INSTRUCTIONS

Switchgear

RELAYS

DEFINITE TIME-OVERCURRENT RELAY
TYPE PJC (365A537)

GENERAL ELECTRIC
Fig. 1 Outline And Panel Drilling For Type PJC (365A537) Relay
DEFINITE TIME OVERCURRENT RELAY

TYPE PJC (365A537)

INTRODUCTION

These instructions supplement instruction books GEI-20916 and GEI-28884 which are included in this book. The combination of the three form complete instructions for the special relay, 365A537.

DESCRIPTION

This relay is a combination of a Type PJC13D and a Type HGA14S relays mounted in a size M-2 case. The construction of the overcurrent unit is similar to those in Type PJC13D relay except only one target and seal-in unit is used. The d-c time delay auxiliary unit is similar to the Type HGA14S15 except the 50 mfd, capacitor (23F713 G-102) is provided for external mounting. Also a blocking rectifier and discharge resistor are added.

The rectifier (4JA1A3) is mounted on a separate textolite plate.

RATINGS AND BURDENS

The Type PJC units are rated 12 amperes, 60 cycles and have a calibration range of 4 to 16 amperes.

The Type HGA auxiliary unit is rated 125 volts d-c and is similar to the Type HGA14S15 relay listed in the included GEI-20916 instruction book.

Burdens and other ratings are listed in the included instruction books for each unit.

CHARACTERISTICS

The total operating time is obtained by adding the Type PJC operating time, determined from the time curves in the included GEI-28884 (Fig. 2), to the operating time of the Type HGA unit. The time delay of the auxiliary unit is adjustable between 2 to 12 cycles and is set by moving the slider on the charging resistor.

OPERATION

The overcurrent and auxiliary units operate individually as described in the included instruction books. When external connections from studs 15 to 16

These instructions do not purport to cover all details or variations in equipment nor to provide for every possible contingency to be met in connection with installation, operation, or maintenance. Should further information be desired or should particular problems arise which are not sufficiently covered for the purchaser's purposes, the matter should be referred to the General Electric Company.
Definite Time Overcurrent Relay Type PJC (365A537)

and 17 to 18 are made and d-c voltage of proper polarity is applied to studs 10 and 20 definite operating times can be obtained. The operation of any of the overcurrent units will begin charging of the external capacitor through the adjustable resistor and the rectifier. The auxiliary unit will operate when the charge on the capacitor has equalled the pick-up voltage of the unit. When all the overcurrent units reset, the 1000 ohm resistor will be connected across the external capacitor discharging it, insuring a definite pick-up time even on two instantaneous reclosures of the overcurrent unit. The rectifier prevents the capacitor from discharging into the auxiliary unit coil before the overcurrent contacts close.

INSTALLATION

The outline and panel drilling is shown in Fig. 1 and the internal connections in Fig. 2.

Fig. 2 Internal Connections For Type PJC (365A537) Relay