



PCS-985U

Voltage Injector

The stator earth fault protection with external voltage injector can detect 100% earth faults in the stator windings of generator which is connected with the network via a unit transformer. The auxiliary power supply device PCS-985U can inject low-frequency external power source to the generator stator winding side, PCS-985U coordinate with PCS-985, then one set of integral generator stator ground fault protection with 20Hz voltage injection is formed.

The hardware of the PCS-985U is constituted by low-frequency power source, low-frequency filter, converter, voltage-divide resistance and etc. The dimensions of PCS-985U is

266x482.6x281mm (heightxwidthxdepth), it can be installed on the spot or in the relay room. PCS-985U has high flexibility and reliability.

Generator neutral point is grounding via a grounding transformer. Through the voltage divider, the PCS-985 protection relay can get U_{G0} . In addition, I_{G0} is measured via a miniature CT. If a ground fault happens at the generator stator winding, generally the injected low-frequency voltage will decrease and the low-frequency current will increase. If the ground fault location is not near to the neutral point, the zero-sequence current will increase significantly.

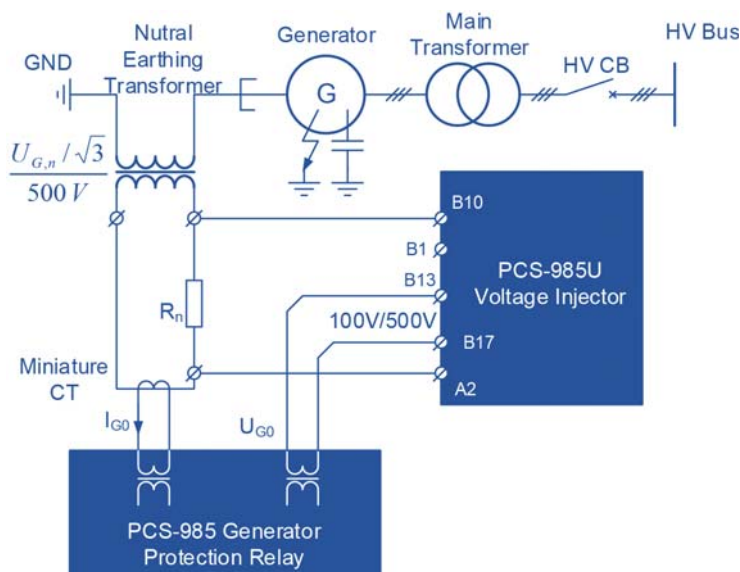


Figure 1 Typical Scheme of PCS-985U