INSTRUCTIONS

OVERVOLTAGE AND UNDERVOLTAGE RELAYS

TYPES

IAV11C IAV12C IAV14B IAV12B IAV14C

IN

UNIVERSAL AND DRAWOUT CASES



SCHENECTADY, N.Y.

.12-42

SUPERSEDES GEI-12962B

UNDERVOLTAGE AND OVERVOLTAGE RELAYS

TYPES

IAVIIC, IAVIID, IAVI2B, IAVI2C, IAVI4B, & IAVI4C

The Type IAVIIC relay is a single-unit induction-disk type of overvoltage relay with single circuit-closing contacts. It differs from the Type IAVIIA relay covered in the attached instruction books GEH-874 and GEH 1143 only in that it has an external resistor and capacitor to compensate for changes in pick-up due to changes in frequency.

The Type IAVIID relay is a single-unit induction-disk type of overvoltage relay with an instantaneous attachment and single circuit-closing contacts. It differs from the Type IAVIIB relay only in that it has an external resistor and capacitor to compensate for changes in pick-up due to changes in frequency.

The Type IAV12B relay is a single-unit induction-disk type of overvoltage relay with an instantaneous attachment and two circuit-elosing contacts. It differs from the Type IAV12A relay in that it has an external resistor and capacitor to compensate for changes in pick-up due to changes in frequency.

The IAV12C relay is a single-unit induction-disk type of over-voltage relay with two-circuit-closing contacts and an instantaneous attachment having a separate target. Otherwise, it is the same as the IAV12A.

The Type IAV14B relay is a single-unit induction-disk type of undervoltage relay with single circuit-closing contacts. It differs from the Type IAV14A relay only in that it has an external resistor and capacitor to compensate for changes in pick-up due to changes in frequency.

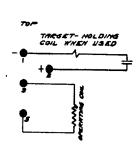
The external resistor and capacitor for the IAVIIC, IAVIID, IAVI2B, and IAVI4B are connected in parallel and the combination is connected in series with the operating coil of the relay. The relays are calibrated with the external resistor and capacitor in the circuit.

The Type IAV14C relay is a single-unit induction-disk type of undervoltage relay with single circuit-closing contacts. It differs from the Type IAV14A relay only in that a capacitor has been added in series with the coil and has an extra terminal common to both. The relay is calibrated with the coil and the capacitor in series.

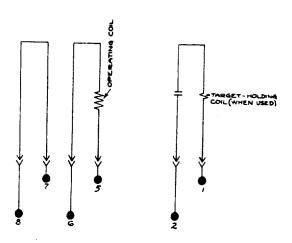
The capacitor provides necessary impedance to the circuit when the coil is shorted to drop out the relay. The use of a capacitor instead of a resistor for this function gives a better burden to the contacts shorting the coil of the relay. The internal connections for the relays are given in Figs. 1 and 3 of these instructions. The outline and panel drilling for all single-unit drawout relays are given in Fig. 1 of GEH-1143. For models in the universal case, Fig. 1 of GEH-874 is the outline and panel drilling for the IAV11C, IAV11D, and IAV14B relays, Fig. 3 of GEH-874 for IAV12B, and IAV12C and Fig. 2 of these instructions for the IAV14C relays.

External connections for Types IAVIIC, IAVIID, and IAVI4B in drawout case are given in Fig. 4 of these instructions.

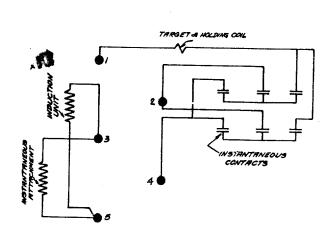
With the above exceptions, the description of the relays in GEH-874 and GEH-1143 applies to these relays.



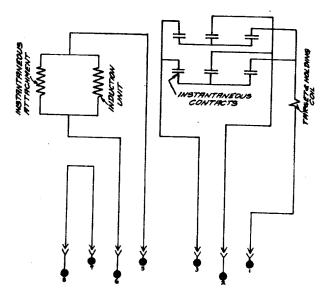
(A)
TYPE IAVIIC RELAY - UNIVERSAL CASE
(K-4237405)



(B)
TYPE IAVIIC RELAY - DRAWOUT CASE
(K-6154611)



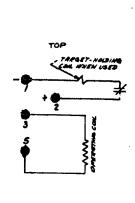
(C) -TYPE IAV12B RELAY - UNIVERSAL CASE (K-6209049)



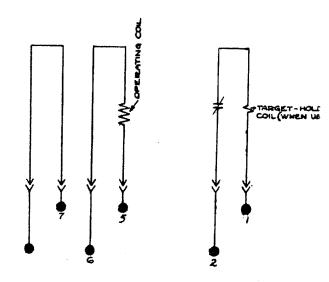
(D)
TYPE IAV12B RELAY - DRAWOUT CASE
(K-6209050)

FIG. 1 (Sheet 1)

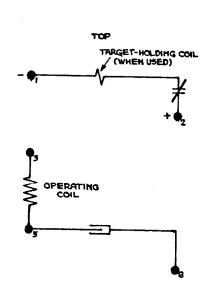
INTERNAL CONNECTIONS - BACK VIEW



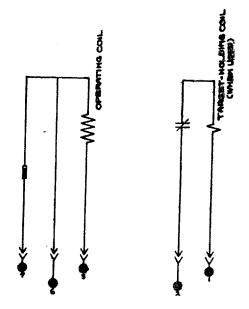
(E)
TYPE IAV14B RELAY - UNIVERSAL CASE
(K-6174177)



(F)
TYPE IAV14B RELAY - DRAVOUT CASE
(K-6154611)



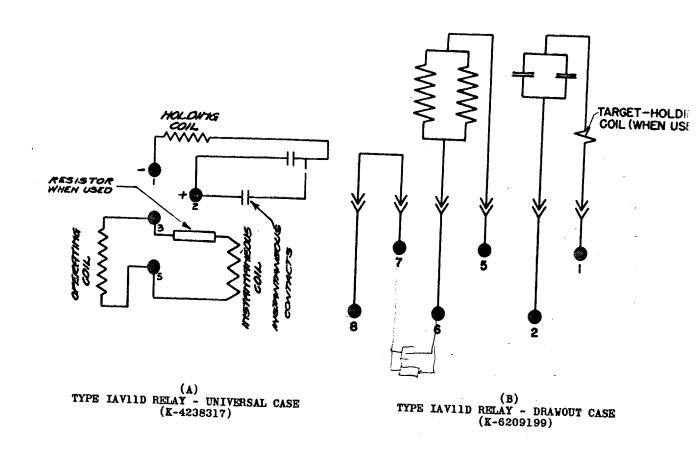
(G)
TYPE IAV14C RELAY - UNIVERSAL CASE
(K-6209000)



(H)
TYPE IAV14C RELAY - DRAWOUT CASE
(K-6209001)

FIG. 1 (Sheet 2)

INTERNAL CONNECTIONS - BACK VIEW



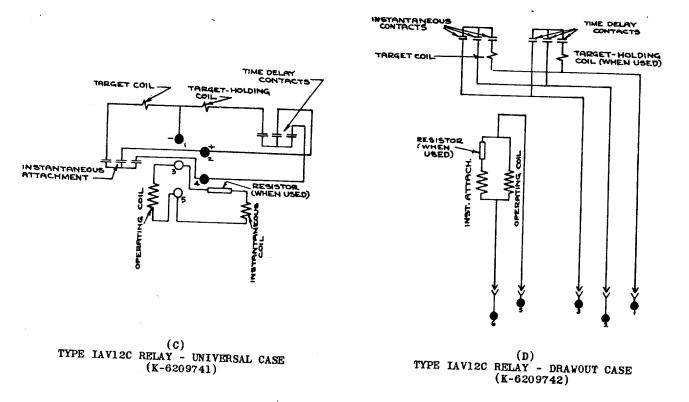


FIG. 3
INTERNAL CONNECTIONS (BACK VIEW)

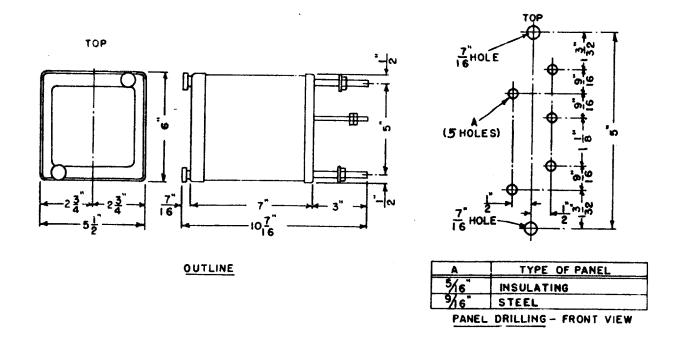


FIG. 2
OUTLINE AND PANEL DRILLING FOR TYPE IAV14C RELAY
UNIVERSAL CASE (K-6209000)

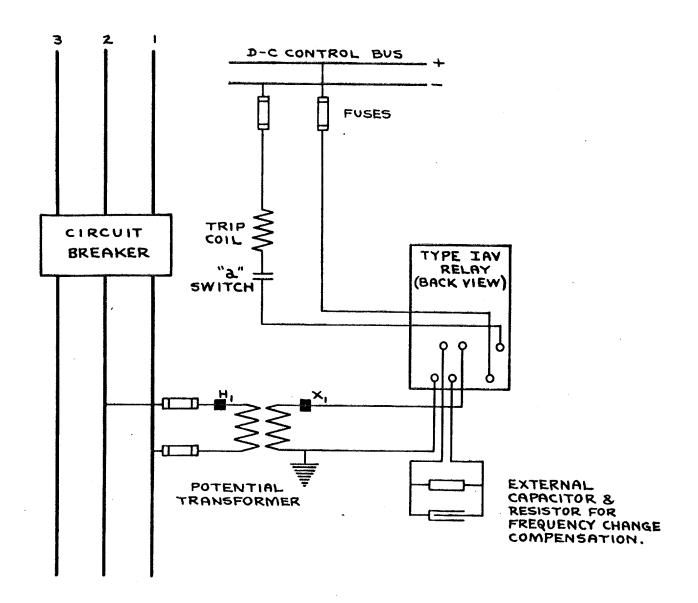


FIG. 4

EXTERNAL CONNECTIONS FOR TYPES IAV11C, IAV11D, AND IAV14B RELAYS IN DRAWOUT CASE (K-6209369)