 µm, service condition ISO no. 1, for accessories classified IP code IPX0;
 - 12 µm, service condition ISO no. 2, for accessories classified IP code IPX4;
 - 25 µm, service condition ISO no. 3, for accessories classified IP code IPX5 and IPX6;
- steel provided with an electroplated coating of nickel and chromium according to ISO 1456, the coating having a thickness of at least:
 - 20 µm, service condition ISO no. 2, for accessories classified IP code IPX0;
 - 30 µm, service condition ISO no. 3, for accessories classified IP code IPX4;

- 40 µm, service condition ISO no. 4, for accessories classified IP code IPX5 and IPX6;
- steel provided with an electroplated coating of tin according to ISO 2093, the coating having a thickness of at least:
 - 12 µm, service condition ISO no. 2, for accessories classified IP code IPX0;
 - 20 µm, service condition ISO no. 3, for accessories classified IP code IPX4;
 - 30 µm, service condition ISO no. 4, for accessories classified IP code IPX5 and IPX6.

NOTE In the following country, the use of any type of zinc alloy for current-carrying parts is not allowed: BR, ZA

Current-carrying parts which may be subjected to mechanical wear shall not be made of steel provided with an electroplated coating.

Under moist conditions, metals showing a great difference of electro-chemical potential with respect to each other should not be used in contact with each other. Corrosion due to electrochemical action between dissimilar metals that are in contact is minimized if the combined electrochemical potential is below about 0,6 V.

The requirements of 26.5 do not apply to screws, nuts, washers, clamping plates and similar parts of terminals.