1-1118 Westinghouse Type CCL Polyphase Induction Motors

with a horizontal or a vertical shaft. The horizontal shaft motor can be equipped with back gears and a countershaft. Each of these modifications



Stator Core of Type CCL Motor

is more fully described on other pages of this circular.

Mechanical Features

The following description of the construction of a CCL motor applies in general to the whole line. A few exceptions to the general rule, most of which are herein noted, are made for some sizes. As shown by the illustrations, the general outline is graceful and attractive, the frame and bearing brackets are so formed as to protect all the delicate parts and at the same time allow ample ventilation.

An induction motor con-

sists of two essential parts, the stationary part, or stator, often called the primary, and the rotating part, or rotor, often called the secondary. In a CCL motor the stator, or stationary primary, consists of a frame with two removable bearing brackets and bearings, and a core which carries the windings. The rotor, or rotating secondary, consists of a core with conductors, a spider, and shaft. The following descriptions of the parts will be better understood by reference to the accompanying illustrations.

Frame. The frame consists of a cylindrical cast iron ring having substantial supporting feet. Inside this ring are several lugs that support the stator core far enough from the frame to allow a good ventilating space between the frame and the core. The ends of the lugs and the frame are machined to receive the bearing brackets.

Bearing Brackets. Cast iron bearing brackets of the ventilated type are ⁻ bolted to the ends of the frame in such a way that the brackets can be rotated through any 90-degree angle. This feature permits mounting the motor on the floor, wall, or ceiling.

The brackets of motors using frames larger than No. 5 (5 h.p. standard speed) are divided horizontally through the center line of the shaft, and the