# Switchgear

# RELAYS

UNDERVOLTAGE RELAYS

TYPES
(IAV62A AND IAV63A

GENERAL DE ELECTRIC

## UNDERVOLTAGE RELAYS

#### TYPE IAV

#### INTRODUCTION

These instructions are a supplement to instruction book GEI-22770 which is included in this book. The combination of the two form complete instructions for the Types IAV62A and IAV63A relays.

#### BURDENS

Burdens for the Type IAV62A relay at 115 volts and 60 cycles.

Setting	Pick-up	Volt	Power	Watts
Volts	Range	Amps.	Factor	
55	55 - 110	17.9	.73	13.0
110	55 - 110	8.5	.92	7.8

Burdens for the Type IAV63A relay at 115 volts and 60 cycles.

Dropout	Volt	Power	Watts
Volts	Amps	Factor	
70	4.2	.47	1.97

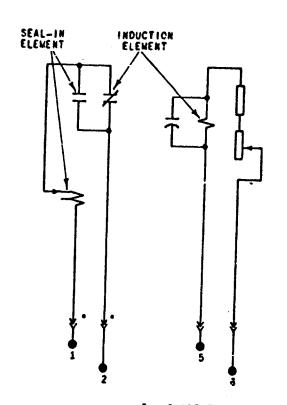
#### DESCRIPTION

The Types IAV62A and IAV63A relays are similar in construction and operation to the Type IAV54E relay.

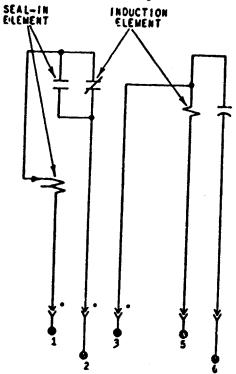
The Type IAV62A relay has an untapped coil with a parallel capacitor and an adjustable series resistor in place of the tapped coil. It will operate within 10 per-cent of its setting for frequency variations of 25 per-cent from rated frequency. The voltage at which the relay closes its contacts may be set at any value within the range given on the nameplate.

The Type IAV63A relay has an untapped coil with a series capacitor in place of the tapped coil. The capacitor is used in order to permit shorting of the operating coil by some external means such as the contacts of another relay. Thus the time delay of the IAV63A may be added to that of the other relay for time delay tripping. The drop-out time of this relay is set at the

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.



Type IAV Undervoltage Relay GEI-20997A

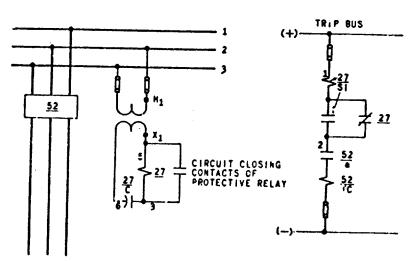


" = SHORT FINGERS

I Type IAVS2A Relay, Internal Connections (Front View).

Type IAV63A Relay, Internal Fig. 2 Connections (Front View).

\* = SHOR1 FINGERS



DEVICE FUNCTION NUMBERS

27 - A-C UNDERVOLTAGE RELAY, TYPE 'AV63A 52 - POWER CIRCUIT BREAKER

# - AUXILIARY CONTACT, CLOSED WHEN BREAKER CLOSED SI - SEAL-IN ELEMENT TC - TRIP COIL

Typical Wiring Diagram for Type IAV63A Relay.

# GEI-20997A Type IAV Undervoltage Relays

factory to be 10 seconds from the number 10 time dial setting when the coil is suddenly shorted.

## INSTALLATION

### MOUNTING

The outline and panel drilling dimensions for these relays are given in Fig. 4.

## CONNECTIONS

Internal connections for these relays are given in Figs. 1 and 2.

A typical wiring diagram for the Type IAV63A relay is given in Fig. 3.

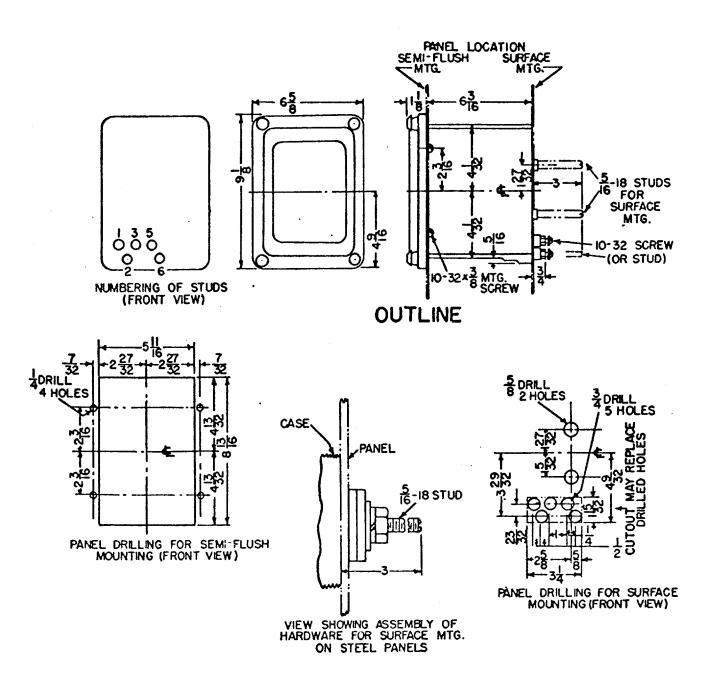


Fig. 4 Outline and Panel Drilling Dimensions for Types 1AV62A and 1AV63A Relays.



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