

AM5 Protection Relay

User Manual V1.0

Declaration

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form by any means, electronic, mechanical photocopying, recording, or otherwise without prior permission of our company.

The violator will bear the dependent legal responsibility.

We reserve all the rights to revise product specification without notice.

Please consult local agent to get the latest information of our products specification.

CONTENTS

1 Introduction.....	1
1.1 Product overview.....	1
1.2 Selection guide by application.....	2
1.3 Relay selection table.....	4
2 Technical Parameters.....	5
2.1 Rated Characteristics.....	5
2.2 Protection characteristics.....	6
2.3 Environmental characteristics.....	6
2.4 Product safety.....	6
2.5 Electromagnetic compatibility characteristics.....	6
3 Use.....	8
3.1 Front panel.....	8
3.2 Push buttons.....	8
3.3 Menu description.....	9
3.3.1 Navigation.....	10
3.3.2 Configuration.....	11
3.3.3 Parameter.....	12
3.3.4 Debug.....	15
3.3.5 Record.....	15
3.3.6 Communication.....	16
3.3.7 Control.....	17
3.3.8 Time.....	17
3.3.9 Information.....	17
4 Dimensions and Installation.....	18
4.1 Dimensions and Cut-out dimensions.....	18
4.2 Installation procedure.....	18
5 Wiring.....	19
5.1 AM5 rear panel.....	19
5.2 Typical application.....	20
6 Product maintenance.....	22
Appendix A Setting Value.....	23
Appendix B Relay Event.....	107
Appendix C Remote address table.....	142

1 Introduction

1.1 Product overview

The AM5 relay has the modular design and it can be optimized to almost all types of feeder protection applications in medium voltage distribution systems.

➤ **Protection function**

The AM5 relay has a modular design and it can be optimized to the line, transformer, distribution transformer, motor, capacitor, busbar, PT protection applications in medium voltage distribution systems.

➤ **High performance hardware and software platform**

The AM5 Protection Relay adopts the 550MHz processor, 16-bit synchronous sampling A/D, 48 points high-speed sampling per cycle, and real-time parallel computing. The relay has sufficient hardware resources and high reliability, with 5M bytes Flash, 1588K bytes Sram.

➤ **Rich measuring inputs**

3 phase measure currents;

3 phase protection currents;

2 residual currents;

3 phase voltages;

1 residual voltage;

16 digital input (both AC and DC);

10 digital output;

Trip and close circuit supervision, which can adapt to 0.25~5A trip-and-close current.

➤ **Communication**

2 RS485 ports;

1 IRIG-B port;

1 USB connection for AM5 setting software;

Powerful CPU supporting Modbus-RTU, IEC 60870-5-103

➤ **User-machine interface(UMI)**

Clear LCD display for alarms and events

Programmable function keys and LEDs

Programmable tripping output matrix

➤ **Logs and Records**

The relay has sequence of event record and disturbance record .

1.2 Selection guide by application

Function	AM5						
	-F	-C	-M	-T	-B	-U1	-DB
Input Current	8	8	8	8	6	0	6
Input Voltage	4	4	4	4	6	4	6
Digital	-F	-C	-M	-T	-B	-U1	-DB
Digital Input	16	16	16	16	16	16	16
Digital Output	10	10	10	10	10	10	10
Rear port	-F	-C	-M	-T	-B	-U1	-DB
RS485 (2 ports)	√						
USB(1 port)	√						
Protocols	-F	-C	-M	-T	-B	-U1	-DB
Modbus Serial	√						
IEC 60870-5-103	√						
Measurment	-F	-C	-M	-T	-B	-U1	-DB
Electric parameter	U、I、P、Q、PF、Fr、Ep、Eq、Es				U、I、Fr	U、Fr	U、I、Fr
Logs and Records	-F	-C	-M	-T	-B	-U1	-DB
Fault recorder	√						
Number of circuit breaker trip and close	√						√
Sequence of event record	√						
Monitoring function	-F	-C	-M	-T	-B	-U1	-DB
Trip-and-Close Circuit Supervision	√						
Remote control	√						
Others	-F	-C	-M	-T	-B	-U1	-DB
GPS	√						
Protection Function	-F	-C	-M	-T	-B	-U1	-DB
Overcurrent(3 stages) [ANSI 50/51]	√			√			
Directional Overcurrent(3 stages) [ANSI 67]	√						
Overcurrent(2 stages) [ANSI 50/51]		√	√		√		√
Earth fault [ANSI 50N/51N]	√	√	√	√			
Overcurrent IDMT(Normal inverse,Very inverse,Extremely inverse) [ANSI 51N]	√	√	√	√	√		
Overload [ANSI 49F]	√		√	√			
Trip and close circuit supervision (alarm)	√	√	√	√	√		√
Under voltage [ANSI 27]			√			√ alarm	
Loss voltage [ANSI 27]	√						
PT supervision [ANSI 60]	√	√	√	√	√	√	√
Three phase Auto-Reclose [ANSI 79]	√						
Under frequency [ANSI 81U]	√						
Over frequency [ANSI 81O]	√						
Post-accelerated Overcurrent	√				√		√
Overvoltage [ANSI 59]	√	√	√			√ alarm	√ alarm

Protection Function	-F	-C	-M	-T	-B	-U1	-DB
Locked rotor [ANSI 51LR]			√				
Unbalance voltage [ANSI 60]		√	√				
Unbalance current [ANSI 60]		√	√				
Incorrect phase sequence			√				
Residual Overvoltage protection [ANSI 59N]	√	√	√			√ alarm	
Non-electricity	√	√	√	√			
Motor starting time-out [ANSI 48]			√				
Directional power [ANSI 32]	√						
Thermal overload [ANSI 49M]			√				
Positive sequence Overcurrent (2 stages/IDMT) [ANSI 46]			√				
BUS tie protection and standby power automatic switch					√		√
Bus charging					√		
FC block [ANSI 86]	√	√	√	√			
EMC block	√	√	√	√			
Intermittent earth fault	√	√					
Over haul-lockout [ANSI 86]	√	√	√	√	√	√	√

Note: √ represent with this feature,blank represents without this function.

1.3 Relay selection table

A	M									
									GPS Synchronization: with	1
									without	2
									Anti-pumping Function: with	1
									without	2
									Communication Interface: 1 RS485	1
									2 RS485	2
									Power: AC/DC 110V	1
									AC/DC 220V	2
									DC 48V	3
									I0 CT Input: 1A	1
									5A	5
									CT Input: 1A	1
									5A	5
									Type: Line protection	F
									Transformer protection	T
									Motor protection	M
									Capacitor protection	C
									Bus tie protection	B
									PT supervision	U1
									0.4kV standby power automatic transfer	DB
									Serial number	5
									Protection relay	
									Acrel	

Note: 1) When DC48V is selected as the auxiliary power supply of the relay, it cannot connect operating circuit, and the circuit breaker must have its own anti tripping function.

2 Technical Parameters

2.1 Rated Characteristics

Version	
Characteristics	AM5
Power Supply	
Rated voltage	AC/DC 110V or AC/DC 220V or DC48V
Range	Rated voltage $\times$ (1 $\pm$ 20%)
Burden	≤ 10 VA
PT Inputs	
Rated value	AC 100V or $100/\sqrt{3}$ V
PT rated secondary range	1V $\sim$ 120V
Accuracy	0.5S
Burden	≤ 0.5 VA (each phase)
Voltage withstand	Continuous: 1.2 Un 10s: 2 Un
Phase CT Inputs (Protection Current)	
CT rated secondary range	AC 5A or 1A
Dynamic	0.04 $\sim$ 15 $\times$ CT rated current
Accuracy	0.5S
Burden	≤ 0.5 VA (each phase)
Thermal withstand	Continuous: 2 In 1s: 40 In
Phase CT Inputs (Measurement Current)	
CT rated secondary range	AC 5A or 1A
Dynamic	0.04 $\sim$ 1.2 $\times$ CT rated current
Accuracy	0.5S
Burden	≤ 0.5 VA (each phase)
Thermal withstand	Continuous: 1.5 In 1s: 4 In
Frequency	
Rated frequency	50Hz or 60Hz
Frequency range	45 $\sim$ 55Hz or 60Hz
Accuracy	± 0.1 Hz
Digital Inputs	
Operating nominal voltage	AC/DC 110V or AC/DC 220V or DC48V

Digital Inputs	
Voltage threshold	70% of nominal voltage
Reset threshold	55% of nominal voltage
Burden	$\leq 1\text{W}$ (each phase) (DC220V)
Digital Outputs	
Make and carry	≥ 10000 operations
Making capacity	$\geq 1000\text{W}$, L / R = 40ms
Continuous current	$\geq 5\text{A}$
Short duration carry current	$\geq 30\text{A}$ for 200ms
Breaking capacity	$\geq 30\text{W}$, L/R = 40ms

2.2 Protection characteristics

Characteristics	Accuracy	Resolution	Disengaging ratio
Voltage	$\pm 3\%$	0.001V	0.95 and 1.05
Current	$\pm 3\%$	0.001A	0.95 and 1.05
Frequency	$\pm 0.02\text{Hz}$	0.001Hz	
Operation delay t>(DT)	40ms or $\pm 2\%$ setting value	0.001s	-
Operation delay t>(IDMT)	40ms or $\pm 5\%$ setting value	0.001s	-

2.3 Environmental characteristics

During operation: $10^{\circ}\text{C} \sim +55^{\circ}\text{C}$, temperature; 5%~95%, humidity

Storage: $-25^{\circ}\text{C} \sim +70^{\circ}\text{C}$

Altitude: $\leq 2000\text{m}$

Enclosure: IP20 (local panel)

2.4 Product safety

Insulation: Insulation resistance $>100\text{M}\Omega$ at 500Vdc

High voltages withstand: 2kV rms AC, 1 min:between all case terminals connected together,
and the case earth/ground;

2 kV rms AC, 1 min:between all terminals of independent circuits

Impulse voltage: $\pm 5\text{kV}$ (1.2/50 μs , 0.5J)

2.5 Electromagnetic compatibility characteristics

Characteristics	Standard	Level/Class
Radiated emission	IEC-60255-26:2023——5.1	A
Conducted emission	IEC-60255-26:2023——5.2	A
Radiated radio frequency fields	IEC-60255-26:2023	A
Electrostatic discharge	IEC-60255-26:2023——6.1	B

Characteristics	Standard	Level/Class
Conducted radio frequency disturbance	IEC-60255-26:2023——6.2-6.5	A
Fast transient bursts	IEC-60255-26:2023——6.2-6.5	B
Slow damped oscillatory waves	IEC-60255-26:2023——6.2-6.4	B
Surges	IEC-60255-26:2023——6.2-6.4	B
Voltage dips and short interruptions test (AC or DC)	IEC-60255-26:2023——6.2	A/C ¹
Magnetic field at power frequency	IEC-60255-26:2023——6.1	B

¹ AC and DC voltage dips meet the criteria A/C of the IEC60255-26:2023—6.2. AC and DC voltage interruptions meet the criteria C of the IEC60255-26:2023—6.2. Ripple on DC input power port immunity meet the criteria A of the IEC60255-26:2023—6.2. DC auxiliary power supply ports gradually shutdown/start-up meet the criteria C of the IEC60255-26:2023—6.2.

3 Use

3.1 Front panel

The AM5 relay is equipped with a user friendly local panel which is shown in Figure 3.1.

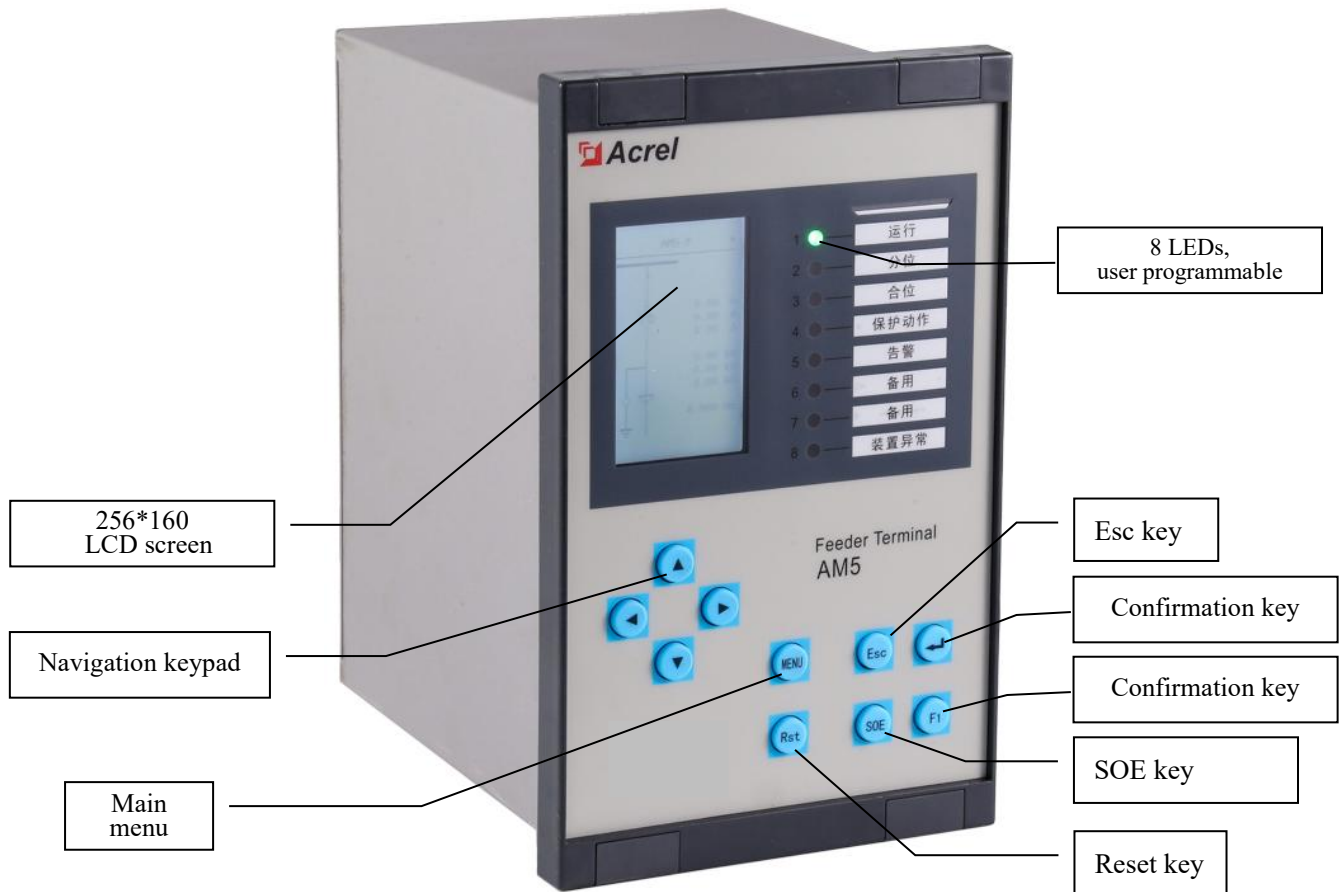


Fig 3.1 AM5 Surface

3.2 Push buttons

Table 3.1 Push buttons

Symbol	Function	Symbol	Function
	Home key to return to the main screen.		Up navigation push-button for moving up in the menu or increasing a numerical value.
	Reset key to release latches and reset LED status.		Down navigation push-button for moving down in the menu or decreasing a numerical value.
	Esc key to return to the previous view.		Left navigation push-button for moving back across a menu or selecting a digit in a

Symbol	Function	Symbol	Function
	Enter push-button for activating or confirming a function.		numerical value.
	SOE key for viewing sequence of event.		Right navigation push-button for moving forwards across a menu or selecting a digit in a numerical value.
			Programable function push-button for AM5.

3.3 Menu description

The relay is powered on to enter the main screen(Mimic screen), and can take turns display Measurement, Remote Signal, DO Mapping by pushing the  key.

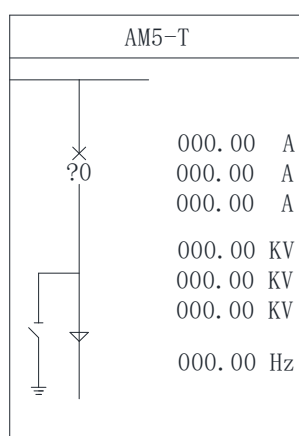


Fig 3.2 Mimic screen

RemoteMeter	
Ia	0000.000 A
Ib	0000.000 A
Ic	0000.000 A
I01	0000.000 A
I02	0000.000 A
IA	0000.000 A

Fig 3.3 Measurement

RemoteSignal	
CB On	OFF
CB Off	OFF
Work Posi.	OFF
Test Posi.	OFF
GroundSwitch	OFF
Remote	OFF
Discharge	OFF
SlightGas	OFF
SevereGas	OFF
PressureRele.	OFF
OverTemp.	OFF
HighTemp.	OFF

Fig 3.4 Remote Signal

All of the digital inputs can be showed on the “Remote Signal” screen. When the digital input is tied to the supply voltage, the state of this DI will be “ON”, otherwise the state of the DI is “OFF”.

DO	Mapping	DO	Mapping	DO	Mapping
RemoteTrip	10000 00000 000	VP. T	00100 00000 000	DO Test	00000 00000 000
RemoteClose	01000 00000 000	Non-elec1. T	00000 00000 100		
3I>>>.S	00000 00000 100	OverHeat. T	00000 00000 100		
3I>>>.R	00000 00000 100	Sta. OutT. T	00000 00000 100		
3I>	00000 00000 100	Alarm	00000 00010 000		
I0>	00000 00000 100	Action. S	00000 00100 000		

Fig 3.5 DO configuration interface

In the DO mapping interface, the mapping relationship between protection function and digital output is shown in the following table with 1-13 binary digits.

1	2	3	4	5	6	7	8	9	10	11	12	13
0	0	0	0	0	0	0	0	0	0	0	0	0

1~10 represent passive output DO1~DO10, respectively; 11~12 represent protection trip, protection close; 13 represents internal closing block relay. If the number from 1 to 13 is 1, indicating that the protection function is configured to this output; if it is 0, indicating that the output is not configured.

3.3.1 Navigation

The menu of relay is multi-level menu; Press the  key to enter the main menu. There are 9 sub-menus in the main menu, as shown as figure 3.6, which is composed of names and icons of sub-menus. Press the  key to enter either sub-menu in the main menu, and press the  key to return to the superior menu. Figure 3.7 shows the navigation diagram of the relay, which can be used to find relevant parameters quickly.

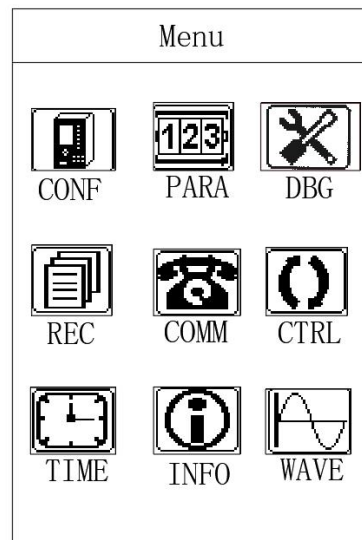


Fig 3.6 Main menu

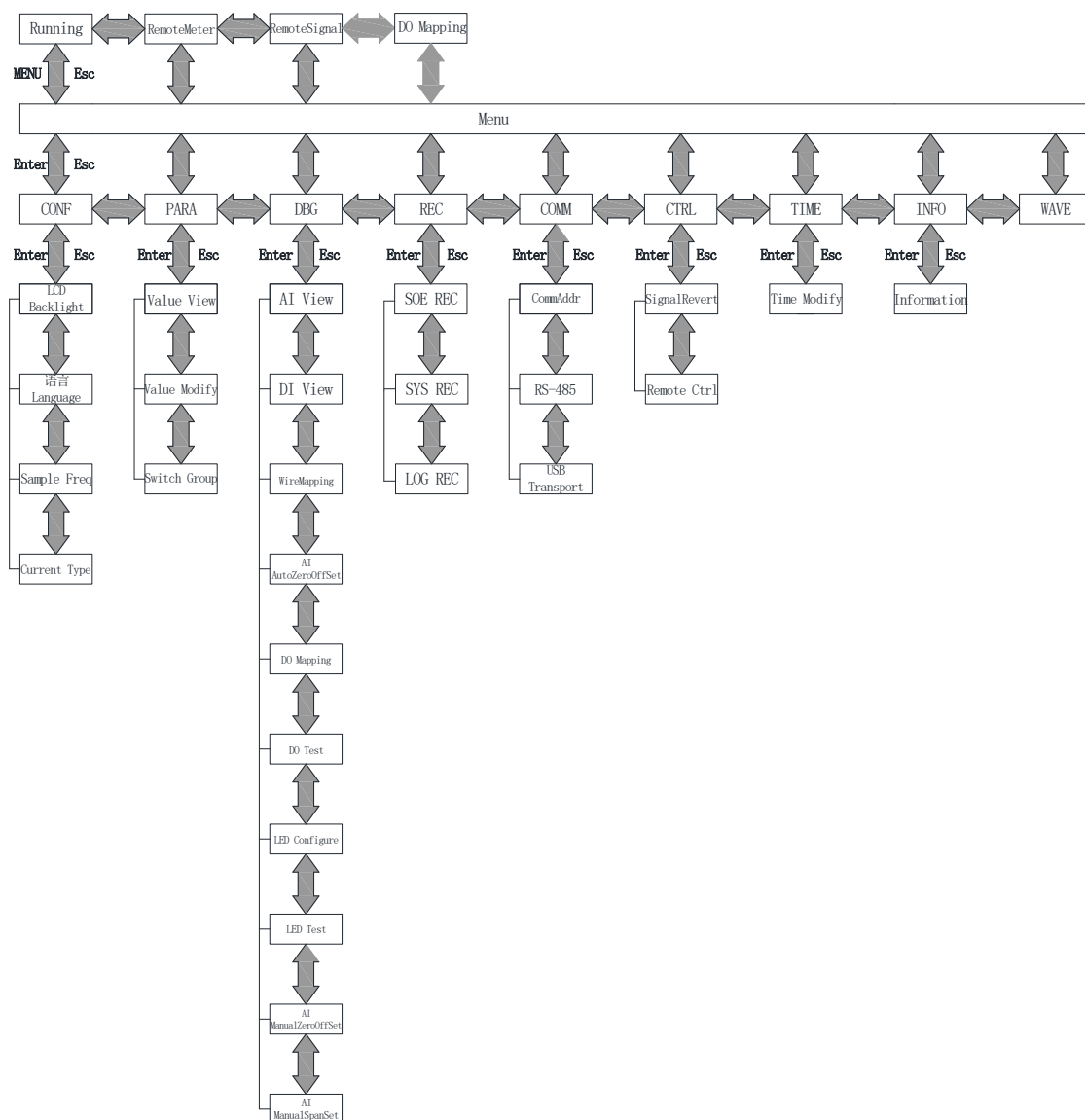


Fig 3.7 Navigation diagram

3.3.2 Configuration

The "Conf" menu can set the LCD backlight time, as shown in Figure 3.8. After modification, press the  key to confirm the modification and press the  to return to main menu .The data saving interface will pop up, as shown in Figure 3.9 ;Press the  key to save the modification and return to the main menu, or press the  key to return to the main menu directly without saving the modification.

CONF
LCD Backlight: 999s
语言Language: ENGLISH
Sample Freq: 50.000Hz
Current Type: Measure

Fig 3.8 LCD backlight time settings

CONF
LCD Backlight 999s
语言Language: ENGLISH
Sa  SAVE? Hz
Current Type: Measure

Fig 3.9 Data saving

3.3.3 Parameter

The "Para" menu includes 3 sub-menus: Value View, Value Modify and Switch Group, as shown in Figure 3.10.

3.3.3.1 Value View

The "Value View" menu includes two sub-menus: "Selected" and "Running". There are 4 groups of valid value in the "Selected",which are 00, 01, 02, and 03 areas. After selecting the corresponding area, as shown in Figure 3.11, press the  key to enter the "Value View" menu.

All values can be viewed page by page by the  and  key , as shown as figure 3.12. The "Running" shows the current running area of the relay.

PARA
Value View
Value Modify
Switch Group

Fig 3.10 Parameter

Value Group
Selected:01
Running:01

Fig 3.11 Selection area

View[00]	001/140
CT	10.000
PT	100.000
U Unit	kV
PT Mode	3PT
CT Mode	3CT
U. Less	15.000V

Fig 3.12 Value View

3. 3. 3. 2 Modify

The "Modify" menu includes two sub-menus: "Selected" and "Running" .The initial password of this menu is "0008".

Set the group code in the "Selected", and enter the "Modify" by the the  key. All the values are showed page by page, and select the values which need to be modified by the , ,  and  keys. The values can be selected by the  key, and be modified by the  and  key, as shown as figure 3.14.After the modification, press the  key to confirm the modification, and then set the next value as the same way.

After all modifications, press the  key to quit the "Modify". If value has been changed, the data saving interface will pop up, as shown as figure 3.9.Press the  key to save the modification and return to the “Menu” .If press the  key, relay will return to the“Menu”directly without saving the modification.

The"Running" interface only shows the current running area of the relay, and no modification is made here.

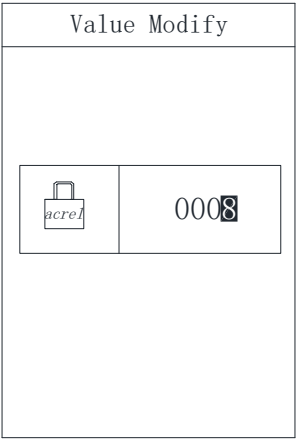


Fig 3.13 Enter password

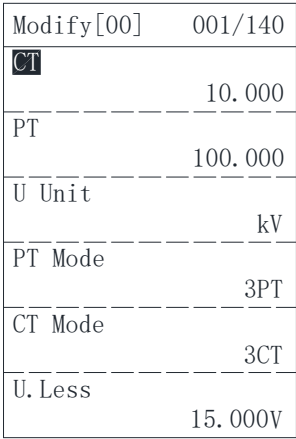


Fig 3.14 Modify



Fig 3.15 Group

3. 3. 3. 3 Group

The"Group"menu includes two sub-menus:"Selected" and "Running". The initial password of this menu is"0008". There are four valid groups from 00 to 03 in the "Group". After setting, the modification can be confirmed by the the "Enter" key, and then return to the main menu by the "Esc"key.The running value area will display the current running value area of the relay, as shown in Figure 3.15.

3.3.3.4 DI configuration

The user can configures digital input of the device according to the requirements, and DI can be set in parameter menu according to remote address table in Appendix 2.

For the remote DI definition, user need to set the remote name. If you need to change the third DI to “isolation switch on”, find it code is 1085 according to Appendix 2, and then change "Name 03 Configuration" to 00001085 in modify menu. After the change, you can view it in the remote interface, as shown in Figure 3.16.

Modify[00]	109/140	Modify[00]	109/140	RemoteSignal	
Name04. C	000000000	Name04. C	000001085	CB On	OFF
Name05. C	000000000	Name05. C	000000000	CB Off	OFF
Name06. C	000000000	Name06. C	000000000	Iso. Swi. On	OFF
Name07. C	000000000	Name07. C	000000000	Test Posi.	OFF
Name08. C	000000000	Name08. C	000000000	GroundSwitch	OFF
Name09. C	000000000	Name09. C	000000000	Remote	OFF
				Discharge	OFF
				SlightGas	OFF
				SevereGas	OFF
				PressureRele.	OFF
				OverTemp.	OFF
				HighTemp.	OFF

Fig 3.16 remote configuration interface

For the functional DI definition (CB On, CB off, Remote, Manual trip, Manual close, Block Reclosing, Discharge, Maintenance and Non-elec.1 and other non-elec. DI), user need to set the remote name and DI position configuration. If you need to change Non-elec.1 to the fifth DI, find the code of Non-elec.1 as 2040 according to Appendix 2, and then change the "Name 05 configuration" to 00002040 in modify menu, and then change the "Non-elec.1 configuration" in the modify menu to 5, and you can view it in remote interface after the change, as shown in Figure 3.17.

Modify[00]	109/140	Modify[00]	109/140	RemoteSignal	
Name01. C	000000000	ManualCl. C	000000009	CB On	OFF
Name02. C	000000000	Bl. Re. C	000000010	CB Off	OFF
Name03. C	000000000	Non-el1. C	000000005	Iso. Swi. On	OFF
Name04. C	000000000	Non-el2. C	000000012	Test Posi.	OFF
Name05. C	000002040	Ma. C	000000013	Non-elec. 1	OFF
Name06. C	000000000	Spare1. C	000000014	Remote	OFF
				Discharge	OFF
				ManualTrip	OFF
				ManualClose	OFF
				BlockReclosing	OFF
				Spare1	OFF
				Non-elec. 2	OFF

Fig 3.17 Functional DI configuration interface

3. 3. 4 Debug

The "Debug" menu is used to test before delivery. The function includes zero adjustment, amplitude adjustment, relay output test, LED test, LED color configuration, and relay output configuration.

When use the “Debug” menu, please contact the manufacturer first!

3. 3. 5 Record

The “REC” includes 3 types of record: SOE Record、 System Record and LOG Record.

3. 3. 5. 1 SOE Record

The "SOE" menu shows the event sequence, total number of events, event code, event time, event name, action type (trip or alarm), and other information. It can also record the action values and time of the protection event, as shown in Figure 3.18. The relay can save more than 200 event records.

3. 3. 5. 2 System Record

The "SYS" menu shows the error sequence, error counts, error time, error name, error code and so on, as shown in Figure 3.19. The relay can save more than 200 error records.

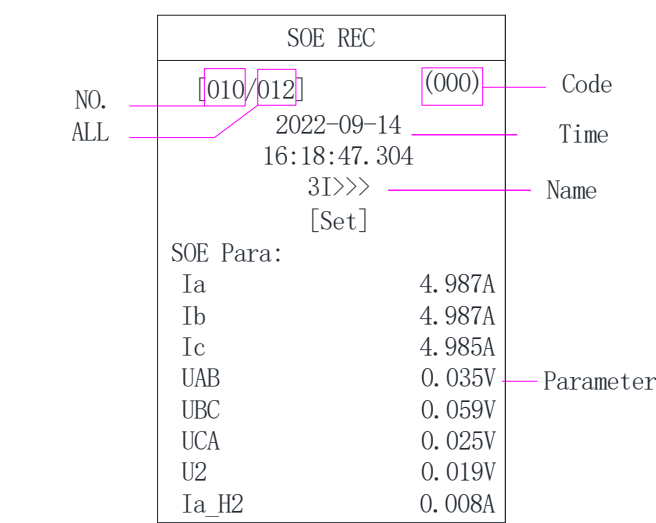


Fig 3.18 Event record screen

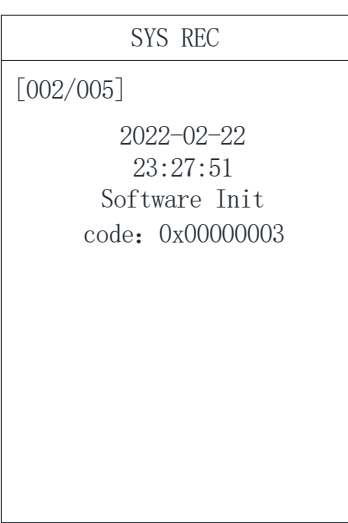


Fig 3.19 System record screen

3. 3. 5. 3 Logical record

As shown in Figure 3.20, the "Log" menu records all operations and setting changes of the relay.

LOG REC [0001/1494]
20240327-110831.000
Device power on/off
ON

Fig 3.20 log record interface

3.3.6 Communication

The “Comm” menu can set the communication address and baud rate, as shown in figure 3.17. Communication parameters can be set from table 3.2 selection parameters. After setting, press “Esc” key to exit, then press “Enter” to save, then press “Esc” key to return to the main menu.

COMM
CommAddr
RS-485
USB Transport

Fig 3.21 Communication setting

CommAddr
00001

Fig 3.22 Relay address setting

Table 3.2 Communication parameter setting

Setting	Parameter
Relay address	0~255
Baud rate	4800、9600、14400、19200、38400、56000、57600
Data bits	8、9
Stop bits	1、1.5、2
Parity mode	No parity、Even parity、Odd parity
Protocol select	Modbus、IEC103

3.3.7 Control

The "Control" menu is used to test before delivery. The function in this menu includes remote trip、remote close and signal reset.

When use the “Ctrl” function, please contact the manufacturer first!

3.3.8 Time

The "Time" menu is used to modify the clock. As shown in Figure 3.23, press the "Enter" key after the time setting is completed, then press the "Esc" key to return to the main menu.

3.3.9 Information

“Info” menu can display the basic information include Name、Version、Check code、Hardware、software、logic、logic version and so on, as shown in figure 3.24.

Time Modify	
Current Time: 2014-03-27 11:09:04	
Y-M-D:	2014-03-27
H:M:S:	11:09:04

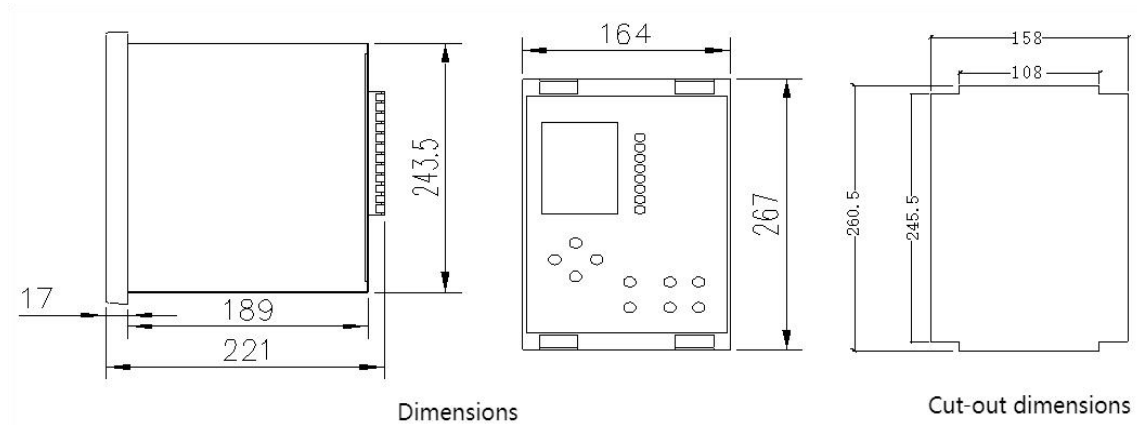
Fig 3.23 Time setting

INFO
AM5-F
HalVer: 1.34
CRC Code: 0x7235
2024-01-12_13:51:45
Hardware:
2013-12-28_10:56:13
Software:
2013-12-28_10:56:16
LogicVer:
V2001 1.04
2013-12-28_10:56:41

Fig 3.24 Device information

4 Dimensions and Installation

4.1 Dimensions and Cut-out dimensions



Note:

1. The square hole size is 245.5 * 158;
2. The opening size is in mm.

4.2 Installation procedure

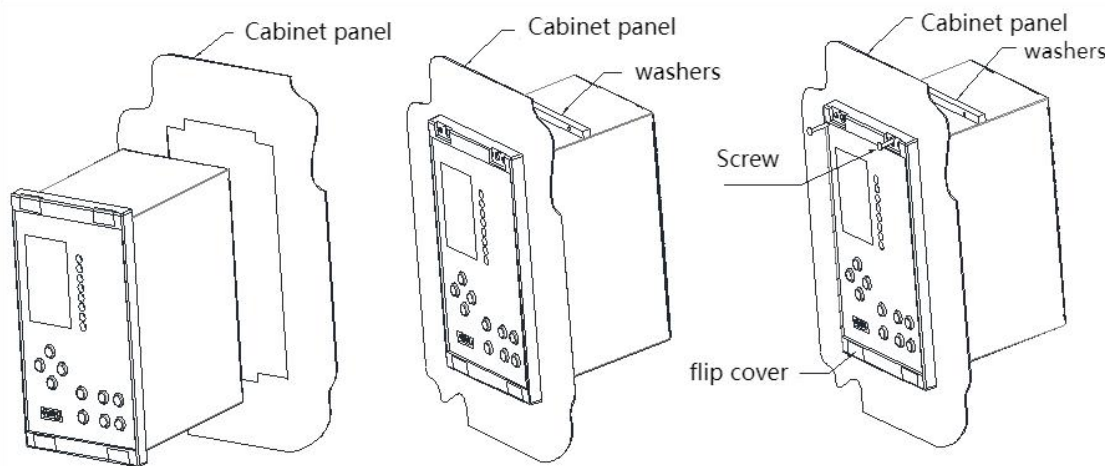


Fig 4.1

Fig 4.2

Fig 4.3

1. Prepare the cut-out in the panel for the flush installation according to the above dimensions.
2. Fasten the AM5 protection relay in its position with for four M3×12mm screws with washers.
3. Cover four small flip covers on the four screws again.

5 Wiring

5.1 AM5 rear panel

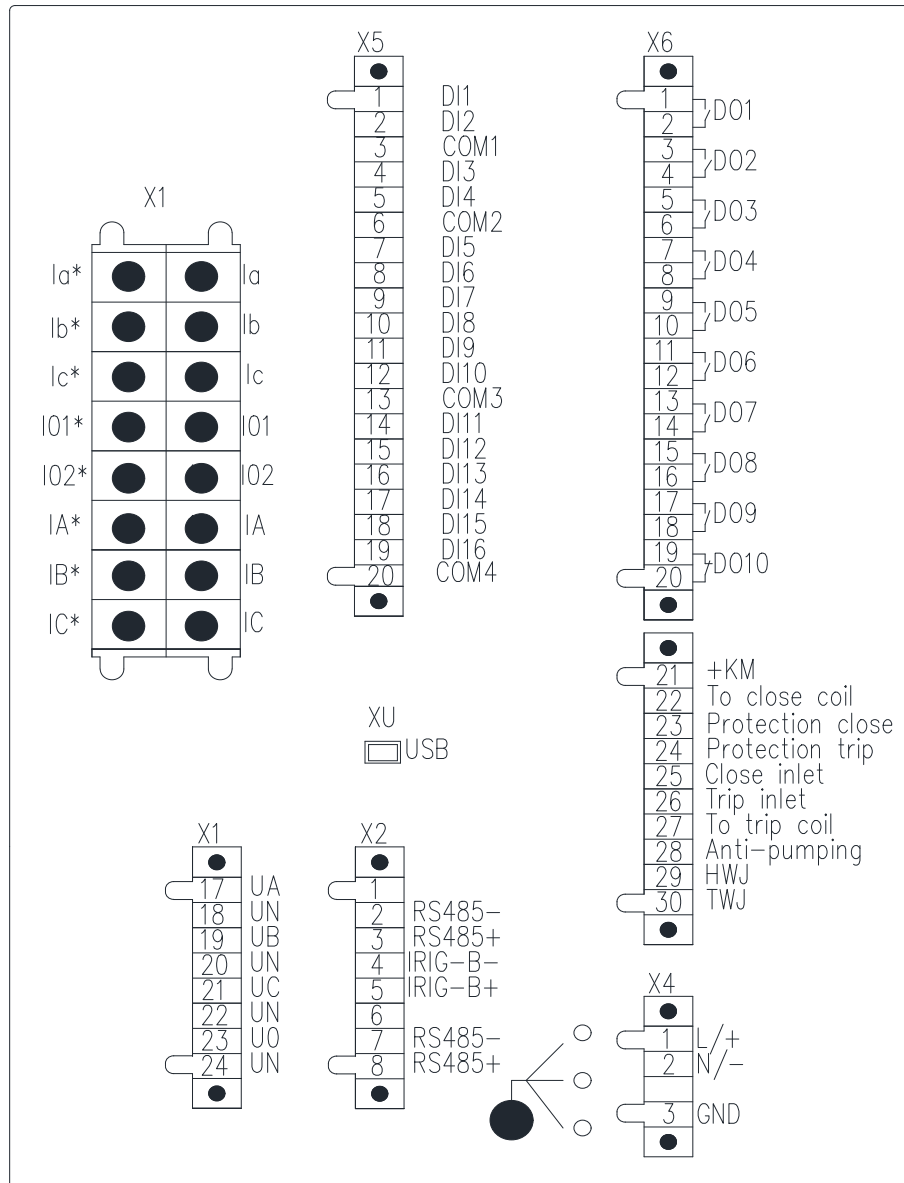
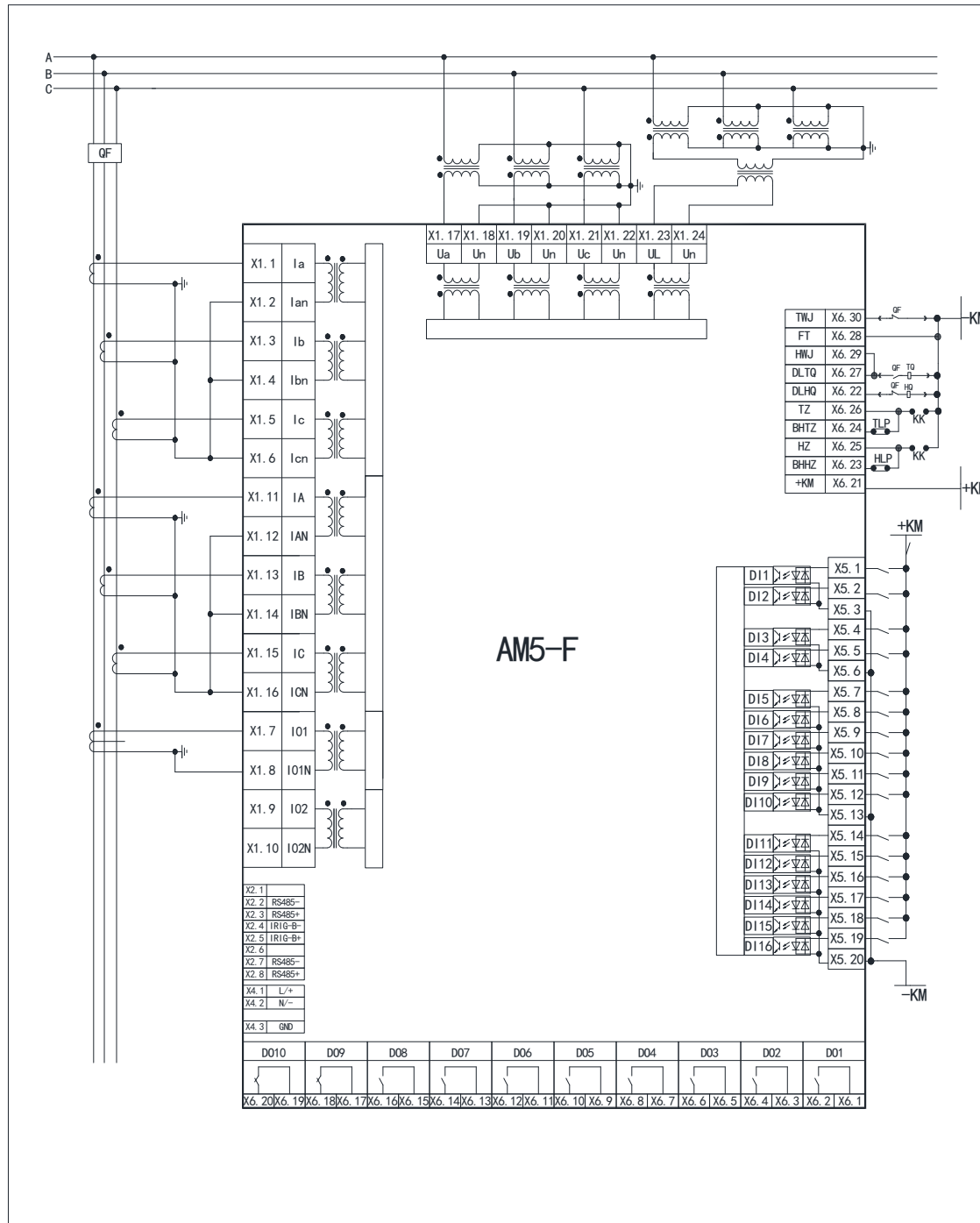


Fig 5.1 AM5

X1	1-16	Current
X1	17-24	Voltage
X2	1-8	RS-485 and IRIG-B
X4	1-2	Power supply
X4	3	Power ground
X5	1-20	Digital inputs
X6	1-20	Digital outputs
X6	21-30	Anti-pumping and trip and close supervision
XU		USB

5.2 Typical application

The following describe typical application diagrams. 3CTs and residual current, 3PTs and residual voltage have been showed in the diagrams.



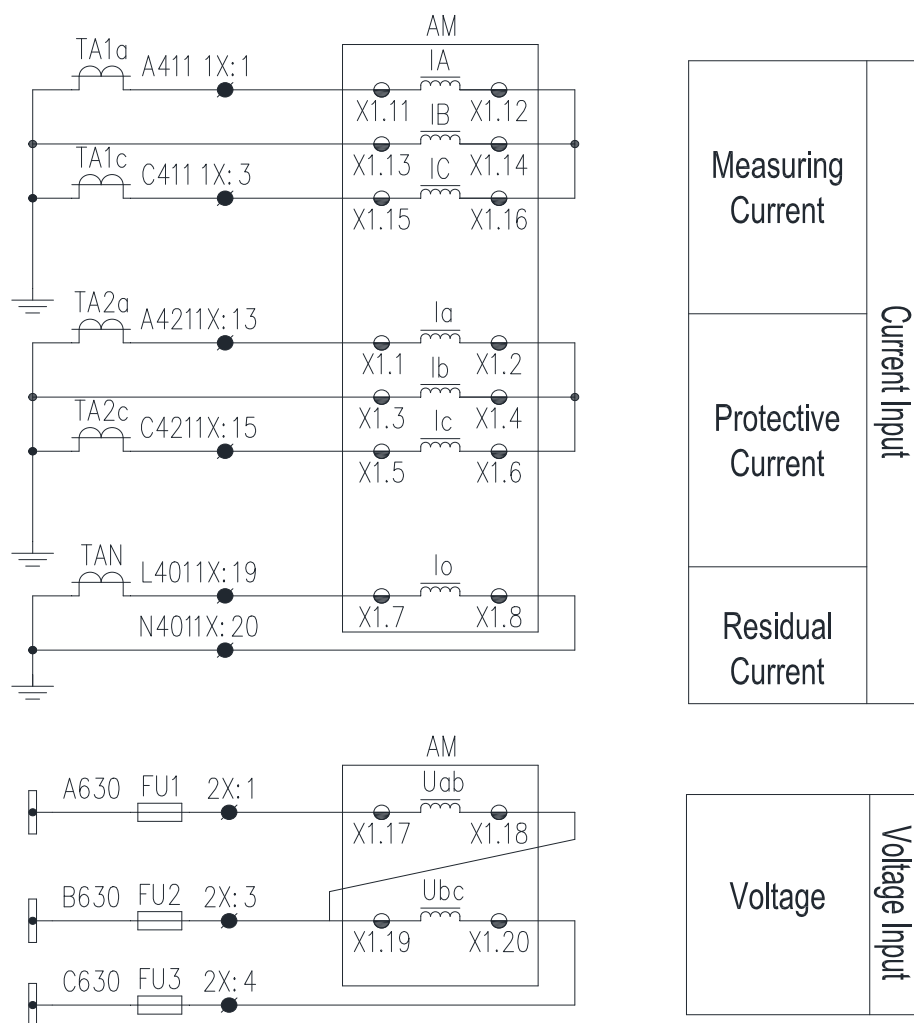


Fig 5.2 2PT&2CT Wiring

6 Product maintenance

The following table shows the common problems and treatment methods of the AM5 during use.

Problems	Possible causes	Treatment suggestions
The trip relay doesn't close.	1、Corresponding function is not enabled. 2、Conditions for closure. 3、Incorrect DO mapping.	1、Set the corresponding protection enable on; 2、Check the blocking condition. 3、Configure the corresponding digital output in the "DBG" menu. 4、Please contact after-sales staff.
The voltage value is incorrect.	The "PT mode" is different from the wiring.	Reset the "PT mode" according to the wiring.
Communication failure.	1、The polarity of communication cable is reversal. 2、Communication parameter and protocol are in-conformity. 3、Communication cable break. 4、Wrong communication address.	1、Check the wiring. 2、Reset communication parameters and protocols. 3、Repair or replace the communication cable. 4、Reset the communication address in the "COMM" menu.
No digital signal acquisition.	No signal input to corresponding digital input.	Measure the voltage between the corresponding digital input and the common terminal of the relay. Check whether the voltage is normal.
The circuit breaker trips when power is supplied.	The energizing inrush current generated by closing the transformer on no-load causes a protection misoperation.	Enable EMC restraint function.

The procedure for testing the anti-trip function is as follows:

- 1、Cancel the X6.28 anti-trip wiring of relay, short circuit the manual close contact, at this time the circuit breaker is closed, at this time, manually trip, if the circuit breaker after a series of tripping and closing operations, keep in the closing state, it means that the circuit breaker does not have anti-trip; If the circuit breaker is kept in the trip state after a series of tripping and closing operations, it means that the circuit breaker is with anti-trip.
- 2、After confirming that the circuit breaker is not equipped with anti-trip, connect the comprehensive protection X6.28 anti-trip to the negative power and use the anti-trip function of relay. At this time, short circuit the manual close contact, the circuit breaker is closed, and manually trip. After a series of tripping and closing operations, the circuit breaker remains in the trip state, which means that the anti-trip function is triggered; release manual closing short wiring. Wait for 10s and then manually close. At this time, the circuit breaker can be closed normally, indicating that the anti-trip lock state is released.

Appendix A Setting Value

AM5-F 定值表 AM5-F Settings				
保护名称 Protection function	定值名称 Value Name	默认值 Default	范围 Range	备注 Notice
	CT 变比 CT	10	0.1~9999	
	PT 变比 PT	100	0.1~9999	
	一次电压显示 U Unit [Primary voltage display]	0	0~1	KV;V
	电压接线方式 PT Mode [Voltage measurement Mode]	0	0~1	3PT; 2PT
	电流接线方式 CT Mode [Current measurement Mode]	0	0~1	3CT; 2CT
过流一段 3I>>> [50] Instantaneous Overcurrent	过流一段投退 E.3I>>> [Enable.3I>>>]	0	0~1	退出; 投入 OFF; ON
	一段带方向 E.3I>>>.D [67] [Enable.3I>>> .Direction]	0	0~2	不带方向; 指向线路; 指向母线 OFF; Line; Bus
	一段经低压 E.3I>>>.U [Enable.3I>>> .Voltage]	0	0~1	退出; 投入 OFF; ON [If enable 3I>>>.U, voltage conditions should be considered for overcurrent protection. When the smallest of the three line voltages is less than

				U.Under and greater than U.Less, the overcurrent protection DO is prepare work.]
	过流一段定值 3I>>>. [3I>>> Value]	10A	0.04~100	
	过流一段延时 3I>>>.T [3I>>> Delay]	0s	0~60	
过流二段 3I>> [51] Time-limited Overcurrent	过流二段投退 E.3I>> [Enable.3I>>.]	0	0~1	退出；投入 OFF； ON
	二段带方向 E.3I>>.D [67] [Enable.3I>> .Direction]	0	0~2	不带方向；指向线路；指 向母线 OFF； Line； Bus
	二段经低压 E.3I>>.U [Enable.3I>> .Voltage]	0	0~1	退出；投入 OFF； ON [If enable 3I>>.U, voltage conditions should be considered for overcurrent protection. When the smallest of the three line voltages is less than U.Under and greater than U.Less, the overcurrent protection DO is prepare work.]
	过流二段定值 3I>> [3I>> Value]	7.5A	0.04~100	
	过流二段延时 3I>>.T [3I>> Delay]	0.2s	0~60	
过流三段	过流三段投退	0	0~1	退出；投入

3I> [51] Definite time Overcurrent	E.3I> [Enable.3I>]			OFF; ON
	过流三段方式 E.3I>.M [Enable.3I> .Mode]	0	0~1	告警; 跳闸 Alarm; Trip
	三段带方向 E.3I>.D [67] [Enable.3I> .Direction]	0	0~2	不带方向; 指向线路; 指向母线 OFF; Line; Bus
	三段经低压 E.3I>.U [Enable.3I> .Voltage]	0	0~1	退出; 投入 OFF; ON [If enable 3I>.U, voltage conditions should be considered for overcurrent protection. When the smallest of the three line voltages is less than U.Under and greater than U.Less, the overcurrent protection DO is prepare work.]
	过流三段定值 3I> [3I> Value]	7A	0.04~100	
	过流三段延时 3I>.T [3I> Delay]	0.5s	0~60	
反时限过流 I>Inv [51] Inverse Time Overcurrent (IDMT)	反时限过流投退 E. I>.Inv [Enable I> Inverse]	0	0~1	退出; 投入 OFF; ON
	反时限经低压 E.I>.Inv.U [Enable I>Inverse Voltage]	0	0~1	退出; 投入 OFF; ON [If enable I>.Inv.U, voltage conditions should be considered for overcurrent protection. When the

				smallest of the three line voltages is less than U.Under and greater than U.Less, the overcurrent protection DO is prepare work.]
	反时限启动电流 I>.Inv [Inverse Current]	5A	0.04~100	
	反时限时间系数 I>.Inv.K [Inverse Time Coefficient]	0.5s	0~100	
	反时限曲线类型 I>.Inv.X [Inverse Curve Type]	0	0~2	一般；非常；极端 S1； S2； S3 NI； VI； EI
过负荷告警 I>Lo.A [49F] Overload Alarm	过负荷告警投退 E.I>Lo.A [Enable Overload Alarm]	0	0~1	退出；投入 OFF； ON
	过负荷告警定值 I>Lo.A [Overload Alarm Value]	6.5A	0.04~100	
	过负荷告警延时 I>Lo.A.T [Overload Alarm Delay]	5s	0~999	
过负荷跳闸 I>Lo.T [49F] Overload Trip	过负荷跳闸投退 E.I>Lo.T [Enable Overload Trip]	0	0~1	退出；投入 OFF； ON
	过负荷跳闸定值 I>Lo.T [Overload Trip value]	6A	0.04~100	
	过负荷跳闸延时 I>Lo.T.T [Overload Trip delay]	10s	0~60	
后加速过流 I>P	后加速过流投退 E.I>P	0	0~1	退出；投入 OFF； ON

Post-Accelerated Overcurrent	[Enable Post-accelerated Overcurrent]			
	后加速经低压 E.I>P.U [Enable I>P Voltage]	0	0~1	退出；投入 OFF；ON [If enable I>P.U, voltage conditions should be considered for over current protection. When the smallest of the three line voltages is less than U.Under and greater than U.Less, the overcurrent protection DO is prepare work.]
	后加速过流定值 I>P [Post-accelerated Overcurrent Value]	6.5A	0.04~100	
	后加速过流延时 I>P.T [Post-accelerated Overcurrent Delay]	0s	0~60	
零序 I01 过流一 段 I01>>>> [50N] Instantaneous ground fault overcurrent	I01 一段投退 E.I01>>>> [Enable I01>>>>]	0	0~1	退出；投入 OFF；ON
	I01 一段带方向 E.I01>>>>D [67N] [Enable.I01>>>> .Direction]	0	0~2	不带方向；指向线路；指 向母线 OFF；Line；Bus
	I01 一段定值 I01>>>> [I01>>>> Value]	10A	0.04~100	
	I01 一段延时 I01>>>>.T [I01>>>> Delay]	5s	0~60	
	I01 一段 3U0 值	2V	0~200	

	I01>>>.3U0 [I01>>>.Self-produced U0]			
零序 I01 过流二段 I01>> [51N] Time limited ground fault overcurrent	I01 二段投退 E.I01>> [Enable I01>>]	0	0~1	退出; 投入 OFF; ON
	I01 二段方式 E.I01>>M [Enable I01>> Mode]	0	0~1	告警; 跳闸 Alarm; Trip
	I01 二段带方向 E.I01>>D [67N] [Enable.I01>>> .Direction]	0	0~2	不带方向; 指向线路; 指向母线 OFF; Line; Bus
	I01 二段定值 I01>> [I01>> Value]	9A	0.04~100	
	I01 二段延时 I01>>.T [I01>> Delay]	10s	0~60	
	I01 二段 3U0 值 I01>>.3U0 [I01>>.Self-produced U0]	2V	0~200	
零序 I02 过流一段 I02>>> [50N] Instantaneous ground fault overcurrent	I02 一段投退 E.I02>>> [Enable I02>>>]	0	0~1	退出; 投入 OFF; ON
	I02 一段带方向 E.I02>>>D [67N] [Enable.I02>>> .Direction]	0	0~2	不带方向; 指向线路; 指向母线 OFF; Line; Bus
	I02 一段定值 I02>>> [I02>>> Value]	10A	0.04~100	
	I02 一段延时 I02>>>.T [I02>>> Delay]	5s	0~60	
	I02 一段 3U0 值 I02>>>.3U0	2V	0~200	

	[I02>>>.Self-produced U0]			
零序 I02 过流二段 I02>> [51N] Time limited ground fault overcurrent	I02 二段投退 E.I02>> [Enable I02>>]	0	0~1	退出; 投入 OFF; ON
	I02 二段方式 E.I02>>M [Enable I02>> Mode]	0	0~1	告警; 跳闸 Alarm; Trip
	I02 二段带方向 E.I02>>D [67N] [Enable.I02>> .Direction]	0	0~2	不带方向; 指向线路; 指向母线 OFF; Line; Bus
	I02 二段定值 I02>> [I02>> Value]	9A	0.04~100	
	I02 二段延时 I02>>.T [I02>> Delay]	10s	0~60	
	I02 二段 3U0 值 I02>>.3U0 [I02>>.Self-produced U0]	2V	0~200	
PT 断线告警 PT supervision[60]	PT 断线告警投退 E.PtBr.A [Enable PT Break alarm]	0	0~1	退出; 投入 OFF; ON
	PT 断线告警延时 PtBr.T [PT Break delay]	10s	0~999	
	无压定值 U.None [No-voltage]	15V	0~200	[Less than U.None means that there is no voltage]
	无流定值 I.None [No-current]	0.2A	0.04~100	[Less than I.None means that there is no current]
	PT 断线负序电压 U2.Pt [Negative sequence	35V	0~200	

	voltage]			
控故障告警 Trip and close circuit supervision	控故障告警投退 E.CB.A [Enable Trip and close circuit supervision alarm]	0	0~1	退出；投入 OFF； ON
	控故障告警延时 CB.A.T [Trip and close circuit supervision alarm delay]	10s	0~999	
	低压阈值 U.Less [Under voltage threshold]	15V	0~200	
	低电压定值 U.Under [Under voltage value]	70V	0~200	
低频减载 [81U] Under Frequency Protection	低频减载投退 E.UnderFr. [Enable Under Frequency]	0	0~1	退出；投入 OFF； ON
	低压闭锁 E.UnderFr.U [Enable Under Frequency Voltage block]	0	0~1	退出；投入 OFF； ON
	欠流闭锁 E.UnderFr.I [Enable Under Frequency current block]	0	0~1	退出；投入 OFF； ON
	滑差闭锁 E.UnderFr.dHz. [Enable Under Frequency slip block]	0	0~1	退出；投入 OFF； ON
	低频减载定值 UnderFr [Under Frequency value]	49Hz	45~60	
	低频减载延时 UnderFr.T	3s	0~60	

	[Under Frequency delay]			
	滑差闭锁值 dHz.B [Under Frequency slip block value]	0.1Hz/s	0.1~100	
	欠流闭锁值 I.B [Under Frequency current block value]	5A	0.2~100	
	低压闭锁值 U.B [Under Frequency voltage block value]	50V	0~200	
重合闸 [79] Auto-Reclose	重合闸投退 E.Reclos [Enable Auto-Reclose]	0	0~1	退出；投入 OFF； ON
	重合闸延时 Reclos.T [Auto-Reclose delay]	5s	0.1~ 9999.999	
	重合闸方式 Reclos.X [Auto-Reclose Mode]	0	0~1	不检；检无压
	重合闸充电延时 Rec.C.T [Auto-Reclose charge delay]	5s	0.1~ 9999.999	
	重合闸充电返回 T RecC.RT [Auto-Reclose charge return time]	1s	0~9999.999	
	保护重合返回延时 T.R.T [Trip Auto-Reclose return time]	30s	0~9999.999	

	不对应重合投退 E.nonP. [Enable non-position Auto-Reclose]	1	0~1	退出；投入 OFF；ON
FC 配合的过流 闭锁功能 FC Block	FC 闭锁投退 E.FCBlock [Enable FC Block]	0	0~1	退出；投入 OFF；ON
	FC 闭锁电流定值 FCB.I [FC Block current value]	10A	0.04~100	
	FC 闭锁延时 FCB.T [FC Block delay]	5s	0~60	
零序 I01 反时限 过流 I01.Inv [51N] Inverse time ground fault	I01 反时限投退 E.I01.Inv [Enable I01.Inverse]	0	0~1	退出；投入 OFF；ON
	I01 反时限启动值 I01.Inv [I01.Inverse value]	5A	0.04~100	
	I01 反时限系数 I01.Inv.K [I01.Inverse time coefficient]	0.5s	0~100	
	I01 反时限曲线 I01.Inv.X [I01.Inverse curves type]	0	0~2	一般；非常；极端 S1；S2；S3 NI；VI；EI
零序 I02 反时限 过流 I02.Inv [51N] Inverse time ground fault	I02 反时限投退 E.I02.Inv [Enable I02.Inverse]	0	0~1	退出；投入 OFF；ON
	I02 反时限启动值 I02.Inv [I02.Inverse value]	5A	0.04~100	
	I02 反时限系数 I02.Inv.K [I02.Inverse time	0.5s	0~100	

	coefficient]			
	I02 反时限曲线 I02.Inv.X [I02.Inverse curves type]	0	0~2	一般；非常；极端 S1； S2； S3 NI； VI； EI
失压保护 LVP [27] Under Voltage	失压保护投退 E.LVP [Enable Under voltage]	0	0~1	退出；投入 OFF； ON
	失压方式 E.LVP.M [Enable Under voltage Mode]	0	0~1	告警；跳闸 Alarm； Trip
	无流闭锁投退 E.LVPT.I.B [Enable Under voltage current block]	0	0~1	退出；投入 OFF； ON [If enable LVP.I.B, when the current is less than I.None, under voltage protection will be blocked.]
	失压保护定值 U.LVP [Under voltage value]	70V	0~200	
	失压保护延时 LVP.T [Under voltage delay]	5s	0~60	
	PT 断线闭锁投退 E.PT.B [Enable PT break block]	1	0~1	退出；投入 OFF； ON [When PT break occurs, the relay will send an alarm signal and lock out the under voltage protection.]
	合位允许投退 E.CCB On.B [Enable circuit breaker on block]	0	0~1	退出；投入 OFF； ON
	低电压阈值投退 E.LVThr.	0	0~1	退出；投入 OFF； ON

	[Enable Under voltage threshold]			[If enable LVThr. , when the voltage is greater than U.None and less than U.LVP , under voltage protection will act. If exit LVThr. , under voltage protection is Loss voltage protection.]
零序过压保护 U0.OVP [59N] Residual Overvoltage Protection	零序电压来源 U0 Source	0	0~1	外接；自产 U0；3U0 [From residual overvoltage transformer； Three-phase voltage synthesis]
	零序过压投退 E.U0.OVP [Enable Residual Over voltage protection]	0	0~1	退出；投入 OFF； ON
	零序过压方式 E.U0.OVP.M [Enable Residual Over voltage Mode]	0	0~1	告警；跳闸 Alarm； Trip
	零序过压定值 U0.OVP [Residual Over voltage value]	20V	0~200	
	零序过压延时 U0.OVP.T [Residual Over voltage protection delay]	5s	0~60	
过电压保护 OVP [59] Overvoltage Protection	过电压保护投退 E.OVP [Enable Over voltage protection]	0	0~1	退出；投入 OFF； ON
	过电压方式 E.OVP.M	0	0~1	告警；跳闸 Alarm； Trip

	[Enable Over voltage Mode]			
	过电压保护定值 U.OVP [Over voltage protection value]	120V	0~200	
	过电压保护延 OVP.T [Over voltage protection delay]	5s	0~999	
逆功率保护 RP [32R] Reverse Power Protection	逆功率保护投退 E.RP [Enable Reverse-Power Protection]	0	0~1	退出；投入 OFF； ON
	逆功率保护定值 RP [Reverse-Power Protection value]	0kW	0~ 10000000000	
	逆功率保护延时 RP.T [Reverse-Power Protection delay]	0s	0~99	
高频保护 [81O] Over Frequency Protection	高频保护投退 E.OF [Enable Over Frequency]	0	0~1	退出；投入 OFF； ON
	高频保护定值 OF [Over Frequency value]	50Hz	45~60	
	高频保护延时 OF.T [Over Frequency delay]	5s	0~999	
非电量 1 Non-Electric1 Protection	非电量 1 投退 E.Non-el1 [Enable Non-Electricity1]	0	0~1	退出；投入 OFF； ON
	非电量 1 方式	0	0~1	告警；跳闸

	E.Non-el1.M [Enable Non-Electricity1 Mode]			Alarm; Trip
	非电量 1 延时 Non-el1.T [Non-Electricity1. delay]	1s	0~999	
非电量 2 Non-Electric2 Protection	非电量 2 投退 E.Non-el2 [Enable Non-Electricity2]	0	0~1	退出; 投入 OFF; ON
	非电量 2 方式 E.Non-el2.M [Enable Non-Electricity2 Mode]	0	0~1	告警; 跳闸 Alarm; Trip
	非电量 2 延时 Non-el2.T [Non-Electricity2 delay]	1s	0~999	
	跳闸内部时间 Default.T [Trip Default Time]	0s	0~999	
	断路器位置采集 CB Po.Ac [Circuit Breaker position Collection]	1	0~1	辅助触点; 分合位监视 Auxiliary.C;CB M. [Auxiliary contact;Circuit Breaker Monitor]
	断路器动作时间 Cir.Br.T [Circuit Breaker trip and close time]	0.3s	0~999	
	弹簧未储能延时 Sp.En.D. [Discharge delay]	0s	0~999	
	过量返回系数 Excess R.C [Excess Return Coefficient]	0.95	0.001~1	
	欠量返回系数 Under R.C	1.05	1.000~2	

	[Under Return Coefficient]			
检修状态闭锁 Overhaul lockout	检修闭锁通讯投退 E.M.BC [Enable Overhaul-lockout communication]	0	0~1	退出；投入 OFF；ON
	检修闭锁出口投退 E.M.BE [Enable Overhaul-lockout DO]	0	0~1	退出；投入 OFF；ON
间歇接地保护 Intermittent ground fault protection	间歇接地投退 E.Inter.G [Enable Intermittent ground fault protection]	0	0~1	退出；投入 OFF；ON
	间歇接地方式 Inter.G.M [Intermittent ground fault Mode]	1	0~1	告警；跳闸 Alarm；Trip
	间歇接地定值 Inter.G [Intermittent ground fault value]	3A	0.04~75	
	间歇接地判 3U0 E.InG.3U0 [Enable Intermittent ground fault judgment 3U0]	0	0~1	退出；投入 OFF；ON
	间歇接地 3U0 值 InG.3U0 [Intermittent ground fault 3U0 value]	10V	0~200	
	间歇接地延时 Inter.G.T [Intermittent ground fault delay]	5s	0~999	
	间歇接地持续 T In.G.C.T	0.02s	0~999	

	[Intermittent ground fault duration]			
	间歇接地展宽 In.G.Pulse [Intermittent ground fault Pulse]	1s	0~999	
	I0 参与 2CT 计算 I0 P 2CT [I0 participate in 2CT calculation]	0	0~1	保护 CT 不同变比；保护 CT 同变比 CT D.R； CT S.R [protective CT is different from zero sequence CT] ; [protective CT is same as zero sequence CT] [When there are 2CT, whether zero sequence current is involved in the calculation of Ib.]
遥信名字配置 Remote name configuration	实遥信 01 名配置 Name01.C [Name01.Configuration]	0	0~9999	
	实遥信 02 名配置 Name02.C [Name02.Configuration]	0	0~9999	
	实遥信 03 名配置 Name03.C [Name03.Configuration]	0	0~9999	
	实遥信 04 名配置 Name04.C [Name04.Configuration]	0	0~9999	
	实遥信 05 名配置 Name05.C [Name05.Configuration]	0	0~9999	
	实遥信 06 名配置 Name06.C [Name06.Configuration]	0	0~9999	

	实遥信 07 名配置 Name07.C [Name07.Configuration]	0	0~9999	
	实遥信 08 名配置 Name08.C [Name08.Configuration]	0	0~9999	
	实遥信 09 名配置 Name09.C [Name09.Configuration]	0	0~9999	
	实遥信 10 名配置 Name10.C [Name10.Configuration]	0	0~9999	
	实遥信 11 名配置 Name11.C [Name11.Configuration]	0	0~9999	
	实遥信 12 名配置 Name12.C [Name12.Configuration]	0	0~9999	
	实遥信 13 名配置 Name13.C [Name13.Configuration]	0	0~9999	
	实遥信 14 名配置 Name14.C [Name14.Configuration]	0	0~9999	
	实遥信 15 名配置 Name15.C [Name15.Configuration]	0	0~9999	
	实遥信 16 名配置 Name16.C [Name16.Configuration]	0	0~9999	
遥信位置配置 Remote position configuration	合位配置 CB On.C [Circuit Breaker On Configuration]	1	0~18	
	分位配置	2	0~18	

	CB Off.C [Circuit Breaker Off Configuration]			
	运行位置配置 W.P.C [Circuit Breaker handcart work position Configuration]	3	0~16	
	试验位置配置 T.P.C [Circuit Breaker handcart test position Configuration]	4	0~16	
	接地刀位置配置 Gro.S.C [Ground switch Configuration]	5	0~16	
	远方配置 Remote.C [Remote Configuration]	6	0~16	
	弹簧未储能配置 Disch.C [Discharge Configuration]	7	0~16	
	手动分闸配置 ManualTr.C [Manual Trip Configuration]	8	0~16	
	手动合闸配置 ManualCl.C [Manual Close Configuration]	9	0~16	
	闭锁重合闸配置 Bl.Re.C [Block Auto-Reclose Configuration]	10	0~16	
	非电量 1 配置	11	0~16	

	Non-el1.C [Non-electrc1 Configuration]			
	非电量 2 配置 Non-el2.C [Non-electrc2 Configuration]	12	0~16	
	检修状态配置 Ma.C [Overhaul Configuration]	13	0~16	
	备用 1 配置 Spare1.C [Spare1 Configuration]	14	0~16	
	备用 2 配置 Spare2.C [Spare2 Configuration]	15	0~16	
	信号复归配置 ResetSig.C [Reset Signal Configuration]	16	0~16	
	跳闸展宽 Tripping pulse	300ms	0~1000	

AM5-T 定 值 表 AM5-T Settings				
保护名称 Protection function	定 值 名 称 Value Name	默认值 Default	范 围 Range	备 注 Notice
	CT 变比 CT	10	0.1~9999	
	PT 变比 PT	100	0.1~9999	
	一次电压显示 U Unit [Primary voltage display]	0	0~1	KV;V

	电压接线方式 PT Mode [Voltage measurement mode]	0	0~1	3PT; 2PT
	电流接线方式 CT Mode [Current measurement mode]	0	0~1	3CT; 2CT
	低压阈值 U.Less [Under voltage threshold]	15V	0~200	
	低电压定值 U.Under [Under voltage value]	70V	0~200	
	复合电压负序定值 U2 [Negative sequence voltage]	35V	1~200	
过流一段 3I>>> [50] Instantaneous Over current	过流一段投退 E.3I>>> [Enable.3I>>>]	0	0~1	退出; 投入 OFF; ON
	一段经复压 E.3I>>>.U2 [Enable.3I>>> .Composite Voltage]	0	0~1	退出; 投入 OFF; ON [If enable 3I>>>.U2, composite voltage conditions should be considered for over current protection. When the smallest of the three line voltages is less than U.Under and greater than U.Less or the negative voltage greater than U2 the overcurrent protection DO is prepare work.]

	过流一段定值 3I>>> [3I>>> value]	10A	0.04~100	
	过流一段延时 3I>>>.T [3I>>> delay]	0s	0~60	
过流二段 3I>> [51] Time limited overcurrent	过流二段投退 E.3I>> [Enable.3I>>.]	0	0~1	退出；投入 OFF； ON
	二段经复压 E.3I>>.U2 [Enable.3I>> . Composite Voltage]	0	0~1	退出；投入 OFF； ON [If enable 3I>>.U2, composite voltage conditions should be considered for overcurrent protection. When the smallest of the three line voltages is less than U.Under and greater than U.Less or the negative voltage greater than U2 the overcurrent protection DO is prepare work.]
	过流二段定值 3I>> [3I>> value]	7.5A	0.04~100	
	过流二段延时 3I>>.T [3I>> delay]	0.2s	0~60	
	过流三段投退 E.3I> [Enable.3I>]	0	0~1	退出；投入 OFF； ON
过流三段 [51] 3I> Definite time overcurrent	过流三段方式 E.3I>.M [Enable.3I> .Mode]	0	0~1	告警；跳闸 Alarm； Trip

	三段经复压 E.3I>.U2 [Enable.3I>> . Composite Voltage]	0	0~1	退出；投入 OFF； ON [If enable 3I>.U2, composite voltage conditions should be considered for overcurrent protection. When the smallest of the three line voltages is less than U.Under and greater than U.Less or the negative voltage greater than U2 the overcurrent protection DO is prepare work.]
	过流三段定值 3I> [3I> value]	7A	0.04~100	
	过流三段延时 3I>.T [3I> delay]	0.5s	0~60	
反时限过流 I>Inv [51] Inverse Time Overcurrent (IDMT)	反时限过流投退 E.I>.Inv [Enable I> Inverse]	0	0~1	退出；投入 OFF； ON
	反时限经复压 E.I>.Inv U2 [Enable I>Inverse Composite Voltage]	0	0~1	退出；投入 OFF； ON [If enable Inv U2, composite voltage conditions should be considered for overcurrent protection. When the smallest of the three line voltages is less than U.Under and greater than U.Less or the negative voltage greater than U2 the

				overcurrent protection DO is prepare work.]
	反时限启动电流 I>.Inv [Inverse current]	5A	0.04~100	
	反时限时间系数 I>.Inv.K [Inverse time coefficient]	0.5s	0~100	
	反时限曲线类型 I>.Inv.X [Inverse curve]	0	0~2	一般；非常；极端 S1； S2； S3 NI； VI； EI
过负荷告警 I>Lo.A [49F] Overload Alarm	过负荷告警投退 E.I>Lo.A [Enable Overload Alarm]	0	0~1	退出；投入 OFF； ON
	过负荷告警定值 I>Lo.A [Overload Alarm value]	6.5A	0.04~100	
	过负荷告警延时 I>Lo.A.T [Overload Alarm delay]	5s	0~999	
过负荷跳闸 I>Lo.T [49F] Overload Trip	过负荷跳闸投退 E.I>Lo.T [Enable Overload Trip]	0	0~1	退出；投入 OFF； ON
	过负荷跳闸定值 I>Lo.T [Overload Trip value]	6A	0.04~100	
	过负荷跳闸延时 I>Lo.T.T [Overload Trip delay]	10s	0~60	
I01 过流一段 I01>>>> [50N] Instantaneous ground fault overcurrent	I01 一段投退 E.I01>>>> [Enable I01>>>>]	0	0~1	退出；投入 OFF； ON
	I01 一段定值 I01>>>> [I01>>>> value]	10A	0.04~100	

	I01 一段延时 I01>>>.T [I01>>> delay]	5s	0~60	
I01 过流二段 I01>> [51N] Time limited ground fault overcurrent	I01 二段投退 E.I01>> [Enable I01>>]	0	0~1	退出；投入 OFF；ON
	I01 二段方式 E.I01>>.M [Enable I01>> Mode]	0	0~1	告警；跳闸 Alarm；Trip
	I01 二段定值 I01>> [I01>> value]	9A	0.04~100	
	I01 二段延时 I01>>.T [I01>> delay]	10s	0~60	
I02 过流一段 I02>>> [50N] Instantaneous ground fault overcurrent	I02 一段投退 E.I02>>> [Enable I02>>>]	0	0~1	退出；投入 OFF；ON
	I02 一段定值 I02>>> [I02>>> value]	10A	0.04~100	
	I02 一段延时 I02>>>.T [I02>>> delay]	5s	0~60	
I02 过流二段 I02>> [50N] Time limited ground fault overcurrent	I02 二段投退 E.I02>> [Enable I02>>]	0	0~1	退出；投入 OFF；ON
	I02 二段方式 E.I02>>.M [Enable I02>> Mode]	0	0~1	告警；跳闸 Alarm；Trip
	I02 二段定值 I02>> [I02>>> value]	9A	0.04~100	
	I02 二段延时 I02>>.T	10s	0~60	

	[I02>>> delay]			
PT 断线告警 PtBr [60] PT supervision alarm	PT 断线告警投退 E.PtBr.A [Enable PT Break alarm]	0	0~1	退出；投入 OFF；ON
	PT 断线告警延时 PtBr.T [PT Break delay]	10s	0~999	
	无压定值 U.None [No-voltage]	15V	0~200	[Less than U.None means that there is no voltage]
	无流定值 I.None [No-current]	0.2A	0.04~100	[Less than I.None means that there is no current]
	PT 断线负序电压 U2.Pt [Negative sequence voltage]	35V	0~200	
控故障告警 Trip and Close Circuit Supervision Alarm	控故障告警投退 E.CB.A [Enable Trip and close circuit supervision alarm]	0	0~1	退出；投入 OFF；ON
	控故障告警延时 CB.A.T [Trip and close circuit supervision alarm delay]	10s	0~999	
FC 配合的过流 闭锁功能 FC Block	FC 闭锁投退 E.FCBlock [Enable FC Block]	0	0~1	退出；投入 OFF；ON
	FC 闭锁电流定值 FCB.I [FC Block current value]	10A	0.04~100	
	FC 闭锁延时 FCB.T [FC Block delay]	5s	0~60	
零序 I01 反时限	I01 反时限投退	0	0~1	退出；投入

过流 I01.Inv [51N] Inverse time ground fault	E.I01.Inv [Enable I01.Inverse]			OFF; ON
	I01 反时限启动值 I01.Inv [I01.Inverse value]	5A	0.04~100	
	I01 反时限系数 I01.Inv.K [I01.Inverse time coefficient]	0.5s	0~100	
	I01 反时限曲线 I01.Inv.X [I01.Inverse curves type]	0	0~2	一般; 非常; 极端 S1; S2; S3 NI; VI; EI
零序 I02 反时限 过流 I02.Inv [51N] Inverse time ground fault	I02 反时限投退 E.I02.Inv [Enable I02.Inverse]	0	0~1	退出; 投入 OFF; ON
	I02 反时限启动值 I02.Inv [I02.Inverse value]	5A	0.04~100	
	I02 反时限系数 I02.Inv.K [I02.Inverse time coefficient]	0.5s	0~100	
	I02 反时限曲线 I02.Inv.X [I02.Inverse curves type]	0	0~2	一般; 非常; 极端 S1; S2; S3 NI; VI; EI
轻瓦斯告警 LGas. Light gas Alarm	轻瓦斯告警投退 E.LGas.A [Enable Light Gas.Alarm]	0	0~1	退出; 投入 OFF; ON
	轻瓦斯告警延时 LGas.T [Light Gas Alarm delay]	5s	0~999	
重瓦斯跳闸 SGas. Severe Gas Trip	重瓦斯跳闸投退 E.SGas.T [Enable Severe Gas Trip]	0	0~1	退出; 投入 OFF; ON
	重瓦斯跳闸延时	5s	0~60	

	SGas.T [Severe Gas Trip. delay]			
压力释放保护 Pre.Re. Pressure Release	压力释放投退 E.Pre.Re [Enable Pressure Release]	0	0~1	退出；投入 OFF；ON
	压力释放方式 E.Pre.Re.M [Enable Pressure Release Mode]	0	0~1	告警；跳闸 Alarm；Trip
	压力释放延时 Pre.Re.T [Pressure Release delay]	5s	0~60	
高温告警 OTem. Over Temperature Alarm	高温告警投退 E.OTem.A [Enable Over Temperature Alarm]	0	0~1	退出；投入 OFF；ON
	高温告警延时 OTem.T [Over Temperature Alarm delay]	5s	0~999	
超温跳闸 High Temperature Trip	超温跳闸投退 E.HTem.T [Enable High Temperature Trip]	0	0~1	退出；投入 OFF；ON
	超温跳闸延时 HTem.T [Enable High Temperature Trip]	5s	0~60	
变压器门开保护 DoOp. Transformer Door Opening Protection	门开投退 E.DoOp. [Enable Transformer Door Opening]	0	0~1	退出；投入 OFF；ON
	门开方式 E.DoOp.M [Enable Transformer Door	0	0~1	告警；跳闸 Alarm；Trip

	Opening Mode]			
	门开延时 DoOp.T [Transformer Door Opening delay]	5s	0~60	
温控器故障保护 Th.Fa. Thermostat Failure Protection	温控器故障投退 E.Th.Fa. [Enable Thermostat Failure]	0	0~1	退出；投入 OFF；ON
	温控器故障方式 E.Th.Fa.M [Enable Thermostat Failure Mode]	0	0~1	告警；跳闸 Alarm；Trip
	温控器故障延时 Th.Fa.T [Thermostat Failure delay]	5s	0~60	
非电量 1 Non-Electric1 Protection	非电量 1 投退 E.Non-el1 [Enable Non-Electricity1]	0	0~1	退出；投入 OFF；ON
	非电量 1 方式 E.Non-el1.M [Enable Non-Electricity1 Mode]	0	0~1	告警；跳闸 Alarm；Trip
	非电量 1 延时 Non-el1.T [Non-Electricity1 delay]	1s	0~999	
非电量 2 Non-Electric2 Protection	非电量 2 投退 E.Non-el2 [Enable Non-Electricity2]	0	0~1	退出；投入 OFF；ON
	非电量 2 方式 E.Non-el2.M [Enable Non-Electricity2 Mode]	0	0~1	告警；跳闸 Alarm；Trip
	非电量 2 延时 Non-el2.T	1s	0~999	

	[Non-Electricity2 delay]			
	跳闸内部时间 Default.T [Default delay]	0s	0~999	
	断路器位置采集 CB Po.Ac [Circuit Breaker position Collection]	1	0~1	辅助触点；分合位监视 Auxiliary.C;CB M. [Auxiliary contact;Circuit Breaker Monitor]
	断路器动作时间 Cir.Br.T [Circuit breaker trip and close time]	0.3s	0~999	
	弹簧未储能延时 Sp.En.D. [Discharge delay]	0s	0~999	
	过量返回系数 Excess R.C [Excess Return Coefficient]	0.95	0.001~1	
	欠量返回系数 Under R.C [Under Return Coefficient]	1.05	1.000~2	
检修状态闭锁 Overhaul lockout	检修闭锁通讯投退 E.M.BC [Enable Overhaul-lockout communication]	0	0~1	退出；投入 OFF； ON
	检修闭锁出口投退 E.M.BE [Enable Overhaul-lockout DO]	0	0~1	退出；投入 OFF； ON
	零序电压来源 U0 Source	0	0~1	外接；自产 U0 U0； 3U0 [From Residual overvoltage transformer;

				Three-phase voltage synthesis]
间歇接地保护 Intermittent ground fault protection	间歇接地投退 E.Inter.G [Enable Intermittent ground fault protection]	0	0~1	退出；投入 OFF；ON
	间歇接地方式 Inter.G.M [Intermittent ground fault Mode]	1	0~1	告警；跳闸 Alarm；Trip
	间歇接地定值 Inter.G [Intermittent ground fault value]	3A	0.04~75	
	间歇接地判 3U0 E.InG.3U0 [Enable Intermittent ground fault judgment 3U0]	0	0~1	退出；投入 OFF；ON
	间歇接地 3U0 值 InG.3U0 [Intermittent ground fault 3U0 value]	10V	0~200	
	间歇接地延时 Inter.G.T [Intermittent ground fault delay]	5s	0~999	
	间歇接地持续 T In.G.C.T [Intermittent ground fault duration]	0.02s	0~999	
	间歇接地展宽 In.G.Pulse [Intermittent ground fault Pulse]	1s	0~999	
	I0 参与 2CT 计算	0	0~1	保护 CT 不同变比；保护

	I0 P 2CT [I0 participate in 2CT calculation]			CT 同变比 CT D.R; CT S.R [protective CT is different from zero sequence CT] ; [protective CT is same as zero sequence CT] [When there are 2CT, whether zero sequence current is involved in the calculation of Ib.]
遥信名字配置 Remote name configuration	实遥信 01 名配置 Name01.C [Name01.Configuration]	0	0~9999	
	实遥信 02 名配置 Name02.C [Name02.Configuration]	0	0~9999	
	实遥信 03 名配置 Name03.C [Name03.Configuration]	0	0~9999	
	实遥信 04 名配置 Name04.C [Name04.Configuration]	0	0~9999	
	实遥信 05 名配置 Name05.C [Name05.Configuration]	0	0~9999	
	实遥信 06 名配置 Name06.C [Name06.Configuration]	0	0~9999	
	实遥信 07 名配置 Name07.C [Name07.Configuration]	0	0~9999	
	实遥信 08 名配置 Name08.C [Name08.Configuration]	0	0~9999	
	实遥信 09 名配置	0	0~9999	

	Name09.C [Name09.Configuration]			
	实遥信 10 名配置 Name10.C [Name10.Configuration]	0	0~9999	
	实遥信 11 名配置 Name11.C [Name11.Configuration]	0	0~9999	
	实遥信 12 名配置 Name12.C [Name12.Configuration]	0	0~9999	
	实遥信 13 名配置 Name13.C [Name13.Configuration]	0	0~9999	
	实遥信 14 名配置 Name14.C [Name14.Configuration]	0	0~9999	
	实遥信 15 名配置 Name15.C [Name15.Configuration]	0	0~9999	
	实遥信 16 名配置 Name16.C [Name16.Configuration]	0	0~9999	
遥信位置配置 Remote position configuration	合位配置 CB On.C [Circuit Breaker On Configuration]	1	0~18	
	分位配置 CB Off.C [Circuit Breaker Off Configuration]	2	0~18	
	运行位置配置 W.P.C [Circuit Breaker handcart work position	3	0~16	

	Configuration]			
	试验位置配置 T.P.C [Circuit Breaker handcart test position Configuration]	4	0~16	
	接地刀位置配置 Gro.S.C [Ground switch Configuration]	5	0~16	
	远方配置 Remote.C [Remote Configuration]	6	0~16	
	弹簧未储能配置 Dish.C [Discharge Configuration]	7	0~16	
	轻瓦斯配置 LGas.C [Light Gas Configuration]	8	0~16	
	重瓦斯配置 SGas.C [Severe Gas Configuration]	9	0~16	
	压力释放配置 Pre.Re.C [Pressure Release Configuration]	10	0~16	
	高温配置 OTem.C [Over Temperature Configuration]	11	0~16	
	超温配置 HTem.C [High Temperature Configuration]	12	0~16	
	变压器门开配置 DoOp.C	13	0~16	

	[Transformer Door Open Configuration]			
	温控器故障配置 Th.F.C [Thermostat Failure Configuration]	14	0~16	
	检修状态配置 Ma.C [Over Haul-lockout Configuration]	15	0~16	
	信号复归配置 ResetSig.C [Reset Signal Configuration]	16	0~16	
	非电量 1 配置 Non-el1.C [Non-electrc1 Configuration]	0	0~16	
	非电量 2 配置 Non-el2.C [Non-electrc2 Configuration]	0	0~16	
	跳闸展宽 Tripping pulse	300ms	0~1000	

AM5-M 定 值 表 AM5-M Settings				
保护名称 Protection function	定 值 名 称 Value Name	默认值 Default	范 围 Range	备 注 Notice
	CT 变比 CT	10	0.1~9999	
	PT 变比 PT	100	0.1~9999	
	一次电压显示	0	0~1	KV;V

	U Unit [Primary voltage display]			
	电压接线方式 PT Mode [Voltage measurement mode]	0	0~1	3PT; 2PT
	电流接线方式 CT Mode [Current measurement mode]	0	0~1	3CT; 2CT
	额定电流一次值 Ie1 [Rated primary current]	300A	0.04~9999	
	电动机额定启动时间 Te [Rated start time of motor]	5s	0~9999	电动机状态识别 Motor state recognition
	启动延时 Start delay	0.1s	0~1	
过流一段 3I>>> [50] Instantaneous Overcurrent	过流一段投退 E.3I>>> [Enable.3I>>>]	0	0~1	退出; 投入 OFF; ON
	启动一段定值 3I>>>.S [3I>>> Start value]	30A	0.04~100	
	启动一段延时 3I>>>.Ts [3I>>> Start delay]	0s	0~60	
	运行一段定值 3I>>>.R [3I>>> Running value]	15A	0.04~100	
	运行一段延时 3I>>>.Tr [3I>>> Running delay]	0s	0~60	
过流二段 3I>>	过流二段投退 E.3I>>	0	0~1	退出; 投入 OFF; ON

[51] Time limited overcurrent	[Enable.3I>>]			
	过流二段定值 3I>> [3I>> value]	7.5A	0.04~100	
	过流二段延时 3I>>.T [3I>> delay]	0.2s	0~60	
反时限过流 I>Inv [51] Inverse Time Overcurrent (IDMT)	反时限过流投退 E.I>.Inv [Enable I> Inverse]	0	0~1	退出；投入 OFF；ON
	反时限启动电流 I>.Inv [Inverse current]	5A	0.04~100	
	反时限时间系数 I>.Inv.K [Inverse time coefficient]	0.5s	0.1~100	
	反时限曲线类型 I>.Inv.X [Inverse curve]	0	0~2	一般；非常；极端 S1； S2； S3
过负荷告警 I>Lo.A [49F] Overload Alarm	过负荷告警投退 E.I>Lo.A [Enable Overload Alarm]	0	0~1	退出；投入 OFF；ON
	过负荷告警定值 I>Lo.A [Overload Alarm value]	6.5A	0.04~100	
	过负荷告警延时 I>Lo.A.T [Overload Alarm delay]	5s	0~999	
过负荷跳闸 I>Lo.T [49F] Overload Trip	过负荷跳闸投退 E.I>Lo.T [Enable Overload Trip]	0	0~1	退出；投入 OFF；ON
	过负荷跳闸定值 I>Lo.T [Overload Trip value]	6A	0.04~100	
	过负荷跳闸延时	10s	0~60	

	I>Lo.T.T [Overload Trip delay]			
零序 I01 过流一段 I01>>> [50N] Instantaneous ground fault overcurrent	I01 一段投退 E.I01>>> [Enable I01>>>]	0	0~1	退出；投入 OFF； ON
	I01 一段定值 I01>>> [I01>>> value]	10A	0.04~100	
	I01 一段延时 I01>>>.T [I01>>> delay]	5s	0~60	
零序 I01 过流二段 I01>> [51N] Time limited ground fault overcurrent	I01 二段投退 E.I01>> [Enable I01>>]	0	0~1	退出；投入 OFF； ON
	I01 二段方式 E.I01>>.M [Enable I01>> Mode]	0	0~1	告警；跳闸 Alarm； Trip
	I01 二段定值 I01>> [I01>> value]	9A	0.04~100	
	I01 二段延时 I01>>.T [I01>> delay]	10s	0~60	
零序 I01 反时限 过流 I01.Inv [51N] Inverse time ground fault	I01 反时限投退 E.I01.Inv [Enable I01.Inverse]	0	0~1	退出；投入 OFF； ON
	I01 反时限启动值 I01.Inv [I01.Inverse value]	5A	0.04~100	
	I01 反时限系数 I01.Inv.K [I01.Inverse time coefficient]	0.5s	0~100	
	I01 反时限曲线 I01.Inv.X	0	0~2	一般；非常；极端 S1； S2； S3

	[I01.Inverse curves type]			NI; VI; EI
零序 I02 过流一段 I02>>> [50N] Instantaneous ground fault overcurrent	I02 一段投退 E.I02>>> [Enable I02>>>]	0	0~1	退出; 投入 OFF; ON
	I02 一段定值 I02>>> [I02>>> value]	10A	0.04~100	
	I02 一段延时 I02>>>.T [I02>>> delay]	5s	0~60	
零序 I02 过流二段 I02>> [51N] Time limited ground fault overcurrent	I02 二段投退 E.I02>> [Enable I02>>]	0	0~1	退出; 投入 OFF; ON
	I02 二段方式 E.I02>>.M [Enable I02>> Mode]	0	0~1	告警; 跳闸 Alarm; Trip
	I02 二段定值 I02>> [I02>> value]	9A	0.04~100	
	I02 二段延时 I02>>.T [I02>> delay]	10s	0~60	
零序 I02 反时限 过流 I02.Inv [51N] Inverse time ground fault	I02 反时限投退 E.I02.Inv [Enable I02.Inverse]	0	0~1	退出; 投入 OFF; ON
	I02 反时限启动值 I02.Inv [I02.Inverse value]	5A	0.04~100	
	I02 反时限系数 I02.Inv.K [I02.Inverse time coefficient]	0.5s	0~100	
	I02 反时限曲线 I02.Inv.X [I02.Inverse curves type]	0	0~2	一般; 非常; 极端 S1; S2; S3 NI; VI; EI

负序一段过流 I2>>> [46] [Negative sequence instantaneous overcurrent]	负序一段投退 E.I2>>> [Enable I2>>>]	0	0~1	退出；投入 OFF；ON
	负序一段定值 I2>>> [I2>>> value]	10A	0.04~100	
	负序一段延时 I2>>>.T [I2>>> delay]	5s	0~60	
负序二段过流 I2>> [46] [Negative sequence time-limited overcurrent]	负序二段投退 E.I2>> [Enable I2>>]	0	0~1	退出；投入 OFF；ON
	负序二段方式 E.I2>>.M [Enable I2>> Mode]	0	0~1	告警；跳闸 Alarm；Trip
	负序二段定值 I2>> [I2>> value]	9A	0.04~100	
	负序二段延时 I2>>.T [I2>> delay]	10s	0~999	
负序反时限过流 I2>Inv [46] [Negative sequence inverse overcurrent (IDMT)]	负序反时限投退 E.I2>Inv [Enable I2>Inverse]	0	0~1	退出；投入 OFF；ON
	负序反时限电流 I2>Inv [I2>Inverse value]	6A	0.04~100	
	负序反时限系数 I2>Inv.K [I2>Inverse. time coefficient]	0.1s	0~100	
	负序反时限曲线 I2>Inv.X [I2>Inverse curves]	0	0~2	一般；非常；极端 S1； S2； S3 NI； VI； EI
启动时间过长	启动超时投退	0	0~1	退出；投入

SoutT [48] [Motor Start time supervision]	E.SoutT [Enable Start out time]			OFF; ON
	启动超时定值 SoutT.I [Start out time delay]	1.125	0.04~100	
堵转保护 [51LR] Locked rotor	堵转保护投退 E.Stall [Enable locked rotor]	0	0~1	退出; 投入 OFF; ON
	堵转电流定值 Stall.I [Locked rotor Current value]	6.5A	0.04~75	
	堵转保护延时 Stall.T [Locked rotor delay]	5s	0~60	
热过载保护 [49M] Thermal overload	热过载投退 E.OverHeat [Enable thermal overload]	0	0~1	退出; 投入 OFF; ON
	告警百分比 Heat.Al.P [Thermal overload Alarm percentage]	70%	0~100	
	跳闸百分比 Heat.Tr.P [Thermal overload Trip percentage]	100%	0~200	
	发热时间常数 HeatPro.K [Thermal overload coefficient]	15min	0~100	
	散热时间常数 HeatEmi.K [Thermal overload emission coefficient]	30min	0~300	
	重启动过热闭锁值	50%	0~100	

	HeatRe [Thermal overload Restart block]			
相序保护 [47] Incorrect Phase Sequence Protection	相序保护投退 E.Ph.Se. [Enable Staggered Phase]	0	0~1	退出；投入 OFF； ON
	线电压高定值 LiV.HSet. [Line voltage high setting]	120V	0~200	
	线电压低定值 LiV.LSet. [Line voltage low setting]	70V	0~200	
	正序电压比例 U1 Ratio [Positive voltage Ratio]	30%	0~100	
	负序电压比例 U2 Ratio [Negative voltage Ratio]	50%	0~100	
	相序保护延时 Ph.Se.T [Staggered Phase delay]	0s	0~100	
	相序信号返回 T Ph.Se.SRT [Staggered Phase signal reset]	2s	0~60	
电压不平衡保护 [60] Unbalance Voltage Protection	电压不平衡投退 E.Unb.V [Enable Unbalance Voltage]	0	0~1	退出；投入 OFF； ON
	电压不平衡度 Unb.V.R. [Unbalance Voltage factor]	20%	0~100	
	电压不平衡值 Unb.V [Unbalance Voltage value]	30V	0~200	

	电压不平衡延时 Unb.V.T [Unbalance Voltage delay]	0.03s	0~100	
电流不平衡保护 Unb.I [60] Unbalance Current Protection	电流不平衡投退 E.Unb.I [Enable Unbalance Current]	0	0~1	退出；投入 OFF； ON
	电流不平衡定值 Unb.I [Unbalance Current value]	15%	0~200	
	电流不平衡延时 Unb.I.T [Unbalance Current delay]	5s	0~999	
低电压保护 [27] Under voltage Protection	低电压保护投退 E.LVP [Enable Undervoltage]	0	0~1	退出；投入 OFF； ON
	低电压方式 E.LVP.M [Enable Undervoltage Mode]	0	0~1	告警；跳闸 Alarm； Trip
	无流闭锁投退 E.LVP.I.B [Enable Undervoltage Trip current block]	0	0~1	退出；投入 OFF； ON
	低电压保护定值 U.LVP [Undervoltage value]	70V	0~200	
	低电压保护延时 LVP.T [Undervoltage delay]	5s	0~60	
	PT 断线闭锁投退 E.PT.B [Enable PT break block]	1	0~1	退出；投入 OFF； ON
	合位允许投退 E.CCB On.B	0	0~1	退出；投入 OFF； ON

	[Enable circuit breaker on block]			
	低电压阈值投退 E.LVThr. [Enable Undervoltage threshold]	0	0~1	退出；投入 OFF；ON
零序过压保护 U0.OVP [59N] Residual Overvoltage Protection	零序电压来源 U0 Source	0	0~1	外接；自产 U0 U0；3U0
	零序过压投退 E.U0.OVP [Enable Residual over voltage]	0	0~1	退出；投入 OFF；ON
	零序过压方式 E.U0.OVP.M [Enable Residual over voltage Mode]	0	0~1	告警；跳闸 Alarm；Trip
	零序过压定值 U0.OVP [Residual over voltage value]	20V	0~200	
	零序过压延时 U0.OVP.T [Residual over voltage value delay]	5s	0~60	
过电压保护 OVP [59] Overvoltage Protection	过电压保护投退 E.OVP [Enable Over voltage]	0	0~1	退出；投入 OFF；ON
	过电压方式 E.OVP.M [Enable Over voltage Mode]	0	0~1	告警；跳闸 Alarm；Trip
	过电压保护定值 U.OVP [Over voltage value]	120V	0~200	
	过电压保护延时	5s	0~999	

	OVP.T [Over voltage delay]			
PT 断线告警 [60] PT supervision alarm	PT 断线告警投退 E.PtBr.A [Enable PT Break alarm]	0	0~1	退出；投入 OFF； ON
	PT 断线告警延时 PtBr.T [PT Break delay]	10s	0~999	
	无压定值 U.None [No-voltage]	15V	0~200	
	无流定值 I.None [No-current]	0.2A	0.04~100	
	PT 断线负序电压 U2.Pt [Negative sequence voltage]	35V	0~200	
控故障告警 Trip and close circuit supervision	控故障告警投退 E.CB.A [Enable Trip and close circuit supervision alarm]	0	0~1	退出；投入 OFF； ON
	控故障告警延时 CB.A.T [Trip and close circuit supervision alarm delay]	10s	0~999	
FC 配合的过流闭 锁功能 FC Block	FC 闭锁投退 E.FCBlock [Enable FC Block]	0	0~1	退出；投入 OFF； ON
	FC 闭锁电流定值 FCB.I [FC Block current value]	10A	0.04~100	
	FC 闭锁延时 FCB.T [FC Block delay]	5s	0~60	

非电量 1 Non-Electric1 Protection	非电量 1 投退 E.Non-el1 [Enable Non-Electricity1]	0	0~1	退出；投入 OFF； ON
	非电量 1 方式 E.Non-el1.M [Enable Non-Electricity1 Mode]	0	0~1	告警；跳闸 Alarm； Trip
	非电量 1 延时 Non-el1.T [Non-Electricity1. delay]	1s	0~999	
非电量 2 Non-Electric2 Protection	非电量 2 投退 E.Non-el2 [Enable Non-Electricity2]	0	0~1	退出；投入 OFF； ON
	非电量 2 方式 E.Non-el2.M [Enable Non-Electricity2 Mode]	0	0~1	告警；跳闸 Alarm； Trip
	非电量 2 延时 Non-el2.T [Non-Electricity2. delay]	1s	0~999	
	跳闸内部时间 Default.T [Trip Default Time]	0s	0~999	
	断路器位置采集 CB Po.Ac [Circuit Breaker position Collection]	1	0~1	辅助触点；分合位监视 Auxiliary.C;CB M. [Auxiliary contact;Circuit Breaker Monitor]
	断路器动作时间 Cir.Br.T [Circuit Breaker trip and close time]	0.3s	0~999	
	弹簧未储能延时 Sp.En.D. [Discharge delay]	0s	0~999	

	过量返回系数 Excess R.C [Excess Return Coefficient]	0.95	0.001~1	
	欠量返回系数 Under R.C [Under Return Coefficient]	1.05	1.000~2	
检修状态闭锁 Overhaul lockout	检修闭锁通讯投退 E.M.BC [Enable Overhaul-lockout communication]	0	0~1	退出；投入 OFF； ON
	检修闭锁出口投退 E.M.BE [Enable Overhaul-lockout DO]	0	0~1	退出；投入 OFF； ON
	I0 参与 2CT 计算 I0 P 2CT [I0 participate in 2CT calculation]	0	0~1	保护 CT 不同变比；保护 CT 同变比 CT D.R； CT S.R [protective CT is different from zero sequence CT] ； [protective CT is same as zero sequence CT] [When there are 2CT, whether zero sequence current is involved in the calculation of Ib.]
遥信名字配置 Remote name configuration	实遥信 01 名配置 Name01.C [Name01.Configuration]	0	0~9999	
	实遥信 02 名配置 Name02.C [Name02.Configuration]	0	0~9999	
	实遥信 03 名配置	0	0~9999	

	Name03.C [Name03.Configuration]			
	实遥信 04 名配置 Name04.C [Name04.Configuration]	0	0~9999	
	实遥信 05 名配置 Name05.C [Name05.Configuration]	0	0~9999	
	实遥信 06 名配置 Name06.C [Name06.Configuration]	0	0~9999	
	实遥信 07 名配置 Name07.C [Name07.Configuration]	0	0~9999	
	实遥信 08 名配置 Name08.C [Name08.Configuration]	0	0~9999	
	实遥信 09 名配置 Name09.C [Name09.Configuration]	0	0~9999	
	实遥信 10 名配置 Name10.C [Name10.Configuration]	0	0~9999	
	实遥信 11 名配置 Name11.C [Name11.Configuration]	0	0~9999	
	实遥信 12 名配置 Name12.C [Name12.Configuration]	0	0~9999	
	实遥信 13 名配置 Name13.C [Name13.Configuration]	0	0~9999	
	实遥信 14 名配置 Name14.C [Name14.Configuration]	0	0~9999	

	实遥信 15 名配置 Name15.C [Name15.Configuration]	0	0~9999	
	实遥信 16 名配置 Name16.C [Name16.Configuration]	0	0~9999	
遥信位置配置 Remote position configuration	合位配置 CB On.C [Circuit Breaker On Configuration]	1	0~18	
	分位配置 CB Off.C [Circuit Breaker Off Configuration]	2	0~18	
	运行位置配置 W.P.C [Circuit Breaker handcart work position Configuration]	3	0~16	
	试验位置配置 T.P.C [Circuit Breaker handcart test position Configuration]	4	0~16	
	接地刀位置配置 Gro.S.C [Ground switch Configuration]	5	0~16	
	远方配置 Remote.C [Remote Configuration]	6	0~16	
	弹簧未储能配置 Dish.C [Discharge Configuration]	7	0~16	
	手动分闸配置	8	0~16	

	ManualTr.C [Manual Trip Configuration]			
	非电量 1 配置 Non-el1.C [Non-electrc1 Configuration]	9	0~16	
	非电量 2 配置 Non-el2.C [Non-electrc2 Configuration]	10	0~16	
	热复归配置 He.Re.C [Heat Reset Configuration]	11	0~16	
	转速低配置 LSpeed.C [Low Speed Configuration]	12	0~16	
	检修状态配置 Ma.C [Overhaul Configuration]	13	0~16	
	备用 1 配置 Spare1.C [Spare1 Configuration]	14	0~16	
	备用 2 配置 Spare2.C [Spare2 Configuration]	15	0~16	
	信号复归配置 ResetSig.C [Reset Signal Configuration]	16	0~16	
	跳闸展宽 Tripping pulse	300ms	0~1000	

AM5-C 定 值 表 AM5-C Settings				
保护名称 Protection function	定 值 名 称 Value Name	默认值 Default	范 围 Range	备 注 Notice
	CT 变比 CT	10	0.1~9999	
	PT 变比 PT	100	0.1~9999	
	一次电压显示 U Unit [Primary voltage display]	0	0~1	KV;V
	电压接线方式 PT Mode [Voltage measurement mode]	0	0~1	3PT; 2PT
	电流接线方式 CT Mode [Current measurement mode]	0	0~1	3CT; 2CT
过流一段 3I>>> [50] Instantaneous Overcurrent	过流一段投退 E.3I>>> [Enable.3I>>>]	0	0~1	退出; 投入 OFF; ON
	过流一段定值 3I>>> [3I>>> value]	10A	0.04~100	
	过流一段延时 3I>>>.T [3I>>> delay]	0s	0~60	
过流二段 3I>> [51] Time limited Overcurrent	过流二段投退 E.3I>> [Enable.3I>>]	0	0~1	退出; 投入 OFF; ON
	过流二段定值 3I>> [3I>> value]	7.5A	0.04~100	

	过流二段延时 3I>>.T [3I>> delay]	0.2s	0~60	
过流三段 3I> [51] Definite time Overcurrent	过流三段投退 E.3I> [Enable.3I>]	0	0~1	退出；投入 OFF； ON
	过流三段方式 E.3I>.M [Enable.3I> Mode]	0	0~1	告警；跳闸 Alarm； Trip
	过流三段定值 3I> [3I> value]	7A	0.04~100	
	过流三段延时 3I>.T [3I> delay]	0.5s	0~60	
反时限过流 I>Inv [51] Inverse Time Overcurrent (IDMT)	反时限过流投退 E.I>.Inv [Enable I> Inverse]	0	0~1	退出；投入 OFF； ON
	反时限启动电流 I>.Inv [Inverse current]	5A	0.04~100	
	反时限时间系数 I>.Inv.K [Inverse time coefficient]	0.5s	0.1~100	
	反时限曲线类型 I>.Inv.X [Inverse curve]	0	0~2	一般；非常；极端 S1； S2； S3 NI； VI； EI
过负荷告警 I>Lo.A [49F] Overload Alarm	过负荷告警投退 E.I>Lo.A [Enable Overload Alarm]	0	0~1	退出；投入 OFF； ON
	过负荷告警定值 I>Lo.A [Overload Alarm value]	6.5A	0.04~100	
	过负荷告警延时 I>Lo.A.T	5s	0~999	

	[Overload Alarm delay]			
过负荷跳闸 I>Lo.T [49F] Overload Trip	过负荷跳闸投退 E.I>Lo.T [Enable Overload Trip]	0	0~1	退出；投入 OFF； ON
	过负荷跳闸定值 I>Lo.T [Overload Trip value]	6A	0.04~100	
	过负荷跳闸延时 I>Lo.T.T [Overload Trip delay]	10s	0~60	
不平衡电流保护 Unb.I [60] Unbalance Current Protection	不平衡电流投退 E.Unb.I [Enable Unbalance Current]	0	0~1	退出；投入 OFF； ON
	不平衡电流定值 Unb.I [Unbalance Current value]	5A	0.04~100	
	不平衡电流延时 Unb.I.T [Unbalance Current delay]	5s	0~60	
零序 I0 过流一段 I0>>> [50N] Instantaneous ground fault overcurrent	I0 一段投退 E.I0>>> [Enable I0>>>]	0	0~1	退出；投入 OFF； ON
	I0 一段定值 I0>>> [I0>>> value]	10A	0.04~100	
	I0 一段延时 I0>>>.T [I01>>> delay]	5s	0~60	
零序 I0 过流二段 I0>> [51N] Time limited ground fault overcurrent	I0 二段投退 E.I0>> [Enable I0>>]	0	0~1	退出；投入 OFF； ON
	I0 二段方式 E.I0>>.M [Enable I0>> Mode]	0	0~1	告警；跳闸 Alarm； Trip

	I0 二段定值 I0>> [I01>> value]	9A	0.04~100	
	I0 二段延时 I0>>.T [I0>> delay]	10s	0~60	
零序 I0 反时限过 流 I0.Inv [51N] Inverse time ground fault	I0 反时限投退 E.I0.Inv [Enable I0.Inverse]	0	0~1	退出；投入 OFF；ON
	I0 反时限启动值 I0.Inv [I0.Inverse value]	5A	0.04~100	
	I0 反时限系数 I0.Inv.K [I0.Inverse time coefficient]	0.5s	0~100	
	I0 反时限曲线 I0.Inv.X [I0.Inverse curves type]	0	0~2	一般；非常；极端 S1； S2； S3 NI； VI； EI
低电压保护 LVP [27] Under voltage Protection	低电压保护投退 E.LVP [Enable Undervoltage]	0	0~1	退出；投入 OFF； ON
	低电压方式 E.LVP.M [Enable Undervoltage Mode]	0	0~1	告警；跳闸 Alarm； Trip
	无流闭锁投退 E.LVP.I.B [Enable Undervoltage current block]	0	0~1	退出；投入 OFF； ON
	低电压定值 U.LVP [Undervoltage value]	70V	0~200	
	低电压延时 LVP.T	5s	0~999	

	[Undervoltage delay]			
	PT 断线闭锁投退 E.PT.B [Enable PT break block]	1	0~1	退出；投入 OFF； ON [When PT break occurs, the relay will send an alarm signal and lock out the under voltage protection.]
	合位允许投退 E.CB On.B [Enable circuit breaker on block]	0	0~1	退出；投入 OFF； ON
	低电压阈值投退 E.LVThr. [Enable Undervoltage threshold]	1	0~1	退出；投入 OFF； ON [If enable LVThr. , when the voltage is greater than U.None and less than U.LVP , under voltage protection will act. If exit LVThr. , under voltage protection is Loss voltage protection.]
过电压保 OVP [59] Overvoltage Protection	过电压保护投退 E.OVP [Enable Overvoltage]	0	0~1	退出；投入 OFF； ON
	过电压方式 E.OVP.M [Enable Overvoltage Mode]	0	0~1	告警；跳闸 Alarm； Trip
	过电压保护定值 U.OVP [Overvoltage value]	120V	0~200	
	过电压保护延时 OVP.T	5s	0~999	

	[Overvoltage delay]			
零序过压保护 U0.OVP [59N] Residual Overvoltage Protection	零序电压来源 U0 Source	1	0~1	外接；自产 U0 U0； 3U0
	零序过压投退 E.U0.OVP [Enable Residual Over voltage protection]	0	0~1	退出；投入 OFF； ON
	零序过压方式 E.U0.OVP.M [Enable Residual Over voltage Mode]	0	0~1	告警；跳闸 Alarm； Trip
	零序过压定值 U0.OVP [Residual Over voltage value]	20V	0~200	
	零序过压延时 U0.OVP.T [Residual Over voltage protection delay]	5s	0~60	
不平衡电压保护 Unb.V [60] Unbalance Voltage Protection	不平衡电压投退 E.Unb.V [Enable Unbalance Voltage]	0	0~1	退出；投入 OFF； ON
	不平衡电压定值 Unb.V [Unbalance Voltage value]	5V	0~200	
	不平衡电压延时 Unb.V.T [Unbalance Voltage delay]	0.03s	0~100	
PT 断线告警 [60] PT supervision alarm	PT 断线告警投退 E.PtBr.A [Enable PT Break alarm]	0	0~1	退出；投入 OFF； ON
	PT 断线告警延时 PtBr.T [PT Break delay]	10s	0~999	

	无压定值 U.None [No-voltage]	15V	0~200	
	无流定值 I.None [No-current]	0.2A	0.04~100	
	PT 断线负序电压 U2.Pt [Negative sequence voltage]	35V	0~200	
控故障告警 Trip and Close Circuit Supervision Alarm	控故障告警投退 E.CB.A [Enable Trip and close circuit supervision alarm]	0	0~1	退出；投入 OFF； ON
	控故障告警延时 CB.A.T [Trip and close circuit supervision alarm delay]	10s	0~999	
FC 配合的过流闭 锁功能 FC Block	FC 闭锁投退 E.FCBlock [Enable FC Block]	0	0~1	退出；投入 OFF； ON
	FC 闭锁电流定值 FCB.I [FC Block current value]	10A	0.04~100	
	FC 闭锁延时 FCB.T [FC Block delay]	5s	0~60	
非电量 1 Non-Electric1 Protection	非电量 1 投退 E.Non-el1 [Enable Non-Electricity1]	0	0~1	退出；投入 OFF； ON
	非电量 1 方式 E.Non-el1.M [Enable Non-Electricity1 Mode]	0	0~1	告警；跳闸 Alarm； Trip
	非电量 1 延时	1s	0~999	

	Non-el1.T [Non-Electricity1. delay]			
非电量 2 Non-Electric2 Protection	非电量 2 投退 E.Non-el2 [Enable Non-Electricity2]	0	0~1	退出；投入 OFF； ON
	非电量 2 方式 E.Non-el2.M [Enable Non-Electricity2 Mode]	0	0~1	告警；跳闸 Alarm； Trip
	非电量 2 延时 Non-el2.T [Non-Electricity2 delay]	1s	0~999	
非电量 3 Non-Electric3 Protection	非电量 3 投退 E.Non-el3 [Enable Non-Electricity3]	0	0~1	退出；投入 OFF； ON
	非电量 3 方式 E.Non-el3.M [Enable Non-Electricity3 Mode]	0	0~1	告警；跳闸 Alarm； Trip
	非电量 3 延时 Non-el3.T [Non-Electricity3 delay]	1s	0~999	
	跳闸内部时间 Default.T [Trip Default Time]	0s	0~999	
	断路器位置采集 CB Po.Ac [Circuit Breaker position Collection]	1	0~1	辅助触点；分合位监视 Auxiliary.C； CB M. [Auxiliary contact;Circuit Breaker Monitor]
	断路器动作时间 Cir.Br.T [Circuit Breaker trip and close time]	0.3s	0~999	
	弹簧未储能延时	0s	0~999	

	Sp.En.D. [Discharge delay]			
	过量返回系数 Excess R.C [Excess Return Coefficient]	0.95	0.001~1	
	欠量返回系数 Under R.C [Under Return Coefficient]	1.05	1.000~2	
检修状态闭锁 Overhaul lockout	检修闭锁通讯投退 E.M.BC [Enable Overhaul lockout communication]	0	0~1	退出；投入 OFF； ON
	检修闭锁出口投退 E.M.BE [Enable Overhaul lockout DO]	0	0~1	退出；投入 OFF； ON
	I0 参与 2CT 计算 I0 P 2CT [I0 participate in 2CT calculation]	0	0~1	保护 CT 不同变比；保护 CT 同变比 CT D.R； CT S.R [protective CT is different from zero sequence CT] ； [protective CT is same as zero sequence CT] [When there are 2CT, whether zero sequence current is involved in the calculation of Ib.]
遥信名字配置 Remote name configuration	实遥信 01 名配置 Name01.C [Name01.Configuration]	0	0~9999	
	实遥信 02 名配置 Name02.C	0	0~9999	

	[Name02.Configuration]			
	实遥信 03 名配置 Name03.C [Name03.Configuration]	0	0~9999	
	实遥信 04 名配置 Name04.C [Name04.Configuration]	0	0~9999	
	实遥信 05 名配置 Name05.C [Name05.Configuration]	0	0~9999	
	实遥信 06 名配置 Name06.C [Name06.Configuration]	0	0~9999	
	实遥信 07 名配置 Name07.C [Name07.Configuration]	0	0~9999	
	实遥信 08 名配置 Name08.C [Name08.Configuration]	0	0~9999	
	实遥信 09 名配置 Name09.C [Name09.Configuration]	0	0~9999	
	实遥信 10 名配置 Name10.C [Name10.Configuration]	0	0~9999	
	实遥信 11 名配置 Name11.C [Name11.Configuration]	0	0~9999	
	实遥信 12 名配置 Name12.C [Name12.Configuration]	0	0~9999	
	实遥信 13 名配置 Name13.C [Name13.Configuration]	0	0~9999	
	实遥信 14 名配置	0	0~9999	

	Name14.C [Name14.Configuration]			
	实遥信 15 名配置 Name15.C [Name15.Configuration]	0	0~9999	
	实遥信 16 名配置 Name16.C [Name16.Configuration]	0	0~9999	
遥信位置配置 Remote position configuration	合位配置 CB On.C [Circuit Breaker On Configuration]	1	0~18	
	分位配置 CB Off.C [Circuit Breaker Off Configuration]	2	0~18	
	运行位置配置 W.P.C [Circuit Breaker handcart work position Configuration]	3	0~16	
	试验位置配置 T.P.C [Circuit Breaker handcart test position Configuration]	4	0~16	
	接地刀位置配置 Gro.S.C [Ground switch Configuration]	5	0~16	
	远方配置 Remote.C [Remote Configuration]	6	0~16	
	弹簧未储能配置 Dish.C	7	0~16	

	[Discharge Configuration]			
	手动分闸配置 ManualTr.C [Manual Trip Configuration]	8	0~16	
	手动合闸配置 ManualCl.C [Manual Close Configuration]	9	0~16	
	非电量 1 配置 Non-el1.C [Non-electrc1 Configuration]	10	0~16	
	非电量 2 配置 Non-el2.C [Non-electrc2 Configuration]	11	0~16	
	非电量 3 配置 Non-el3.C [Non-electrc3 Configuration]	12	0~16	
	检修状态配置 Ma.C [Overhaul Configuration]	13	0~16	
	备用 1 配置 Spare1.C [Spare1 Configuration]	14	0~16	
	备用 2 配置 Spare2.C [Spare2 Configuration]	15	0~16	
	信号复归配置 ResetSig.C [Reset Signal Configuration]	16	0~16	
	跳闸展宽	300ms	0~1000	

	Tripping pulse			
--	----------------	--	--	--

AM5-B 定 值 表 AM5-B Settings				
保护名称 Protection function	定 值 名 称 Value Name	默认值 Default	范 围 Range	备 注 Notice
	CT 变比 CT	10	0.1~9999	
	PT 变比 PT	100	0.1~9999	
	一次电压显示 U Unit [Primary voltage display]	0	0~1	KV; V
	一次图显示方式 Pri.Sys. [Primary system display]	2	0~4	方式 0-方式 4 Mode0-Mode4
	电流接线方式 CT Mode [Current measurement Mode]	0	0~1	3CT; 2CT
进线/母联备投 Standby Power Automatic Transfer	备投判进线电压 E.In.V.C [Enable Incoming Voltage Control]	0	0~1	退出; 投入 OFF; ON
	备投方式 Spa.Mode [Spare Mode]	0	0~4	退出; 分段备投; 进线备 投; 自适应备投; 联切备 投 OFF; Bus Standby; Incoming Standby; Self-adapt Standby; Joint Cut Standby
	进线 1 备投 E.1-In.Spa. [Enable 1-Incoming Spare]	0	0~1	退出; 投入 OFF; ON
	进线 2 备投 E.2-In.Spa. [Enable 2-Incoming Spare]	0	0~1	退出; 投入 OFF; ON
	4 路进线电压做备投 4U.S	0	0~1	退出; 投入 OFF; ON

	[Enable 4-channel incoming voltage Spare]			
	分合指示灯关联 On OFF.I [Circuit Breaker On/Off indicator light]	0	0~2	分段柜；进线 1 柜；进线 2 柜 Busbar;1-Incoming;2-Incoming
	进线 1 电流来源 I1 Source [1-Incoming current source]	0	0~2	通道 4；通道 5；通道 1 CH4;CH5;CH1 [channel4;channel5;channel1]
	进线 2 电流来源 I2 Source [2-Incoming current source]	1	0~2	通道 4；通道 5；通道 1 CH4;CH5;CH1 [channel4;channel5;channel1]
	零流来源 I0 Source	0	0~3	自产；外接通道 2； 外接通道 4；外接通道 5 Self-produced; CH2; CH4; CH5
	进线无压定值 In.U.None [Loss Incoming Voltage]	10V	0~200	
	母线无压定值 B.U.None [Loss Bus Voltage]	10V	0~200	
	进线有压定值 In.Vo.St.V [Incoming Voltage Store]	20V	0~200	
	母线有压定值 B.Vo.St.V [Bus Voltage Store]	20V	0~200	
	进线 1 无流定值 I1.None [1-Incoming Current none]	0.1A	0.04~100	
	进线 2 无流定值 I2.None [2-Incoming Current none]	0.1A	0.04~100	
	分段充电延时 B.Cha.D [Bus charge delay]	15s	0~9999.999	
	进线 1 充电延时 1-I.C.D [1-Incoming charge delay]	15s	0~9999.999	
	进线 2 充电延时 2-I.C.D	15s	0~9999.999	

	[2-Incoming charge delay]			
	跳进线 1 延时 1-In.T.D. [1-Incoming Trip delay]	2s	0~9999.999	
	跳进线 2 延时 2-In.T.D. [2-Incoming Trip delay]	2s	0~9999.999	
	跳母联延时 Bus.T.D. [Bus Trip delay]	2s	0~9999.999	
	合进线 1 延时 1-In.C.D. [1-Incoming Close delay]	2s	0~9999.999	
	合进线 2 延时 2-In.C.D. [2-Incoming Close delay]	2s	0~9999.999	
	合母联延时 Bus.C.D. [Bus Close delay]	2s	0~9999.999	
过流一段 3I>>> [50] Instantaneous Overcurrent	过流一段投退 E.3I>>> [Enable.3I>>>]	0	0~1	退出；投入 OFF； ON
	过流一段定值 3I>>> [3I>>> value]	10A	0.04~100	
	过流一段延时 3I>>>.T [3I>>> delay]	0s	0~60	
过流二段 3I>> [51] Time limited Overcurrent	过流二段投退 E.3I>> [Enable.3I>>]	0	0~1	退出；投入 OFF； ON
	过流二段定值 3I>> [3I>> value]	7.5A	0.04~100	
	过流二段延时 3I>>.T [3I>> delay]	0.2s	0~60	
过流三段 3I> [51] Definite Overcurrent	过流三段投退 E.3I> [Enable.3I>]	0	0~1	退出；投入 OFF； ON
	过流三段方式 E.3I>.M [Enable.3I> Mode]	0	0~1	告警；跳闸 Alarm； Trip
	过流三段定值	7A	0.04~100	

	3I> [3I> value]			
	过流三段延时 3I>.T [3I> delay]	0.5s	0~60	
反时限过流 I>.Inv [51] Inverse Time Overcurrent (IDMT)	反时限过流投退 E.I>.Inv [Enable I> Inverse]	0	0~1	退出；投入 OFF； ON
	反时限启动电流 I>.Inv [Inverse current]	5A	0.04~100	
	反时限时间系数 I>.Inv.K [Inverse time coefficient]	0.5s	0.1~100	
	反时限曲线类型 I>.Inv.X [Inverse curves type]	0	0~2	一般；非常；极端 S1； S2； S3 NI； VI； EI
后加速过流 I>P Post-Accelerated Overcurrent	后加速过流投退 E.I>P [Enable post-accelerated overcurrent]	0	0~1	退出；投入 OFF； ON
	后加速过流定值 I>P [Post-accelerated overcurrent value]	6.5A	0.04~100	
	后加速过流延时 I>P.T [Post-accelerated overcurrent delay]	0s	0~60	
母线充电保护 Bus Charge Protection	充电保护投退 E.B.Cha. [Enable Bus Charging Protection]	0	0~1	退出；投入 OFF； ON
	充电保护电流定值 B.Cha. [Bus Charging value]	5A	0~100	
	充电作用时间 Cha.Ac.T [Bus Charging action time]	3s	0~60	

	充电保护延时 B.Cha.T [Bus Charging delay]	5s	0~60	
零序 I0 一段 I0>>> [50N] [Instantaneous ground fault Overcurrent]	I0 一段投退 E.I0>>> [Enable I0>>>]	0	0~1	退出; 投入 OFF; ON
	I0 一段定值 I0>>> [I0>>> value]	10A	0.04~100	
	I0 一段延时 I0>>>T [I0>>> delay]	5s	0~60	
零序 I0 二段 I0>> [51N] [Time limited ground fault Overcurrent]	I0 二段投退 E.I0>> [Enable I0>>]	0	0~1	退出; 投入 OFF; ON
	I0 二段方式 E.I0>>.M [Enable I0>> Mode]	0	0~1	告警; 跳闸
	I0 二段定值 I0>> [I0>> value]	9A	0.04~100	
	I0 二段延时 I0>>.T [I0>> delay]	10s	0~60	
零序 I0 反时限 I0.Inv [51N] Inverse time ground fault	I0 反时限投退 E.I0.Inv [Enable I0.Inverse]	0	0~1	退出; 投入 OFF; ON
	I0 反时限启动值 I0.Inv [I0.Inverse value]	5A	0.04~100	
	I0 反时限系数 I0.Inv.K [I0.Inverse time coefficient]	0.5s	0~100	
	I0 反时限曲线 I0.Inv.X [I0.Inverse curves type]	0	0~2	一般; 非常; 极端 S1; S2; S3 NI; VI; EI
PT 断线告警 [60] PT supervision alarm	PT 断线告警投退 E.PtBr.A [Enable PT Break alarm]	0	0~1	退出; 投入 OFF; ON
	PT 断线告警延时 PtBr.T [PT Break delay]	10s	0~999	

控故障告警 Trip and Close Circuit Supervision Alarm	控故障告警投退 E.CB.A [Enable Trip and close circuit supervision alarm]	0	0~1	退出；投入 OFF； ON
	控故障告警延时 CB.A.T [Trip and close circuit supervision alarm delay]	10s	0~999	
重合闸 [79] Auto-Reclose	重合闸投退 E.Reclos [Enable Auto-Reclose]	0	0~1	退出；投入 OFF； ON
	重合闸延时 Reclose.T [Auto-Reclose delay]	5s	0.1~ 9999.999	
	重合闸方式 Reclose.X [Auto-Reclose Mode]	0	0~1	不检；检无压 Not check； Check
	重合闸充电延时 Rec.C.T [Auto-reclose charge delay]	5s	0.1~ 9999.999	
	重合闸充电返回 T RecC.RT [Auto-Reclose charge return time]	1s	0~9999.999	
	保护重合返回延时 T.R.T [Trip Auto-Reclose return time]	30s	0~9999.999	
	不对应重合投退 E.nonP. [Enable non-position Auto-Reclose]	1	0~1	退出；投入 OFF； ON
	线路无流定值 I.None [No-Current]	0.2A	0.04~100	[Less than I.None means that there is no current]
	线路无压定值 U.None [No-Voltage]	15V	0~200	[Less than U.None means that there is no voltage]
	断路器动作时间 Cir.Br.T [Circuit Breaker trip and close time]	0.3s	0~999	
	弹簧未储能延时 Sp.En.D.	0s	0~999	

	[Discharge delay]			
检修状态闭锁 Overhaul lockout	检修闭锁通讯投退 E.M.BC [Enable Overhaul-lockout communication]	0	0~1	退出；投入 OFF； ON
	检修闭锁出口投退 E.M.BE [Enable Overhaul-lockout DO]	0	0~1	退出；投入 OFF； ON
	过量返回系数 Excess R.C [Excess Return Coefficient]	0.95	0.001~1	
	欠量返回系数 Under R.C [Under Return Coefficient]	1.05	1.000~2	
遥信名字配置 Remote name configuration	实遥信 01 名配置 Name01.C [Name01.Configuration]	0	0~9999	
	实遥信 02 名配置 Name02.C [Name02.Configuration]	0	0~9999	
	实遥信 03 名配置 Name03.C [Name03.Configuration]	0	0~9999	
	实遥信 04 名配置 Name04.C [Name04.Configuration]	0	0~9999	
	实遥信 05 名配置 Name05.C [Name05.Configuration]	0	0~9999	
	实遥信 06 名配置 Name06.C [Name06.Configuration]	0	0~9999	
	实遥信 07 名配置 Name07.C [Name07.Configuration]	0	0~9999	
	实遥信 08 名配置 Name08.C	0	0~9999	

	[Name08.Configuration]			
	实遥信 09 名配置 Name09.C [Name09.Configuration]	0	0~9999	
	实遥信 10 名配置 Name10.C [Name10.Configuration]	0	0~9999	
	实遥信 11 名配置 Name11.C [Name11.Configuration]	0	0~9999	
	实遥信 12 名配置 Name12.C [Name12.Configuration]	0	0~9999	
	实遥信 13 名配置 Name13.C [Name13.Configuration]	0	0~9999	
	实遥信 14 名配置 Name14.C [Name14.Configuration]	0	0~9999	
	实遥信 15 名配置 Name15.C [Name15.Configuration]	0	0~9999	
	实遥信 16 名配置 Name16.C [Name16.Configuration]	0	0~9999	
遥信位置配置 Remote position configuration	合位配置 CB On.C [Circuit Breaker On Configuration]	1	0~18	
	分位配置 CB Off.C [Circuit Breaker Off Configuration]	2	0~18	
	运行位置配置 W.P.C [Circuit Breaker handcart work position Configuration]	3	0~16	

	试验位置配置 T.P.C [Circuit Breaker handcart test position Configuration]	4	0~16	
	闭锁备自投配置 Bl.SPA.C [Block Spare Configuration]	5	0~16	
	远方配置 Remote.C [Remote Configuration]	6	0~16	
	弹簧未储能配置 Disch.C [Discharge Configuration]	7	0~16	
	1QF 配置 1QF On.C [1QF On Configuration]	8	0~16	
	2QF 配置 2QF On.C [2QF On Configuration]	9	0~16	
	备自投投入配置 E.SPA.C [Enable Spare Configuration]	10	0~16	
	备自投自动复归配置 SPAR.C [Spare Reset Configuration]	11	0~16	
	手动分闸配置 ManualTr.C [Manual Trip Configuration]	12	0~16	
	闭锁重合闸配置 Bl.Re.C [Block Auto-Reclose Configuration]	13	0~16	
	检修状态配置 Ma.C [Overhaul Configuration]	14	0~16	
	手动合闸配置 ManualCl.C [Manual Close Configuration]	15	0~16	
	信号复归配置 Resetsig.C	16	0~16	

	[Reset Signal Configuration]			
	跳闸展宽 Tripping pulse	300ms	0~1000	

AM5-U1 定 值 表 AM5-U1 Settings				
保护名称 Protection function	定 值 名 称 Value Name	默认值 Default	范 围 Range	备 注 Notice
	PT 变比 PT	100	0.1~9999	
	一次电压显示 U Unit [Primary voltage display]	0	0~1	KV;V
	电压接线方式 PT Mode [Voltage measurement mode]	0	0~1	3PT; 2PT
低电压告警 [27] Under voltage alarm	低电压告警投退 E.U.Un.A [Enable Undervoltage Alarm]	0	0~1	退出; 投入 OFF; ON
	低电压告警定值 U.Un.A [Undervoltage Alarm value]	50V	0~200	
	低电压告警延时 U.Un.A.T [Undervoltage Alarm delay]	5s	0~999	
	PT 断线闭锁投退 E.PT.B [Enable PT Break Alarm]	1	0~1	退出; 投入 OFF; ON
	无压定值 U.None [No-voltage]	15V	0~200	[Less than U.None means that there is no voltage]
	低电压阈值投退 E.LVThr. [Enable Undervoltage Trip threshold]	0	0~1	退出; 投入 OFF; ON [If enable LVThr. , when the voltage is greater than U.None and less than U.LVP , under voltage protection will act. If exit

				LVTHr. , under voltage protection is Loss voltage protection.]
零序过压告警 [59N] Residual Over voltage alarm	零序过压告警投退 E.O.U0 [Enable Residual over voltage alarm protection]	0	0~1	退出；投入 OFF； ON
	零序过压告警定值 O.U0 [Residual over voltage alarm value]	110V	0~200	
	零序过压告警延时 O.U0.T [Residual over voltage alarm protection delay]	10s	0~999	
过电压告警 [59] Over voltage alarm	过电压告警投退 E.OVP.A [Enable Overvoltage Alarm]	0	0~1	退出；投入 OFF； ON
	过电压告警定值 OVP.A [Overvoltage Alarm value]	110V	0~200	
	过电压告警延时 OVP.A.T [Overvoltage Alarm delay]	10s	0~999	
PT 断线告警 PtBr.A [60] PT supervision alarm	PT 断线告警投退 E.PtBr.A [Enable PT Break Alarm]	0	0~1	退出；投入 OFF； ON
	PT 断线负序电压 U2.Pt [Negative sequence voltage]	35V	0~200	
	PT 断线告警延时 PtBr.T [PT Break delay]	10s	0~999	
自产零序过压告警 [59N] Self-produced residual Over voltage alarm	3U0 告警投退 E.O.3U0.A [Enable Self-produced residual overvoltage alarm]	0	0~1	退出；投入 OFF； ON
	3U0 告警定值 O.3U0.A [Self-produced residual overvoltage alarm value]	110V	0~200	
	3U0 告警延时	10s	0~999	

	O.3U0.A.T [Self-produced residual overvoltage alarm delay]			
检修状态闭锁 Overhaul lockout	检修闭锁通讯投退 E.M.BC [Enable Overhaul-lockout communication]	0	0~1	退出；投入 OFF；ON
遥信名字配置 Remote name configuration	实遥信 01 名配置 Name01.C [Name01.Configuration]	0	0~9999	
	实遥信 02 名配置 Name02.C [Name02.Configuration]	0	0~9999	
	实遥信 03 名配置 Name03.C [Name03.Configuration]	0	0~9999	
	实遥信 04 名配置 Name04.C [Name04.Configuration]	0	0~9999	
	实遥信 05 名配置 Name05.C [Name05.Configuration]	0	0~9999	
	实遥信 06 名配置 Name06.C [Name06.Configuration]	0	0~9999	
	实遥信 07 名配置 Name07.C [Name07.Configuration]	0	0~9999	
	实遥信 08 名配置 Name08.C [Name08.Configuration]	0	0~9999	
	实遥信 09 名配置 Name09.C [Name09.Configuration]	0	0~9999	
	实遥信 10 名配置 Name10.C	0	0~9999	

	[Name10.Configuration]			
	实遥信 11 名配置 Name11.C [Name11.Configuration]	0	0~9999	
	实遥信 12 名配置 Name12.C [Name12.Configuration]	0	0~9999	
	实遥信 13 名配置 Name13.C [Name13.Configuration]	0	0~9999	
	实遥信 14 名配置 Name14.C [Name14.Configuration]	0	0~9999	
	实遥信 15 名配置 Name15.C [Name15.Configuration]	0	0~9999	
	实遥信 16 名配置 Name16.C [Name16.Configuration]	0	0~9999	
遥信位置配置 Remote position configuration	运行位置配置 W.P.C [Circuit Breaker handcart work position Configuration]	3	0~16	
	试验位置配置 T.P.C [Circuit Breaker handcart test position Configuration]	4	0~16	
	检修状态配置 Ma.C [Overhaul Configuration]	15	0~16	
	信号复归配置 ResetSig.C [Reset Signal Configuration]	16	0~16	

AM5-DB 定 值 表				
AM5-DB Settings				
保护名称	定 值 名 称	默认值	范 围	备 注

Protection function	Value Name	Default	Range	Notice
	CT 变比 CT	10	0.1~999	
	PT 变比 PT	1	0.1~999	
	一次电压显示 U Unit [Primary voltage display]	1	0~1	KV; V
	一次图显示方式 Pri.Sys. [Primary system display]	2	0~4	方式 0-方式 4 Mode0-Mode4
	电流接线方式 CT Mode [Current measurement mode]	0	0~1	
进线/母联备投 Standby Power Automatic Transfer	备投判进线电压 E.In.V.C [Enable Incoming voltage control]	0	0~1	退出; 投入 OFF; ON
	备投方式 Spa.Mode [Spare mode]	0	0~4	退出; 分段备投; 进线备投; 自适应 备投; 联切备投 OFF;Bus.S;Incomin g.S;Self-adapt.S;Joi nt Cut.S [OFF; Bus Standby; Incoming Standby; Self-adapt Standby; Joint Cut Standby]
	进线 1 备投 E.1-In.Spa. [Enable 1-Incoming spare]	0	0~1	退出; 投入 OFF; ON
	进线 2 备投 E.2-In.Spa [Enable 2-Incoming spare]	0	0~1	退出; 投入 OFF; ON

4 路进线电压做备投 4U.S [Enable 4-channel incoming voltage spare]	0	0~1	退出；投入 OFF；ON
分合指示灯关联 On OFF.I [Circuit Breaker On/Off indicator light]	0	0~2	分段柜；进线 1 柜； 进线 2 柜 Busbar;1-Incoming; 2-Incoming
进线 1 电流来源 I1 Source [1-Incoming current source]	0	0~2	通道 4；通道 5；通 道 1 CH4;CH5;CH1 [channel4;channel5; channel1]
进线 2 电流来源 I2 Source [2-Incoming current source]	1	0~2	通道 4；通道 5；通 道 1 CH4;CH5;CH1 [channel4;channel5; channel1]
零流来源 I0 Source	0	0~3	自产；外接通道 2； 外接通道 4 Self-produced; CH2; CH4; CH5 [channel2;channel4; channel5]
进线无压定值 In.U.None [Loss Incoming Voltage]	50V	0~500	
母线无压定值 B.U.None [Loss Bus Voltage]	50V	0~500	
进线有压定值 In.Vo.St.V [Incoming Voltage Store]	50V	0~500	
母线有压定值 B.Vo.St.V	50V	0~500	

	[Bus Voltage Store]			
	进线 1 无流定值 I1.None [1-Incoming Current none]	0.1A	0.04~100	
	进线 2 无流定值 I2.None [2-Incoming Current none]	0.1A	0.04~100	
	分段充电延时 B.Cha.D [Bus charge delay]	15s	0~9999.999	
	分段充电返回 T B.Cha.D.R.D [Bus charge Return delay]	10s	0~9999.999	
	进线 1 充电延时 1-I.C.D [1-Incoming charge delay]	15s	0~9999.999	
	进线 1 充电返回 T 1-I.C.RD [1-Incoming charge return delay]	10s	0~9999.999	
	进线 2 充电延时 2-I.C.D [2-Incoming charge delay]	15s	0~9999.999	
	进线 2 充电返回 T 2-I.C.RD [2-Incoming charge return delay]	10s	0~9999.999	
	跳进线 1 延时 1-In.T.D. [1-Incoming Trip delay]	2s	0~9999.999	
	跳进线 2 延时 2-In.T.D. [2-Incoming Trip delay]	2s	0~9999.999	
	跳母联延时 Bus.T.D.	2s	0~9999.999	

	[Bus Trip delay]			
	合进线 1 延时 1-In.C.D. [1-Incoming Close delay]	2s	0~9999.999	
	合进线 2 延时 2-In.C.D. [2-Incoming Close delay]	2s	0~9999.999	
	合母联延时 Bus.C.D. [Bus Close delay]	2s	0~9999.999	
	均无压 1 充电 T LV.1.C.D [Loss Voltage 1 charge delay]	10s	0~9999.999	
	均无压 1 充电返回 T LV1CRD [Loss Voltage 1 charge return delay]	10s	0~9999.999	
	均无压 2 充电 T LV.2.C.D [Loss Voltage 2 charge delay]	10s	0~9999.999	
	均无压 2 充电返回 T LV2CRD [Loss Voltage 2 charge return delay]	10s	0~9999.999	
	柴发备投 E.Die.Sp [Enable Diesel Generator Spare]	0	0~1	退出；投入 OFF；ON
	柴发无压定值 Die.LV [Diesel Generator Loss voltage value]	50V	0~500	
	柴发有压定值	50V	0~500	

	Die.St.V [Diesel Generator Voltage Store]			
	柴发启动延时 Die.Start.T [Diesel Generator Start delay]	2s	0~9999.999	
	柴发停止延时 Die.Stop.T [Diesel Generator Stop delay]	2s	0~9999.999	
	跳 4QF 延时 4QF T.D. [4QF Trip delay]	2s	0~9999.999	
	合 4QF 延时 4QF C.D. [4QF Close delay]	2s	0~9999.999	
过流一段 3I>>> [50] Instantaneous Overcurrent	过流一段投退 E.3I>>> [Enable.3I>>>]	0	0~1	退出；投入 OFF； ON
	过流一段定值 3I>>> [3I>>> value]	10A	0.04~100	
	过流一段延时 3I>>>.T [3I>>> delay]	0s	0~60	
过流二段 3I>> [51] Time limited Overcurrent	过流二段投退 E.3I>> [Enable.3I>>]	0	0~1	退出；投入 OFF； ON
	过流二段定值 3I>> [3I>> value]	7.5A	0.04~100	
	过流二段延时 3I>>.T [3I>> delay]	0.2s	0~60	
过流三段 3I> [51]	过流三段投退 E.3I> [Enable.3I>]	0	0~1	退出；投入 OFF； ON
	过流三段方式	0	0~1	告警；跳闸

Definite Overcurrent	E.3I>.M [Enable.3I>Mode]			Alarm; Trip
	过流三段定值 3I> [3I> value]	7A	0.04~100	
	过流三段延时 3I>.T [3I> delay]	0.5s	0~60	
后加速过流 Post-Accelerated Overcurrent	后加速过流投退 E.I>P [Enable Post-accelerated overcurrent]	0	0~1	退出; 投入 OFF; ON
	后加速过流定值 I>P [Post-accelerated value]	6.5A	0.04~100	
	后加速过流延时 I>P.T [Post-accelerated delay]	0s	0~60	
PT 断线告警 PtBr [60] PT Supervision Alarm	母线 PT 断线投退 E.B.PtBr [Enable Bus PT Break]	0	0~1	退出; 投入 OFF; ON
	进线 PT 断线投退 E.I.PtBr [Enable Incoming PT Break]	0	0~1	退出; 投入 OFF; ON
	PT 断线告警延时 PtBr.T [PT Break delay]	10s	0~999	
控制回路断线告警 Trip and Close Circuit Supervision Alarm	控故障告警投退 E.CB.A [Enable Trip and close circuit supervision alarm]	0	0~1	退出; 投入 OFF; ON
	控故障告警延时 CB.A.T [Trip and close circuit supervision alarm delay]	10s	0~999	
过电压保护 OVP	过电压保护投退 E.OVP	1	0~1	退出; 投入 OFF; ON

[59] Over voltage protection	[Enable Overvoltage protection]			
	过电压出口方式 E.OVP.M [Enable Overvoltage Mode]	0	0~1	告警；跳闸 Alarm; Trip
	过电压保护定值 U.OVP [Overvoltage protection value]	270V	0~500	
	过电压保护延时 OVP.T [Overvoltage protection delay]	0s	0~60	
	闭锁备自投返回 T BI.SRT [Block Spare Return delay]	30s	0~999	
	断路器动作时间 Cir.Br.T [Circuit Breaker trip and close time]	0.3s	0~999	
检修状态闭锁 Overhaul lockout	检修闭锁通讯投退 E.M.BC [Enable Overhaul lockout communication]	1	0~1	退出；投入 OFF; ON
	检修闭锁出口投退 E.M.BE [Enable Overhaul lockout DO]	1	0~1	退出；投入 OFF; ON
	过量返回系数 Excess R.C [Excess Return Coefficient]	0.95	0.001~1	
	欠量返回系数 Under R.C [Under Return Coefficient]	1.05	1~2	
遥信名字配置	实遥信 01 名配置	0	0~9999	

Remote name configuration	Name01.C [Name01.Configuration]			
	实遥信 02 名配置 Name02.C [Name02.Configuration]	0	0～9999	
	实遥信 03 名配置 Name03.C [Name03.Configuration]	0	0～9999	
	实遥信 04 名配置 Name04.C [Name04.Configuration]	0	0～9999	
	实遥信 05 名配置 Name05.C [Name05.Configuration]	0	0～9999	
	实遥信 06 名配置 Name06.C [Name06.Configuration]	0	0～9999	
	实遥信 07 名配置 Name07.C [Name07.Configuration]	0	0～9999	
	实遥信 08 名配置 Name08.C [Name08.Configuration]	0	0～9999	
	实遥信 09 名配置 Name09.C [Name09.Configuration]	0	0～9999	
	实遥信 10 名配置 Name10.C [Name10.Configuration]	0	0～9999	
	实遥信 11 名配置 Name11.C [Name11.Configuration]	0	0～9999	
	实遥信 12 名配置 Name12.C [Name12.Configuration]	0	0～9999	

	实遥信 13 名配置 Name13.C [Name13.Configuration]	0	0~9999	
	实遥信 14 名配置 Name14.C [Name14.Configuration]	0	0~9999	
	实遥信 15 名配置 Name15.C [Name15.Configuration]	0	0~9999	
	实遥信 16 名配置 Name16.C [Name16.Configuration]	0	0~9999	
遥信位置配置 Remote position configuration	合位配置 CB On.C [Circuit Breaker On Configuration]	1	0~18	
	分位配置 CB Off.C [Circuit Breaker Off Configuration]	2	0~18	
	备用 1 配置 Spare1.C [Spare1 Configuration]	3	0~16	
	备用 2 配置 Spare2.C [Spare2 Configuration]	4	0~16	
	闭锁备自投配置 Bl.SPA.C [Block Spare Configuration]	5	0~16	
	远方配置 Remote.C [Remote Configuration]	6	0~16	
	备用 3 配置 Spare3.C	7	0~16	

	[Spare3 Configuration]			
	1QF 位置配置 1QF On.C [1QF On Configuration]	8	0~16	
	2QF 位置配置 2QF On.C [2QF On Configuration]	9	0~16	
	备自投投入配置 E.SPA.C [Enable Spare Configuration]	10	0~16	
	备投自动复归配置 SPAR.C [Spare Reset Configuration]	11	0~16	
	4QF 位置配置 4QF On.C [4QF On Configuration]	12	0~16	
	备用 4 配置 Spare4.C [Spare4 Configuration]	13	0~16	
	检修状态配置 Ma.C [Overhaul Configuration]	14	0~16	
	手动合闸配置 ManualCl.C [Manual Close Configuration]	15	0~16	
	信号复归配置 ResetSig.C [Reset Signal Configuration]	16	0~16	
	跳闸展宽 Tripping pulse	300ms	0~1000	

Appendix B Relay Event

AM 事件记录 AM Event Record				
事件代码 Event code	事件名称 Event name	参数名称 Parameter name	参数值 Parameter values	参数单位 Parameter unit
0	过流一段保护 [Instantaneous overcurrent] 3I>>>	A 相电流 Ia	浮点数 Float	A
		B 相电流 Ib	浮点数 Float	A
		C 相电流 Ic	浮点数 Float	A
		UAB	浮点数 Float	V
		UBC	浮点数 Float	V
		UCA	浮点数 Float	V
		负序电压 Negative sequence voltage U2	浮点数 Float	V
		A 相二次谐波电流 Ia Second Harmonic Ia_H2	浮点数 Float	A
		B 相二次谐波电流 Ib Second Harmonic Ib_H2	浮点数 Float	A
		C 相二次谐波电流 Ic Second Harmonic Ic_H2	浮点数 Float	A
1	过流二段保护 [Time-limited overcurrent] 3I>>	A 相电流 Ia	浮点数 Float	A
		B 相电流 Ib	浮点数 Float	A
		C 相电流 Ic	浮点数 Float	A
		UAB	浮点数 Float	V
		UBC	浮点数 Float	V
		UCA	浮点数 Float	V

		负序电压 Negative sequence voltage U2	浮点数 Float	V
		A 相二次谐波电流 Ia Second Harmonic Ia_H2	浮点数 Float	A
		B 相二次谐波电流 Ib Second Harmonic Ib_H2	浮点数 Float	A
		C 相二次谐波电流 Ic Second Harmonic Ic_H2	浮点数 Float	A
2	过流三段保护 [Definite time overcurrent] 3I>	A 相电流 Ia	浮点数 Float	A
		B 相电流 Ib	浮点数 Float	A
		C 相电流 Ic	浮点数 Float	A
		UAB	浮点数 Float	V
		UBC	浮点数 Float	V
		UCA	浮点数 Float	V
		负序电压 Negative sequence voltage U2	浮点数 Float	V
		A 相二次谐波电流 Ia Second Harmonic Ia_H2	浮点数 Float	A
		B 相二次谐波电流 Ib Second Harmonic Ib_H2	浮点数 Float	A
		C 相二次谐波电流 Ic Second Harmonic Ic_H2	浮点数 Float	A
3	启动时过流一段保护 [Motor Start Instantaneous overcurrent] 3I>>>.S	A 相电流 Ia	浮点数 Float	A
		B 相电流 Ib	浮点数 Float	A
		C 相电流 Ic	浮点数 Float	A

4	运行时过流一段保护 [Motor Run Instantaneous overcurrent] $3I>>>.R$	A 相电流 Ia	浮点数 Float	A
		B 相电流 Ib	浮点数 Float	A
		C 相电流 Ic	浮点数 Float	A
5	A 相反时限过流保护 [Ia Inverse Definite Minimum Time overcurrent] $Ia>InverseT.$	时间 t	浮点数	s
		A 相电流 Ia	浮点数 Float	A
		B 相电流 Ib	浮点数 Float	A
		C 相电流 Ic	浮点数 Float	A
		UAB	浮点数 Float	V
		UBC	浮点数 Float	V
		UCA	浮点数 Float	V
6	B 相反时限过流保护 [Ib Inverse Definite Minimum Time overcurrent] $Ib>InverseT.$	负序电压 Negative sequence voltage U2	浮点数 Float	V
		时间 t	浮点数	s
		A 相电流 Ia	浮点数 Float	A
		B 相电流 Ib	浮点数 Float	A
		C 相电流 Ic	浮点数 Float	A
		UAB	浮点数 Float	V
		UBC	浮点数 Float	V
7	C 相反时限过流保护	UCA	浮点数 Float	V
		负序电压 Negative sequence voltage U2	浮点数 Float	V

	[Ic Inverse Definite Minimum Time overcurrent] Ic>InverseT.	t		
		A 相电流 Ia	浮点数 Float	A
		B 相电流 Ib	浮点数 Float	A
		C 相电流 Ic	浮点数 Float	A
		UAB	浮点数 Float	V
		UBC	浮点数 Float	V
		UCA	浮点数 Float	V
		负序电压 Negative sequence voltage U2	浮点数 Float	V
8	I01 过流一段 [I01 ground fault Instantaneous overcurrent] I01>>>	I01	浮点数 Float	A
9	I01 过流二段 [I01 ground fault Time-limited overcurrent] I01>>	I01	浮点数 Float	A
10	I02 过流一段 [I02 ground fault Instantaneous overcurrent] I02>>>	I02	浮点数 Float	A
11	I02 过流二段 [I02 ground fault Time-limited overcurrent] I02>>	I02	浮点数 Float	A
12	I01 反时限 [I01 ground fault Inverse Definite Minimum Time overcurrent] I01>InverseT.	时间 t	浮点数 Float	s
		I01	浮点数 Float	A
13	I02 反时限 [I02 ground fault Inverse Definite Minimum Time overcurrent] I02>InverseT.	时间 t	浮点数 Float	s
		I02	浮点数 Float	A

14	后加速过流保护 [Post-accelerated overcurrent] $I > P.T$	A 相电流 I_a	浮点数 Float	A
		B 相电流 I_b	浮点数 Float	A
		C 相电流 I_c	浮点数 Float	A
15	重合闸 [Auto-recloser] Reclose	——	——	——
16	低频减载 [Under Frequency] UnderFr.	频率 Frequency	浮点数 Float	Hz
17	手动合闸 [Manual Close]	——	——	——
18	手动分闸 [Manual Trip]	——	——	——
19	过负荷跳闸 $I > Lo.T$ [OverLoad Trip]	最大相电流 Maximum current I_m	浮点数 Float	A
20	负序过流一段保护 [Negative sequence Instantaneous overcurrent] $I_2 >>>$	负序电流 Negative sequence current I_2	浮点数 Float	A
		最大相电流 Maximum current I_m	浮点数 Float	A
21	负序反时限保护 [Negative sequence Inverse Definite Minimum Time] overcurrent $I_2 > Inverse T$	时间 t	浮点数 Float	s
		负序电流 Negative sequence current I_2	浮点数 Float	A
22	热过载跳闸 [Thermal overload Trip] OverHeat.T	跳闸百分比 Trip Percent	浮点数 Float	%
		最大相电流 Maximum current I_m	浮点数 Float	A
		正序电流 Positive sequence current I_1	浮点数 Float	A
		负序电流 Negative sequence	浮点数 Float	A

		current I2		
23	堵转保护 [Blocking Rotor Stall Trip]	最大相电流 Maximum current Im	浮点数 Float	A
24	启动时间过长保护 [Starting time-out] StartOutTime	最大相电流 Maximum current Im	浮点数 Float	A
25	低电压保护 [Under Voltage Trip] LVP.T	最大线电压 Maximum voltage Um	浮点数 Float	V
26	欠电压保护 [Under Voltage Trip] LVP.T	UAB	浮点数 Float	V
		UBC	浮点数 Float	V
		UCA	浮点数 Float	V
27	过电压保护 [Over Voltage Trip] OVP.T	UAB	浮点数 Float	V
		UBC	浮点数 Float	V
		UCA	浮点数 Float	V
28	零序过电压保护/自产零序过 压保护 [Residual Over Voltage Trip/Self-produced Residual Over Voltage Trip] U0.OVP/3U0.OVP	零序电压 Residual voltage U0	浮点数 Float	V
29	不平衡电压保护 [Unbalance Voltage Trip] Unb.V.T	不平衡 U Unbalance Voltage Unb.V	浮点数 Float	V
30	不平衡电流保护 [Unbalance Current Trip] Unb.I.T	不平衡 I Unbalance Current Unb.I	浮点数 Float	A
31	重瓦斯跳闸 [Severe Gas Trip] SevereGas.T	——	——	——
32	压力释放跳闸 [Pressure Release Trip] Pre.Re.T	——	——	——
33	超温跳闸 [High Temperature Trip] HighTemp.T	——	——	——

34	非电量 1 跳闸/计量门 1 跳闸 [Non-electricity 1 Trip/Meter-door 1 Trip] Non-el1.T/Me.do1.T	——	——	——
35	非电量 2 跳闸/计量门 2 跳闸 [Non-electricity 2 Trip/Meter-door 2 Trip] Non-el2.T/Me.do2.T	——	——	——
36	分段备投合母联 [Bus Standby Power Automatic Switch Close Bus] B.S.C.B.	——	——	——
37	分段备投跳进线 1 [Bus Standby Power Automatic Switch Trip 1 Incoming] B.S.T.1	——	——	——
38	分段备投跳进线 2 [Bus Standby Power Automatic Switch Trip 2 Incoming] B.S.T.2	——	——	——
39	2 备 1 跳进线 1 [2 Incoming Spare power, 1 Incoming Primary power, trip 1 Incoming] 2S.1T.1-In.	——	——	——
40	2 备 1 合进线 2 [2 Incoming Spare power, 1 Incoming Primary power, close 2 Incoming] 2S.1C.2-In.	——	——	——
41	1 备 2 跳进线 2 [1 Incoming Spare power, 2 Incoming Primary power, trip 2 Incoming] 1S.2T.2-In.	——	——	——
42	1 备 2 合进线 1 [1 Incoming Spare power, 2 Incoming Primary power, close 1 Incoming] 1S.2C.1-In.	——	——	——
43	分段复归合进线 1 [Bus Standby Power	——	——	——

	Automatic Reset Close 1 Incoming] B.R.C.1			
44	分段复归合进线 2 [Bus Standby Power Automatic Reset Close 2 Incoming] B.R.C.2	——	——	——
45	分段复归跳母联 [Bus Standby Power Automatic Reset Trip Bus] B.R.T.B.	——	——	——
46	2 备 1 复归合进线 1 [2 Incoming Spare power, 1 Incoming Primary power, Reset close 1 Incoming] 2S.1R.C.1	——	——	——
47	2 备 1 复归跳进线 2 [2 Incoming Spare power, 1 Incoming Primary power, Reset trip 2 Incoming] 2S.1R.T.2	——	——	——
48	1 备 2 复归合进线 2 [1 Incoming Spare power, 2 Incoming Primary power, Reset close 2 Incoming] 1S.2R.C.2	——	——	——
49	1 备 2 复归跳进线 1 [1 Incoming Spare power, 2 Incoming Primary power, Reset trip 1 Incoming] 1S.2R.T.1	——	——	——
50	FC 闭锁 [FC Block]	A 相电流 Ia	浮点数 Float	A
		B 相电流 Ib	浮点数 Float	A
		C 相电流 Ic	浮点数 Float	A
51	变压器门误开跳闸 [Transformer Door Open Trip] DoorOpenT	——	——	——
52	遥控合闸 [Remote Close]	——	——	——
53	遥控分闸	——	——	——

	[Remote Trip]			
54	失压保护 [Loss of Voltage Trip] LVP.T	最大线电压 Maximum voltage Um	浮点数 Float	V
55	油位低跳闸 [Low oil Trip] Low oil.T	——	——	——
56	油位高跳闸 [High oil Trip] High oil.T	——	——	——
57	反时限过流保护 [Inverse Definite Time overcurrent] I>InverseT.	时间 t	浮点数 Float	s
		A 相电流 Ia	浮点数 Float	A
		B 相电流 Ib	浮点数 Float	A
		C 相电流 Ic	浮点数 Float	A
58	I01 过流三段 [I01 ground fault Definite time overcurrent] I01>	I01	浮点数 Float	A
59	I01 后加速过流 [I01 ground fault Post-accelerated overcurrent] I01>P.T	时间 t	浮点数 Float	s
		I01	浮点数 Float	A
60	高温保护跳闸 [Over Temperature Trip] OverTemp.T	——	——	——
61	轻瓦斯保护跳闸 [Light Gas Trip] LightGasT	——	——	——
62	2 备 1 跳母联 [2 Incoming Spare power, 1 Incoming Primary power, trip bus] 2S.1T.B.	——	——	——
63	2 备 1 复归合母联 [2 Incoming Spare power, 1 Incoming Primary power, Reset close bus] 2S.1R.C.B.	——	——	——
64	柴发机备投跳进线 1	——	——	——

	[Diesel Generator Standby Power Automatic Switch Trip 1 Incoming] Die.S.T.1			
65	柴发机备投跳进线 2 [Diesel Generator Standby Power Automatic Switch Trip 2 Incoming] Die.S.T.2	——	——	——
66	柴发机备投合母联 [Diesel Generator Standby Power Automatic Switch Close Bus] Die.S.C.B.	——	——	——
67	柴发机备投合柴发机 [Diesel Generator Standby Power Automatic Switch Close Diesel Gnerator] Die.S.C.D.	——	——	——
68	非电量 3 跳闸 [Non-electricity 3 Trip] Non-el3.T	——	——	——
69	非电量 4 跳闸 [Non-electricity 4 Trip] Non-el4.T	——	——	——
70	备用 1 跳闸 [Spare 1 Trip] Spare1.T	——	——	——
71	备用 2 跳闸 [Spare 2 Trip] Spare2.T	——	——	——
73	备用 3 跳闸 [Spare 3 Trip] Spare3.T	——	——	——
74	隔离柜连跳 [Isolation Intertrip] Iso.Cab.T	——	——	——
75	系统谐振跳闸 [System Resonanc Trip] Sys.Res.T	——	——	——
76	高频保护 [Over Frequency] OF.T	频率 Frequency	浮点数 Float	Hz

77	温控器故障跳闸 [Temperature Controller Failure Trip] Th.Fa.T	——	——	——
78	自产 3I0 保护一段跳闸 [Self-produce ground fault Instantaneous overcurrent] 3I0>>>	A 相电流 Ia	浮点数 Float	A
		B 相电流 Ib	浮点数 Float	A
		C 相电流 Ic	浮点数 Float	A
		3I0	浮点数 Float	A
79	自产 3I0 保护二段跳闸 [Self-produce ground fault Time-limited overcurrent] 3I0>>	A 相电流 Ia	浮点数 Float	A
		B 相电流 Ib	浮点数 Float	A
		C 相电流 Ic	浮点数 Float	A
		3I0	浮点数 Float	A
80	过负荷告警 I>Lo.A [Over Load Alarm] OverLoadAla.	最大相电流 Maximum current Im	浮点数 Float	A
81	PT 断线告警 (AM5、AM4-U) [PT Break Alarm] PT BreakAla.	UAB	浮点数 Float	V
		UBC	浮点数 Float	V
		UCA	浮点数 Float	V
		负序电压 Negative sequence voltage U2	浮点数 Float	V
82	控故障告警 [Control Circuit Break Alarm] CtrErrorAla.	——	——	——
83	负序过流二段告警 [Negative sequence Time-limited overcurrent Alarm] I2>>.A	负序电流 I2	浮点数 Float	A
		最大相电流 Maximum current Im	浮点数 Float	A

84	热过载告警 [Thermal overload Alarm] OverHeat.A	告警百分比 Alarm percent	浮点数 Float	%
		最大相电流 Maximum current Im	浮点数 Float	A
		正序电流 Positive sequence current I1	浮点数 Float	A
		负序电流 Negative sequence current I2	浮点数 Float	A
85	I母低电压告警 LVP.A (AM5\AM4-U1) [I Bus Under Voltage Alarm] I Bus LVP.A	最大线电压 Maximum voltage Um	浮点数 Float	V
86	I母过电压告警 (AM5\AM4-U1) [I Bus Over Voltage Alarm] I Bus OVP.A	最大线电压 Maximum voltage Um	浮点数 Float	V
87	I母零序过压告警 (AM5\AM4-U1) [I Bus Residual Over Voltage] Alarm I Bus U0.OVP.A	零序电压 Residual Voltage U0	浮点数 Float	V
88	轻瓦斯告警 [Light Gas Alarm] LightGasA			
89	高温告警 [Over Temperature Alarm] OverTemp.A			
90	非电量 2 告警 [Non-electricity 2 Alarm] Non-el2.A	——	——	——
91	非电量 3 告警 [Non-electricity 3 Alarm] Non-el3.A	——	——	——
92	分段充电完成 [BusCharge]	——	——	——
93	进线 1 充电完成 [1 In-coming Charge] I-In.Charge	——	——	——

94	进线 2 充电完成 [2 In-coming Charge] 2-In.Charge	——	——	——
95	I母自产零序过压告警 (AM5\AM4-U1) [I Bus Self-produced Residual Over Voltage Alarm] I Bus 3U0.OVP.A	零序电压 Residual Voltage U0	浮点数 Float	V
96	II母低电压告警 (AM5\AM4-U2) [II Bus Under Voltage Alarm] II Bus LVP.A	最大线电压 Maximum voltage Um	浮点数 Float	V
97	II母零序过压告警 (AM5\AM4-U2) [II Bus Residual Over Voltage Alarm] II Bus U0.OVP.A	零序电压 Residual Voltage U0	浮点数 Float	V
98	II母 PT 断线告警 (AM5\AM4-U2) [II Bus PT Break Alarm] II Bus PT BreakAla.	UAB2	浮点数 Float	V
		UBC2	浮点数 Float	V
		UCA2	浮点数 Float	V
		负序电压 Negative sequence voltage U2	浮点数 Float	V
99	II母过电压告警 (AM5\AM4-U2) [II Bus Over Voltage Alarm] II Bus OVP.A	最大线电压 Maximum voltage Um	浮点数 Float	V
100	II母自产零序过压告警 (AM5\AM4-U2) [II Bus Self-produced Residual Over Voltage Alarm] II Bus 3U0.OVP.A	零序电压 Residual Voltage U0	浮点数 Float	V
101	电机备投跳进线 1,2 [Motor Standby Power Automatic Switch Trip 1,2 Incoming] M.S.T.1,2	——	——	——
102	电机备投合电机 [Motor Standby Power Automatic Switch Close	——	——	——

	Motor] M.S.C.M.			
103	过流三段告警 [Definite time overcurrent Alarm] 3I>.A	A 相电流 Ia	浮点数 Float	A
		B 相电流 Ib	浮点数 Float	A
		C 相电流 Ic	浮点数 Float	A
104	I01 过流一段告警 [I01 ground fault Instantaneous overcurrent Alarm] I01>>>.A	时间 t	浮点数 Float	s
		I01	浮点数 Float	A
105	I01 过流二段告警 [I01 ground fault Time-limited overcurrent Alarm] I01>>.A	时间 t	浮点数 Float	s
		I01	浮点数 Float	A
106	I01 过流三段告警 [I01 ground fault Definite time overcurrent Alarm] I01>.A	时间 t	浮点数 Float	s
		I01	浮点数 Float	A
107	I01 反时限过流告警 [I01 ground fault Inverse Definite Minimum Time overcurrent Alarm] I01>InverseT.A	时间 t	浮点数 Float	s
		I01	浮点数 Float	A
108	I01 后加速告警 [I01 ground fault Post-accelerated overcurrent Alarm] I01>P.A	时间 t	浮点数 Float	s
		I01	浮点数 Float	A
109	I02 过流告警 [I02 ground fault overcurrent Alarm] I02>.A	时间 t	浮点数 Float	s
		I02	浮点数 Float	A
110	I02 反时限过流告警 [I02 ground fault Inverse Definite Time overcurrent Alarm]	时间 t	浮点数 Float	s
		I02	浮点数 Float	A

	I02>InverseT.A			
111	负序过流一段告警 [Negative sequence Instantaneous overcurrent Alarm] I2>>>.A	负序电流 Negative sequenc current I2	浮点数 Float	A
		最大相电流 Maximum current Im	浮点数 Float	A
112	超温保护告警 [High Temperature Alarm] HighTemp.A			
113	重瓦斯保护告警 [Severe Gas Alarm] SevereGas.A			
114	失压告警 [Loss of Voltage Alarm] LVP.A	最大线电压 Maximum voltage Um	浮点数 Float	V
115	I02 过流一段告警 [I02 ground fault Instantaneous overcurrent Alarm] I02>>>.A	时间 t	浮点数 Float	s
		I02	浮点数 Float	A
116	I02 过流二段告警 段告警 [I02 ground fault Time-limited overcurrent Alarm] I02>>.A	时间 t	浮点数 Float	s
		I02	浮点数 Float	A
117	门开告警 [Transformer Door Alarm] DoorOpenA	时间 t	浮点数 Float	s
118	进线 PT 断线 [In-coming PT Break Alarm] I.PtBr.A	——	——	——
119	非电量 1 告警 [Non-electricity 1 Alarm] Non-el1.A			s
120	非电量 4 告警 [Non-electricity 4 Alarm] Non-el4.A			s
121	重合闸充电完成 [Auto-reclose Charge] chargeOK	——	——	——

122	备用 1 告警 [Spare 1 Alarm] Spare1.A	——	——	——
123	备用 2 告警 [Spare 2 Alarm] Spare2.A	——	——	——
124	备用 3 告警 [Spare 3 Alarm] Spare3.A	——	——	——
125	市电充电 [Power Supply Charge] Mark.Charge	——	——	——
126	市电备投跳发电机 [Power Supply Standby Power Automatic Switch Trip Generator] Mark.S.T.D.	——	——	——
127	市电备投合进线 1 [Power Supply Standby Power Automatic Switch Close 1 In-coming] Mark.S.C.1	——	——	——
128	市电备投合进线 2 [Power Supply Standby Power Automatic Switch Close 2 In-coming] Mark.S.C.2	——	——	——
129	逆功率保护 [Reverse Power Trip] RP.T	有功功率 Active power	浮点数 Float	kW
		功率因数 Power factor	浮点数 Float	
130	压力释放告警 [Pressure Release Alarm] Pre.Re.A	——	——	——
131	发电机备 1 充电 [Generator Spare power, 1 In-coming Primary power Charge] A1.S.1.Charge	——	——	——
132	发电机备 2 充电 [Generator Spare power, 2 In-coming Primary power Charge] A1.S.2.Charge	——	——	——

133	柴发机备 1 跳 1QF [Diesel Generator Spare power, 1 In-coming Primary, Trip 1QF] Die.S.1T.1QF	——	——	——
134	柴发机备 1 合 4QF [Diesel Generator Spare power, 1 In-coming Primary, Close 4QF] Die.S.1C.4QF	——	——	——
135	柴发机备 2 跳 2QF [Diesel Generator Spare power, 2 In-coming Primary, Trip 2QF] Die.S.2T.2QF	——	——	——
136	柴发机备 2 合 4QF [Diesel Generator Spare power, 2 In-coming Primary, Close 4QF] Die.S.2C.4QF	——	——	——
137	温控器故障告警 [Temperature Controller Failure Alarm] Th.Fa.A	——	——	——
138	二次过压告警（非电量） [Secondary Over Voltage Alarm] Se.OVP.A	——	——	——
139	不平衡电流 3I0 保护告警 [Unbalance Current Alarm] Unb.3I0.A	A 相电流 Ia	浮点数 Float	A
		B 相电流 Ib	浮点数 Float	A
		C 相电流 Ic	浮点数 Float	A
		3I0	浮点数 Float	A
150	DI1 变位 [DI1 Set] DI1	——	——	——
151	DI2 变位 [DI2 Set] DI2	——	——	——
152	DI3 变位	——	——	——

	[DI3 Set] DI3			
153	DI4 变位 [DI4 Set] DI4	—	—	—
154	DI5 变位 [DI5 Set] DI5	—	—	—
155	DI6 变位 [DI6 Set] DI6	—	—	—
156	DI7 变位 [DI7 Set] DI7	—	—	—
157	DI8 变位 [DI8 Set] DI8	—	—	—
158	DI9 变位 [DI9 Set] DI9	—	—	—
159	DI10 变位 [DI10 Set] DI10	—	—	—
160	DI11 变位 [DI11 Set] DI11	—	—	—
161	DI12 变位 [DI12 Set] DI12	—	—	—
162	DI13 变位 [DI13 Set] DI13	—	—	—
163	DI14 变位 [DI14 Set] DI14	—	—	—
164	DI15 变位 [DI15 Set] DI15	—	—	—
165	DI16 变位 [DI16 Set] DI16	—	—	—
166	DI17 变位 [DI17 Set] DI17	—	—	—

167	DI18 变位 [DI18 Set] DI18	——	——	——
168	DI19 变位 [DI19 Set] DI19	——	——	——
169	DI20 变位 [DI20 Set] DI20	——	——	——
170	合后位置变位 [Position after closing set]	——	——	——
171	合位监视变位 [Circuit Breaker On Set] CCB On set	——	——	——
172	分位监视变位 [Circuit Breaker Off Set] CCB Off set	——	——	——
173	防跳监视变位 [Anti-pumping set]	——	——	——
174	装置上电 [Device on power]	——	——	——
179	PT 断线 [PT Break]	——	——	——
180	3 备 1 充电 [3 In-coming Spare power, 1 In-coming Primary power Charge] 3S.1 Charge	——	——	——
181	3 备 2 充电 [3 In-coming Spare power, 2 In-coming Primary power Charge] 3S.2 Charge	——	——	——
182	A 相差压跳闸 [Phase A Differential Voltage Trip] UdA.T	A 相差压 Phase A Differential Voltage UdA	浮点数 Float	V
183	B 相差压跳闸 [Phase B Differential Voltage] UdB.T	B 相差压 Phase B Differential Voltage UdB	浮点数 Float	V
184	C 相差压跳闸 [Phase C Differential Voltage]	C 相差压 Phase C Differential	浮点数 Float	V

	UdC.T	Voltage UdC		
185	备投再恢复 1#合 3QF [Standby Power Automatic Switch Reset 1#, Close 3QF] S.R.1#.C.3QF	——	——	——
186	均无压恢复充电 [Loss of Voltage Reset Charge] No-Vol.R.Charge	——	——	——
187	均无压复 2 跳 4 [Loss of Voltage Reset 2 In-coming Trip 4 In-coming] No-Vol.R.2.T.4	——	——	——
188	均无压复 2 合 2 [Loss of Voltage Reset 2 In-coming Close 4 In-coming] No-Vol.R.2.C.2	——	——	——
189	均无压复 1 跳 4 [Loss of Voltage Reset 1 In-coming Trip 4 In-coming] No-Vol.R.1.T.4	——	——	——
190	均无压复 1 合 1 [Loss of Voltage Reset 1 In-coming Close 1 In-coming] No-Vol.R.1.C.1	——	——	——
191	均无压复 1 合 3 [Loss of Voltage Reset 1 In-coming Close 3 In-coming] No-Vol.R.1.C.3	——	——	——
192	远方按钮合闸 [Remote button close]	——	——	——
193	远方按钮分闸 [Remote button trip]	——	——	——
194	急停分闸 [Emergency trip]	——	——	——
195	2 备 1 合柴发 [2 In-coming Spare power, 1 In-coming Primary power, Close Diesel Generator] 2S.1C.Die.	——	——	——
196	2 备 1 复归跳柴发 [2 In-coming Spare power, 1 In-coming Primary power, Reset Trip Diesel Generator]	——	——	——

	2S.1R.T.Die.			
197	负控跳闸 [Load Control Trip] Neg.Con.T	——	——	——
198	绝缘监测告警 [Residual Monitor Alarm] Insul.Monit.A	——	——	——
199	绝缘监测跳闸 [Residual Monitor Trip] Insul.Monit.T	——	——	——
200	均无压充电 [Loss of Voltage Charge] No-Vol.Charge	——	——	——
201	均无压跳 2 [Loss of Voltage Trip 2 In-coming] No-Vol.T.2	——	——	——
202	均无压合 1 [Loss of Voltage Close 1 In-coming] No-Vol.C.1	——	——	——
203	备用进线备 1 充电 [Spare In-coming Standby Power Automatic Switch 1 In-coming Charge] Sp.In.S1 Charge	——	——	——
204	备用进线备 2 充电 [Spare In-coming Standby Power Automatic Switch 2 In-coming Charge] Sp.In.S2 Charge	——	——	——
205	备用进线备 1 跳进线 1 [Spare In-coming Standby Power Automatic Switch 1 In-coming Trip 1 In-coming] Sp.In.S1.T.1	——	——	——
206	备用进线备 1 合备用 [Spare In-coming Standby Power Automatic Switch 1 In-coming Close Spare In-coming] Sp.In.S1.C.Sp.	——	——	——
207	备用进线备 2 跳进线 2 [Spare In-coming Standby	——	——	——

	Power Automatic Switch 2 In-coming Trip 2 In-coming] Sp.In.S2.T.2			
208	备用进线备 2 合备用 [Spare In-coming Standby Power Automatic Switch 2 In-coming Close Spare In-coming] Sp.In.S2.C.Sp	——	——	——
209	均无压跳进线 1,2 [Loss of Voltage Trip 1,2 In-coming] No-Vol.T.1,2	——	——	——
210	均无压合母联 [Loss of Voltage Close Bus] No-Vol.C.B.	——	——	——
211	均无压合备用进线 [Loss of Voltage Close Spare In-coming] No-Vol.C.Sp.In.	——	——	——
212	欠流告警 [Under Current Alarm] LIP.A	A 相电流 Ia	浮点数 Float	A
		B 相电流 Ib	浮点数 Float	A
		C 相电流 Ic	浮点数 Float	A
213	电压不平衡开入跳闸 [Unbalance Voltage Trip] Unb.V.DI.T	——	——	——
214	分段备投合进线 3 [Bus Standby Power Automatic Switch Close 3 In-coming] B.S.C.3	——	——	——
215	分段备投合进线 4 [Bus Standby Power Automatic Switch Close 4 In-coming] B.S.C.4	——	——	——
216	进线 1 逆功率 [1 In-coming Reverse Power Trip] 1-In.RP.T	——	——	——
217	2 备 1 跳进线 1 手车	——	——	——

	[2 In-coming Spare power, 1 In-coming Primary power, trip 1 In-coming Handcart] 2S.1T.1-In.Hand.			
218	2 备 1 复归合进线 1 手车 [2 In-coming Spare power, 1 In-coming Primary power, Reset Close 1 In-coming Handcart] 2S.1R.C.1-In.Hand.	——	——	——
219	低侧网门告警 [Low side net-door Alarm] Low S.D.A	——	——	——
220	低侧网门跳闸 [Low side net-door Trip] Low S.D.T	——	——	——
221	事故总信号 [Accident Signal]	——	——	——
222	电压不平衡跳闸 [Unbalance Voltage Trip] Unb.V.T	——	——	——
223	相序保护跳闸 [Incorrect Phase Sequence Voltage Trip] Ph.Se.T	——	——	——
224	断相保护跳闸 [Voltage Phase Loss Trip] Break ph.T	——	——	——
225	I段 PT 投入 [I Bus PT Input] I PT Invest.	——	——	——
226	II段 PT 投入 [II Bus PT Input] II PT Invest.	——	——	——
227	PT 并列 [PT Parallel] PT Juxtaposition	——	——	——
228	1 号 2 号主供断电警报 [1,2 In-coming Primary power loss Alarm] 1,2 Main supply outage.A	——	——	——
229	遥控并列 [Remote Parallel] Remote Juxtaposition	——	——	——

230	遥控解列 [Remote Disconnection] Remote Splitting	——	——	——
231	母线充电保护 [Bus Charge Trip] B.Cha.T	A 相电流 Ia	浮点数 Float	A
		B 相电流 Ib	浮点数 Float	A
		C 相电流 Ic	浮点数 Float	A
232	CT 二次过压跳闸 [Secondary CT Over Voltage Trip] CT Se.OVP.T	——	——	——
233	CT 二次过压告警 [Secondary CT Over Voltage Alarm] CT Se.OVP.A	——	——	——
234	隔离手车连跳动作 [Isolation Handcart Inter trip] Iso.Handcart.T	——	——	——
235	备投允许 [Standby Power Automatic Switch Permission] Standby allowed	——	——	——
236	允许合闸信号 [Close Circuit Breaker Signal Permission] Allowable C.signal	——	——	——
237	柴发机备投跳母联 [Diesel Generator Standby Power Automatic Switch Trip Bus] Die.S.T.B.			
238	备投启动柴发信号 [Standby Power Automatic Switch Start Diesel Generator Signal] S.Sta.Die.Sig.			
239	油位高告警 [High oil Alarm] High oil.A			
240	均无压跳母联 [Loss of Voltage Trip Bus] No-Vol.T.B.			

241	负序过流二段跳闸 [Negative sequence Time-limited overcurrent] I2>>	负序电流 I2	浮点数 Float	A
		最大相电流 Maximum Current Im	浮点数 Float	A
242	差动总启动标志 [Differential total start flag]	——	——	——
243	差动速断保护 [Instantaneous Differential Differential quick break protection]	动作时间 Action time	浮点数 Float	s
		A 相差流 Differential IA IdA	浮点数 Float	A
		B 相差流 Differential IB IdB	浮点数 Float	A
		C 相差流 Differential IC IdC	浮点数 Float	A
		A 相制动 Restraint IA IrA	浮点数 Float	A
		B 相制动 Restraint IB IrB	浮点数 Float	A
		C 相制动 Restraint IC IrC	浮点数 Float	A
244	比率差动保护 [Differential protection with Ratio Restraining] Ratio differential protection	动作时间 Action time	浮点数 Float	s
		A 相差流 Differential IA IdA	浮点数 Float	A
		B 相差流 Differential IB IdB	浮点数 Float	A
		C 相差流 Differential IC IdC	浮点数 Float	A
		A 相制动 Restraint IA IrA	浮点数 Float	A
		B 相制动 Restraint IB IrB	浮点数 Float	A

		C 相制动 Restraint IC IrC	浮点数 Float	A
245	差流越限 [Differential current overshoot]	A 相差流 Differential IA IdA	浮点数 Float	A
		B 相差流 Differential IB IdB	浮点数 Float	A
		C 相差流 Differential IC IdC	浮点数 Float	A
246	正序过流一段保护 [Positive sequence Instantaneous overcurrent] I1>>>	定值 Fixed value	浮点数 Float	A
		延时 Delayed	浮点数 Float	s
		正序电流 Positive sequence current I1	浮点数 Float	A
247	正序过流二段保护 [Positive sequence Time-limited overcurrent] I1>>	定值 Fixed value	浮点数 Float	A
		延时 Delayed	浮点数 Float	s
		正序电流 Positive sequence current I1	浮点数 Float	A
248	正序过流反时限保护 [Positive sequence Inverse Definite Time overcurrent] I1>InverseT.	曲线类型 Curve type	整数 Integer	一般/非常/ 极端 S1/S2/S3
		启动电流 Starting current	浮点数 Float	A
		时间系数 Time coefficient	浮点数 Float	s
		动作时间 Action time	浮点数 Float	s
		正序电流 Positive sequence current I1	浮点数 Float	A
249	长启动保护告警 [Starting time-out Alarm Long start protection alarm]	计时门槛 Timing threshold	浮点数 Float	A
		动作时间	浮点数	s

		Action time	Float	
250	电流不平衡告警 [Unbalance current Alarm] Unb.I.A	定值 Fixed value	浮点数 Float	A
		延时 Delayed	浮点数 Float	s
		动作值 Action value	浮点数 Float	A
		平均电流 Iavg	浮点数 Float	A
251	电压不平衡告警 [Unbalance Voltage Alarm] Unb.V.A	定值 Fixed value	浮点数 Float	V
		延时 Delayed	浮点数 Float	s
		动作值 Action value	浮点数 Float	V
		平均线电压 Average Voltage Uavg	浮点数 Float	V
		UAB	浮点数 Float	V
		UBC	浮点数 Float	V
		UCA	浮点数 Float	V
252	过电压保护告警 [Over Voltage Alarm] OVP.A	定值 Fixed value	浮点数 Float	V
		延时 Delayed	浮点数 Float	s
		UAB	浮点数 Float	V
		UBC	浮点数 Float	V
		UCA	浮点数 Float	V
		零序电压 Residual Voltage U0	浮点数 Float	V
253	零序过压保护告警 [Residual Over Voltage Alarm] U0.OVP.A	定值 Fixed value	浮点数 Float	V
		延时 Delayed	浮点数 Float	s
		UAB	浮点数 Float	V

		UBC	浮点数 Float	V
		UCA	浮点数 Float	V
		零序电压 Residual Voltage U0	浮点数 Float	V
254	正序过压保护告警 [Positive Over Voltage Alarm] U1.OVP.A	定值 Fixed value	浮点数 Float	V
		延时 Delayed	浮点数 Float	s
		UAB	浮点数 Float	V
		UBC	浮点数 Float	V
		UCA	浮点数 Float	V
		正序电压 Positive Voltage U1	浮点数 Float	V
255	正序过压保护跳闸 [Positive Over Voltage Trip] U1.OVP.T	定值 Fixed value	浮点数 Float	V
		延时 Delayed	浮点数 Float	s
		UAB	浮点数 Float	V
		UBC	浮点数 Float	V
		UCA	浮点数 Float	V
		正序电压 Positive Voltage U1	浮点数 Float	V
256	负序过压保护告警 [Negative Over Voltage Alarm] U2.OVP.A	定值 Fixed value	浮点数 Float	V
		延时 Delayed	浮点数 Float	s
		UAB	浮点数 Float	V
		UBC	浮点数 Float	V
		UCA	浮点数 Float	V

		负序电压 Negative Voltage U2	浮点数 Float	V
257	负序过压保护跳闸 [Negative Over Voltage Trip] U2.OVP.T	定值 Fixed value	浮点数 Float	V
		延时 Delayed	浮点数 Float	s
		UAB	浮点数 Float	V
		UBC	浮点数 Float	V
		UCA	浮点数 Float	V
		负序电压 Negative Voltage U2	浮点数 Float	V
258	低电压保护告警 [Under Voltage Alarm] LVP.A	定值 Fixed value	浮点数 Float	V
		延时 Delayed	浮点数 Float	s
		UAB	浮点数 Float	V
		UBC	浮点数 Float	V
		UCA	浮点数 Float	V
		零序电压 Residual Voltage U0	浮点数 Float	V
259	相序保护告警 [Incorrect Phase Sequence Voltage Alarm] Ph.Se.A	延时 Delayed	浮点数 Float	s
		UAB	浮点数 Float	V
		UBC	浮点数 Float	V
		UCA	浮点数 Float	V
		零序电压 Residual Voltage U0	浮点数 Float	V
		正序电压 Positive Voltage U1	浮点数 Float	V

		负序电压 Negative Voltage U2	浮点数 Float	V
		平均线电压 Average Voltage Uavg	浮点数 Float	V
260	首端 CT 断线告警 [I CT Break Alarm] F.CT Break.A	——	——	——
261	尾端 CT 断线告警 [II CT Break Alarm] T.CT Break.A	——	——	——
262	I02 后加速过流 [I02 ground fault Post-acceleration overcurrent] I02>P.T	时间 t	浮点数 Float	s
		I02	浮点数 Float	A
263	I02 后加速告警 [I02 ground fault Post-acceleration overcurrent Alarm] I02>P.A	时间 t	浮点数 Float	s
		I02	浮点数 Float	A
264	差动保护长期启动 [Long term start of differential protection]	A 相差流 Differential IA IdA	浮点数 Float	A
		B 相差流 Differential IB IdB	浮点数 Float	A
		C 相差流 Differential IC IdC	浮点数 Float	A
265				
266				
267	I侧 CT 断线告警 [I CT Break Alarm] I CT Break.A	——	——	——
268	II侧 CT 断线告警 [II CT Break Alarm] II CT Break.A	——	——	——

269	III侧 CT 断线告警 [III CT Break Alarm] III CT Break.A	——	——	——
270	IV侧 CT 断线告警 [IV CT Break Alarm] IV CT Break.A	——	——	——
271	有压有流出口动作 [Voltage and current trip Pressure and current outlet action]	——	——	——
272	预留 (告警事件代码) Reserve			
289				
290	启动风冷 [Start air-cooled water chiller]	A 相电流 Ia	浮点数 Float	A
		B 相电流 Ib	浮点数 Float	A
		C 相电流 Ic	浮点数 Float	A
291	闭锁调压 [Blocking voltage regulation]	A 相电流 Ia	浮点数 Float	A
		B 相电流 Ib	浮点数 Float	A
		C 相电流 Ic	浮点数 Float	A
292	间隙零序过流一段跳闸 [Transient ground fault Instantaneous overcurrent] Clearance I0>>>	间隙零序电流 Transient ground fault current Clearance I0	浮点数 Float	A
293	间隙零序过流二段跳闸 [Transient ground fault Time-limited overcurrent] Clearance I0>>	间隙零序电流 Transient ground fault current Clearance I0	浮点数 Float	A
294	I段 PT 投入 [I Bus PT Input] I PT Invest.	——	——	——
295	II段 PT 投入 [II Bus PT Input] II PT Invest.	——	——	——
296	PT 自动并列 [PT auto-Parallel] PT Juxtaposition	——	——	——
297	遥控并列	——	——	——

	[Remote Parallel] Remote Juxtaposition			
298	遥控解列 [Remote Disconnection] Remote Splitting	——	——	——
299	负控保护跳闸 [Load Control Trip] Neg.Con.T	时间 t	浮点数 Float	s
300	负控保护告警 [Load Control Alarm] Neg.Con.A	时间 t	浮点数 Float	s
301	PT 自动解列 [PT Disconnection] PT Splitting	——	——	——
302	二次谐波闭锁 [Second Harmonic Block] SHB.	A 相二次谐波电流 Ia Second Harmonic Ia_H2	浮点数 Float	A
		B 相二次谐波电流 Ib Second Harmonic Ib_H2	浮点数 Float	A
		C 相二次谐波电流 Ic Second Harmonic Ic_H2	浮点数 Float	A
303	1 备 2 跳非重要负荷 [1 In-coming Spare power, 2 In-coming Primary power, trip Unimportant Load] 1S.2T.Unimp.Lo.	——	——	——
304	2 备 1 跳非重要负荷 [2 In-coming Spare power, 1 In-coming Primary power, trip Unimportant Load] 2S.1T.Unimp.Lo.	——	——	——
305	I02 过流三段 [I02 ground fault Definite time overcurrent] I02>	I02	浮点数 Float	A
306	I02 过流三段告警 [I02 ground fault Definite time overcurrent Alarm] I02>.A	I02	浮点数 Float	A
307	检修状态闭锁 [Maintenance Block] Maint.Sta.B.	——	——	——

308	电机温度 1 跳闸 [Motor Temperature 1 Trip] M.Tem1.T	——	——	——
309	电机温度 1 告警 [Motor Temperature 1 Alarm] M.Tem1.A	——	——	——
310	电机温度 2 跳闸 [Motor Temperature 2 Trip] M.Tem2.T	——	——	——
311	电机温度 2 告警 [Motor Temperature 2 Alarm] M.Tem2.A	——	——	——
312	电源监视跳闸 [Power Monitor Trip] Pow.Monit.T	——	——	——
313	电源监视告警 [Power Monitor Alarm] Pow.Monit.A	——	——	——
314	备投停止柴发信号 [Standby Power Automatic Switch Stop Diesel Generator Signal] S.St.Die.Sig.			
315	启动柜故障跳闸 [Starting Cabinet Failure Trip] St.Cab.Fa.T	——	——	——
316	启动柜故障告警 [Starting Cabinet Failure Alarm] St.Cab.Fa.A	——	——	——
317	同期合闸 [Synchronous Close Permission] Synchronous.C	——	——	——
318	进线侧恢复充电 [In-coming Reset Charge] In.R.Charge	——	——	——
319	柴发充电 [Diesel Generator Charge] Die.Charge	——	——	——
320	市电恢复充电 [Power Supply Reset Charge] Mark.R.Charge	——	——	——
321	柴发恢复充电	——	——	——

	[Diesel Generator Reset Charge] Die.R.Charge			
322	柴发备投合柴发 [Diesel Generator Standby Power Automatic Switch Close Diesel Generator] Die.S.C.D.	——	——	——
323	市电恢复跳柴发 [Power Supply Standby Power Automatic Switch Reset Trip Diesel Generator] Mark.R.T.D.	——	——	——
324	市电恢复合市电 [Power Supply Standby Power Automatic Switch Reset Close Power Supply] Mark.R.C.Mark.	——	——	——
325	柴发恢复合柴发 [Diesel Generator Standby Power Automatic Switch Reset Close Diesel Generator] Mark.R.C.D.	——	——	——
326	弧光保护跳闸 [Arc flash Protection Trip] Arc.Pro.T	——	——	——
327	弧光保护告警 [Arc flash Protection Alarm] Arc.Pro.A	——	——	——
328	均无压进线 1 充电 [Loss of Voltage 1 In-coming Charge] No-Vol.1-In.Charge	——	——	——
329	均无压进线 2 充电 [Loss of Voltage 2 In-coming Charge] No-Vol.2-In.Charge	——	——	——
330	均无压合 2 [Loss of Voltage Close 2 In-coming] No-Vol.C.2	——	——	——
331	均无压跳 1 [Loss of Voltage Trip 1	——	——	——

	In-coming] No-Vol.T.1			
332	均无压跳 3 [Loss of Voltage Trip 3 In-coming] No-Vol.T.3	_____	_____	_____
333	A 相二次谐波 [Ia Second Harmonic Block] A.SH.	A 相二次谐波电流 Ia Second Harmonic Ia_H2	浮点数 Float	A
		B 相二次谐波电流 Ib Second Harmonic Ib_H2	浮点数 Float	A
		C 相二次谐波电流 Ic Second Harmonic Ic_H2	浮点数 Float	A
334	B 相二次谐波 [Ib Second Harmonic Block] B.SH.	A 相二次谐波电流 Ia Second Harmonic Ia_H2	浮点数 Float	A
		B 相二次谐波电流 Ib Second Harmonic Ib_H2	浮点数 Float	A
		C 相二次谐波电流 Ic Second Harmonic Ic_H2	浮点数 Float	A
335	C 相二次谐波 [Ic Second Harmonic Block] C.SH.	A 相二次谐波电流 Ia Second Harmonic Ia_H2	浮点数 Float	A
		B 相二次谐波电流 Ib Second Harmonic Ib_H2	浮点数 Float	A
		C 相二次谐波电流 Ic Second Harmonic Ic_H2	浮点数 Float	A

Appendix C Remote address table

名称 Name	代码 Code	名称 Name	代码 Code
状态遥信量 Spare state			
备用状态量遥信 1 Spare state1	1001	备用状态量遥信 2 Spare state2	1002
备用状态量遥信 3 Spare state3	1003	备用状态量遥信 4 Spare state4	1004
备用状态量遥信 5 Spare state5	1005	备用状态量遥信 6 Spare state6	1006
备用状态量遥信 7 Spare state7	1007	备用状态量遥信 8 Spare state8	1008
备用状态量遥信 9 Spare state9	1009	备用状态量遥信 10 Spare state10	1010
备用状态量遥信 11 Spare state11	1011	备用状态量遥信 12 Spare state12	1012
备用状态量遥信 13 Spare state13	1013	备用状态量遥信 14 Spare state14	1014
备用状态量遥信 15 Spare state15	1015	备用状态量遥信 16 Spare state16	1016
备用状态量遥信 17 Spare state17	1017	备用状态量遥信 18 Spare state18	1018
备用状态量遥信 19 Spare state19	1019	备用状态量遥信 20 Spare state20	1020
1#PT 手车工作位置 1#PT Handcart Work Position 1#PT W.P	1021	2#PT 手车工作位置 2#PT Handcart Work Position 2#PT W.P	1022
1#PT 手车试验位置 1#PT Handcart Test Position 1#PT T.P	1023	2#PT 手车试验位置 2#PT Handcart Test Position 2#PT T.P	1024
1#隔离手车工作位 1#Isolation Handcart Work Position 1#Iso.W.P	1025	2#隔离手车工作位 2#Isolation Handcart Work Position 2#Iso.W.P	1026
1#隔离手车试验位 1#Isolation Handcart Test Position 1#Iso.T.P	1027	2#隔离手车试验位 2#Isolation Handcart Test Position 2#Iso.T.P	1028
1QF 隔离刀 1QF Isolation Switch 1QF Iso.K	1029	2QF 隔离刀 2QF Isolation Switch 2QF Iso.K	1030
1QF 位置 1QF Circuit Breaker On 1QF On	1031	2QF 位置 2QF Circuit Breaker On 2QF On	1032

1 号主供跳位警报 1QF Circuit Breaker Off Alarm 1QF Off A.	1033	2 号主供跳位警报 2QF Circuit Breaker Off Alarm 2QF Off A.	1034
345QJ 分位 345QJ Circuit Breaker Off 345QJ Off	1035	I 母 PT 工作位置 I-section busbar PT Handcart Work Position I Bus PT W.P	1036
II 母 PT 工作位置 II-section busbar PT Handcart Work Position II Bus PT W.P	1037	I 母 PT 试验位置 I-section busbar PT Handcart Test Position I Bus PT T.P	1038
II 母 PT 试验位置 II-section busbar PT Handcart Test Position II Bus PT T.P	1039	PT 避雷器手车位置 PT Arrester Handcart Work Position PT Arrester W.P	1040
PT 柜隔离手车工作位 PT Isolation Handcart Work Position PT Iso.W.P	1041	PT 手车工作位置 PT Handcart Work Position PT W.P	1042
PT 手车试验位置 PT Handcart Test Position PT T.P	1043	PT 手车位置 PT Handcart Position PT Position	1044
本段 PT 柜控制开关 PT Control Switch Pri.Sec.PT Cont.Swit.	1045	本段计量车位置 Metering Handcart Position Pri.Sec.Meter.P	1046
本段进线隔离车位置 In-coming Isolation Handcart Position Pri.Sec.In-com.Iso.P	1047	本段母联隔离车位置 Bus Isolation Handcart Position Pri.Sec.Bus Iso.P	1048
本柜 PT 手车工作位 PT Handcart Work Position Pri.Sec.PT W.P	1049	避雷器手车位置 Arrester Handcart Position Arrester Position	1050
避雷手车工作位 Arrester Handcart Work Position Arrester W.P	1051	储能回路直流消失 Storage Circuit DC Loss Storage Cir.DC Loss	1052
弹簧未储能 Discharge	1053	弹簧已储能 Stored Spring	1054
低压侧隔开状态 Low Voltage Separation State LV Separation State	1055	非保证负荷 1 Non guarant load1	1056
非保证负荷 2 Non guarant load2	1057	非保证负荷 3 Non guarant load3	1058
非保证负荷 4 Non guarant load4	1059	非保证负荷 5 Non guarant load5	1060
非保证负荷 6	1061	非保证负荷 7	1062

Non guarant load6		Non guarant load7	
非保证负荷 8 Non guarant load8	1063	非保证负荷 9 Non guarant load9	1064
非保证负荷 10 Non guarant load10	1065	非保证负荷 11 Non guarant load11	1066
非保证负荷 12 Non guarant load12	1067	非保证负荷 13 Non guarant load13	1068
非保证负荷 14 Non guarant load14	1069	非保证负荷 15 Non guarant load15	1070
非保证负荷 16 Non guarant load16	1071	非保证负荷 17 Non guarant load17	1072
非保证负荷 18 Non guarant load18	1073	非保证负荷 19 Non guarant load19	1074
非保证负荷 20 Non guarant load20	1075	分段隔离柜手车位置 Subsection Isolation Handcart Position Subsect.Iso.P	1076
分段隔离手车工作位 Subsection Isolation Handcart Work Position Subsect.Iso.W.P	1077	分位 Circuit Breaker Off CB Off	1078
合位 Circuit Breaker On CB On	1079	负荷开关 Load Switch	1080
复位按钮 Reset Button	1081	高压侧隔开状态 High Voltage Separation State HV Separation State	1082
隔离刀分位 Isolation Switch Off Iso.K.Off	1083	隔离刀合位 Isolation Switch On Iso.K.On	1084
隔离开关合位 Isolation Switch On Iso.Switch On	1085	隔离刀位置 Isolation Switch Position Iso.K.P	1086
隔离刀工作位置 Isolation Switch Work Position Iso.K.W.P	1087	隔离刀试验位置 Isolation Switch Test Position Iso.K.T.P	1088
隔离手车工作位置 Isolation Handcart Work Position Iso.W.P	1089	隔离手车试验位置 Isolation Handcart Test Position Iso.T.P	1090
隔离手车位置 Isolation Handcart Position Iso.P	1091	急停信号 Emergency stop signal Emergency stop sig.	1092
计量断路器分位 Metering Circuit Breaker Off	1093	计量断路器合位 Metering Circuit Breaker On	1094

Meter.CB Off		Meter.CB On	
计量柜弹簧未储能 Metering Discharge Meter.Discharge	1095	计量手车工作位置 Metering Handcart Work Position Meter.W.P	1096
计量手车试验位置 Metering Handcart Test Position Meter.T.P	1097	计量手车位置 Metering Handcart Position Meter.P	1098
接地刀闸 GroundSwitch	1099	进线负荷开关 In-coming Load Switch In-com.Load Switch	1100
进线隔离柜微断跳闸 In-coming Isolation Micro Circuit Breaker Trip In-com.Iso.Micro.CB.T	1101	进线隔离手车工作位置 In-coming Isolation Handcart Work Position In-com.Iso.W.P	1102
进线隔离手车试验位置 In-coming Isolation Handcart Test Position In-com.Iso.T.P	1103	进线手车工作位 In-coming Handcart Work Position In-com.W.P	1104
进线微断跳闸 In-coming Micro Circuit Breaker Trip In-com.Micro.T	1105	母联断路器分位 Bus Circuit Breaker On Bus CB On	1106
母联断路器合位 Bus Circuit Breaker Off Bus CB Off	1107	母联隔离手车工作 Bus Isolation Handcart Work Position Bus Iso.W.P	1108
母联隔离手车位 Bus Isolation Handcart Position Bus Iso.P	1109	母线 PT 柜隔离刀合闸 Bus PT Isolation Switch On Bus PT Iso.K.On	1110
母线 PT 手车工作位 Bus PT Handcart Work Position Bus PT W.P	1111	熔断器手车工作位置 Fuse Handcart Work Position Fuse W.P	1112
熔断器手车试验位置 Fuse Handcart Test Position Fuse T.P	1113	上隔离 Upper Isolation Upper Iso.	1114
上隔离合位 Upper Isolation On Upper Iso.On	1115	上隔离开关合位 Upper Isolation Switch On Upper Iso.Switch On	1116
手车工作位置 Handcart Work Position Work Posi.	1117	手车试验位置 Handcart Test Position Test Posi.	1118
手动分闸 ManualTrip	1119	手动合闸 ManualClose	1120
所用变工作位置 Transformer Handcart Work Position	1121	所用变试验位置 Transformer Handcart Test Position	1122

T.W.P		T.T.P	
跳位监视 Trip Supervision	1123	微型断路器跳闸 Micro Circuit Breaker Trip Micro.CB.T	1124
下 PT 手车工作位 Lower PT Handcart Work Position Lower PT W.P	1125	下隔离 Lower Isolation Lower Iso.	1126
下接地 Lower Ground	1127	信号复归 ResetSignal	1128
压变工作位置 PT Handcart Work Position Pre.Trans.W.P	1129	压变试验位置 PT Handcart Test Position Pre.Trans.T.P	1130
远方 Remote	1131	远方复归 Remote Reset	1132
触头手车工作位置 Contact Handcart Work Position Contact W.P	1133	交直流空开跳闸 AC/DC Micro Circuit Breaker Trip AC/DC Air Switch.T	1134
操作回路跳闸 Operation Circuit Trip Operation Cir.T	1135	电压回路跳闸 Voltage Circuit Trip Voltage Cir.T	1136
隔离开关分位 Isolation Switch Off Iso.Switch Off	1137	PT 隔离开关位置 PT Isolation Switch Position PT Iso.Switch.P	1138
计量 PT 手车工作位置 Metering PT Handcart Work Position Meter.PT W.P	1139	操显装置告警 Manipulation Device Alarm Oper.And Disp.Devi.A	1140
接地手车工作 Ground Handcart Work Position Ground W.P	1141	接地手车试验 Ground Handcart Test Position Ground T.P	1142
避雷手车试验位 Arrester Handcart Test Position Arrester T.P	1143	母线电压失压 Bus Voltage Loss B.Vol.Lo	1144
储能电源失电 Power Loss	1145	断路器温度报警 Circuit Breaker Temperature Alarm Cir.Temp.A	1146
油机并车屏联跳 Oil Engine Parallel Intertrip Oil.Eng.Par.Joint.T	1147	I/II 段失压跳闸信号 I/II Loss Voltage Trip Signal I/II LV.T Sig.	1148
I/II 段电压并列信号 I/II Voltage Parallel Signal I/II Vol.Par.Sig.	1149	进线侧电源失电 In-coming Power Loss In-com.Power Loss	1150
本段 PT 断线信号 PT Break Signal Pri.Sec.PT Break Sig.	1151	本段母线退出信号 Bus Exit Signal Pri.Sec.Bus Exit Sig.	1152

联络手车工作 Busbar Handcart Work Position Liaison W.P	1153	联络手车试验 Busbar Handcart Test Position Liaison T.P	1154
下 PT 手车试验位 Lower PT Handcart Test Position Lower PT T.P	1155	母线接地信号 Ground Bus Signal	1156
电压不平衡 Unbalance Voltage	1157	熔断器开关 Fuse Switch	1158
非电量遥信 Non-electricity			
备用非电量遥信 1 Spare Non-electricity 1 Spare Non-elec.1	2001	备用非电量遥信 2 Spare Non-electricity 2 Spare Non-elec.2	2002
备用非电量遥信 3 Spare Non-electricity 3 Spare Non-elec.3	2003	备用非电量遥信 4 Spare Non-electricity 4 Spare Non-elec.4	2004
备用非电量遥信 5 Spare Non-electricity 5 Spare Non-elec.5	2005	备用非电量遥信 6 Spare Non-electricity 6 Spare Non-elec.6	2006
备用非电量遥信 7 Spare Non-electricity 7 Spare Non-elec.7	2007	备用非电量遥信 8 Spare Non-electricity 8 Spare Non-elec.8	2008
备用非电量遥信 9 Spare Non-electricity 9 Spare Non-elec.9	2009	备用非电量遥信 10 Spare Non-electricity 10 Spare Non-elec.10	2010
备用非电量遥信 11 Spare Non-electricity 11 Spare Non-elec.11	2011	备用非电量遥信 12 Spare Non-electricity 12 Spare Non-elec.12	2012
备用非电量遥信 13 Spare Non-electricity 13 Spare Non-elec.13	2013	备用非电量遥信 14 Spare Non-electricity 14 Spare Non-elec.14	2014
备用非电量遥信 15 Spare Non-electricity 15 Spare Non-elec.15	2015	备用非电量遥信 16 Spare Non-electricity 16 Spare Non-elec.16	2016
备用非电量遥信 17 Spare Non-electricity 17 Spare Non-elec.17	2017	备用非电量遥信 18 Spare Non-electricity 18 Spare Non-elec.18	2018
备用非电量遥信 19 Spare Non-electricity 19 Spare Non-elec.19	2019	备用非电量遥信 20 Spare Non-electricity 20 Spare Non-elec.20	2020
高温 Over Temperature OverTemp.	2021	超温 High Temperature HighTemp.	2022
转速低	2023	转速高	2024

Low Speed		High Speed	
轻瓦斯 SlightGas	2025	重瓦斯 Severe Gas	2026
油位高 High Oil Level	2027	油位低 Low Oil Level	2028
压力释放 Pressure Release PressureRele.	2029	温控器故障 Temperature Controller Failure Therm.Fa.	2030
热复归 HeatRecovery	2031	门控跳 Door Open Trip Door Control.T	2032
门禁跳闸 Access Control Trip Access Control.T	2033	隔离手车连跳 Isolation Handcart Inter trip Iso.Handcart.T	2034
高侧网门 High side net-door	2035	低侧网门 Low side net-door	2036
感烟器报警 Smoke Detector Alarm Smoke Detector.A	2037	负控跳闸 Load Control Trip Nega.Control.T	2038
变压器门开 Door Open	2039	非电量 1 Non-electricity 1 Non-elec.1	2040
非电量 2 Non-electricity 2 Non-elec.2	2041	非电量 3 Non-electricity 3 Non-elec.3	2042
非电量 4 Non-electricity 4 Non-elec.4	2043	非电量 5 Non-electricity 5 Non-elec.5	2044
非电量 6 Non-electricity 6 Non-elec.6	2045	非电量 7 Non-electricity 7 Non-elec.7	2046
非电量 8 Non-electricity 8 Non-elec.8	2047	非电量 9 Non-electricity 9 Non-elec.9	2048
非电量 10 Non-electricity 10 Non-elec.10	2049	非电量 11 Non-electricity 11 Non-elec.11	2050
非电量 12 Non-electricity 12 Non-elec.12	2051	非电量 13 Non-electricity 13 Non-elec.13	2052
非电量 14 Non-electricity 14 Non-elec.14	2053	非电量 15 Non-electricity 15 Non-elec.15	2054
非电量 16	2055	非电量 17	2056

Non-electricity 16 Non-elec.16		Non-electricity 17 Non-elec.17	
非电量 18 Non-electricity 18 Non-elec.18	2057	非电量 19 Non-electricity 19 Non-elec.19	2058
非电量 20 Non-electricity 20 Non-elec.20	2059	计量门 1 跳闸 Meter-door 1 Trip Meter-door1.T	2060
计量门 2 跳闸 Meter-door 2 Trip Meter-door2.T	2061	计量门 3 跳闸 Meter-door 3 Trip Meter-door3.T	2062
计量门 4 跳闸 Meter-door 4 Trip Meter-door4.T	2063	计量门 5 跳闸 Meter-door 5 Trip Meter-door5.T	2064
计量门 6 跳闸 Meter-door 6 Trip Meter-door6.T	2065	计量门 7 跳闸 Meter-door 7 Trip Meter-door7.T	2066
计量门 8 跳闸 Meter-door 8 Trip Meter-door8.T	2067	计量门 9 跳闸 Meter-door 9 Trip Meter-door9.T	2068
计量门 10 跳闸 Meter-door 10 Trip Meter-door10.T	2069	计量门 11 跳闸 Meter-door 11 Trip Meter-door11.T	2070
计量门 12 跳闸 Meter-door 12 Trip Meter-door12.T	2071	计量门 13 跳闸 Meter-door 13 Trip Meter-door13.T	2072
计量门 14 跳闸 Meter-door 14 Trip Meter-door14.T	2073	计量门 15 跳闸 Meter-door 15 Trip Meter-door15.T	2074
计量门 16 跳闸 Meter-door 16 Trip Meter-door16.T	2075	计量门 17 跳闸 Meter-door 17 Trip Meter-door17.T	2076
计量门 18 跳闸 Meter-door 18 Trip Meter-door18.T	2077	计量门 19 跳闸 Meter-door 19 Trip Meter-door19.T	2078
计量门 20 跳闸 Meter-door 20 Trip Meter-door20.T	2079	负控保护 Load Control Protection Nega.Control.P	2080
弧光保护 Arc flash Protection Arc.P	2081	5 次 A 相电容故障 5th A Phase Capacitor Failure 5th A p.Capacitor.F	2082
5 次 B 相电容故障 5th B Phase Capacitor Failure 5th B p.Capacitor.F	2083	5 次 C 相电容故障 5th C Phase Capacitor Failure 5th C p.Capacitor.F	2084

7 次 A 相电容故障 7th A Phase Capacitor Failure 7th A p.Capacitor.F	2085	7 次 B 相电容故障 7th B Phase Capacitor Failure 7th B p.Capacitor.F	2086
7 次 C 相电容故障 7th C Phase Capacitor Failure 7th C p.Capacitor.F	2087		
压板遥信 Plate			
备用硬压板遥信 1 Spare Plate 1 Spare HardPre.Plate1	3001	备用硬压板遥信 2 Spare Plate 2 Spare HardPre.Plate2	3002
备用硬压板遥信 3 Spare Plate 3 Spare HardPre.Plate3	3003	备用硬压板遥信 4 Spare Plate 4 Spare HardPre.Plate4	3004
备用硬压板遥信 5 Spare Plate 5 Spare HardPre.Plate5	3005	备用硬压板遥信 6 Spare Plate 6 Spare HardPre.Plate6	3006
备用硬压板遥信 7 Spare Plate 7 Spare HardPre.Plate7	3007	备用硬压板遥信 8 Spare Plate 8 Spare HardPre.Plate8	3008
备用硬压板遥信 9 Spare Plate 9 Spare HardPre.Plate9	3009	备用硬压板遥信 10 Spare Plate 10 Spare HardPre.Plate10	3010
备用硬压板遥信 11 Spare Plate 11 Spare HardPre.Plate11	3011	备用硬压板遥信 12 Spare Plate 12 Spare HardPre.Plate12	3012
备用硬压板遥信 13 Spare Plate 13 Spare HardPre.Plate13	3013	备用硬压板遥信 14 Spare Plate 14 Spare HardPre.Plate14	3014
备用硬压板遥信 Spare Plate 15 15Spare HardPre.Plate15	3015	备用硬压板遥信 16 Spare Plate 16 Spare HardPre.Plate16	3016
备用硬压板遥信 17 Spare Plate 17 Spare HardPre.Plate17	3017	备用硬压板遥信 18 Spare Plate 18 Spare HardPre.Plate18	3018
备用硬压板遥信 19 Spare Plate 19 Spare HardPre.Plate19	3019	备用硬压板遥信 20 Spare Plate 20 Spare HardPre.Plate20	3020
1QF 故障闭锁 1QF Fault Block	3021	2QF 故障闭锁 2QF Fault Block	3022
I 段 PT 投入 I PT Input	3023	II 段 PT 投入 II PT Input	3024
PT 并列硬压板 PT Parallel Plate	3025	备投允许 Standby Power Automatic Switch	3026

PT Par.HardPre.Plate		Permission SPA.Permission	
备自投投入 Enable Standby Power Automatic Switch E.SPAS	3027	备自投自动复归 Enable Standby Power Automatic Switch and Reset E.SPASaR	3028
闭锁保护 Block Protection	3029	闭锁备自投 Block Standby Power Automatic Switch Bl.SPAS	3030
闭锁电压输入 Block Voltage Input	3031	闭锁重合闸 BlockReclosing	3032
差动保护硬压板 Differential Protection Plate Differ.HardPre.Plate	3033	投低压侧跳闸 Enable Low Voltage Trip LV.T Input	3034
投高压侧跳闸 Enable High Voltage Trip HV.T Input	3035	投过流保护 Enable Overcurrent Protection Overcurrent.P Input	3036
允许遥控并列 Remote Parallel Permission Remote Par.Allowed	3037	允许自动并列 Automatic Parallel Permission Automatic Par.Allowed	3038
置检修状态 Maintenance	3039	重合闸压板 Reclosing Plate Reclosing Pre.Plate	3040
自投开关投入 Enable Automatic Switch AutomaticSwitch Input	3041		
信号量遥信 Signal			
备用信号量遥信 1 Spare Signal 1 Spare Signal1	4001	备用信号量遥信 2 Spare Signal 2 Spare Signal2	4002
备用信号量遥信 3 Spare Signal 3 Spare Signal3	4003	备用信号量遥信 4 Spare Signal 4 Spare Signal4	4004
备用信号量遥信 5 Spare Signal 5 Spare Signal5	4005	备用信号量遥信 6 Spare Signal 6 Spare Signal6	4006
备用信号量遥信 7 Spare Signal 7 Spare Signal7	4007	备用信号量遥信 8 Spare Signal 8 Spare Signal8	4008
备用信号量遥信 9 Spare Signal 9 Spare Signal9	4009	备用信号量遥信 10 Spare Signal 10 Spare Signal10	4010

备用信号量遥信 11 Spare Signal 11 Spare Signal11	4011	备用信号量遥信 12 Spare Signal 12 Spare Signal12	4012
备用信号量遥信 13 Spare Signal 13 Spare Signal13	4013	备用信号量遥信 14 Spare Signal 14 Spare Signal14	4014
备用信号量遥信 15 Spare Signal 15 Spare Signal15	4015	备用信号量遥信 16 Spare Signal 16 Spare Signal16	4016
备用信号量遥信 17 Spare Signal 17 Spare Signal17	4017	备用信号量遥信 18 Spare Signal 18 Spare Signal18	4018
备用信号量遥信 19 Spare Signal 19 Spare Signal19	4019	备用信号量遥信 20 Spare Signal 20 Spare Signal20	4020
一段系统接地 System Ground Pri.System Ground	4021	PT 断线 PT Break	4022
失压脱扣 Loss Voltage Trip LV.T	4023	复位信号 ResetSignal	4024
运行状态 Running State	4025	负控保护 Load Control Protection Nega.Control.P	4026
电压并列 Voltage Parallel	4027	系统谐振信号 System Resonance Signal Sys.Resonance Sig.	4028
系统接地信号 System Ground Signal Sys.Ground Sig.	4029	绝缘监察 Insulation Monitor	4030
主变异常信号 Transformer Abnormal Signal Transf.Abnormal Sig.	4031	CT 二次过压 CT Secondary Over Voltage CT Secondary.OV	4032
事故跳闸输入 Emergency Trip Input Emergency.T input	4033	电源监视 Power Monitor	4034
发电机启动 Generator Start Alternator Start	4035	发电机故障 Generator Failure Alternator Failure	4036
控制回路断线 Control Circuit Break CtrError Act	4037	PT 电压切换 PT Voltage Switch Pt Voltage Switch	4038
电压不平衡信号 Unbalance Votage Signal	4039	本段 PT 失压 PT Loss Voltage	4040

Unbalance.V Sig.		Pri.Sec.PT V.LOSS	
风扇已运行 Running Blower	4041	PT 并列 PT Parallel	4042
控制回路正常 Control Circuit Normal CtrError Normal	4043	电容器故障信号 Capacitor Failure Signal Capac.Failure Sig.	4044

Headquarters: Acrel Co., Ltd.

Trade Company: Acrel E-Business(Shanghai)Co., Ltd.

Address: No.253 Yulv Road, Jiading District, Shanghai, China

Postcode: 201801

Manufacturer: Jiangsu Acrel Electrical Manufacturing Co., Ltd.

Address: No.5 Dongmeng Road, Dongmeng industrial Park, Nanzha Street, Jiangyin City,
Jiangsu Province, China

TEL./WhatsApp: 0086 188 6162 8731

Web-site: www.acrel-electric.uk

E-mail: elsie.ren@email.acrel.cn

Postcode: 214405