PCS-9726

Generation Management Unit

PCS-9726 generation management unit is a microprocessor-based device used for protecting, measuring and controlling two-winding box-type transformer in new energy power station (wind power station or photovoltaic power station etc.). It also includes the functions of protocol conversion and ring-network communication, and supports externally expanded color touch screen LCD to achieve local monitoring.

Functions

Protection Functions

- Six stages of mechanical protection
- Three stages of phase overcurrent protection
- Two stages of negative sequence overcurrent protection

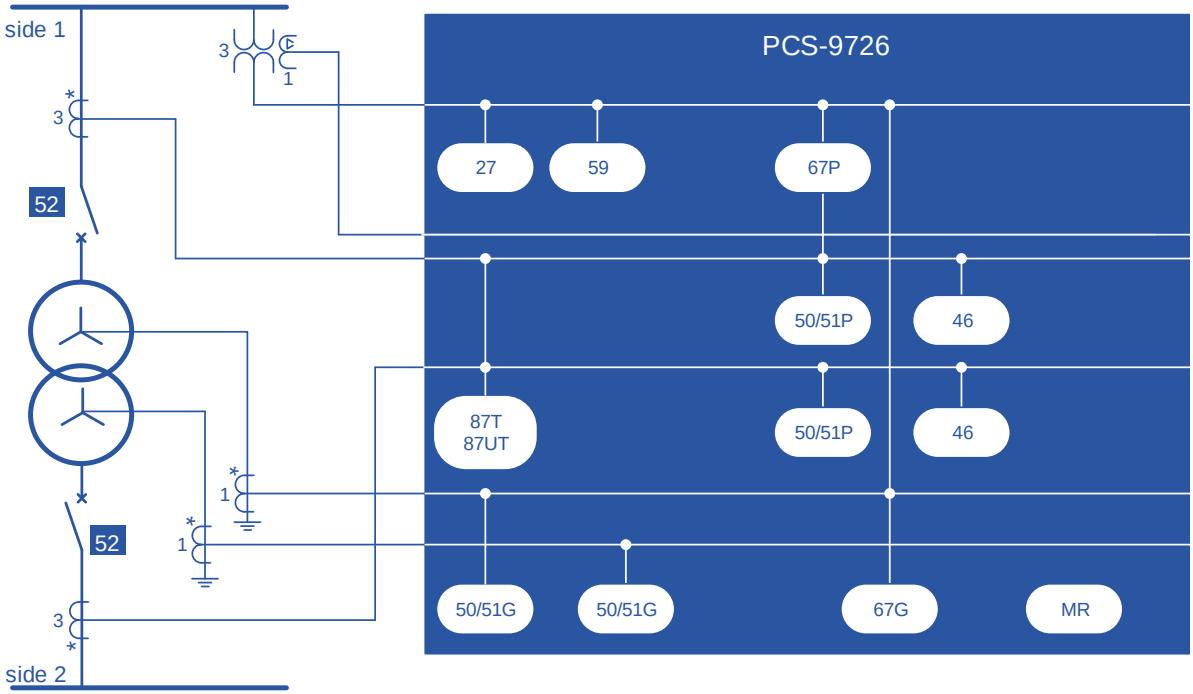

Figure 1 Typical PCS-9726 Functional Block Diagram

- Two stages of residual overcurrent protection
- One stage of undervoltage protection
- One stage of overvoltage protection
- Differential protection (optional)

Measurement Functions

- 42 binary inputs
- 26 analog inputs
- 3 groups of remote control signals
- 4 groups of 4-20mA signals
- 4 groups of RTD signals

Communication Functions

- Four Ethernet ports
- Ten RS485/RS232 serial ports
- Support of various protocols: IEC61850, IEC60870-5-103, Modbus.
- “Hand in hand” ring network by two pairs of optical interface

Additional Functions

- Hardware and secondary circuit detection
- Clock synchronization: PPS and IRIG-B
- 64 disturbance records with waveforms
- Friendly HMI interface
- Convenient auxiliary debugging software
- Powerful waveform analysis tool

Features

- High reliability
  Dual A/D sampling and mutual-check technology are adopted, one channel of sampling is used for protection calculation, the other channel is for enabling output relay, ensuring the accuracy and reliability of protection sampling and the correctness of protection operation.
- High performance
  64 disturbance records with waveforms, 1024 supervision events and 1024 binary events can be recorded.
- Flexible configuration
  Modular design and graphical configuration are used to meet the different needs of users in various industries, ensuring rapid development speed and high reliability.
- Powerful communication function
  The device is equipped with 4 optical ports and 10 serial ports, and can communication with inverters and other devices through CAN bus. It supports power industry communication standards IEC61850, IEC60870-5-103, IEC60870-5-104, MODBUS, etc.