

399



AM2SE 系列微机保护测控装置

AM2SE Protection Relay

操作说明书 V1. 3

Operational Manual V1. 3

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申 明

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AM2SE Series Protection Relay

1 Overview

- A complete set of protection, related to the application;
- 4 current input, 3 voltage input, 8DI, 5DO;
- Auxiliary power supply adapts with AC220V, DC220V, DC110V, AC110V;DC48V,DC24V;
- 1 RS485 serial communication, IEC60870-5-103 and Modbus-RTU;
- more than 200 sequence of event records, more than 400 system logs, and more than 10 seconds tripping context records;
- Powerful graphic programmable Logic.

2 Characteristic

- Rich protection functions

Feeder protection;

Transformer protection;

- Measurement

RMS current values;

RMS voltage values;

frequency;

Power factor;

RMS active power.

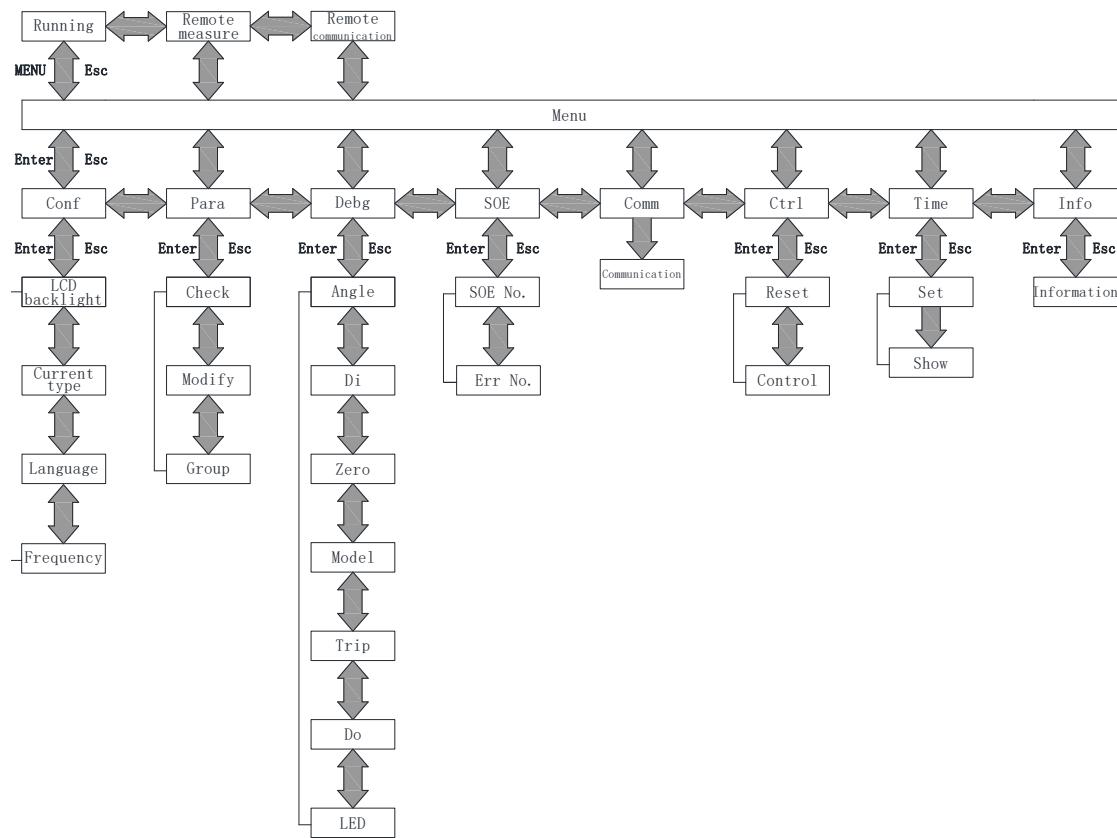
- Control functions

Remote control;

Local control;

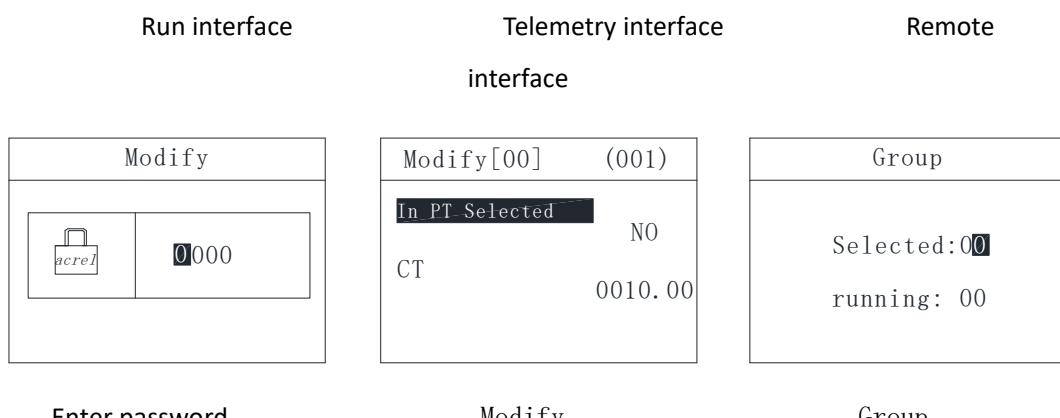
Programmable switchgear interlocking;

3 Operation process



4 LCD Display

AM2SE			Name	Value	Unit	Name	State
Fr	0.000Hz		Ia	0.000	A	CCB On	
UAB	0.00 KV		Ib	0.000	A	(YX_01)	OFF
UBC	0.00 KV		Ic	0.000	A	CCB OFF	
UCA	0.00 KV		IO	0.000	A	(YX_02)	OFF



The screenshot displays two tables of event records. The left table shows a single SOE entry with time, date, code, and name. The right table lists multiple parameters (Ia, Ib, Ic, UAB) with their respective values. A pink arrow points from the 'Parameter' label to the right table.

SOE [002/026]		No. A11
Time	19-10-21 09:48:57.619	
Code:	(000)	
Name	3I>>> [Set] SOE Par. next	

SOE [002/026]		Parameter
Ia	12.346A	
Ib	0.010A	
Ic	0.000A	
UAB	0.043V	

SOE [002/026]	
UBC	0.022V
UCA	0.021V
U2	0.060V
Ia_H2	0.008A

Event record screen

5 Functions

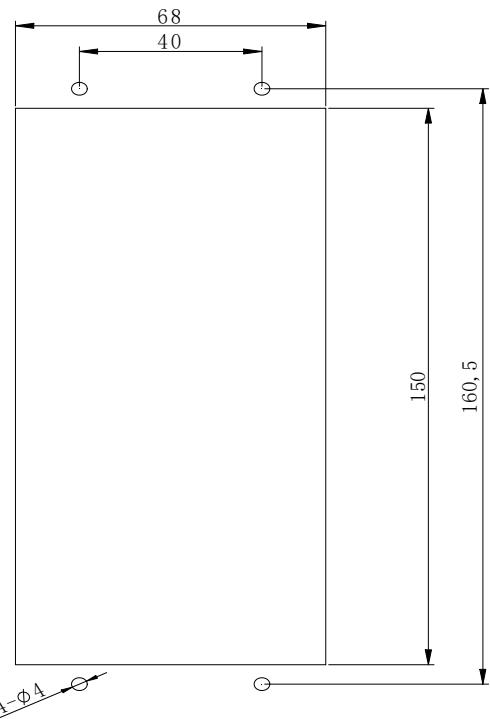
Protection functions	AM2SE-	
	V	H
Overcurrent (3 stages, IDMT)	■	
Earth fault (3 stages, IDMT)	■	
Negative sequence overcurrent (2 stages, IDMT)	■	
Auto-reclose	■	
Overload (trip/alarm)	■	
Under frequency	■	
Post-accelerated overcurrent	■	
I0 Post-accelerated overcurrent	■	
Overvoltage(trip)	■	
Undervoltage (trip)	■	
Self-produced over zero-voltage (trip)	■	
Residual overvoltage (trip)	■	
FC block	■	
Trip and close circuit supervision (alarm)	■	
Non-electricity (trip/alarm)	■	
Undervoltage (alarm)	■	
Overvoltage (alarm)	■	
Residual overvoltage (alarm)	■	
PT supervision (alarm)	■	
Self-produced over zero-voltage (alarm)	■	
Rear ports	V	H
RS485	■	
Protocols	V	H
Modbus serial	■	
IEC 60870-5-103	■	
Measurement	V	H
Electric parameter	U,I,P,Q,PF,Fr,Ep,Eq,Es	
Input Current	4	

Input Voltage	3	
Logs and Records	V	H
Fault recorder	■	
Sequence of event record	■	
Monitoring Functions	V	H
Anti-pumping circuit	Optional	
Remote control	■	

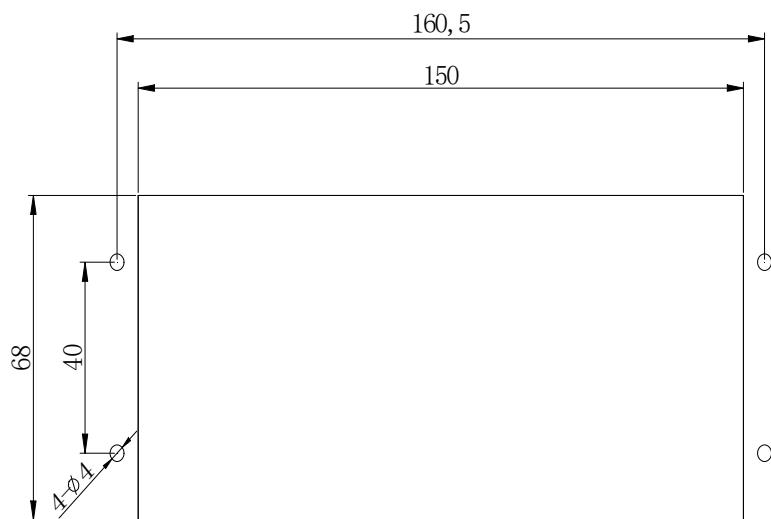
6 Technical Parameters

Power supply	Rated input	AC/DC220V, or AC/DC110V, or DC48V, or DC24V
	Range	Rared Voltage $\times (1\pm20\%)$
	Consumption	$\leq 10W$ (DC)
Rated Voltage	Rated input	AC 100V/100/ $\sqrt{3}$ V
	Range	1~120V
	Accuracy	$\pm 0.5\%$
	Consumption	$\leq 0.5VA$ (single phase)
Rated Current	Rated input	AC 5A /1A
	Range	0.04In~15In
	Accuracy	$\pm 0.5\%$
	Consumption	$\leq 0.5VA$ (single phase)
Frequency	Rated frequency	50Hz or 60Hz
	Range	45~55Hz or 60Hz
	Accuracy	$\pm 0.1Hz$
DI	Rated Voltage	AC/DC220V, or AC/DC110V, or DC48V, or DC24V
	Range	Rared Voltage $\times (1\pm20\%)$
	Consumption	$\leq 1W$ (DC220V) (single channel)
DO	Mechanical life	≥ 10000
	Switching capacity	$\geq 1000W$, L/R = 40ms
	On current	continuous $\geq 5A$, short time (200ms) $\geq 30A$
	Interrupting capacity	$\geq 30W$, L/R = 40ms
Environment	Temperature	-10°C ~ +55°C
	Humidity	5% ~ 95% (No condensation and freeze inside)
	Altitude	$\leq 2500m$

7 Cut-out dimensions



AM2SE-V Cut-out dimensions



AM2SE-H Cut-out dimensions