## Phase failure indicator

The circuit shown will indicate whenever any one of the three phases of a balanced supply is absent. Each phase is separately stepped down to about 9 volts and rectified. The three cathodes of the diodes are joined together and resistor R, is adjusted so that Tr, is just conducting when three phases are present. In this condition the relay will operate. If one of the phases is off the average voltage at the base of Tr. is reduced and the relay is released. S. K. Sud,

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