

North American IEC 60309-1 & IEC 60309-2 Clock Diagram

A Guide to Color, Numbering and Ratings

In order to prevent connecting devices to an incorrect power source, the IEC 60309 Standard specifies both physical attributes and marking requirements to prevent such mismatch. The dimensions of the device and ground pin, color of the device, and location of the ground pin are all designed for safety requirements.

Devices are color-coded based on voltage and frequency, and these combinations are distinguished by the location of the ground pin relative to a keyway in the housing. The ground pin can be in one of twelve locations spaced at 30° intervals around the circle on which all the pins lie representing a clock. The various positions are referenced from the view of the open side of a socket (or connector/receptacle); the 6 o'clock (180°) position is at the same angle as the keyway, and is oriented downwards. The ground pin also has a larger diameter than the other pins, preventing the wrong type of plug being inserted into a socket, connector, or receptacle.

