NOFUZE CONVERTIBLE DISTRIBUTION PANELBOARDS FOR POWER DISTRIBUTION UNITS

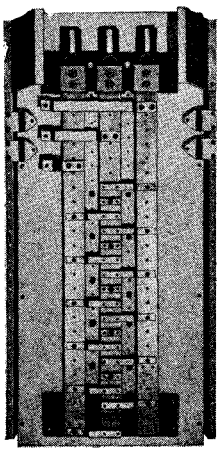

FIG. 1—PANELBOARD BUS ARRANGEMENT

GENERAL

The Nofuze convertible distribution panelboard is designed to eliminate switches and fuses in capacities from 15 to 600 amperes inclusive. In addition to the general advantages of "De-ion" breakers the design of this panelboard incorporates two important features as follows:

1. **Narrow type construction** with full operating and protective features. In a panel 20 inches wide it is possible to provide circuit capacities from 15 to 600 amperes in 2 and 3-pole combinations which can be fully operated under load with perfect safety.
2. **Convertibility**—Uniform pole spacings and dimensions with standardized bus arrangement and interchangeable trip elements allow the maximum convertibility between different pole and ampere combinations.

PANEL CONSTRUCTION

The panel construction is of the sectionalized type. Thus it is possible to provide space in the cabinet for future additional circuits. These circuits can be easily added and connected in place without removing the panel from the cabinet. Also, since 100, 225, 400 and 600-ampere frames are equipped with removable trip units, desired changes in capacities on these frame sizes may be made without removing the unit. The 50-ampere frames are furnished complete with either 15, 20, 25, 35 or 50-ampere calibrations. In addition, because of standardized breaker dimensions it is possible to interchange units of different poles or capacities.

All breakers of the 50 and 100-ampere frame sizes readily lend themselves to interchangeability without the need for any change in bus connections. However, if a 225, 400 or 600-ampere frame is to be substituted for any 50 or 100-ampere frames, some minor bus changes are required.

Blanks are provided when ordered for future breakers. When ordered, a neutral bus bar may be provided. The panel is usually mounted in a weather proof compartment and transformer connections made directly to the panel busses. Branch feeders are connected directly to the feeder breaker in this compartment.

BREAKER CONSTRUCTION

Type AB "De-ion" Circuit-Breakers 2 and 3 Poles—With and Without Trip Units

125 Volts D-C. 250 Volts A-C.
250 Volts D-C. 600 Volts A-C.

15 To 600 Amperes

Type AB "De-ion" Circuit-Breakers are small, compact manually-operated devices of the enclosed type having arc chambers which operate without outward disturbance, and interchangeable sealed trip units which permit small overloads to continue for short periods of time, and which trip the breakers instantly on short-circuits.

Breakers rated at 250 volts D-C., 600 volts A-C. are equipped with the "Cold Cathode Rotary type" De-ion arc chambers and those rated at 125 volts D-C., 250 volts A-C. are equipped with "Through Plate type" De-ion arc chambers.

The main contacts are of the high pressure butt type, having the contact surfaces faced with special metals so that high temperature or burning of the surfaces will not change the contact resistance. The arcing contact tips are made of a special arc resisting alloy which will stand up under repeated severe short-circuits.

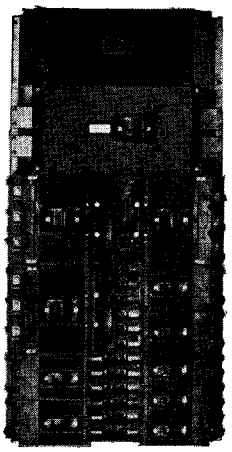

FIG. 2—PANEL WITH CENTER SECTION COVER REMOVED SHOWING UNIFORM BREAKER TERMINAL SPACINGS FOR CONVERTIBILITY

Important: Both types of arc chamber, and the main and arcing contacts are so designed and constructed that they will last for the life of the breakers and need not be replaced or maintained.

The trip units have been calibrated at the factory for a specific current rating. The cover is sealed to prevent tampering with the adjustments.

These circuit-breakers will carry 100% load continuously but a sustained load as high as 125% of the breaker's rating will positively trip it. Some variation of the exact tripping point within this range may be expected.

OPERATION

When the breaker is open the handle is in either the midway or the OFF position. If in mid-position the breaker has been tripped automatically and the latch must be reset by moving the handle to the extreme OFF position before attempting to restore service. Close, after resetting the latch, by moving the handle to the ON position.

An extension handle with a screw for attaching it is supplied with each break-

NOFUZE CONVERTIBLE DISTRIBUTION PANELBOARDS—Continued

er of 250 to 600 ampere rating. After mounting the breaker remove the screw from the extension handle and place the open end over the short handle which projects through the breaker cover, with the countersink for the screw head toward the line end of the breaker. Press down until the screw holes are in line, and insert the screw.

Caution: Do not operate breaker except with extension handle mentioned in above paragraph.

MAINTENANCE

The entire breaker mechanism is enclosed in a molded case and sealed at the factory against tampering and to insure permanent calibration of the bi-metals. As the contacts are protected by the De-ion chamber against burning no maintenance is necessary.

To Change Trip Units:

Throw breaker to open position, remove the load terminal studs (F) and screws (D), loosen screw (C) and lift the trip unit out of frame.

Trip units of a given number of poles are interchangeable on the 100, 225 and 600 ampere frames.

To Install Trip Units:

Place trip unit in the frame as shown in Fig. 3, making sure that the locating lug (A) of the trip unit bracket projects into the hole (B) provided for it, then screw (C) and (D) firmly in place. Each screw (C) is provided with a lock washer only and each screw (D) is provided with a lock washer and a plain washer. Do not add plain washers on (C), as mechanical interference with latch may result.

RENEWAL PARTS

In case the breaker should become inoperative or damaged a new one should be ordered from the nearest Westinghouse Electric & Manufacturing Co. Office of directly from the Sharon, Pa., works, giving serial and stock order number as stamped on the distribution unit nameplate and style number and rating of breaker.

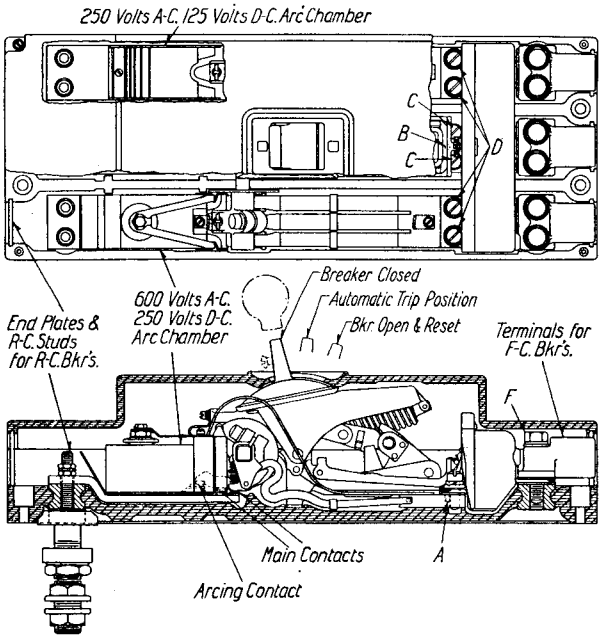

FIG. 3

Westinghouse Electric Corporation

East Pittsburgh, Pa.

Printed in U.S.A.