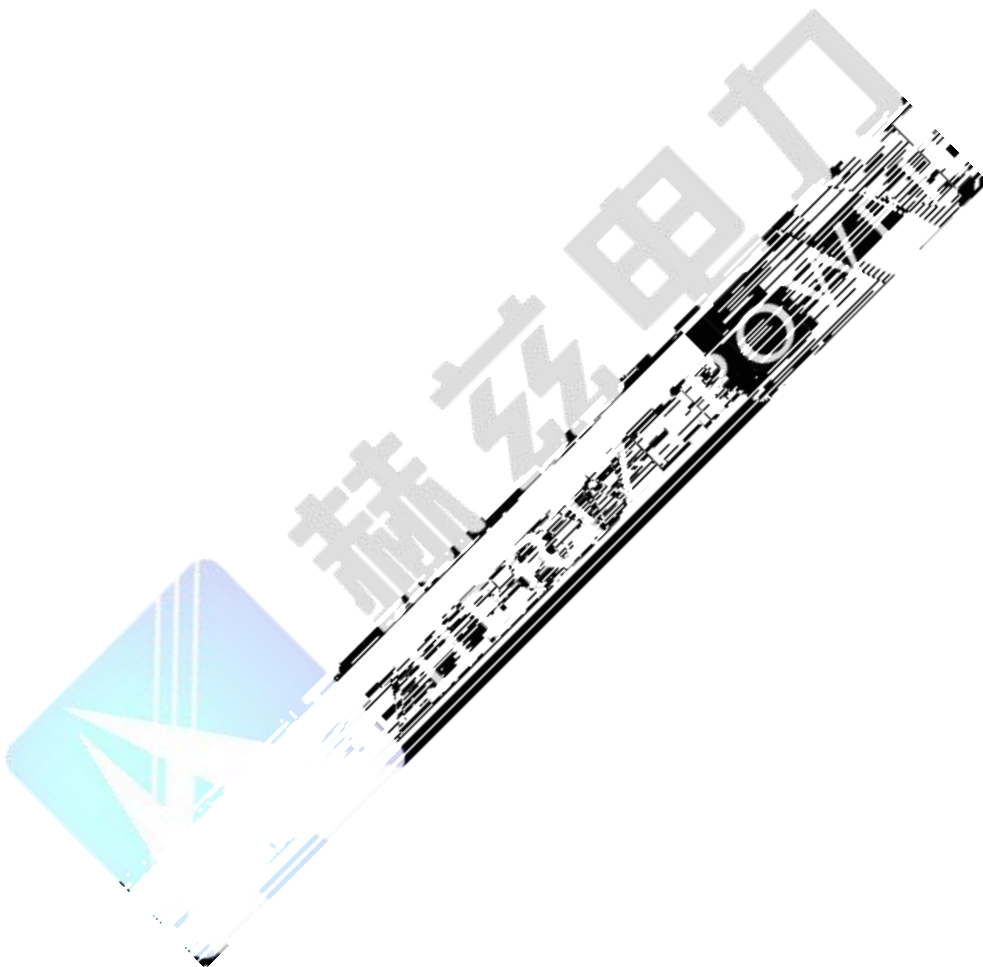


HZDW-DB

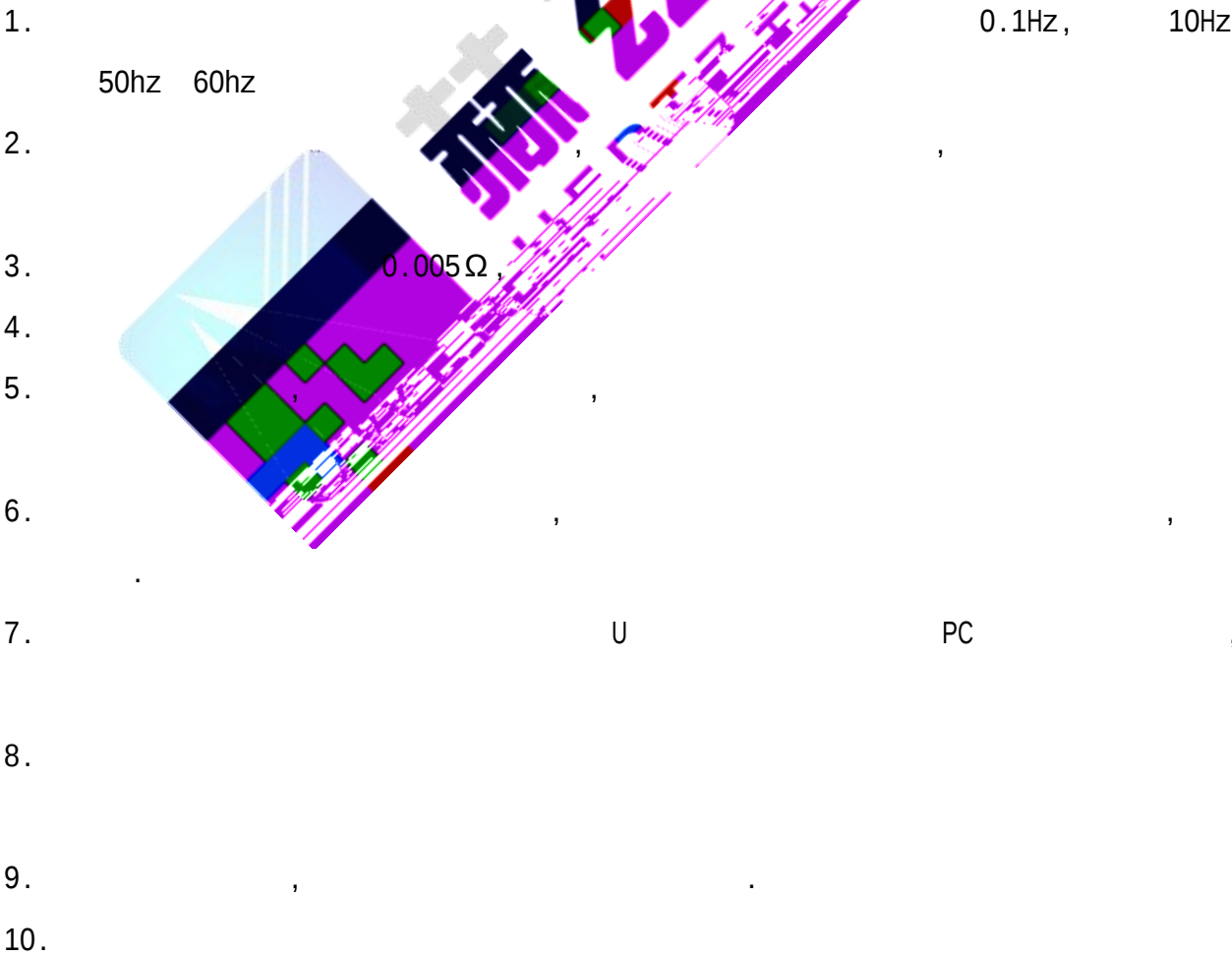


≠ —

30A

HZDW-DB

HZDW-DB



11.

12.

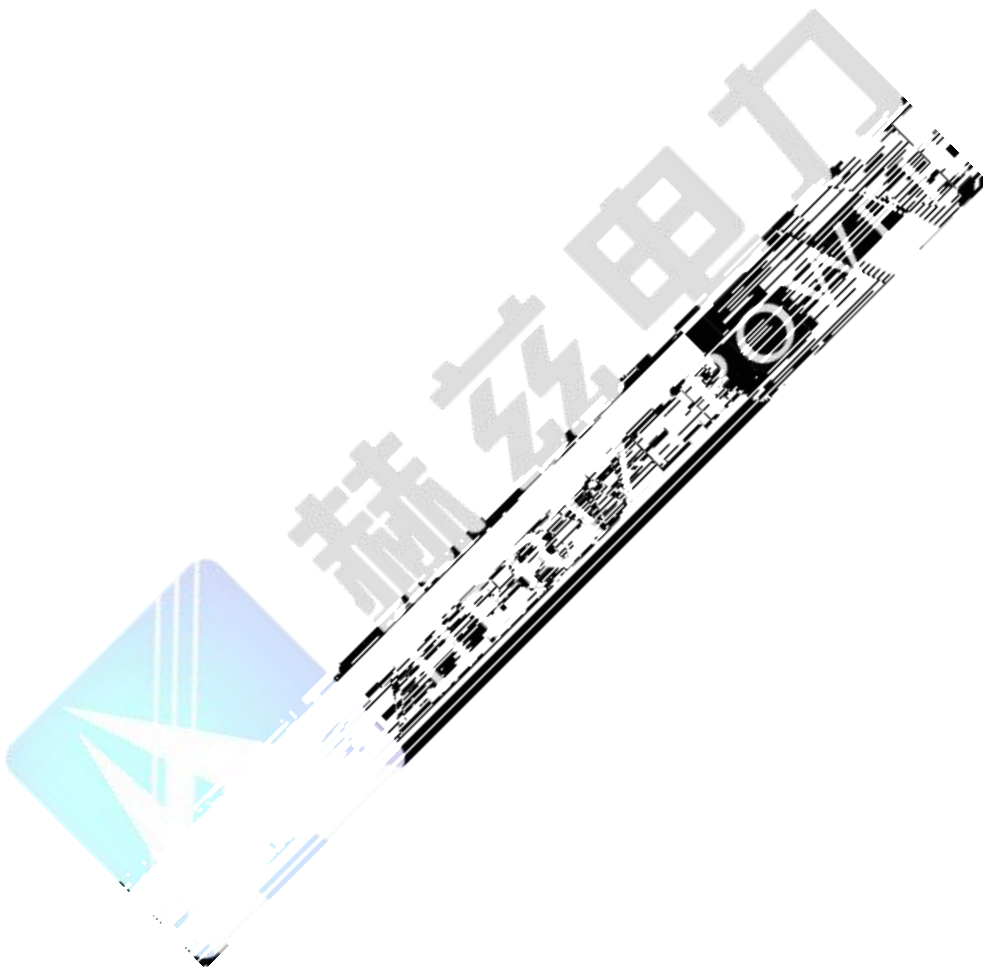
13.

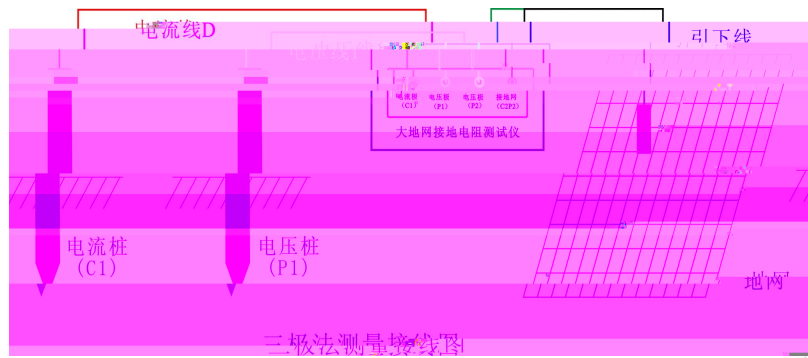
30A m "

Đ

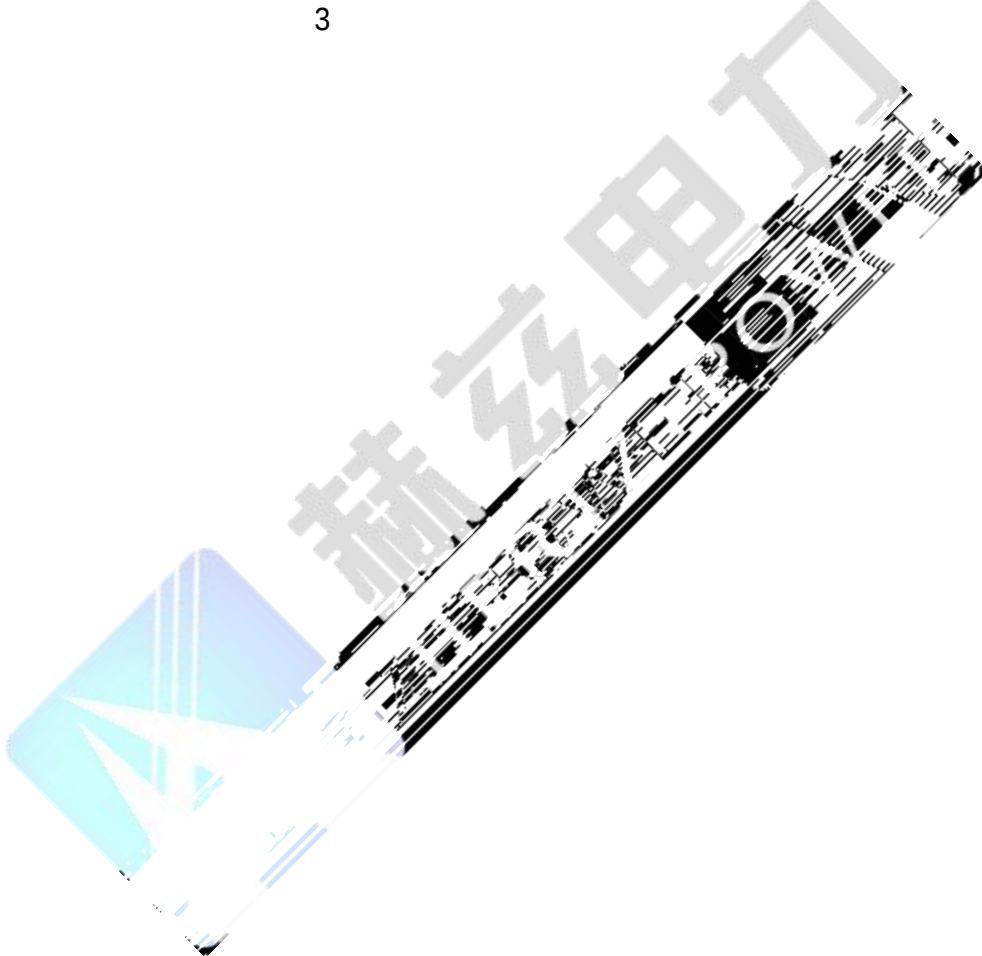
Đ







3



4

5AC 220V/50Hz

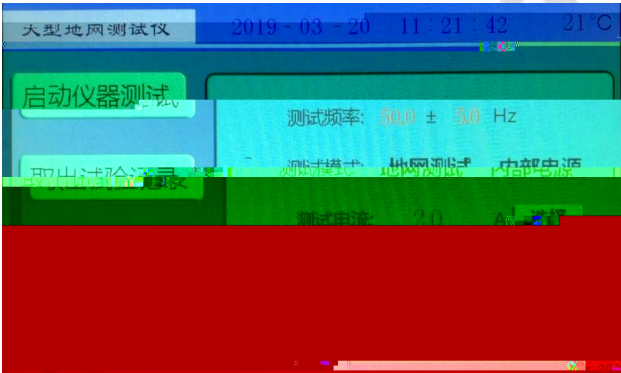
6

7

8

7.2

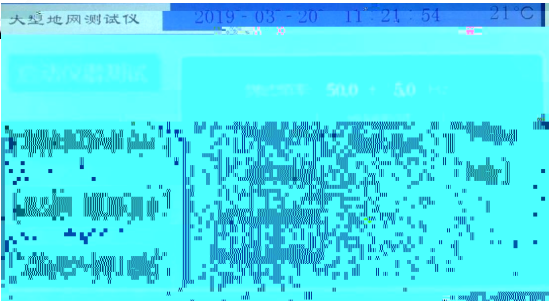
1.5



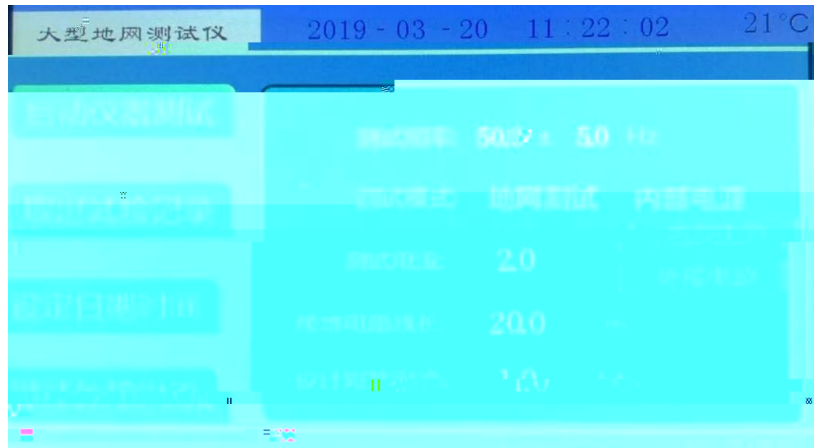
250.0 ± 5.0Hz45.0 ± 5.0Hz50 ± 5Hz

1)60 ± 5Hz50Hz50.0 ± 0.0Hz

2)40-70HZ6



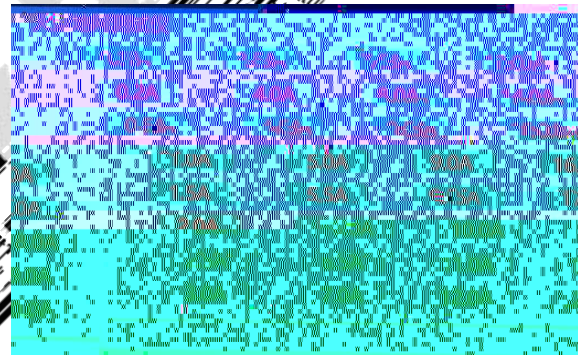
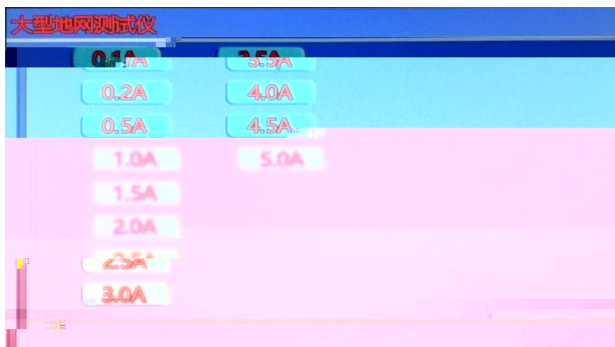
3)67



7

4) 2.0A

8



8

5A 20A

20

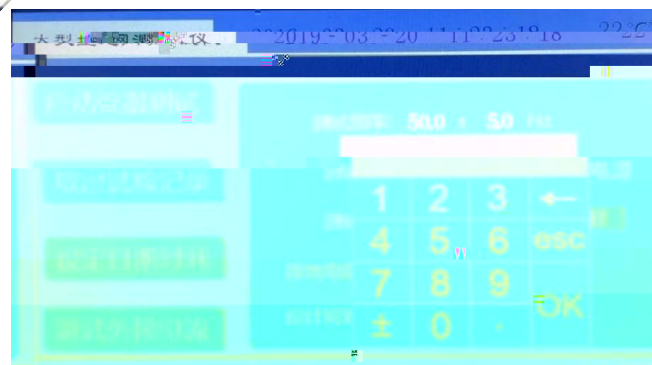
1kA

5)

6)

7) (5)

9



9

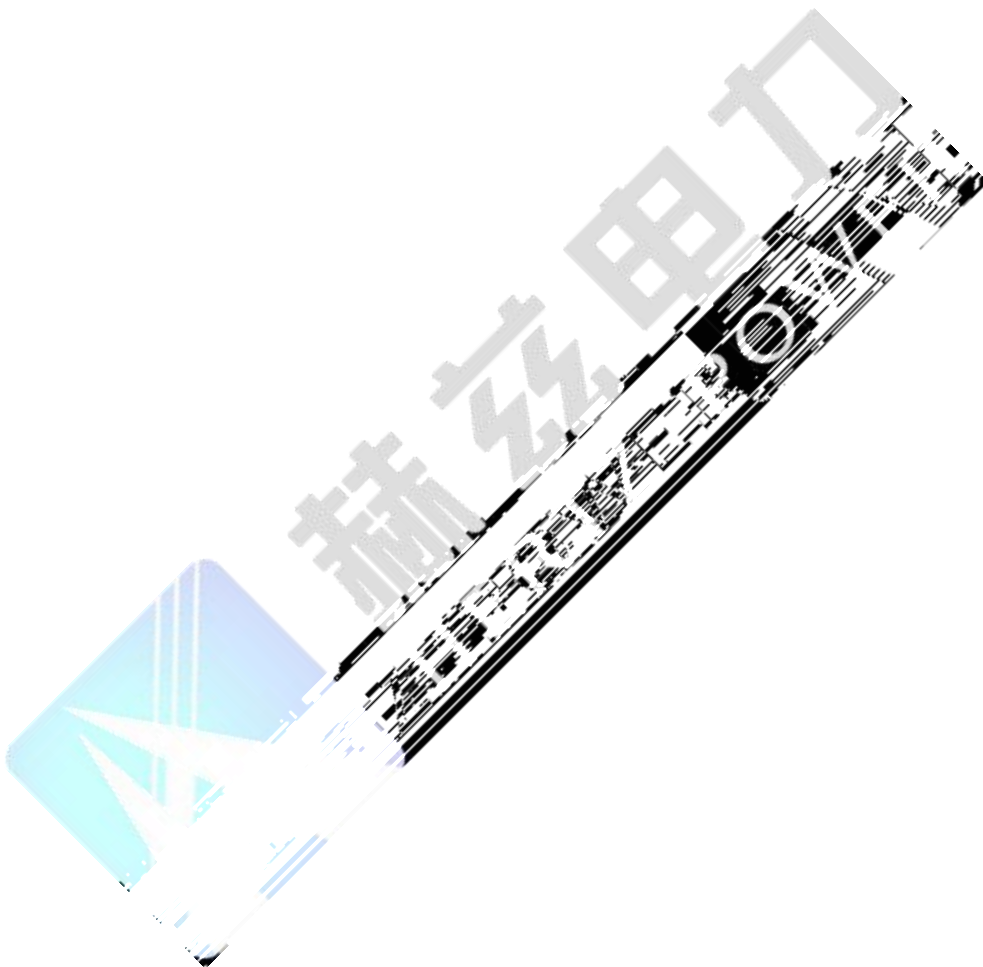
OK

esc

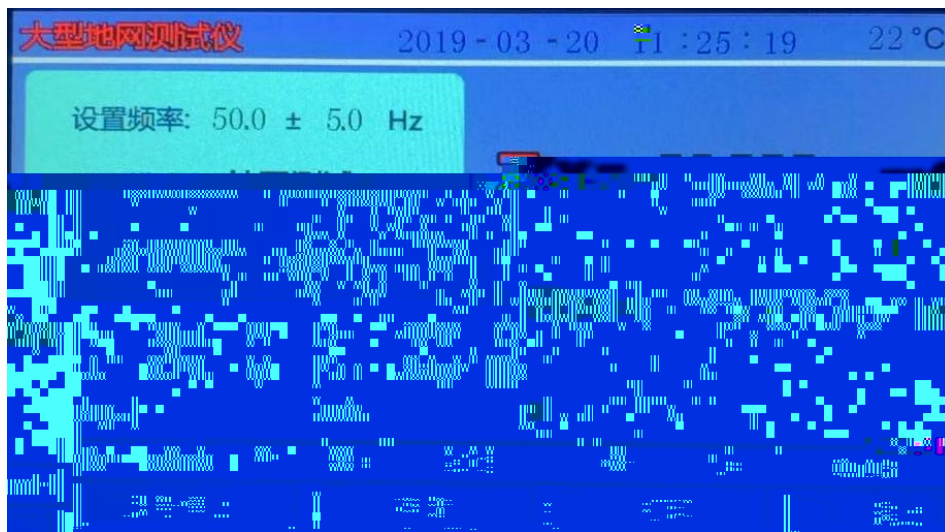
7.3

(5) ,

,



12

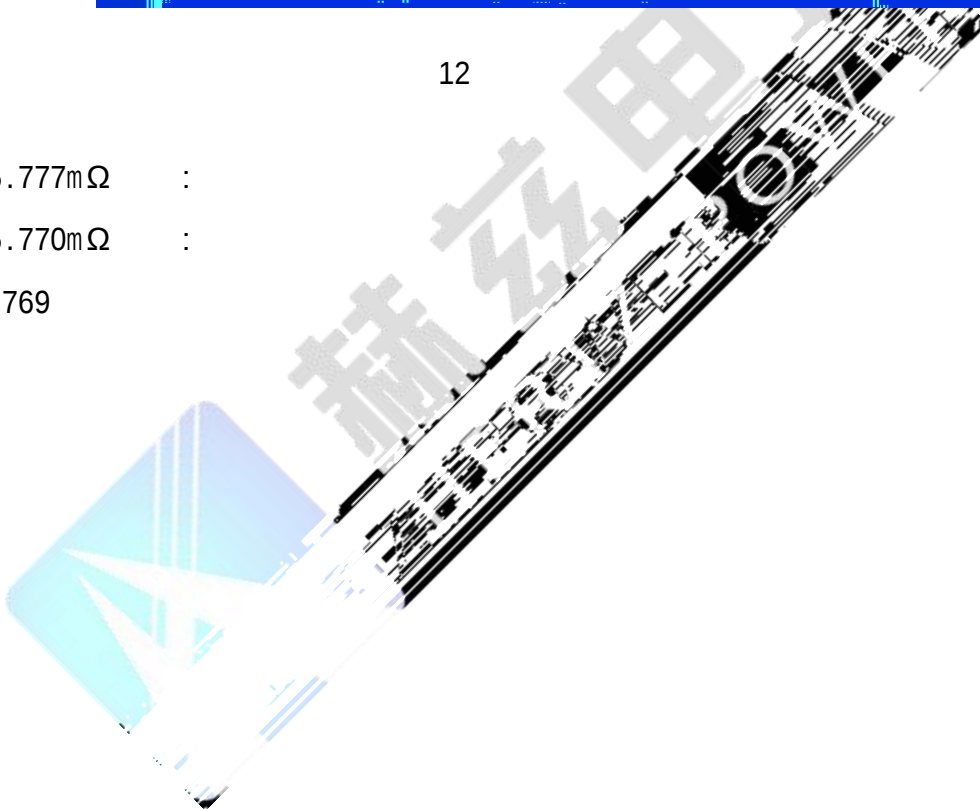


12

$$Z_x = 75.777\text{m}\Omega \quad :$$

$$R_x = 75.770\text{m}\Omega \quad :$$

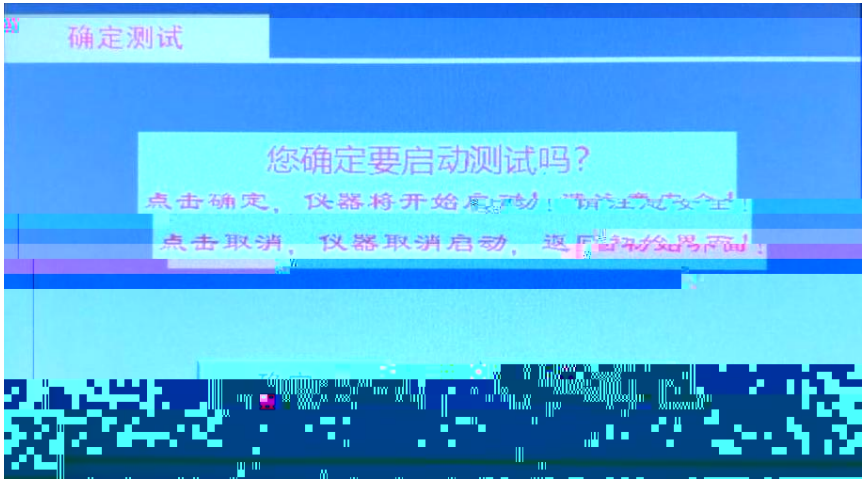
$$\Phi = 0.769$$



7.4

(5) , 20

, 14



14

(15)

(5)



I=2.002A

U=0.153V

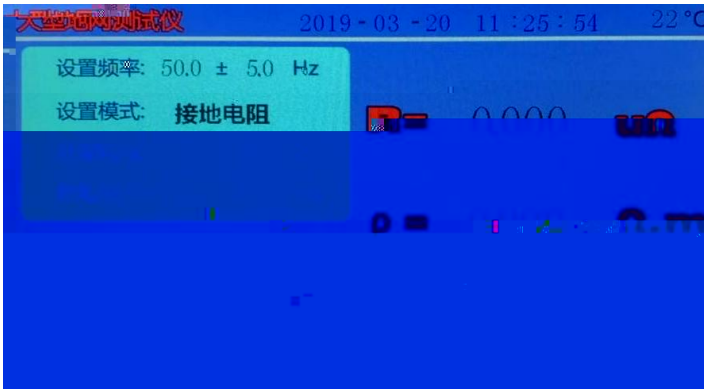
R=0.076 Ω

F=55.00Hz (F1)

F=45.00Hz (F2)

84% 84%

100%

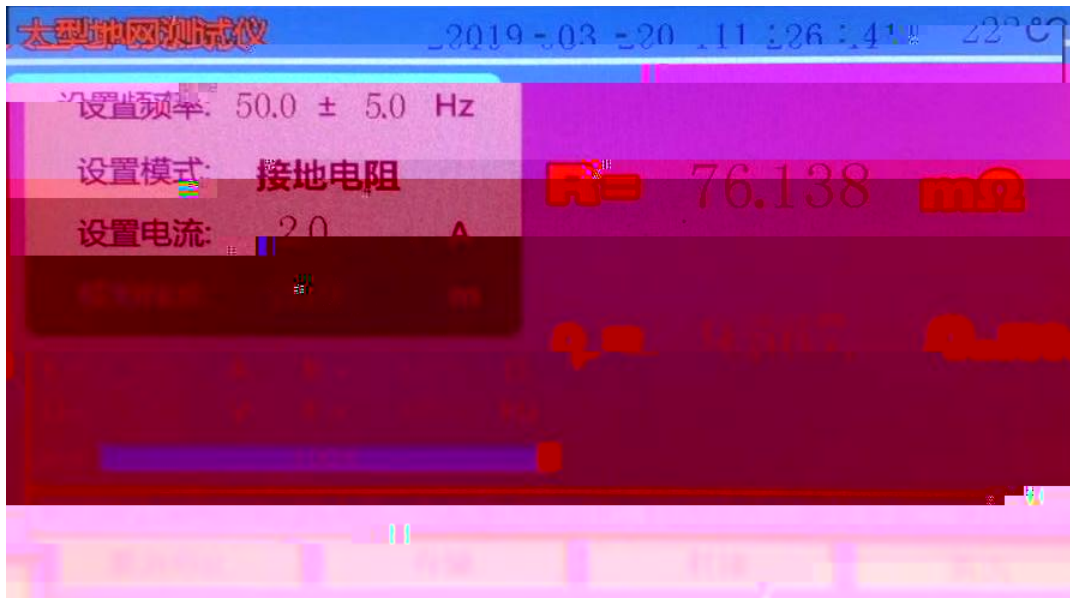


15

225

027-83267669

16



16

$R = 76.138\text{m}\Omega$:

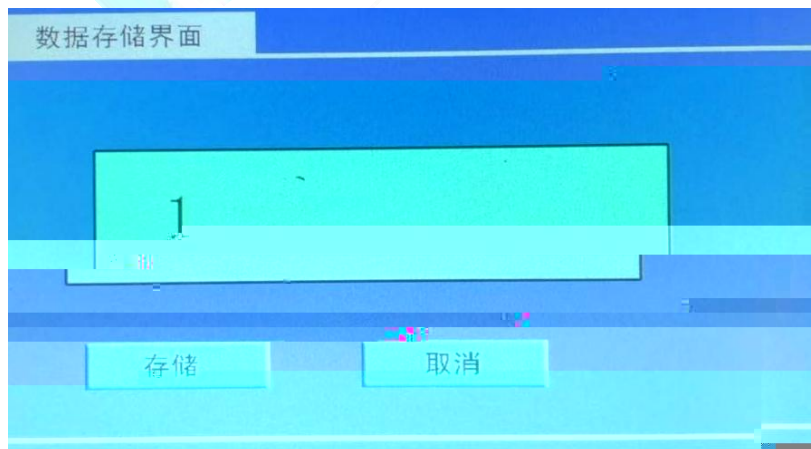
$\rho = 9.567\Omega \cdot \text{m}$:

$I = 2.000\text{A}$:

$U = 0.152\text{V}$:

(5)

17



17

1.

2. ,

,

3. ,

7.5

1

2

3 0.0A

0.5m

4

0.01Ω

5

C1

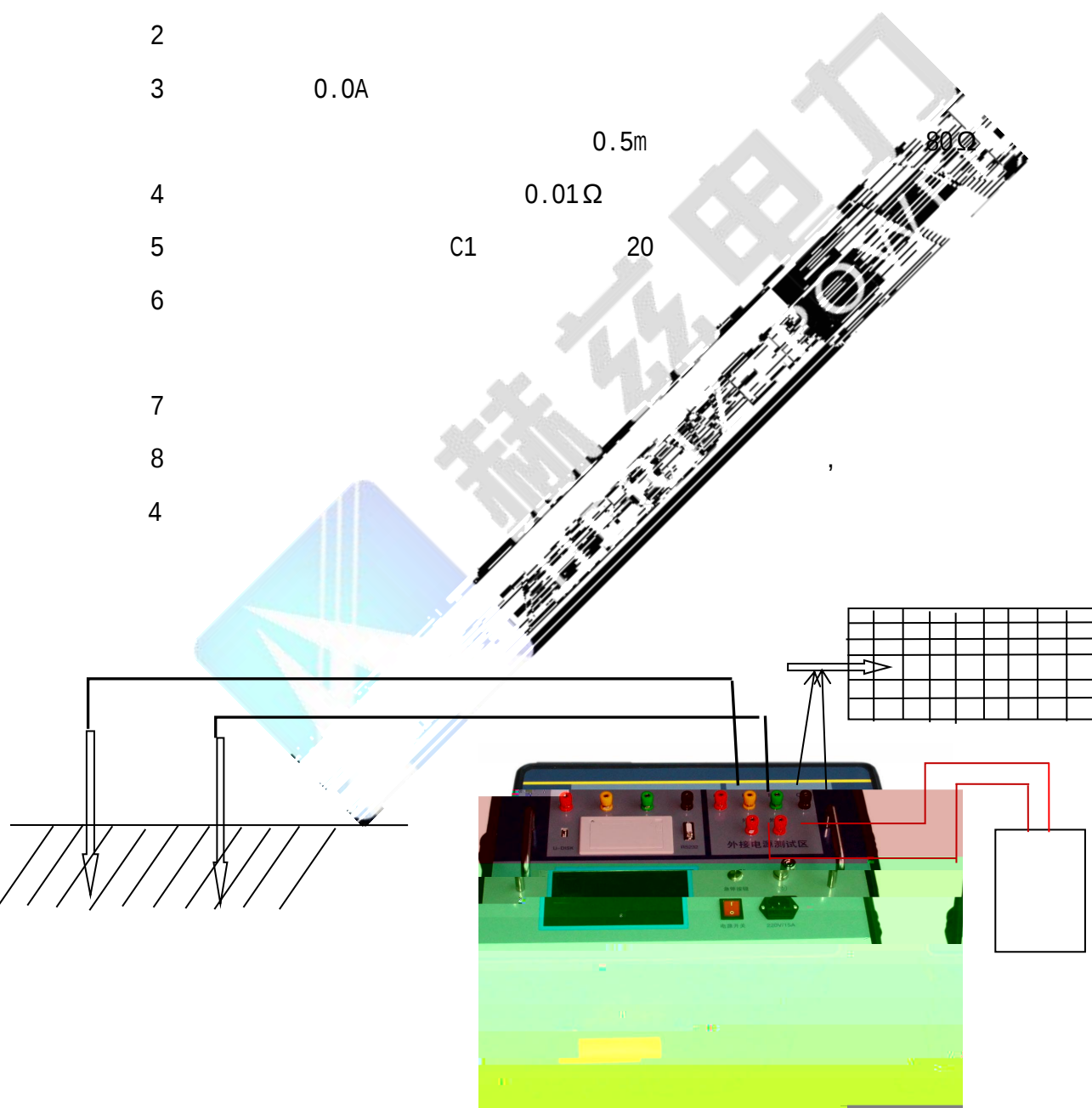
20

6

7

8

4

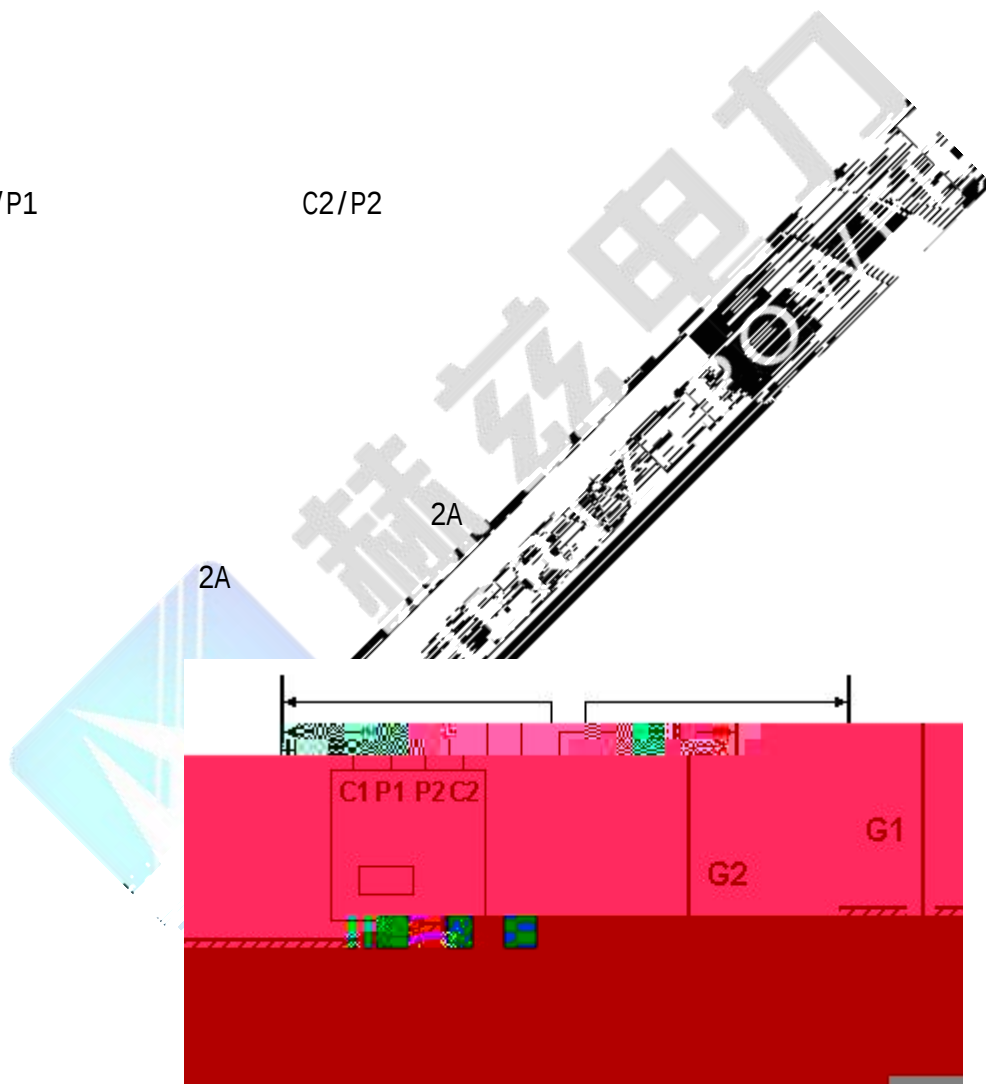


- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

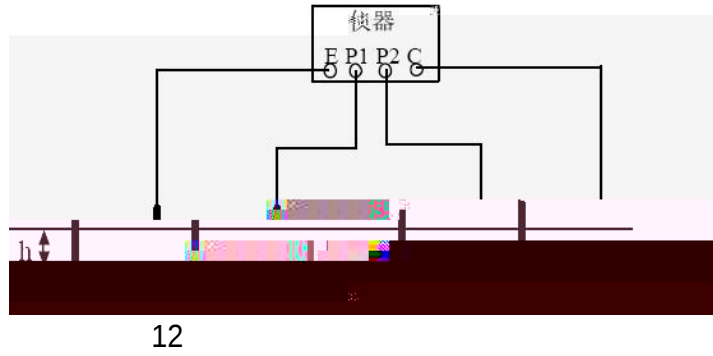
C1/P1

C2/P2

- 1
- 2
- 3
- 4



12



a b h a=b
a b h, a b>10h

1.5cm

25mm × 25mm × 4mm

40cm

Z

ρ

$$\rho = \pi a(a+b)Z/b$$

$a \gg h$ $b \gg h$

$a=b$

$$\rho = 2\pi aZ$$

C

dCG

4~5

dPG

dCG

$$Z = \frac{1}{2} \left[\frac{1}{d_{PG}} + \frac{1}{d_{CG}} - \frac{1}{\sqrt{d_{PG}^2 + d_{CG}^2 - 2d_{PG}d_{CG}\cos\theta}} \right] \quad \text{公式 (1)}$$

θ —

Z' —

dPG

dCG

θ

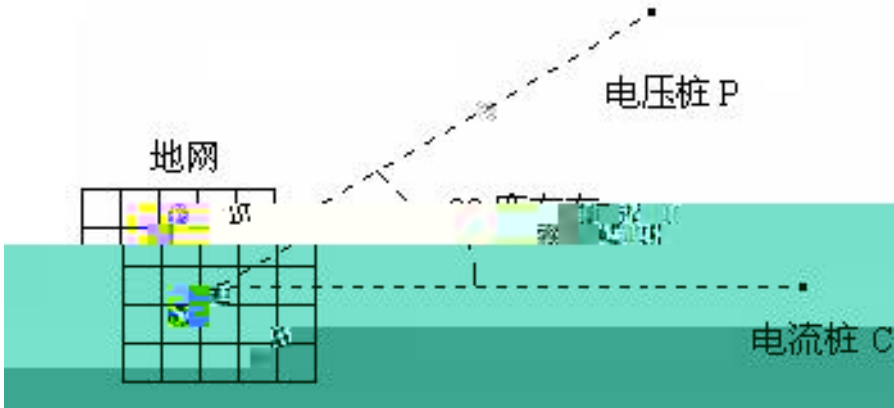
30°

$$dPG = dCG = 2D$$

2A

225

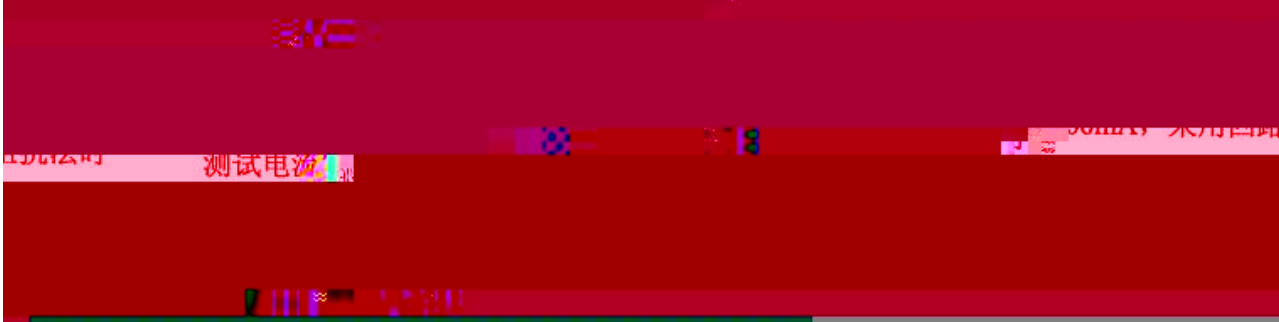
027-83267669



1			
2			
3			
4			
5	P1	P2	5m
6	(C1	C2	3m
7	(	)	
8			
9			
10			
11			

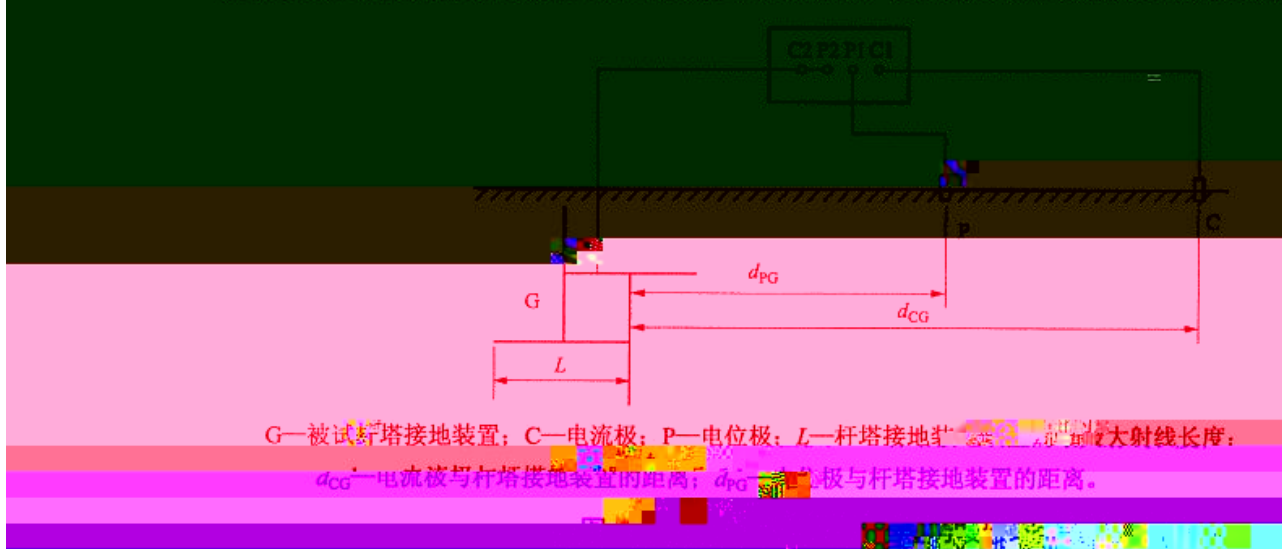
7 输电线路杆塔接地装置的接地阻抗测试

输电线路杆塔接地装置

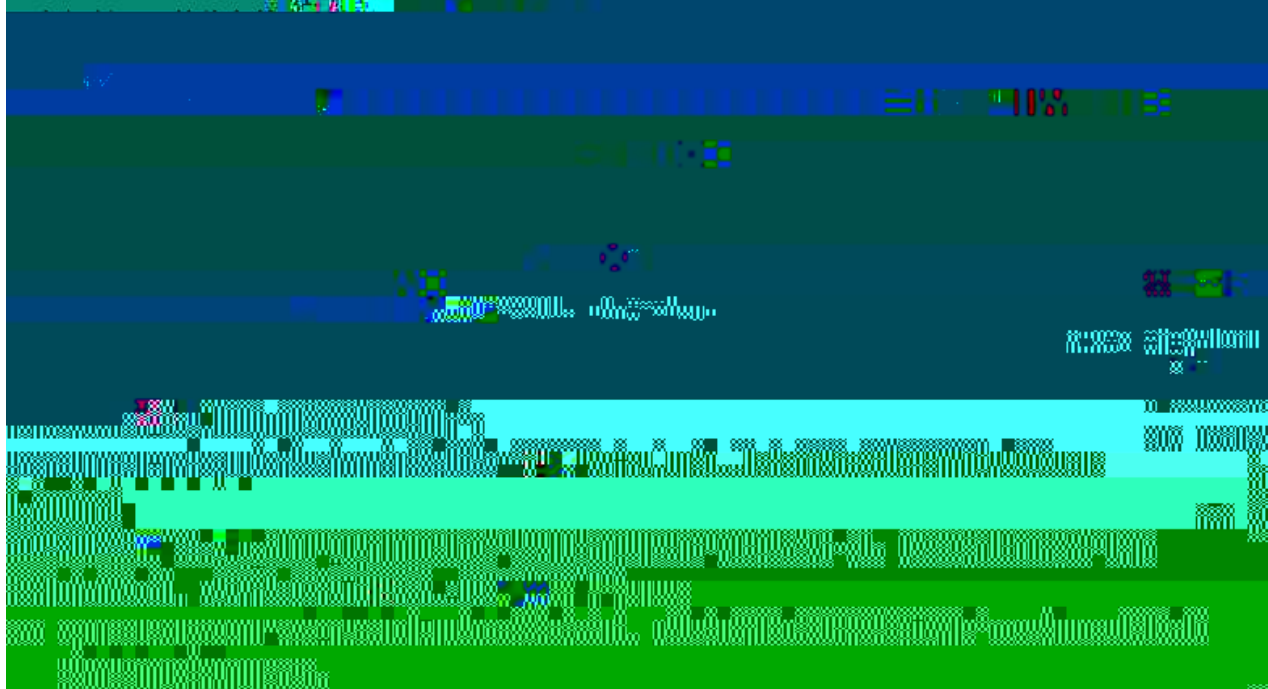


7.2.1 测试方法

三极法测试输电线路杆塔接地装置接地阻抗的方法和原理与变电站接地装置的基本相同，见图 7。杆塔接地装置的最大对地射线长度为 D ，当被测杆塔接地装置有射线时， D 取射线长度。由于杆塔接地装置通常没有交流电源，且电阻较大，所以测试一般采用便携式接地阻抗测试仪。



测试杆塔的接地电阻时，应拆除被测杆塔所有接地引下线，即把杆塔塔身与接地装置的电气连接



7.3 回路阻抗法

7.3.1 适用条件

回路阻抗法适用于以下条件：

- 杆塔塔身与其接地装置在电气上无连接

。在由被测杆塔接地装置、接地装置杆塔、避雷线、远方多级杆塔及其接地装置组成的回路中接入测试仪器，如图8所示。产生测试电流，测得被测杆塔接地装置的接地阻抗的并联效应， $Z_{\text{总}}$ 大于且可接受的被测杆塔接地装置的接地阻抗， $Z_{\text{总}}$ 为杆塔接地阻抗测试中是可以接受的。

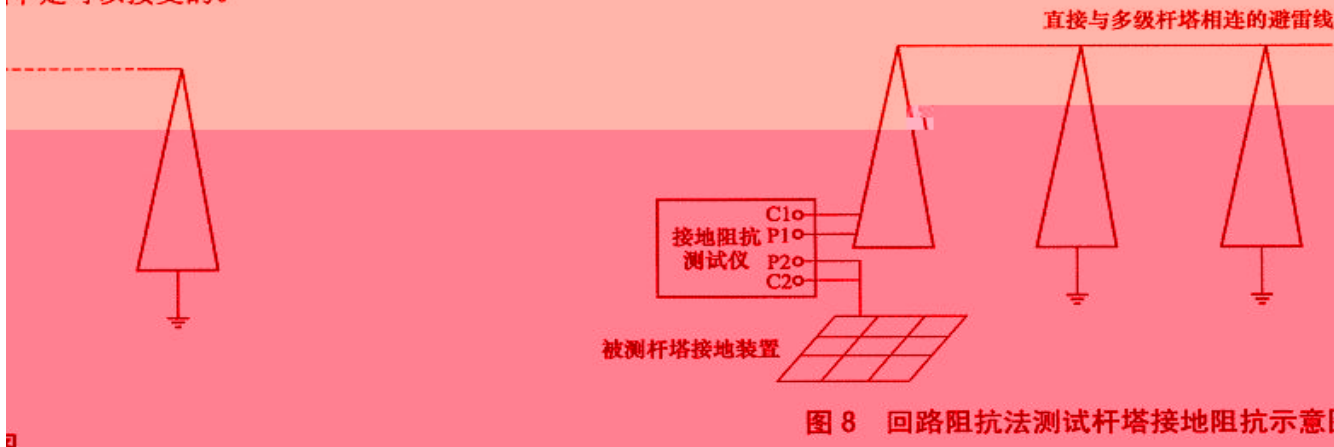


图8 回路阻抗法测试杆塔接地阻抗示意图

若实测值过大或过小（如大于 50Ω 或小于 2Ω ），或者超过经验值，应用三极法验证。

1

2

1.

2.

1

2

3

2

24

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24

48

4

225

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