

30.4 Coiled wire heating elements may be supported on porcelain, hook type insulators depending upon the stiffness of the coil, the spacing between hooks, and the shape of the hook, etc. Porcelain insulators of all types will normally be required to be retained in place by means other than the heating element.

30.5 Heating elements shall be securely fastened to terminals (under the heads of terminal binding screws) in such a manner that the wire is not be likely to become loosened during the lifetime of the heater.

30.6 If an auxiliary control device, such as a thermostat, or a combination thermostat and control switch in a product with electric heat or remote control assembly, has a marked ON or OFF position, or is marked with another wording or symbol, such as "NO HEAT, COLD, O," or similar wording, that conveys the same meaning as "OFF", it shall disconnect the element or elements and controls from all ungrounded conductors of the supply circuit when placed in that position. This requirement applies to a thermostat in a remote control assembly that is referred to on the product nameplate, but does not apply to a remote auxiliary control device in a Class 2 circuit such as a room thermostat.

30.7 An auxiliary control is considered to be one that is intended primarily for regulating time, temperature, etc, under conditions of intended operation, but is not intended for protection against overload or excessive temperature conditions, etc.

30.8 Electric heaters employing resistance-type heating elements intended for comfort heating shall be protected at not more than 60 A, and the protected circuit shall not have a concurrent load exceeding 48 A. These heating elements shall be connected in protected subdivided circuits if any total concurrent load of the unit exceeds 48 A based on nameplate ratings. If the overcurrent protective devices are in a separate assembly for independent mounting, as described in Clause 30.9, the rating of the overcurrent protective devices also shall not exceed 1.5 times the current rating of the connected load, if such rating is more than 16.7 A.

*Exception: If a heater assembly is provided with means for field connection to a power supply for only the resistance-type elements, with or without their control circuit, in a wiring enclosure having a separate cover and physically separated from the power supply for other loads, the rating of the other loads need not be considered in applying this requirement.*

30.9 The overcurrent protective devices for subdivided circuits, as required by Clause 30.8, may be provided by the product manufacturer as a separate assembly for independent mounting.

30.10 The overcurrent protection specified in Clauses 30.8 and 30.9 shall be circuit breakers, cartridge fuses, or type S plug fuses, of a type and rating appropriate for branch circuit protection, in accordance with the requirements of CSA C22.1 and ANSI/NFPA No. 70.

30.11 An electric heater shall be equipped with one or more automatically resetting temperature-limiting controls that will disconnect the heating element or elements from the supply circuit to prevent temperatures from exceeding the limits specified in Table 39.5. These temperature-limiting controls shall be factory-installed as an integral part of the heater.

30.12 The temperature-limiting controls shall comply with the applicable requirements of CSA C22.2 No. 24 and UL 353.