



---

(1)

(2)

(3) TQWX-III

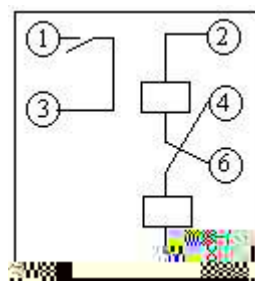
DL-31

DL-31

DL-31

0.8

2-3



2-3 DL-31

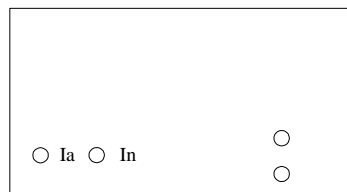
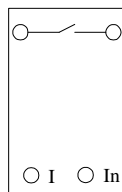
(1)

(2)

2-4  $I_a$   
 $I$   $I_n$   
2-4 1  
24V+ 24V- A K

24V+

A



2-4

3.5A

(1)

a.

PC

2-5

b.

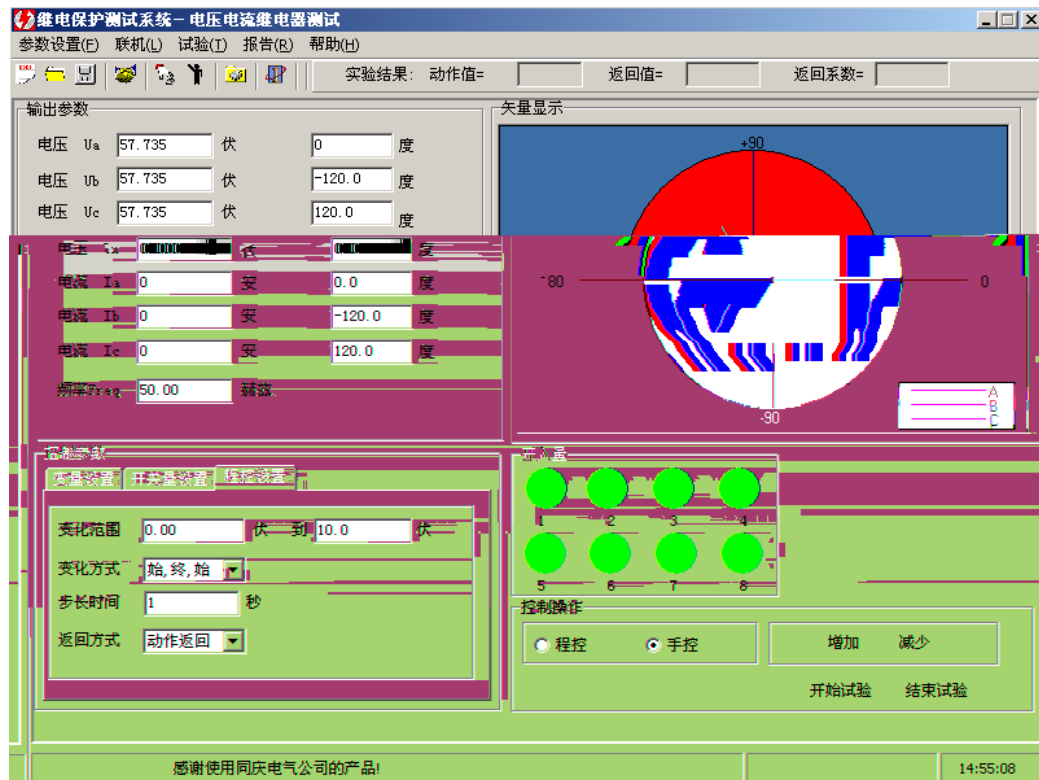
2-6

2-7

$I_a$  2-4 A

0.05A

2-4 1



2-5

c.

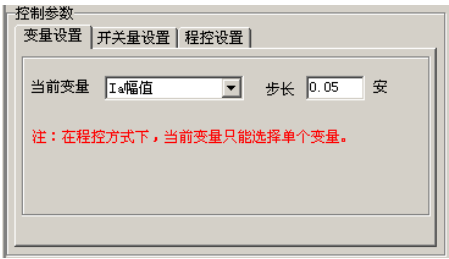
$I_a$

0

d.

e.

TQWX-III



2-6



2-7

f.

g.

$$\frac{\frac{[ \quad ]}{\quad} \times 100\%}{\frac{[ \quad ]}{\quad} \times 100\%}$$

2-1

h.

4.5A

2-1

2-2

2-1

3.5A

	(A)	(A)	
1			
2			
3			
4			
(A)			/
(%)			
(%)			

2-2

	(A)	
1	3.5	
2	4.5	

(2)

---

a. 2-5

b.

2-8

控制参数

变量设置 | 开关量设置 | 程控设置

变化范围 0.00 安 到 0.00 安

步长时间 1 秒

返回方式 动作返回 ▼

2-8

0.5s

c.

(1)

(2)

- 
- (1)
  - (2)
  - (3)      DY-36

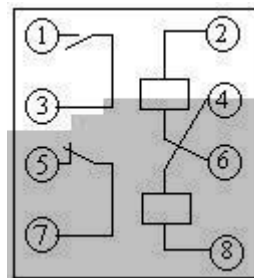
DY-36

DY-36

!

!

2-9

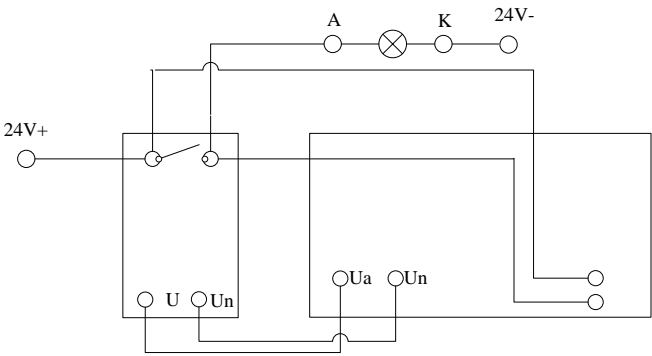


2-9 DY-36

2-10

$U_a$      $U_n$

$U$      $U_n$



2-10

50V

(1)

a.        2-10

b.                    PC

c.                    2.2                     $U_a$

3

2-3

2-3

50V

	(V)	(V)	
1			
2			
3			
(V)			/
(%)			
(%)			



--	--

(2)

a. 2-10

b.

0

A

55V

0.5V

$U_a$

3

2-4

2-4

	(V)	(V)	
1			
2			
3			
(V)			/
(%)			
(%)			
(V)	50		

(1)

(2)

(3)

(1)

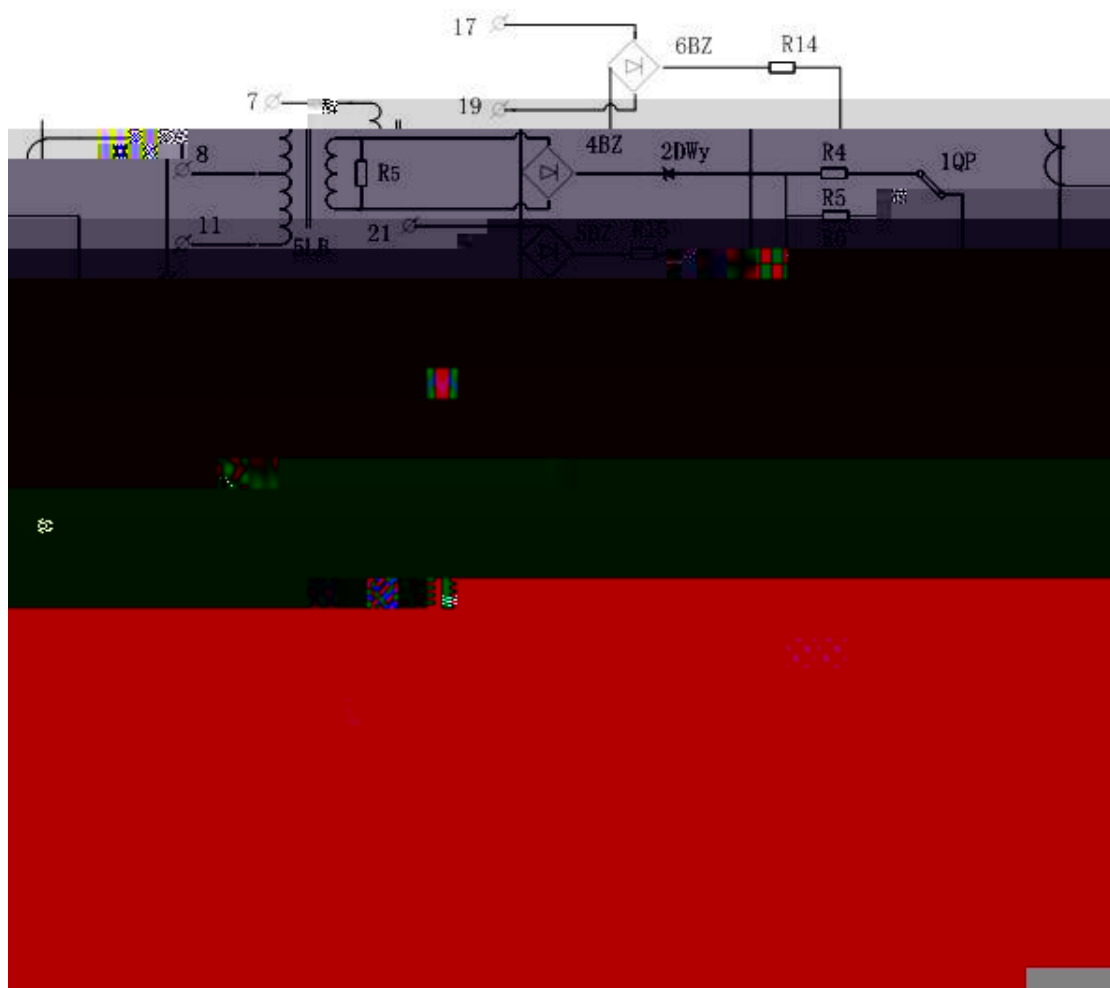
(2)

LCD-4

LCD-4

LCD-4

2-18



2-18 LCD-4

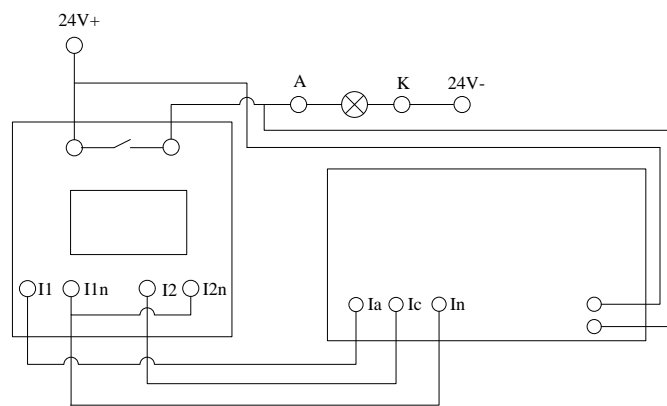
1LB

m L1 C1 C2 1BZ m  
 50Hz 100Hz  
 1BZ  
 DKB m 2BZ m L2  
 C3 C4 C5 100Hz 50Hz  
 2BZ W<sub>2</sub>  
 0.2-0.25  
 2LB 5LB 3BZ 4BZ 1D<sub>w</sub> 2D<sub>w</sub>  
 2LB 3LB  
 3BZ 4BZ 1D<sub>w</sub> 2D<sub>w</sub>  
 5 6A >5 6A  
 R<sub>4</sub> R<sub>5</sub> R<sub>6</sub> 1QP  
 0.4 0.5 0.6  
 R<sub>7</sub> R<sub>8</sub> JH R<sub>9</sub> R<sub>10</sub> R<sub>11</sub>  
 W<sub>1</sub> 2QP  
 1 1.5 2 2.5A  
 CT  
 C<sub>6</sub> 7BZ W<sub>3</sub>  
 ZJ 3D<sub>wy</sub> W<sub>3</sub> 4  
 10 3 4D<sub>wy</sub>  
 CT  
 I<sub>1</sub> I<sub>2</sub>  
 I<sub>1</sub> I<sub>2</sub> I<sub>r</sub>  
 I<sub>d</sub>

1 2.5A

1A 1.5A 2A 2.5A

0.4 0.5 0.6



2-19

(1) 2A 0.5

(2) PC

(3)

$I_1, I_2$   $I_1$   $I_2$   $I_2$   
 $I_d$   $I_1$  0  $I_2$   
 180

$(I_d, I_r)$

LCD-4

$I_d = I_1 + I_2$   $I_r = I_1 I_2$  2-20

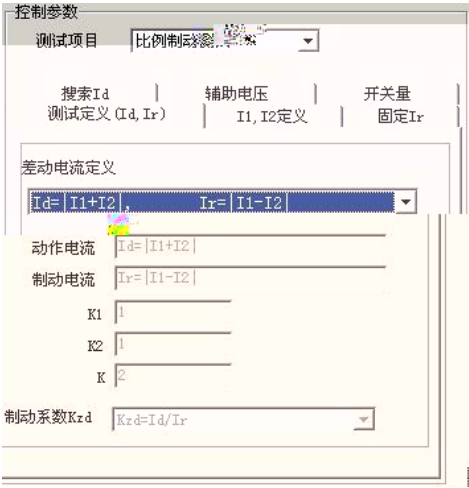
$I_r$

$I_r$

$I_r$

$I_r$

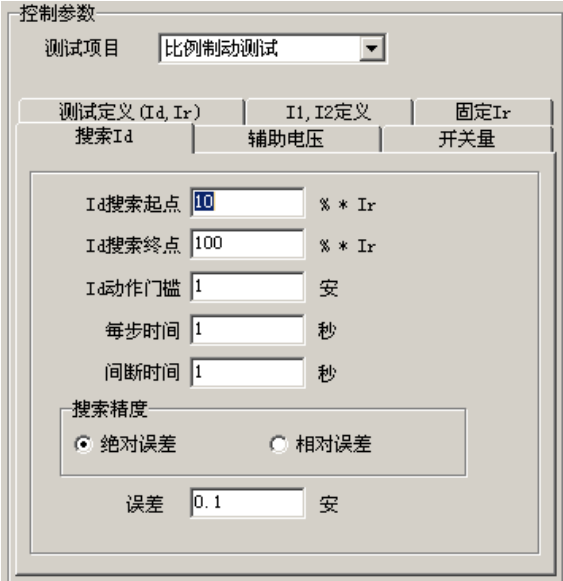
2A 10A 0.5A



2-20  $(I_d \quad I_r)$

$I_d$   $I_r$   $I_d$  2-21 (  $I_d$   $I_r$  )  
TQWX-III

$I_d$  10 100  $I_d$  2A 1  
1 0.01A



2-21  $I_d$

$I_d$  1  
100  
(4) I II II  
I2  
 $K_{zd}$   $I_d \quad I_r$   
(5)

---

(6)                                      0.4    0.6                                      3-5

$I_d = f(I_r)$

(1)

(2)

---

(1)

(2)

(3)

(1)

---

$$I_{pu} = K_{rel}^I \frac{E'}{X_S + X_0 L}$$

$$\frac{E'}{L} = K_{rel}^I \frac{X_S}{X_0}$$

1.2~1.3

---

(2)

---



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$$L_1 = \frac{L}{K_{rel}} = 0.75L$$

$$K_{rel} = 1.3 \sim 1.4$$

$$I_{pu} = \frac{E'}{X_S + X_0 L_1}$$

$$E'$$

$$X_S$$

$$X_0$$

$$L_1=0.75L$$

$$I_{pu}$$

$$U_{pu} \quad \sqrt{3}I_{pu}X_0L_1$$

2-22

A

3QF

DL-31

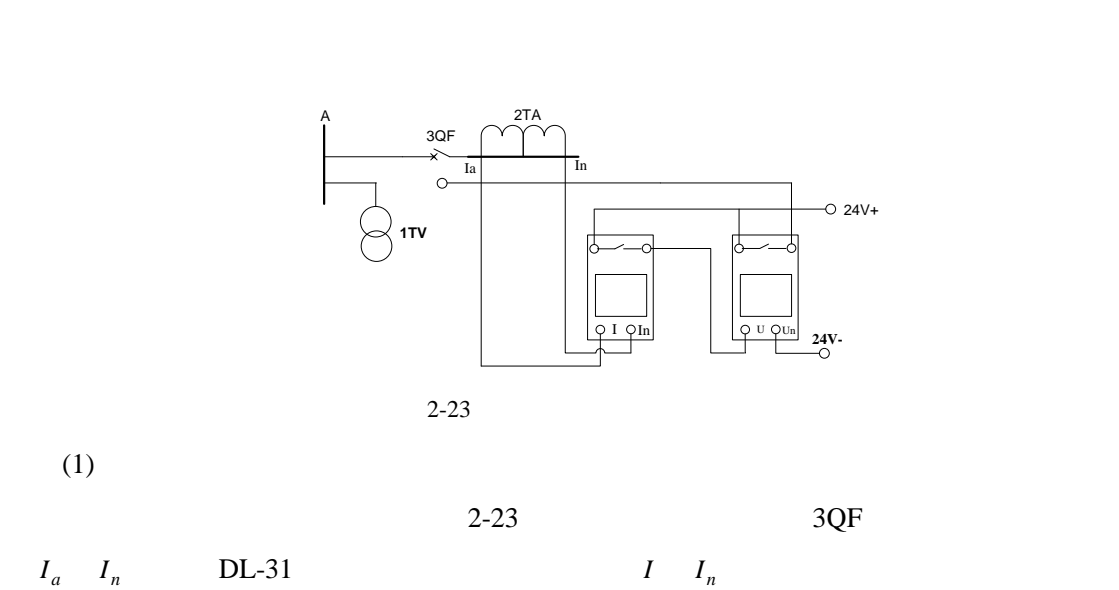
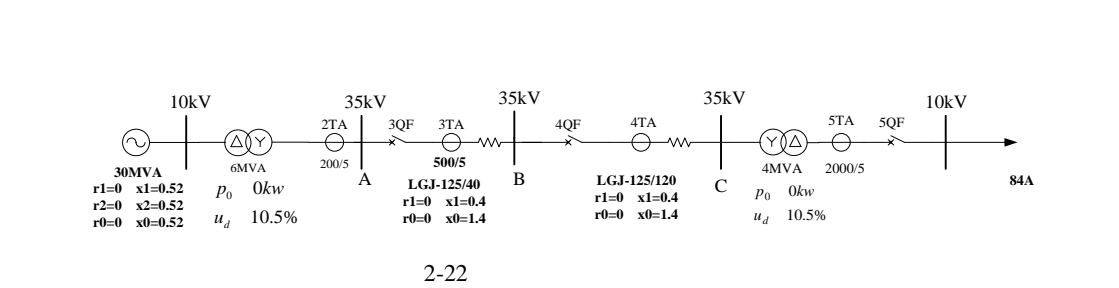
2-23

DL-31

DY-36

2-25

DZY-202



(1)

2-23

3QF

$$I_a \quad I_n$$

$$DL-31$$

$$I \quad I_n$$



(2)

2-22

2-13

DL-31

(3)

.ddb

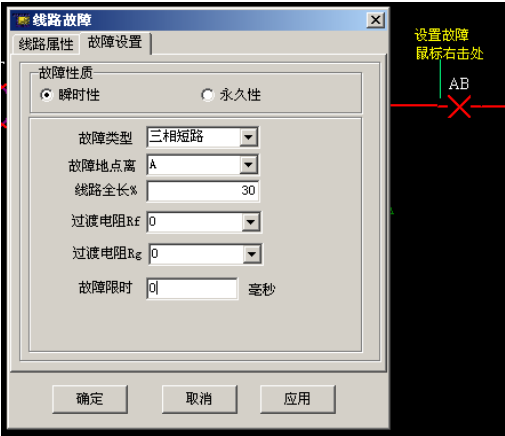
.ddb

a.

2-24 AB

1 99

$R_f$   $R_g$  0 0 0



2-24

0% 100%

b.

c.

3QF

d.

e.

3QF

f.

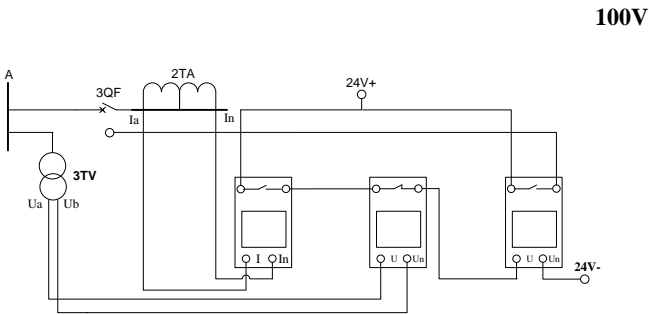
a-e

2-13				
g.	AB	AB		
2-13				
2-13				

	(A)	(V)		
				AB
	5.03			
	4.55	15.6		

(1)				
			2-25	3QF (3TV)
$U_a$	$U_b$	DY-36	$U$	$U_n$ 3QF
(TA)	$I_a$	$I_n$	DL-31	$I$ $I_n$
3QF				

(2)				
2-13				



(3)				
	AB	2-13		