

P15D

Dual powered overcurrent relay

The P15D is a dual powered non-directional overcurrent and earth fault relay which provides protection for applications where no external auxiliary power supply is available, or where the auxiliary supply available does not guarantee the dependability required for protection applications.



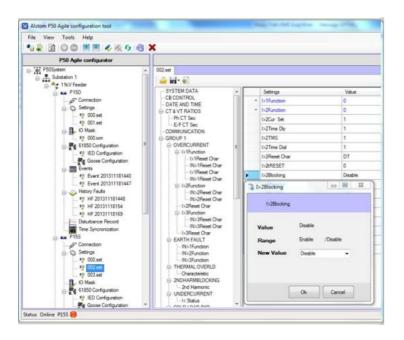
CUSTOMER BENEFITS

- CT only or dual powered relay
- Less burden on substation battery when CT energised
- · Cost effective
- Measurement, protection and monitoring in one box
- Front USB port for local communication
- Internal battery for maintaining LCD/communication during faults
- Compact size

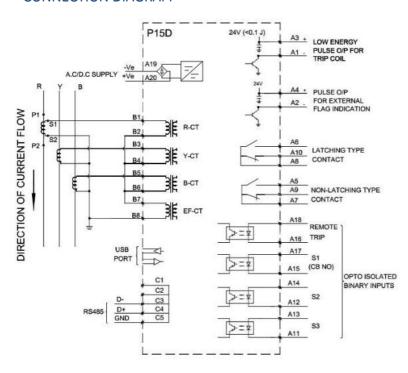
P50 Agile series: compact feeder relays

The P15D relay offers supervision functions including measurement, monitoring and recording. Industry and utility protocols are available for transmitting relay data to a supervisory control system via communication networks. The user-friendly operator interface facilitates easy reading of measured values and simple configuration of the relay. This relay is mainly deployed in medium voltage and low voltage industrial installations, distribution network substations and most specifically in ring main unit (RMU) networks for monitoring and protection purposes.

ANSI	FUNCTION OVERVIEW	P15D
	Protection	
50	Definite time overcurrent	•
50N	Neutral/Earth definite time overcurrent	•
51	IDMT overcurrent	•
51N	Neutral/Earth IDMT overcurrent	•
68	Inrush blocking	•
49	Thermal overload	•
37	Undercurrent detection (aux. power mode)	•
CLP	Cold load pick-up	•
	Communication	
	USB port	•
	Modbus/IEC 60870-5-103 (RS485)	•
	Binary Input/Output	
	Binary Input	4
	Binary Output	2
	Low energy pulse output for tripping	•
	Energy output for external flag indicator	•
	Analogue input	
	Phase current input 3x 1 ph	•
	Earth current input 1x 1 ph	•
	General	
	Setting groups	2
	Self diagnostics	•
	Measurements	•
	Event records	•
	Fault records	•
	Disturbance records	•
	Hardware	
Auxiliary supply	a. Internal from CT b. External: 24-50 V DC or 100-230 V AC	/DC (Option)
Climatic conditions	Operating - 25 °C to + 65 °C Storage −25 °C to + 65 °C	
	Housing IP 52	



CONNECTION DIAGRAM



COMMUNICATIONS

- Front USB port for real-time data viewing, device setting, and upload/download
- Rear EIA (RS) 485 port for SCADA communication
- Multiple protocols Modbus/ IEC60870-5-103 (user selectable)

PROTECTION & CONTROL

- Timed and instantaneous phase and earth fault protection (3 independent stages)
- Wide range of IEC/IEEE curves
- Thermal overload protection
- Cold load pickup protection
- Inrush blocking
- · 4 Digital inputs
- 2 Digital outputs
- 1 A/5 A ordering option for CTs
- Low energy pulse output tripping for RMU
- Dual power supply option
- Internal battery for maintaining LCD/communication during faults
- · 2 setting groups
- Password protection
- Self-supervision & internal diagnostics

MEASUREMENT, RECORDING & POST FAULT ANALYSIS

- Metering of phase & neutral currents
- Measurement of thermal state
- Up to 100 time tagged event records
- Up to 5 disturbance records
- Battery-backed indication

FRONT PANEL INTERFACE

- 4 LEDs for status indication
- Backlit LCD display (16 x 2)
- 8 navigation keys for setting and interrogation

For more information please contact GE Grid Solutions

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