INTERFACE PROTECTION
SYSTEM UNIT

COMPLIANT WITH
VDE-AR-N 4105 and VDE V 0126-1-1 application guides
General characteristics

The PMVF 80 device has been designed as an Interface Protection (IP) in accordance with VDE-AR-N 4105 and VDE V 0126-1-1 application guides. It is used when a local generating system is connected in parallel with the electric utility. The controls refer to limits of voltage and frequency monitoring.

In the case when either the voltage or the frequency are out of admissible limits, the IP must step in by re-energising a relay output so that the interface switch (IS) trips.

PMVF 80 is equipped with 4 inputs having the following functions:
- IS status feedback
- R.O.C.O.F or Vector shift delay
- Disabling signal
- Remote tripping (forced IS opening, independent of voltage and frequency values).

Also, there are 2 relay outputs for:
- IS opening and closing
- Backup device opening (programmable: retentive normally energised, retentive normally de-energised or adjustable pulse).

The backup device consists of a signal contemporary device, transmitted only if the IS failed and did not complete the disconnection.

PMVF 80 also has 2 additional relay outputs to configure as:
- Autonomous signalling in case of phase power unbalance (LSP), only if three CTs are also installed
- Programmable alarm

Operational characteristics

- Auxiliary voltage: 100...240VAC/110...250VDC
- Voltage inputs range: 50-50000VAC
- Relay outputs: 250VAC 5A (AC1) / 30VDC 5A
- Relay can be password protected to prevent parameters being altered
- 4 digital inputs
- Current inputs (optional): via CTs with selectable /5A or /1A secondary
- Programmable rated voltage, programmable voltage and frequency thresholds and delays
- Support of EXM series communications modules (USB, RS232, RS485, Ethernet)
- Modular housing: 6 modules
- Parameter configuration and remote control (only with communication expansion module) with software
- Degree of protection: IP40 on front; IP20 on terminals
- Predispensed for IEC/EN 61850 signal supervision using expansion or external module
- Event log (128 events with time reference):
  - interface protection trip events
  - password interaction events
  - commands execution
  - system events.

Reference standards