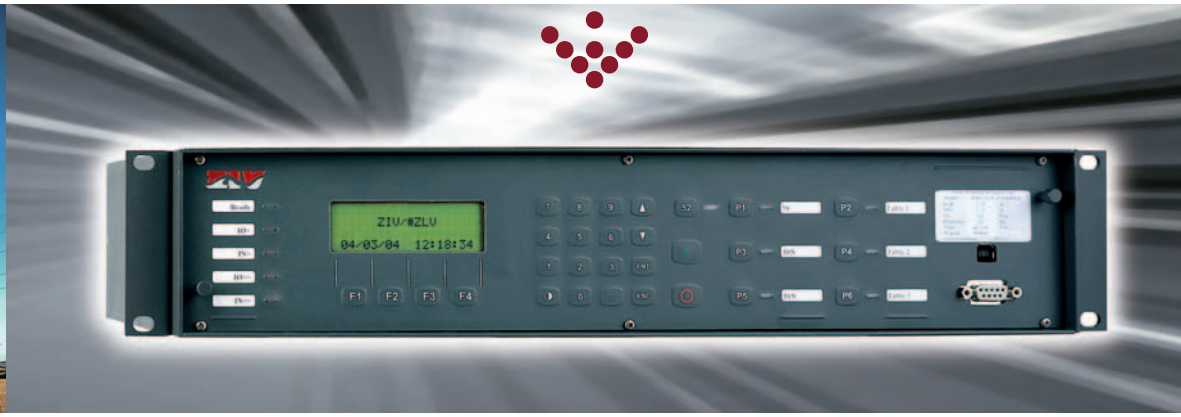
8ZLV *Distance Protection IED*



IEC 61850 Compatible

Selective, fast and reliable protection in overhead lines and cables

Protection Functions

21/21N	Distance protection for ground and phase faults.
50SUP	Overcurrent for distance monitoring.
68/78	Power swing blocking / out-of-step tripping.
85-21	Protection schemes for distance elements.
50	Instantaneous phase overcurrent (3 units).
50Q	Instantaneous negative sequence overcurrent (I2) (3 units).
50N	Instantaneous ground overcurrent (3 units).
51	Time delay phase overcurrent (inverse/definite) (3 units).
51Q	Time delay negative sequence overcurrent (inverse/definite) (I2) (3 units).
51N	Time delay neutral overcurrent (inverse/definite) (3 units).
67	Directional phase overcurrent.
67Q	Directional negative sequence overcurrent.
67N	Directional neutral overcurrent.
27	Phase undervoltage element (3 units).
59	Phase overvoltage element (3 units).
59N	Ground overvoltage element (2 units).
81M	Overfrequency (3 units).
81m	Underfrequency (3 units).
81D	Frequency rate of change (3 units).
49	Thermal image unit.
46	Open phase element: I2/I1 (current unbalance).
85-67N/67Q	Protection schemes for ground overcurrent elements.
50BF	Breaker failure.
27WI	Weak infeed logic.
50SOF	Switch-on-to-fault detector.
50STUB	Stub bus protection.
79	Recloser.
FL	Fault locator.
3	Trip and close circuit monitoring (up to 6 circuits).
25	Synchronism check.
2	Pole discrepancy detection.

ZIV p + c

Contributing to improved Safety, Quality of Service and Profitability of Electrical Systems

8ZLV

Distance Protection IED

Additional Functions

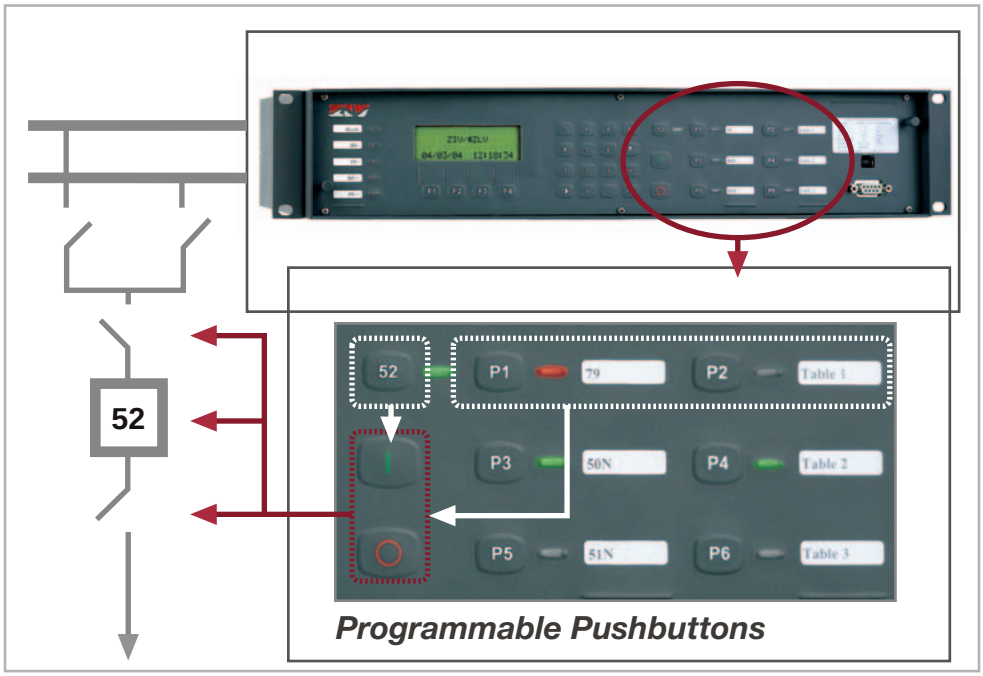
- Load encroachment.
- VT fuse failure detection.
- Remote breaker open detector.
- Oscillographic recorder (32 s/c).
- 4 protection zones.
- Quadrilateral and variable dynamic Mho for phase to phase and ground faults.
- Rated current: 1A / 5A.
- Frequency: 50 / 60 Hz.
- Sequence-of-events recording, fault reporting and historical metering data logging.
- Integrated simulator.
- Time synchronization (Protocol and IRIG-B).
- Programmable logic.
- Operation interface: alphanumeric display and keypad.
- Logic for series compensated lines.
- Open pole detector.
- 4 setting groups.
- Push-buttons (2) for local control of the breaker.
- Fully programmable (6) push-buttons for operations / commands.
- 4/10 programmable LED targets.
- 4 fast solid state outputs.
- Digital inputs: 10, 22 or 34, depending on model.
- Digital outputs: 10, 23 or 36, depending on model (any of them can be used as trip output).
- One “in service” output.
- One RS232+USB local port.
- Two RS232, F.O and RS485 remote ports.
- Protocol DNP 3.0 Level II, IEC-870-5 and ModBus.
- New ZIVercomplus® software package.
- Compatible with **IEC 61850**.

Metering

- Phase currents and voltages (line and phase values).
- Ground current and voltage.
- Ground current of a parallel line.
- Earth current (for polarization).
- Positive, negative and zero sequence currents and voltages.
- Active, reactive and apparent power.
- Active and reactive energy.
- Power factor (cos φ).
- Frequency.

Technical Assistance Around the Clock ZIV (877) ZIV-USA 1 24 hours 365 days

ten year product 10 warranty*



Programmable Pushbuttons

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