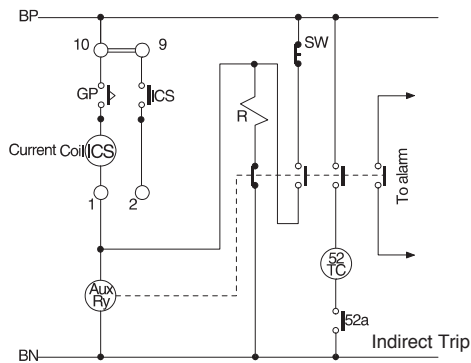
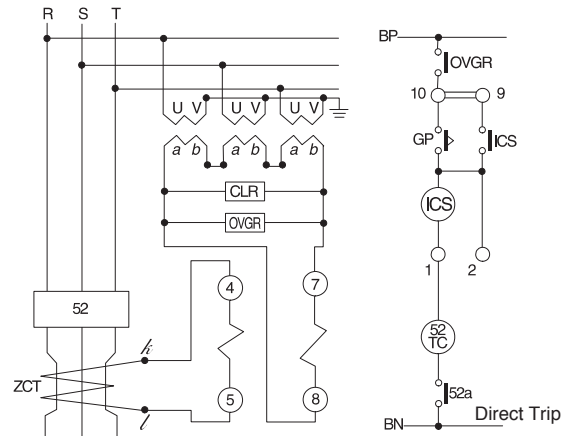
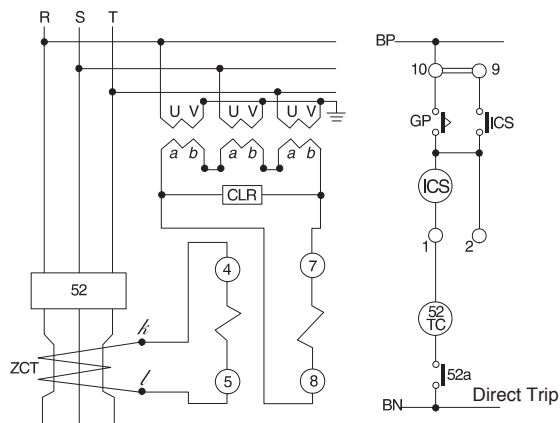


TOYO TSG-C1V(C9V) Operation Manual

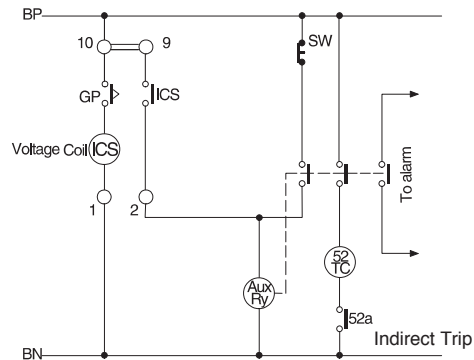
1. This relay select the fault distribution line by zero phase voltage (V_0) and zero phase current (I_0), and operates with circuit breaker for grounding protection of high voltage distribution lines.
2. When using the relay, ZC / ZCM type zero phase current transformer produced in accordance with the JEC1201 standard should be used. The ratings should be zero phase primary current = 200mA, and secondary current = 1.5mA. If ZS type ZCT is used, it shall be used with GPT.
3. Operation: the P.U. value of this relay is 150mA (ZCT primary). When phase angle is 37° leading, rated voltage (V_0) and ZCT primary current = 200mA the relay will trip after about 16 seconds. The characteristic of tripping phase angle is shown below. When the relay is only given zero phase voltage (V_0) and zero phase current (I_0), it will not trip.

■ Wiring and Phase Angle Characteristic:

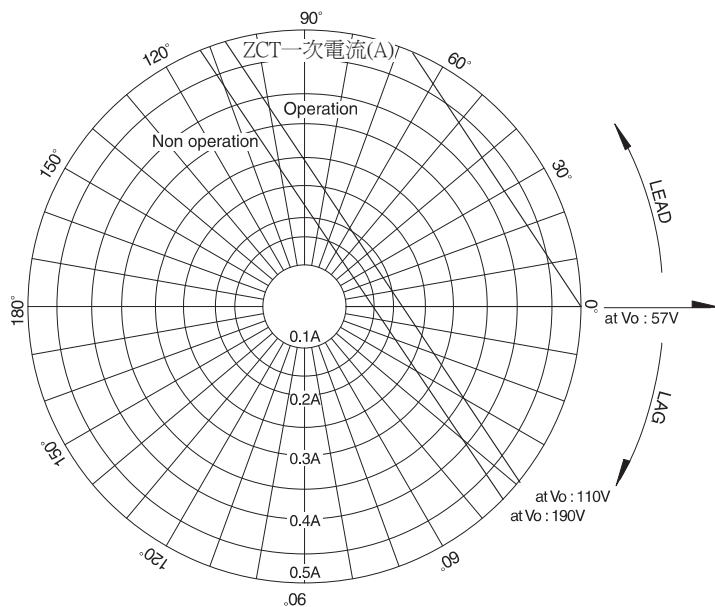


ICS coil is current coil

Interlock with OVG to avoid mis-trip



ICS coil is voltage coil



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