DESCRIPTION

INSTALLATION

MAINTENANCE

INSTRUCTIONS

Types "GP" and "GPD"—SIZE 6—A-C CONTACTORS
2 - 3 Pole
Front or Rear Connected

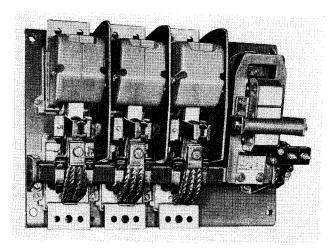


FIG. 1. Type GP-630 Front Connected Contactor

THE TYPE GP AND GPD SIZE 6 CONTACTORS are unit assembled a-c contactors having all parts mounted on a steel base. The unit is suitable for mounting on either steel or insulating panels. Contactors are available in two or three pole, front or rear connected assemblies, with or without arc quenchers.

Rear connected contactors are similar in construction to those shown in Figs. 1 and 2 for front connection, except that stationary contact support and shunt support assemblies are provided with brazed on rear connection studs which project from the rear of the steel base plate through holes provided in the center of the molded insulating bases.

All parts of the front connected contactors are removable from front of panel. On the rear connected contactors, hardware and connections must be removed from rear connection studs before stationary contact support and shunt support assemblies can be removed.

The Type GP contactor has an a-c operating magnet, and the Type GPD contactor has a d-c operating magnet.

The Type GP and GPD contactors are insulated for a maximum of 600 volts. The operating coils are designed for continuous duty. The a-c coils

will operate the contactor at 85% to 110% of rated coil voltage. The d-c coils will operate the contactors at 80% to 110% of rated coil voltage.

Table 1. Ratings

CHARACTERISTICS	OPEN	ENCLOSED
Voltage	600	600
8-Hour Rating, Amperes	600	540
1-Hour Rating, Amperes	800	720

DESCRIPTION

The a-c magnet is of a laminated "C" shape construction and mounted to the right of the contact arrangement. The moving armature engages the stationary magnet in a vertical plane parallel to the base plate and has a total travel from the opened to the sealed position of approximately 14 degrees.

The stationary magnet laminations are assembled into a precision die cast aluminum base. A permanent air gap is built into this structure to provide sufficient reluctance in the magnetic path to insure a positive drop out on de-energization. The air gap is so situated that the hammering resulting from operational impact will not decrease the amount of air

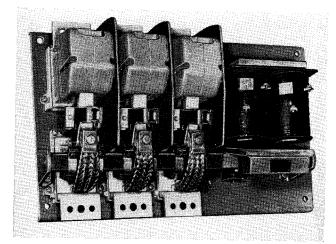


FIG. 2. Type GPD-630 Front Connected Contactor

Measure the contact force at the top of the moving contact inlay and in a line perpendicular to the moving contact.

Initial contact force is measured with the contacts in the open position. The force reading should be taken at the instant contact overtravel begins, that is, when the contact leaves the contact stop.

Contact replacement is necessary when the contact overtravel has been reduced to 5/64 inch. This is represented by a gap of 1/16 inch measured at point "X", Figure 4.

Contact removal is achieved by the following procedure:

1. Remove phase barriers.

- 2. Remove arc quenchers.
- 3. Remove moving contact bearing pin.
- 4. Remove shunt bolts from moving contact.
- **5.** Remove moving contact and contact spring by lifting moving contact out in a vertical direction.
 - 6. Remove stationary contacts.

To install new contacts reverse the procedure.

Contact Adjustment. Make sure that the contacts touch simultaneously within ½2 inch. Sufficient adjustment can generally be obtained by a selective tightening of the two bolts securing the shaft clamp to the moving contact bracket (Fig. 4), tightening one more than the other to produce a slight rotation of the assembly on shaft.



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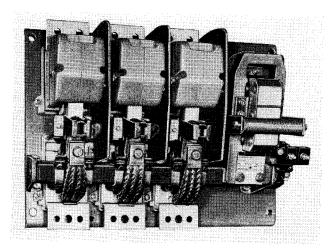


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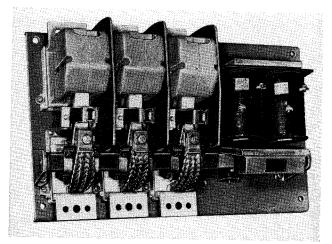


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