87B Relay

POWER SYSTEM PROTECTION EQUIPMENT



Bus Differential Protection Overview The bus protection with differential relay device is suitable for busbars in conventional substations rated at 110 kV and below regardless of wiring configuration; it supports up to nine connected units including the bus tie, perfectly fitting application scenarios of conventional substations. Communication Mode:Optional: RS-485, CAN bus, Ethernet, IEC61850，IEC103

KEY FEATURES

- Section I Busbar Ratio Restrained Minor Differential Protection Function
- Section II Busbar Ratio Restrained Minor Differential Protection Function
- Ratio Restrained Major Differential Protection Function
- CT Broken Line Blocking and Alarm Function
- Composite Voltage Blocking Function

87B RELAY TECHNICAL SPECIFICATIONS

Parameter	Specification
Protection Function	Bus Differential Protection
ANSI Code	87B
Rated Voltage	≤110 kV
Communication	IEC 61850 / IEC 103 / Modbus / Ethernet
Communication Ports	RS-485 / CAN / Ethernet
Protection Time	≤25 ms
Bus Configuration	Single Bus / Double Bus
CT Supervision	Yes
Breaker Failure Protection	Yes

87B RELAY SETTINGS

Category	No.	Name	Range	Unit / Definition
Differential Protection	1	Differential Protection Starting Current Setting	0.25-100	A
	2	CT Broken Line Alarm Setting	0.25-100	A
	3	CT Broken Line Blocking Setting	0.25-100	A
	4	Bus Tie & Section Breaker Failure Current Setting	0.25-100	A
	5	Bus Tie & Section Breaker Failure Time Delay	0-10	s
Breaker Failure Protection	6	Undervoltage Blocking Setting	0-57.7	V
	7	Zero-sequence Voltage Blocking Setting	0-57.7	V
	8	Negative-sequence Voltage Blocking Setting	0-57.7	V

Category	No.	Name	Range	Unit / Definition
	9	Three-phase Failure Phase Current Setting	0.25-100	A
	10	Breaker Failure Zero-sequence Current Setting	0.25-100	A
	11	Breaker Failure Negative-sequence Current Setting	0.25-100	A
	12	Breaker Failure 1st Time Limit	0-10	s
	13	Breaker Failure 2nd Time Limit	0-10	s
Optional FunctionBus Tie Charging Overcurrent Protection	14	Charging Overcurrent Stage I Current Setting	0.25-100	A
	15	Charging Overcurrent Stage I Time Delay	0.1-10	s
	16	Charging Overcurrent Stage II Current Setting	0.25-100	A
	17	Charging Zero-sequence Overcurrent Setting	0.25-100	A
	18	Charging Overcurrent Stage II Time Delay	0.1-10	s

ORDERING INFORMATION

MOQ	LEAD TIME	TRADE TERMS	PAYMENT	WARRANTY
1 unit	7-15 working days	EXW / FOB / CIF / DDU	T/T, L/C, WU, PayPal	12 months