TOSHIBA

ENHANCEMENTS TO GRZ100 DISTANCE RELAY

TOSHIBA announces the launch of enhancements to the GRZ100 range of distance protection relays. This well-proven product already provides extremely high performance through its advanced numeric design, with full-scheme, phase-selective distance protection giving typically one-cycle operating times. Command protection schemes, back-up overcurrent, switch-on-to-fault and stub protections, out-of-step tripping and circuit breaker fail protection completed a powerful protection package. Now, in accordance with our philosophy of continuous product development, the newest versions of the GRZ100 range provide a number of significant enhancements, as described below.

Distance Protection with Integral Communications for Protection Signalling

- GRZ100 distance protection is now available incorporating integral digital communication channels for teleprotection signalling.
- One or two communication channels are provided, suitable for 2-terminal or three-terminal relay-to-relay communication via fibre-optic links, or via electrical interfaces to a digital communication network.
- Phase-segregated command protection distance and DEF schemes (PUP, POP, BOP and UOP with week infeed and current reversal logic).
- Phase-segregated transfer trip (intertripping).
- Transmission of binary signals for user-configurable applications.
- Transmission of measured values to be displayed at the remote terminals.
- Synchronisation of the clocks at the various terminals.
- Enhanced fault-location accuracy by use of remote-end data in the case of 3-terminal applications.
- Continuous monitoring of the communication channels, with capability to provide dual-redundant channels in the case of a 2-ended system, and automatic re-routing of signals in the event of a communication channel failure in a 3-ended system.

Enhanced Distance Protection Characteristics

- Four forward looking distance zones.
- Three reverse looking distance zones.
- One non-directional zone.
- Enhanced power swing blocking characteristic.

Programmable Logic Functions

- User-configurable logic functions for I/O configuration, alarms, indications and recording provide improved flexibility.

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