



赫兹电力  
HERTZ POWER

产品宗旨：技术领先，质量可靠，轻便易用

服务宗旨：快速响应，时间到满意，超过期



HZJB-330T

赫兹电力  
HERTZ POWER

“ ”

“ ”

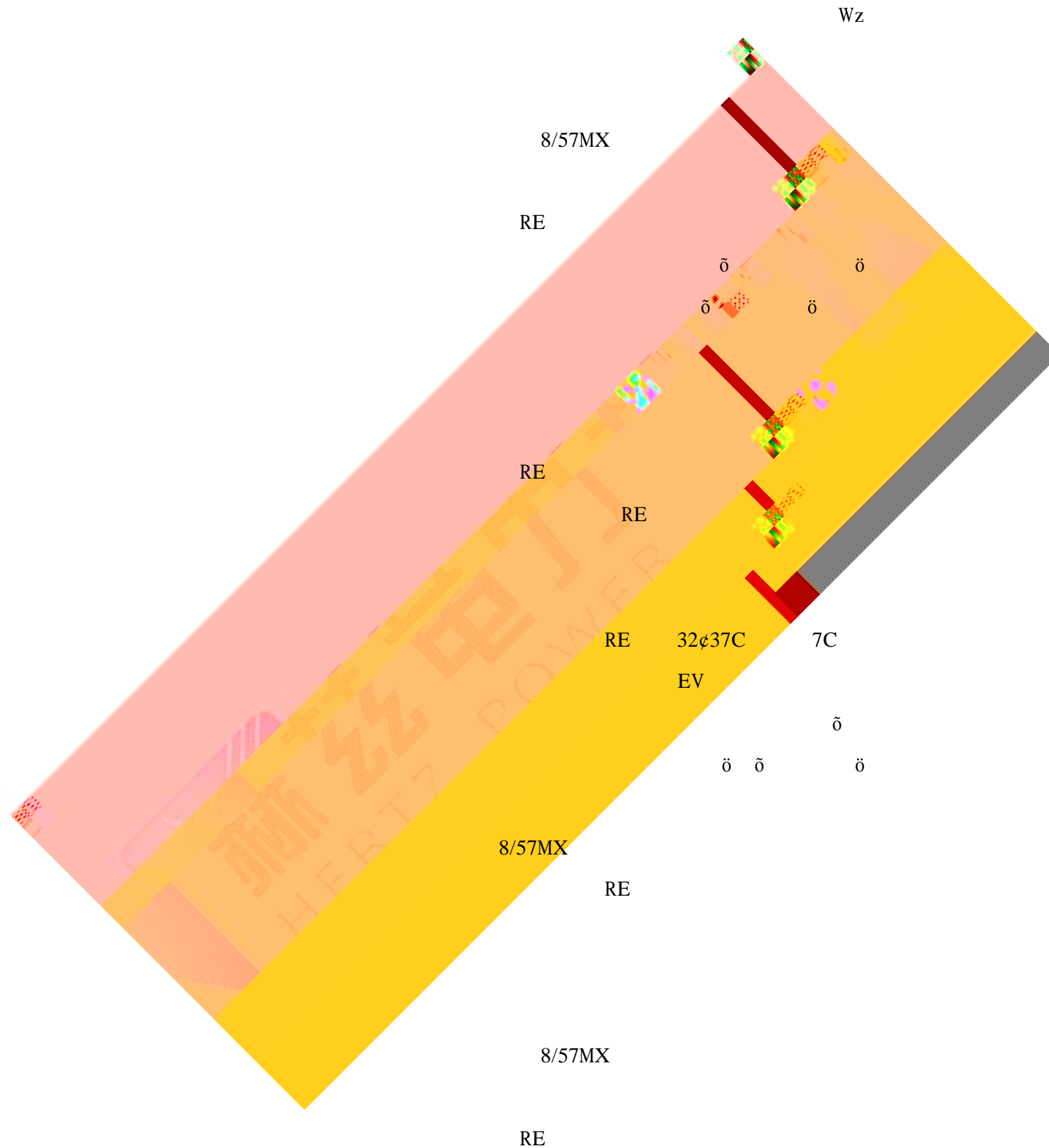
“ PC ” Windows

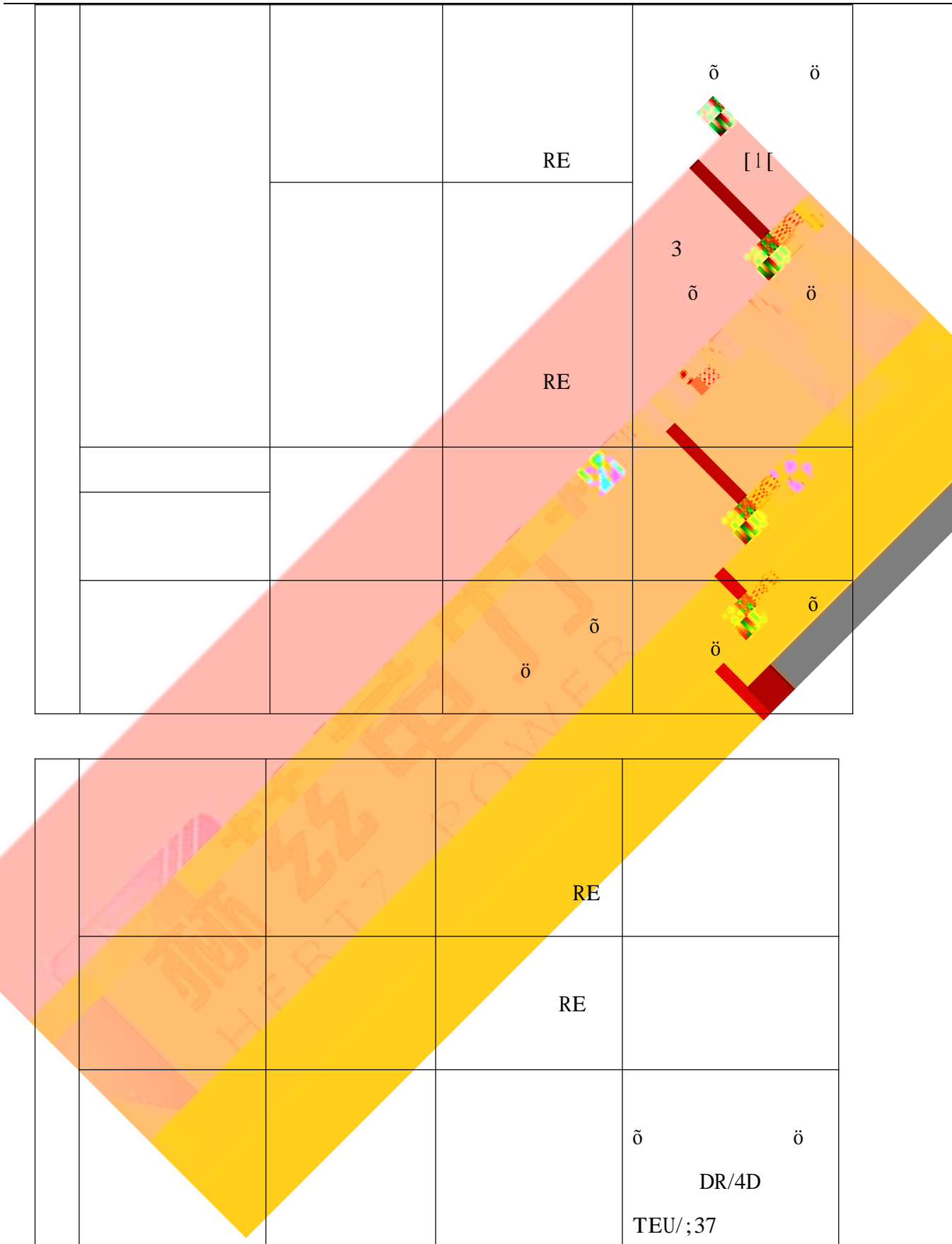
RE

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			öK v
			ö RE
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		RE	

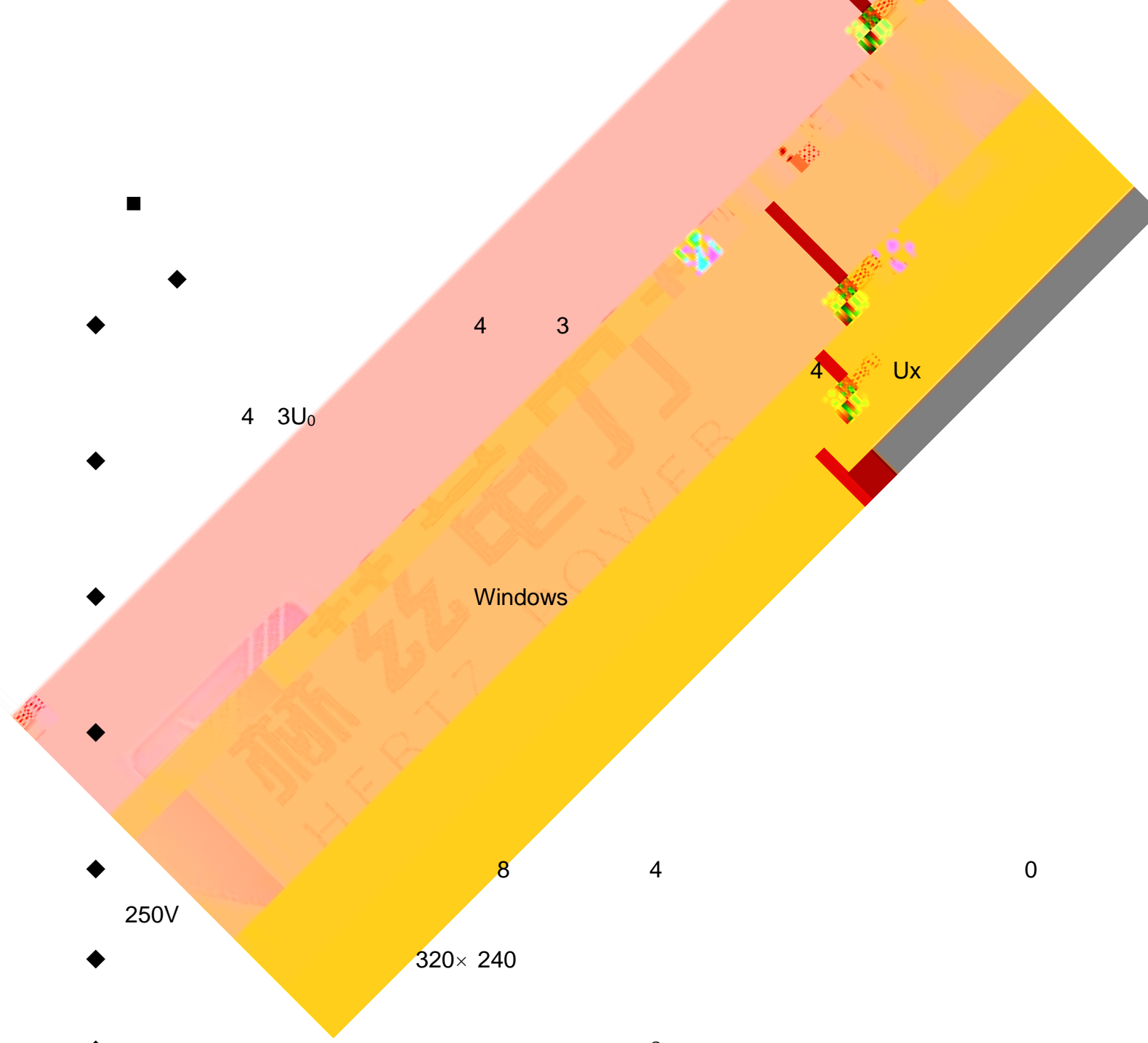








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◆ 110V 220V

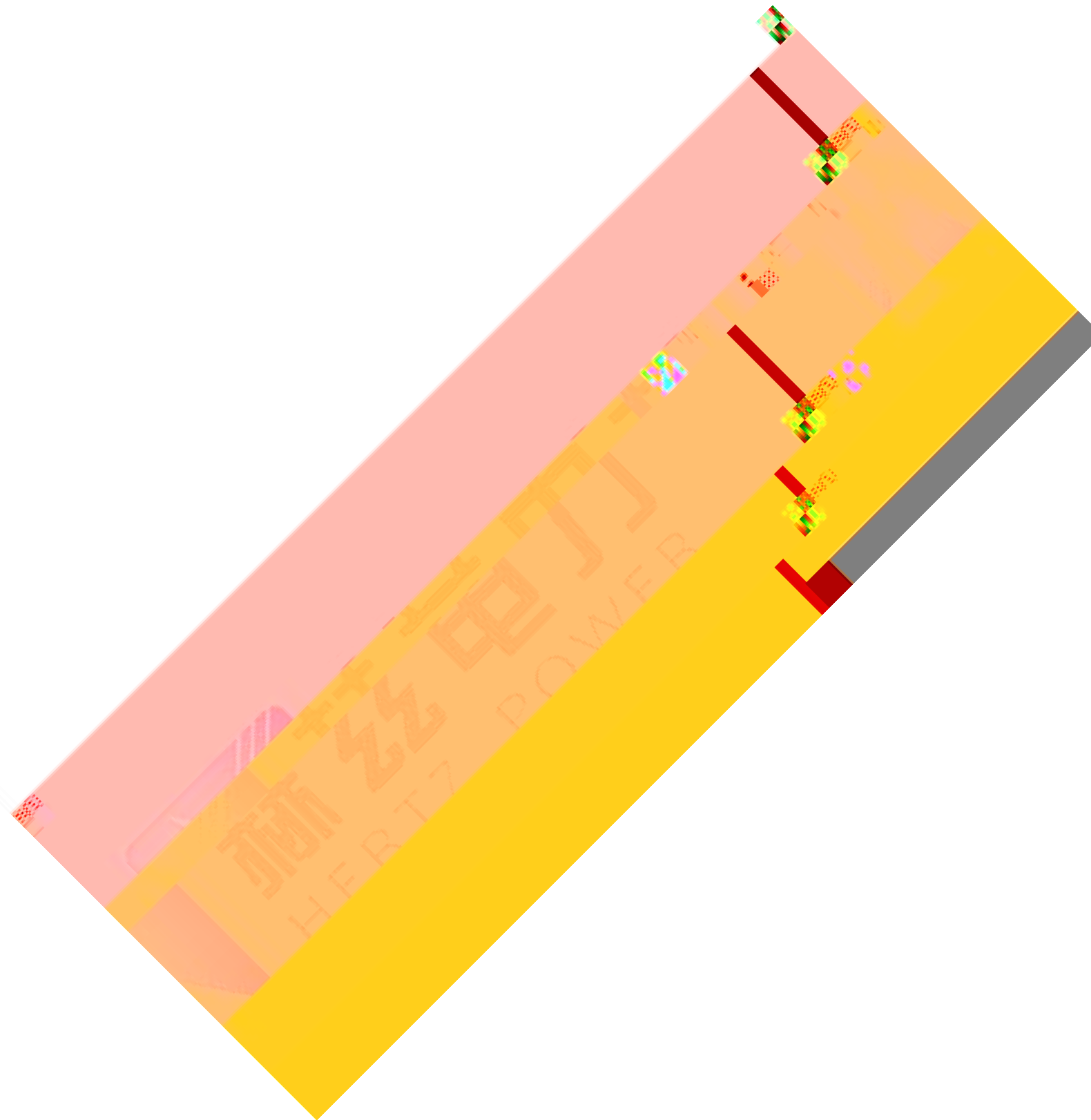


±

±

225

027-83267669



D/A

D/A



10A



0 250V

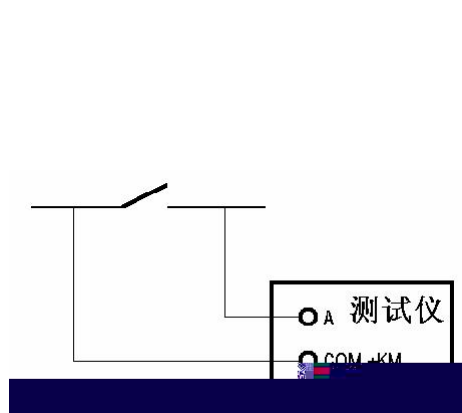
10A

0 6V

11 250V

250 10A 0 250V





320× 240

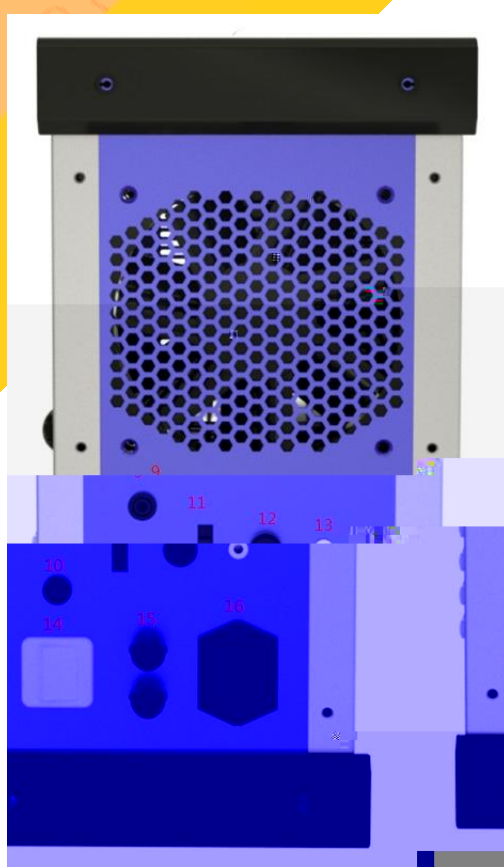
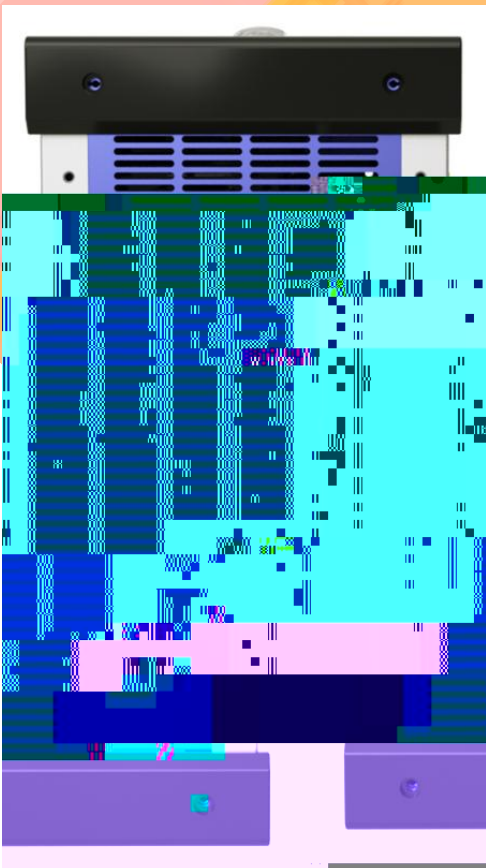


1.5A

110V 220V

2A 250V

2A 250V



5

GPS

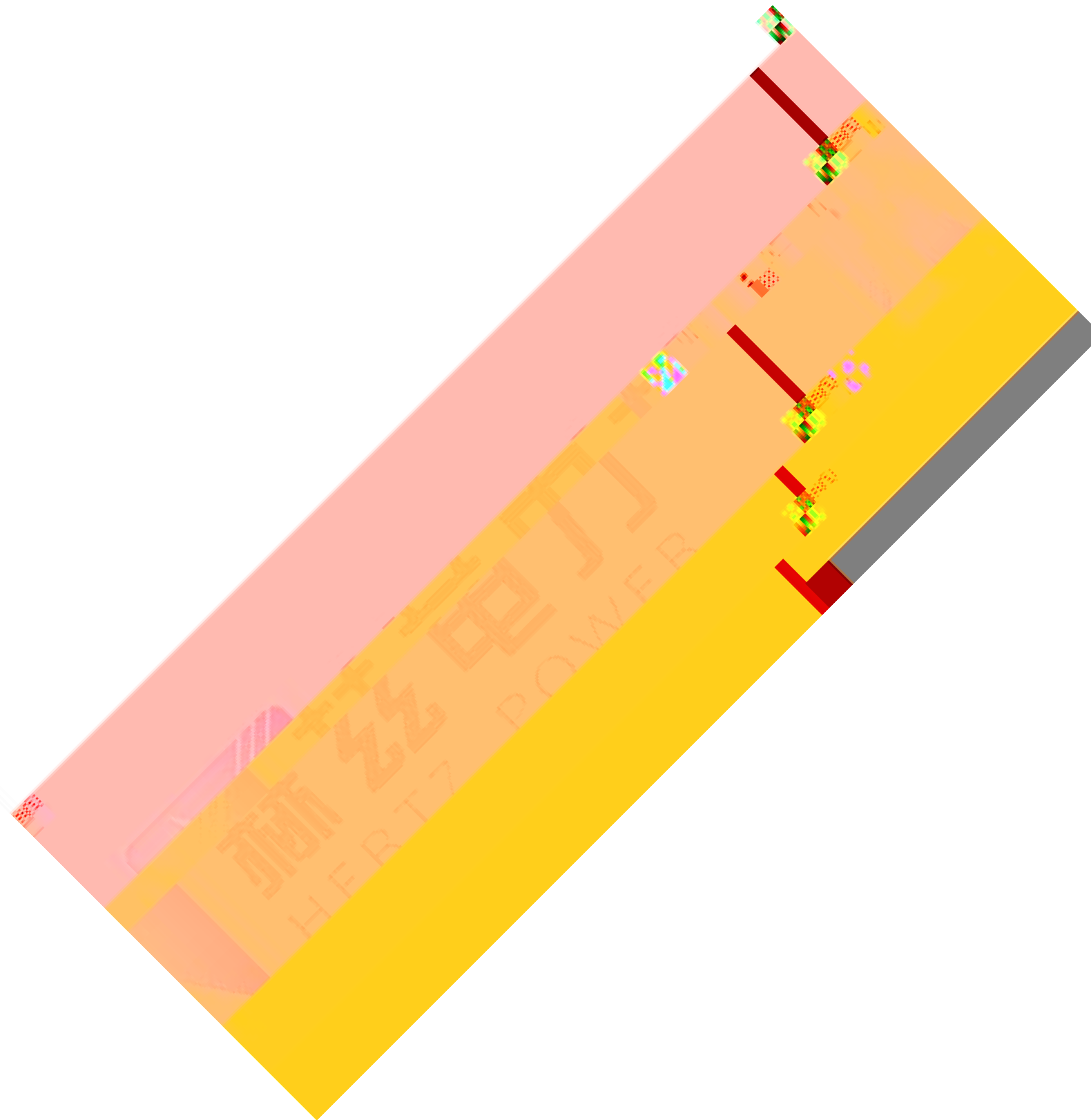
USB

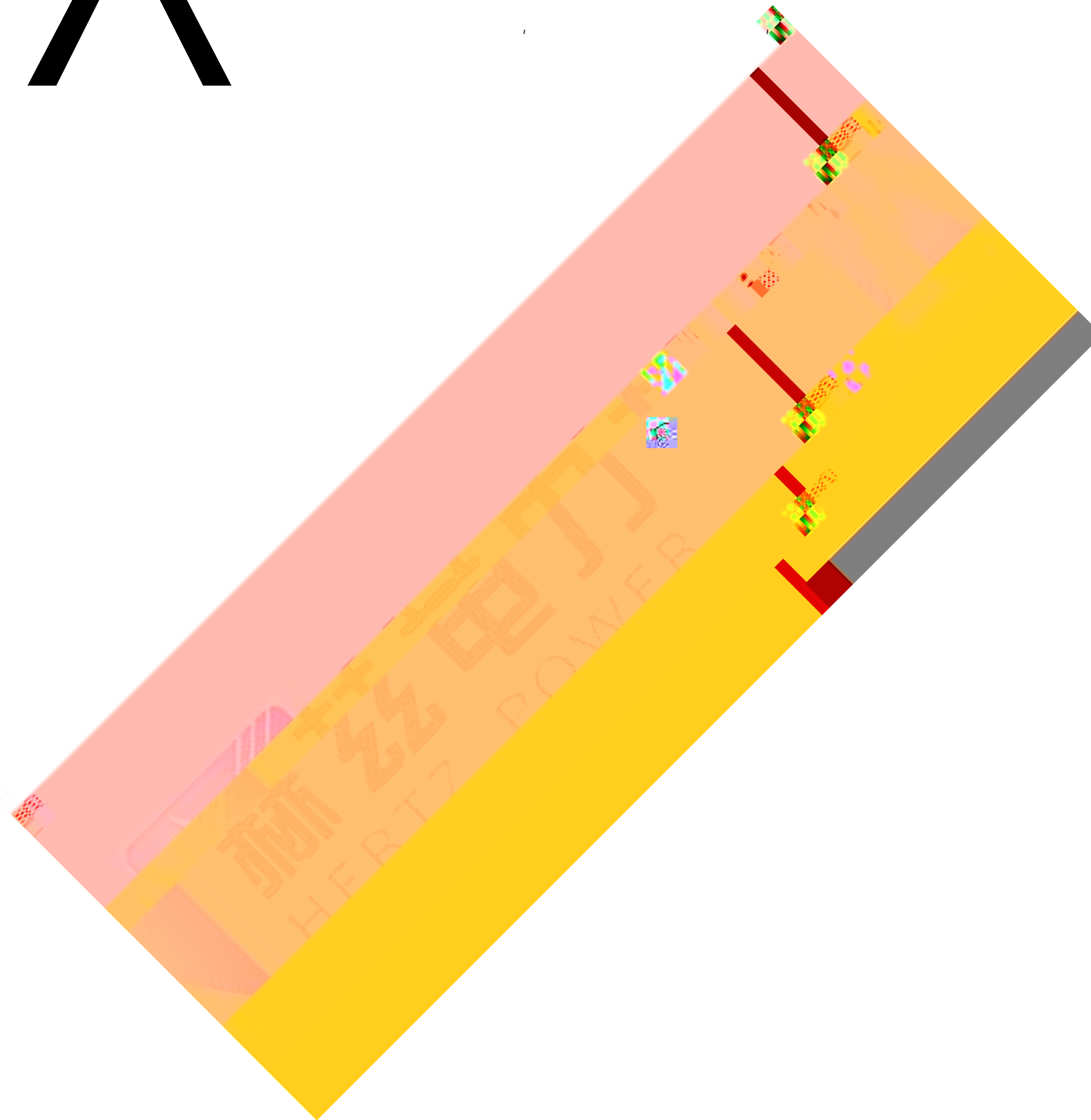
USB

U

220V

220v





●

Uab

Ua

Ub



s

V!

IA IN

ω

A

COM

A

8A

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ω

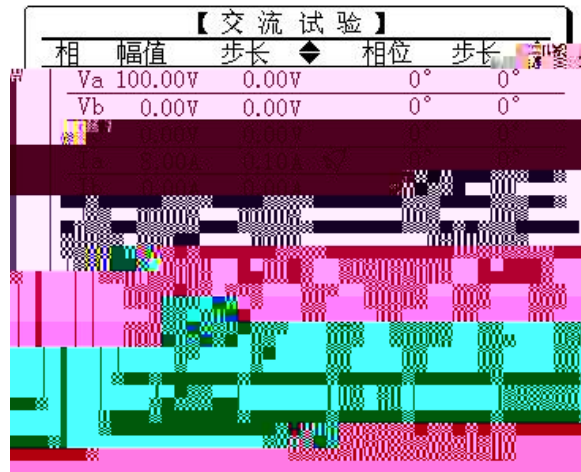
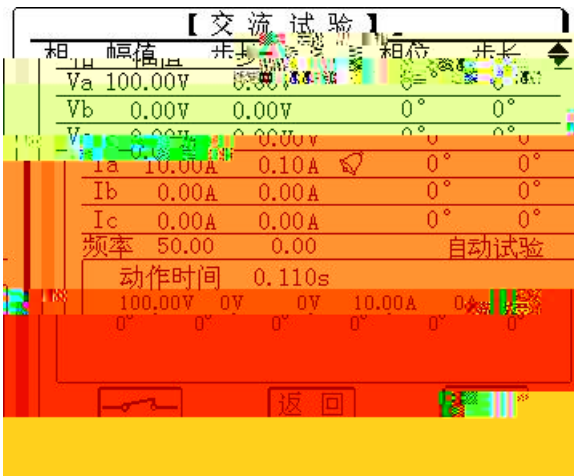
0.1A

# 1



赫兹电力  
HERTZ POWER

# AMPAGE



赫兹电力  
HERTZ POWER





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" " " "

Ua Ub Uc Ia Ib Ic

" " " " " " " "

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Ua Ub Uc Ia Ib Ic

Ua Ub Uab



“ ”

“ ” “ ”

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“ ” “ ”

“ ” “ ”

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Ua Uc



f/ t



【同期、低周试验】			
相	幅值	初相	频率
Va	57.1V	0°	变频率
Vb	57.7V	0°	
Vc	57.7V	0°	
Ia	1A	0°	变频率

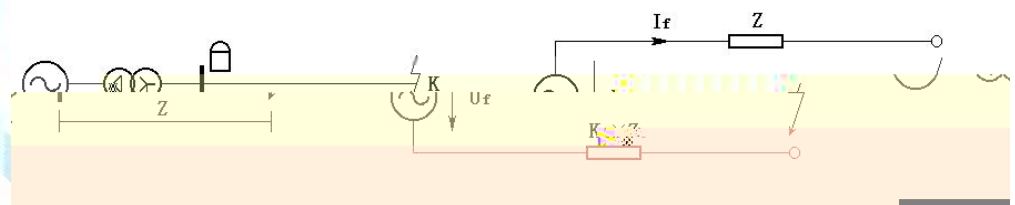
【同期、低周试验】			
相	幅值	初相	频率
Va	57.1V	0°	变频率
Vb	57.7V	0°	
Vc	57.7V	0°	
Ia	1A	0°	变频率



产品宗旨：技术领先，质量可靠，轻便易用

服务宗旨：快速响应，**客户**到满意，**超过期**







57.7V      0A      "      "      "      "

- A   B   C      "      "      R      c
- 



1

35kv

5A

40V

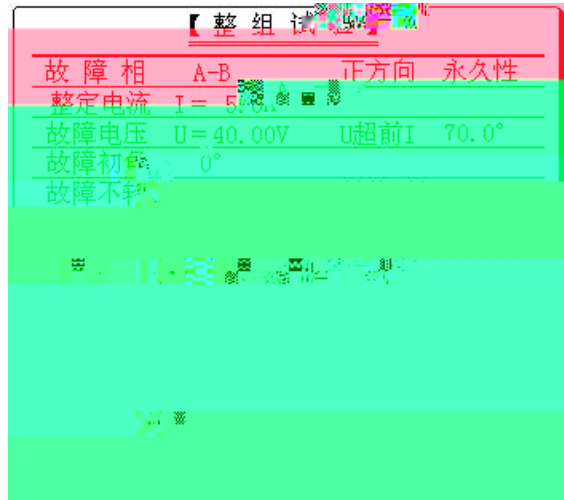
ABC

A C

A

R

COM





产品宗旨：技术领先，质量可靠，轻便易用

服务宗旨：快速响应，**客户**到满意，**超过期**





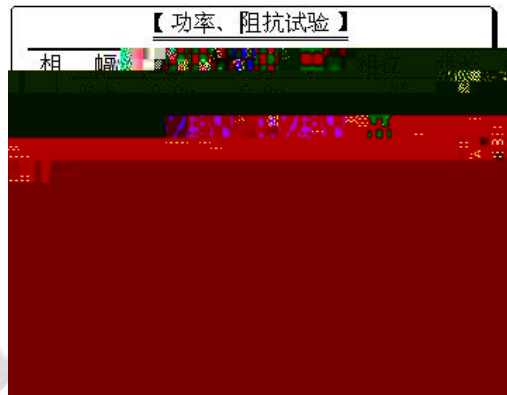
90°

3

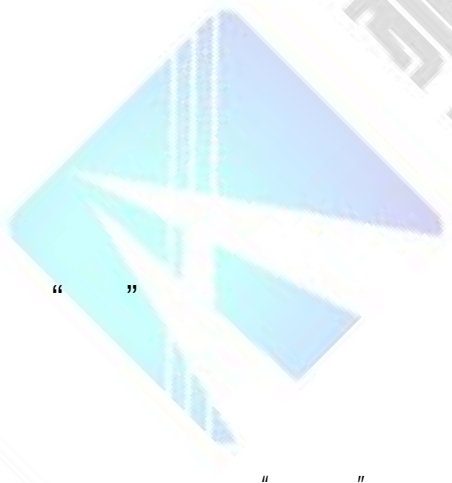
57.7V

90°

57.7V



- 
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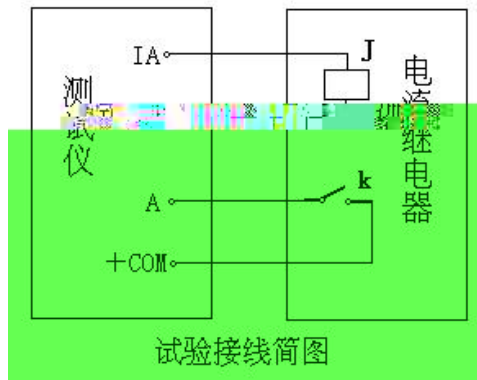


赫兹  
HERTZ POWER

“ ” “ ”  
“ ” “ ”  
,  
“ ”



		UA	UB	UC	UN
IC	IN		UAB	100V	IC
	5A	IC			180°
		1°			
		1°			



赫兹电力  
HERTZ POWER





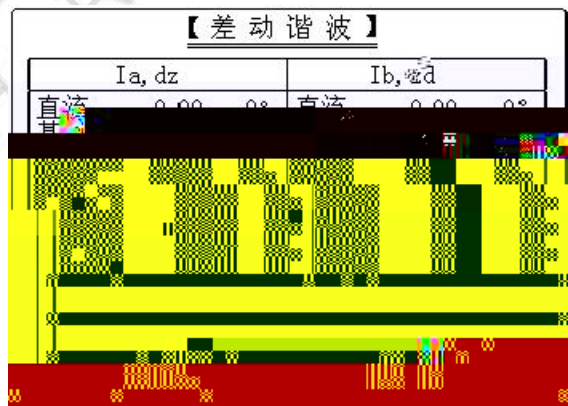
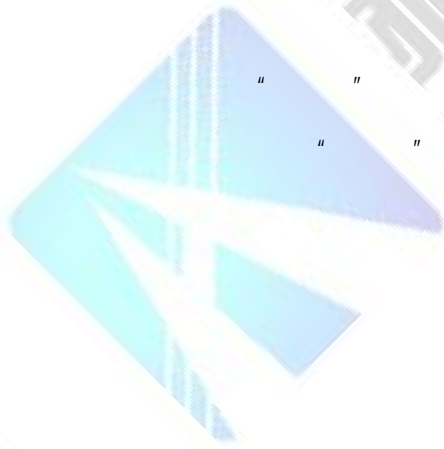


$I_a$   $I_b$   $I_{dz}$   
 $I_{zd}$   
 $I_{dz}$   $I_{zd}$  6  $I_{dz}$   $I_{zd}$



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“ ” “ ”  
“ ” “ ” “ ”

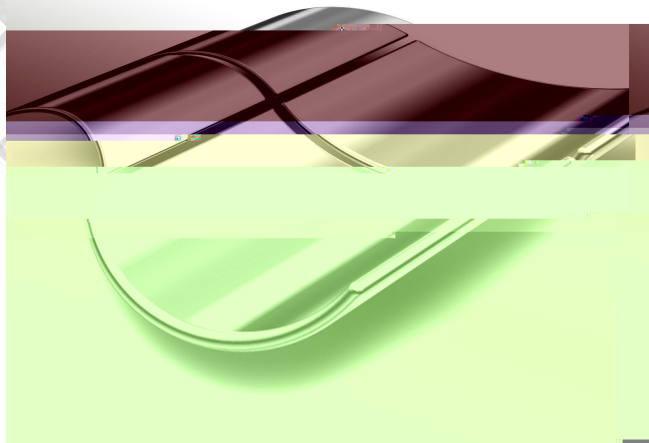








赫兹电力  
HERTZ POWER



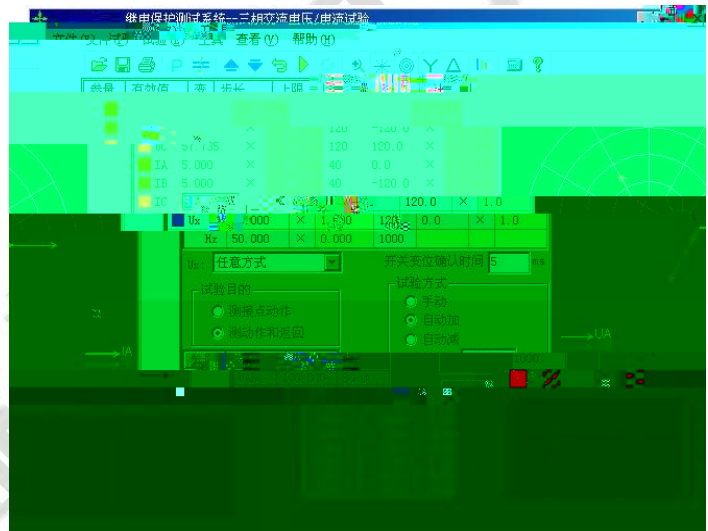
V2.0

“ ” “ ” “ ” “ ” “ ” “ ” “ ”

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“ ” “ ”



\* Evtn-Q

G<^ ^Rctc^ ^

Evtn-U

“ ” “ ”

Evtn-T

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Evtn-Z

G<^ ^

GUE

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赫兹电力  
HERTZ POWER





赫兹电力  
HERTZ POWER



◆ ○  
" "  
20ms 5ms

◆ ○  
" " " "

参量	动作	返回	返回
<input type="checkbox"/> UA			
<input type="checkbox"/> UB			
<input type="checkbox"/> UC			
<input type="checkbox"/> TA			
<input type="checkbox"/> IB			
<input type="checkbox"/> TC			

◆ ○  
" "



0A

" "

"

"

57.735V

"

" Z / " " R / X "



赫兹电力  
HERTZ POWER

产品宗旨：技术领先，质量可靠，  
服务宗旨：快速响，  
易用  
满意  
过期

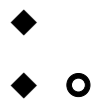


赫兹电力  
HERTZ POWER

“ U ”



赫兹电力  
HERTZ POWER



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30954

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2Å

342Å

342Å

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2Å

342Å

342Å

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;2Å

öWCD KEö öWDE KCö öWEC KDö

2Å

öWCD

KCö öWDE KDö öWEC KEö



;2Å

82X

ö

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2Å WD?2X

2Å

WCD

82X 2Å

“ ” “ ”

KE

WCD

2Å

67Å

67Å

357Å



790957X

2C

öVX

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ö ö

ö ö

ö ö









" "



110V 220V

110V 220V



赫兹电力  
HERTZ POWER



UA=110V UB= 110V

UA UB

225



220V

" "

UA UB



■

" " 4 3 " - "

9

●

9

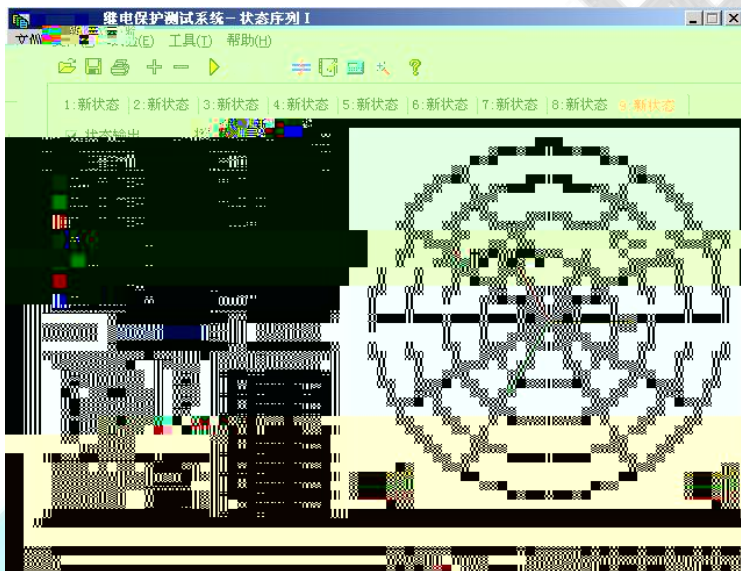
4

3

●

● Ux

●

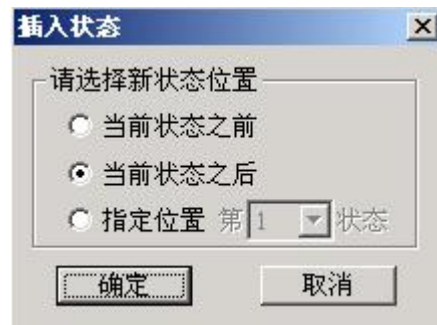


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" " " "







32ou

32ou

C D E T c d e

C D E T c d e

C D E T c d e

C D E T c d e

C D E T c d e

C D E T c d e

C D E T c d e

C D E T c d e

C D E T c d e

C D E T c d e

C D E T c d e

C D E T c d e



9

9

2



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IA

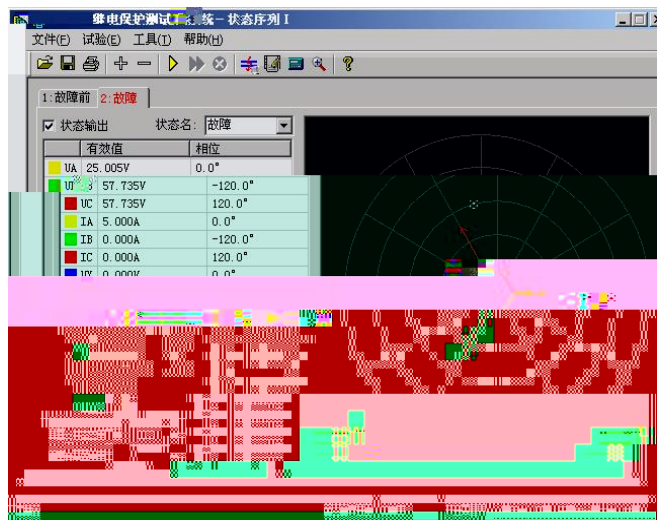
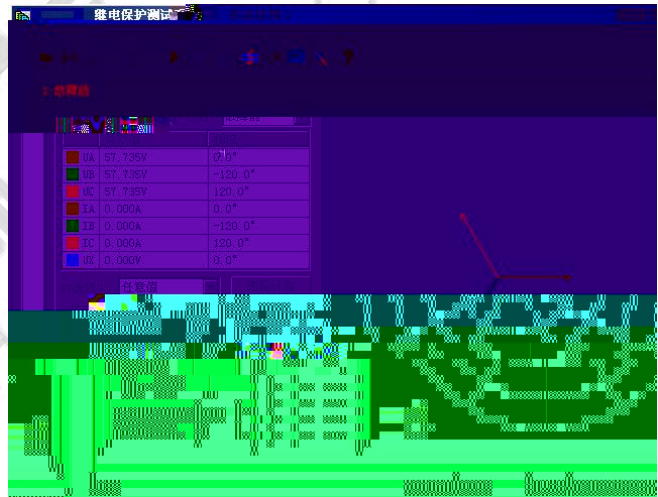
A



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R

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赫兹电力  
HERTZ POWER

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“ ”

● UA UB UC IA IB IC

2 20

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赫兹电力  
HERTZ POWER

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刷新

清零

" "

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4φ42

C

" 2° " D

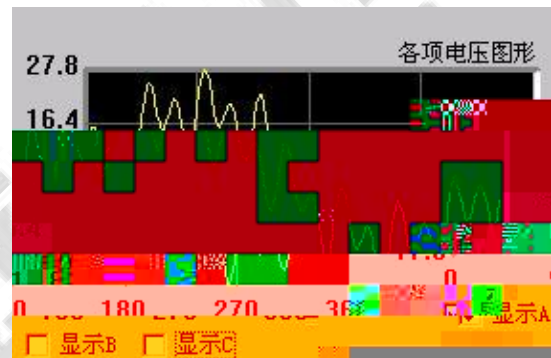
" 342° "

E

" 342° "

3

A



-160~160V

0~120V

-10~10A

0~40A

120V 40A/30A

120V

40A/30A

2

A

20

"

"

"

"

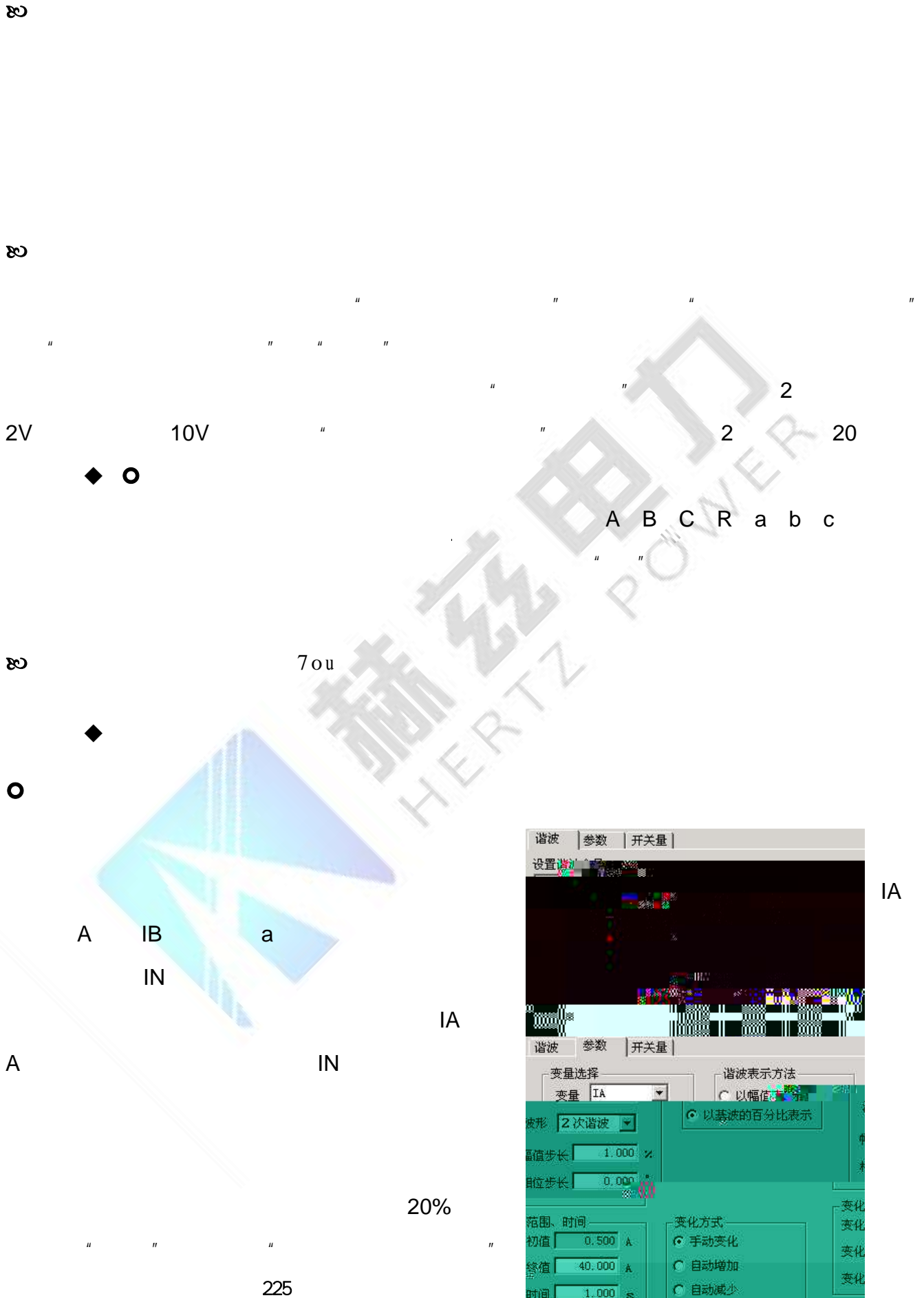
A

V

"

"

谐波	参数	开关量
变量选择		
变量	<input type="text" value="IA"/>	
波形	<input type="text" value="2次谐波"/>	
幅值步长	<input type="text" value="1.000"/> V	
相位步长	<input type="text" value="0.000"/> °	
谐波表示方法		
<input checked="" type="radio"/> 以幅值表示 <input type="radio"/> 以基波的百分比表示		
变化范围、时间		
变化初值	<input type="text" value="0.000"/> V	
变化终值	<input type="text" value="120.000"/> V	
变化时间	<input type="text" value="1.000"/> s	
变化方式		
<input checked="" type="radio"/> 手动变化 <input type="radio"/> 自动增加 <input type="radio"/> 自动减少		



谐波 参数 开关量

设置谐波

谐波 参数 开关量

变量选择  
变量 IA

谐波表示方法  
 以幅值表示  
 以基波的百分比表示

波形 2次谐波

幅值步长 1.000 %

相位步长 0.000

范围、时间

初值 0.500 A

终值 40.000 A

时间 1.000 s

变化方式  
 手动变化  
 自动增加  
 自动减少



赫兹电力

HERTZ POWER

产品宗旨：技术领先，质量可靠，轻便易用

服务宗旨：快速响应，**客户**到满意，**超过期**

IA

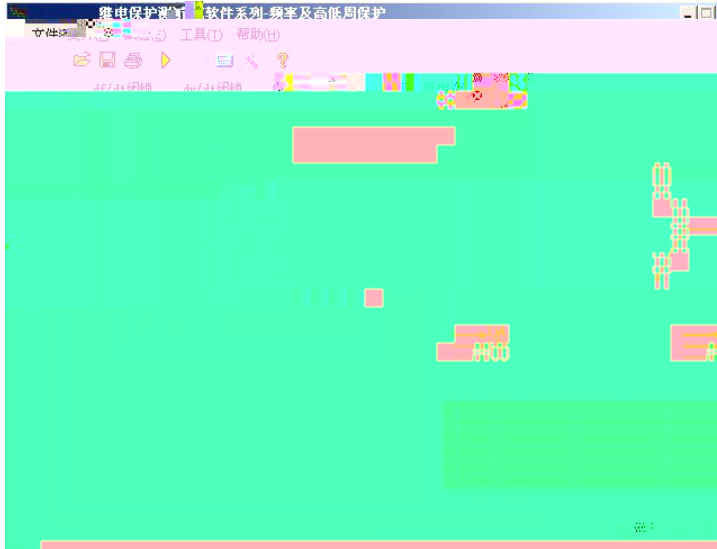


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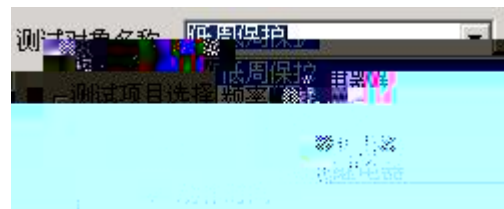
“ ” “ ” “ ” df/dt “ ” dv/dt “ ” “ ” “ ” “ ”

”

“ ” “ ”

“ ” “ ” “ ” “ ” “ ”

“ ” “ ”



”



2

"

"

◆ ○ df/dt

2

" df/dt "

df/dt

df/db "

df/dt

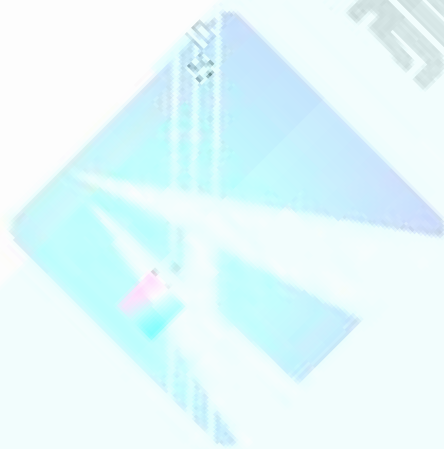
0 0 , È X WJ · NANA ·

GM<sup>®</sup> 1

W

0 i., 8 X M

X



**赫兹电力**  
HERTZ POWER

2

" "

" "

"

"

0.05Hz

2

df/dt

2

" "

2

0.2



Hz"

"

"

"

"

50Hz

df/dt

" — " "

" "

0.2

"

■

“ ”

“ ”

●

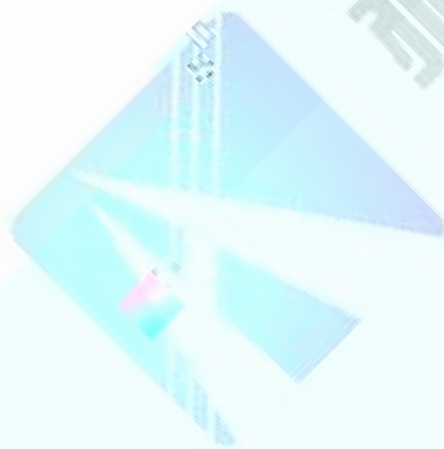
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●

“ ”





赫兹电力  
HERTZ POWER

2

U I

90°

UAB

IC

0

U I

" " " "

" "

2

U0 I0 " " U2 I2 "

2

U0 I0

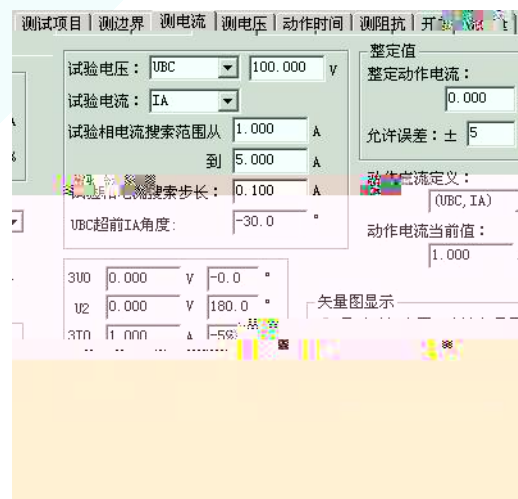
U2 I2

U2 I2

U2 I2



U I





**赫兹电力**  
HERTZ POWER

产品宗旨：技术领先，质量可靠，轻便耐用

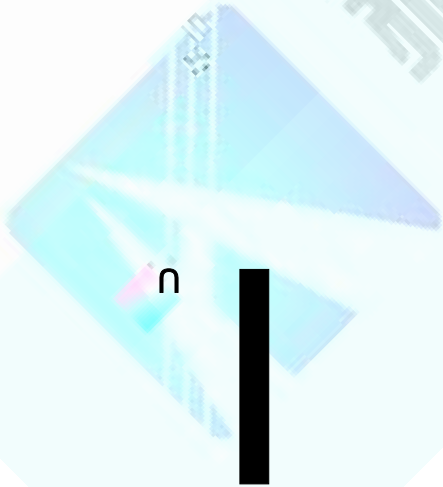
服务宗旨：快速响应，客户满意，超越期望

Ö



U I

赫兹电力  
HERTZ POWER



F

2023

225

3267669

[www.whezi.com](http://www.whezi.com)

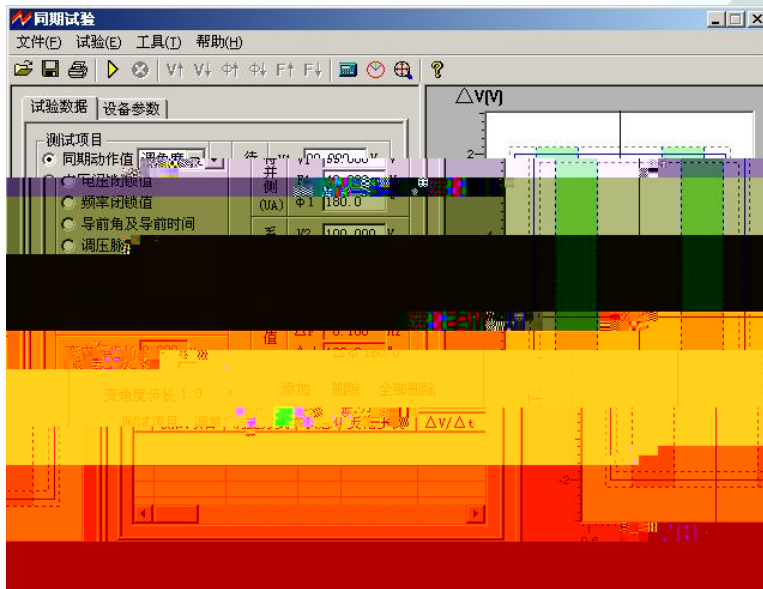
89

whezi@163.com



赫兹电力  
HERTZ POWER

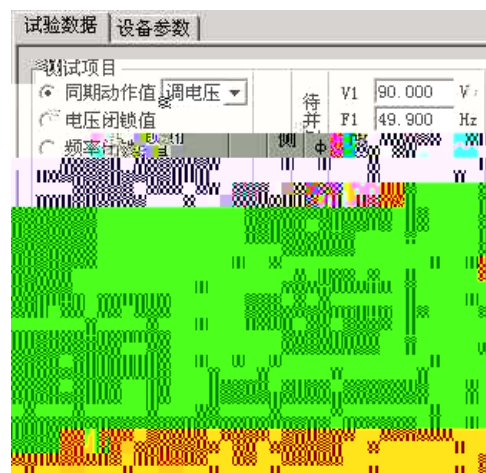
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- ◆
- ◆ ○

2

" " " " " "



“ ” V1 90V F1 1  
49.9Hz 50Hz  
0° “ ” “ ”



赫兹电力  
HERTZ POWER

2

2



2

$$= t / Tw \cdot 360^\circ$$

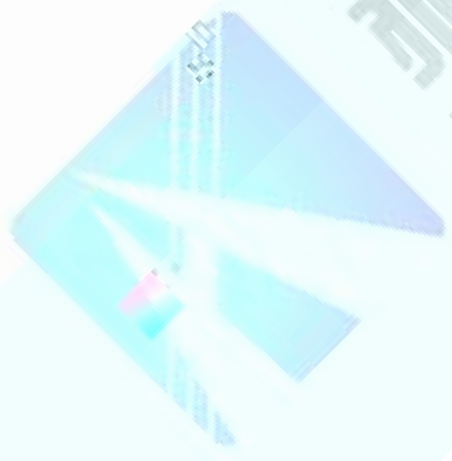
$$Tw = 1 / (f1 - f2)$$

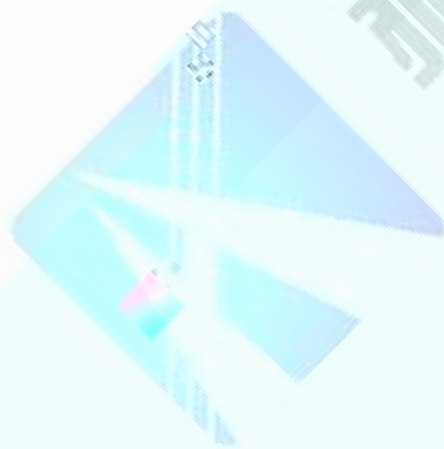
f1

t

f2

赫兹电力  
HERTZ POWER





**赫兹电力**  
HERTZ POWER

2

Y/

2

2

20

5ms

赫兹电力  
HERTZ POWER



U1

UA

U2

UC

UN

UN

" " " " " " " " "

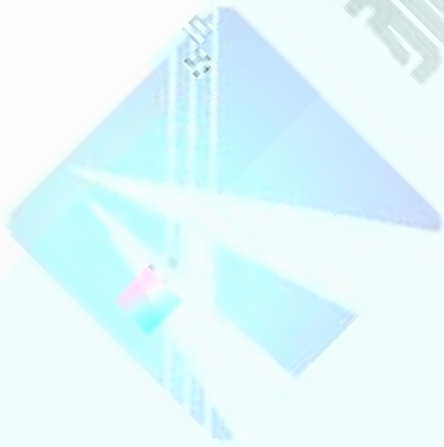
A a B

b

R



赫兹电力  
HERTZ POWER



赫兹电力  
HERTZ POWER

Mq ? \* \21 \3 6 3 +15

\*\3+

\*\2+

Mq

Mqt Mqz

Mqt ? \* T21 T3 6 3 +15

Mqz ? \* Z21 Z3 6 3

\* ;23 + Mq

\*\3+ \*\2+

RU3?RU2

Mq

Mqt Mqz Mq

ö ö ö ö

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赫兹电力  
HERTZ POWER

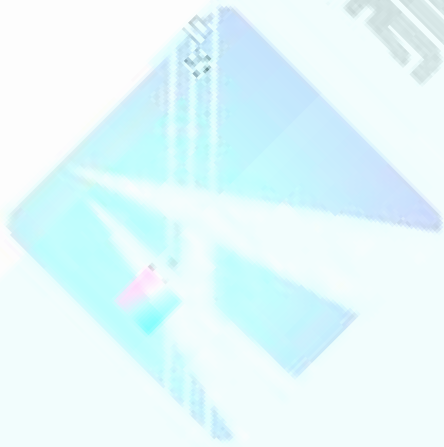



赫兹电力  
HERTZ POWER

赫兹电力  
HERTZ POWER



赫兹电力  
HERTZ POWER



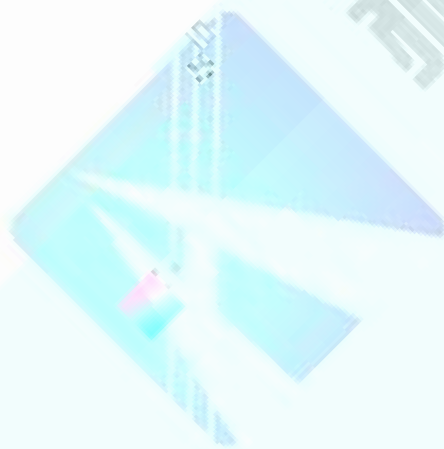


**赫兹电力**  
HERTZ POWER



" " " " "

2



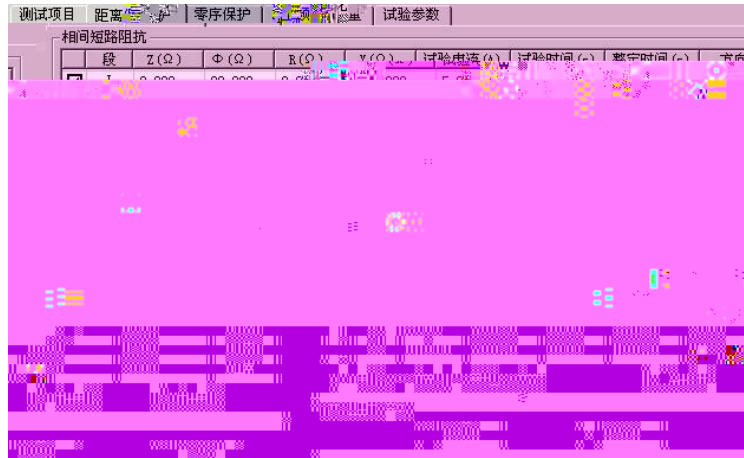
赫兹电力  
HERTZ POWER

KL Kr/Kx Z0/Z1

“ ”



“ ”



∞

1 “ ”

2

3

20 40V

57V

20 30V

57V

4

“ ”

I

0s

II

0.5s

III

1.0s

I

II

III

0.2s

0.7s

1.2s

0.95

1.05

0.95

1.05

5

“

”

6

“

”

“

”

“

”

7

∞

0.8

0.95

1.05

1.2

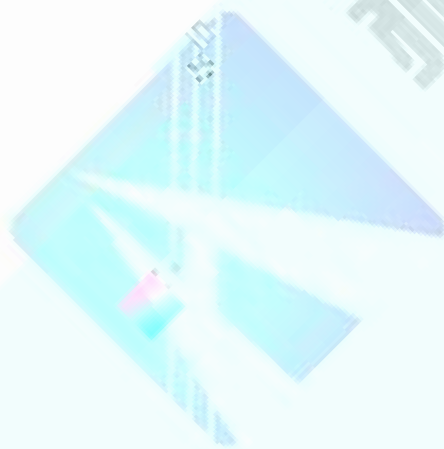


赫兹电力  
HERTZ POWER

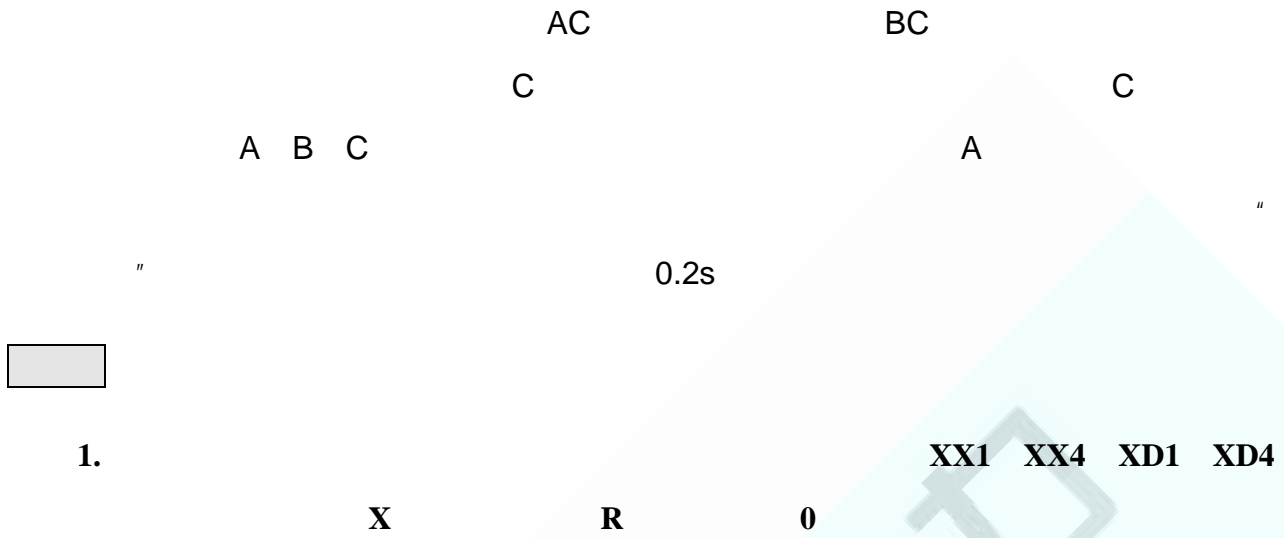


“ ”

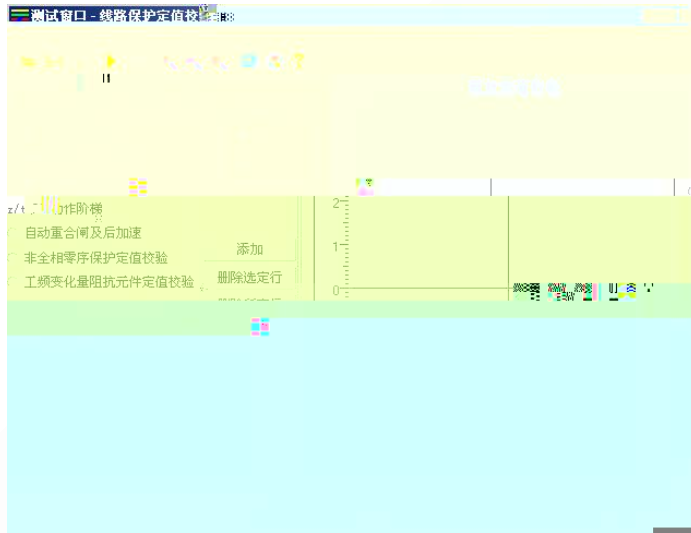
“ ”



**赫兹电力**  
HERTZ POWER



z/t



" R-X" " Z-T"



" " >

KL" " K " Kx" " Z0/Z1"

∞

" " " " " "

" c " " GPS "

01095DKA9516 2C ã ö

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5 Q+e» P P5 QP Ý>

ã e ö

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∞ BI—CT

PT

PT

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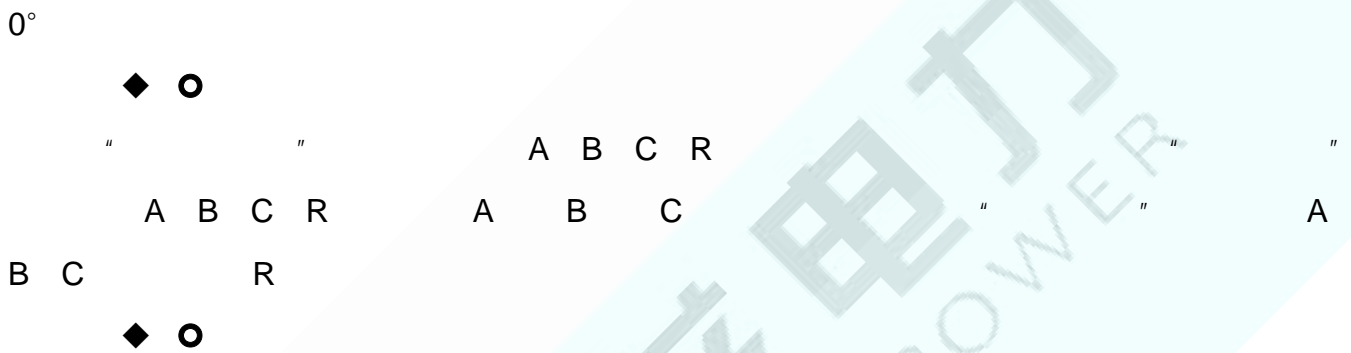
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100V



阻抗定值校验

段	阻抗Z(Ω)	阻抗R(Ω)	阻抗X(Ω)	试验电流(A)	试验时间(S)	整定时间(S)	方向
I	2.000	0.000	2.000	5.000	0.500	0.500	正向
II	4.000	0.000	4.000	0.700	0.500	0.500	正向
III	6.000	0.000	6.000	3.000	2.200	2.000	正向
IV	8.000	0.000	8.000	2.000	1.700	1.500	正向

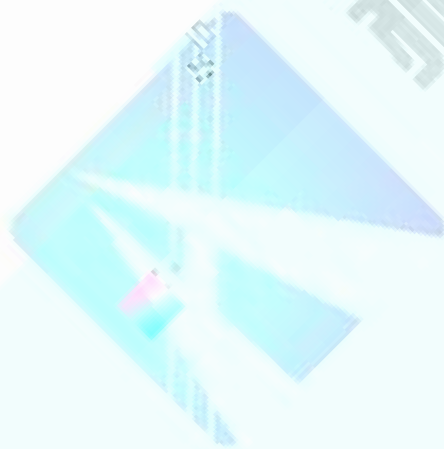
R X

R X

0.95 1.05 0.95

1.05 0.8 1.2

= x



赫兹电力  
HERTZ POWER



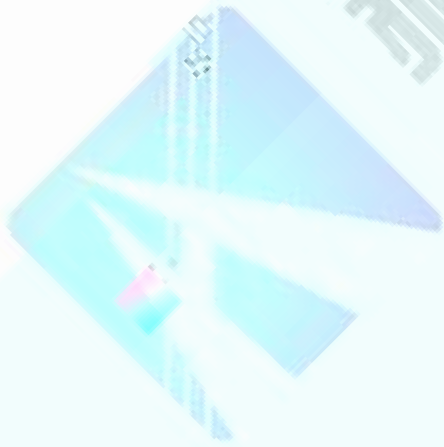
赫兹电力  
HERTZ POWER

产品... 技术领先, 质量可靠, 轻便易用  
服务宗旨: ... 响应, ... 到满意, 超过期...

HS

" " " "

赫兹电力  
HERTZ POWER



0.95 1.05



M

0.9 1.1

M=0.9

M=1.1

M=1.2

10 20A

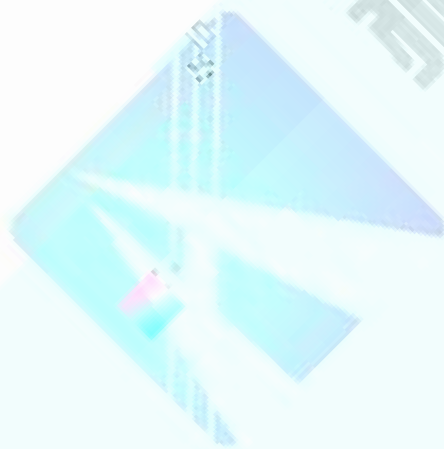


0.2s

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赫兹电力  
HERTZ POWER

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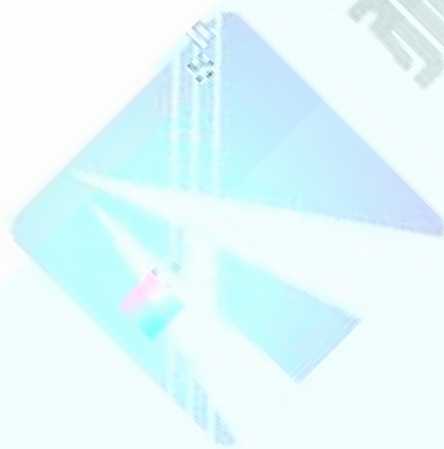
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**赫兹电力**  
HERTZ POWER

80%



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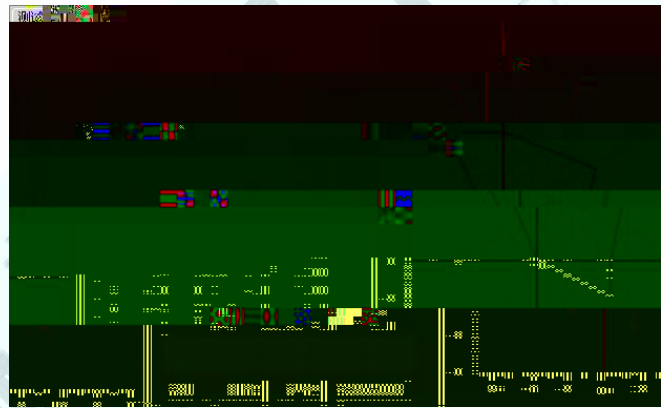
" R-X" " Z- "

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R1 X1

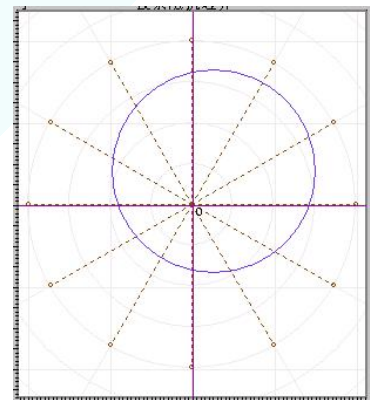
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R X

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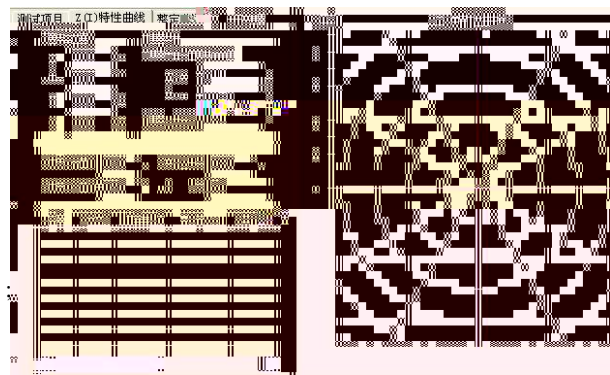


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" Z I "

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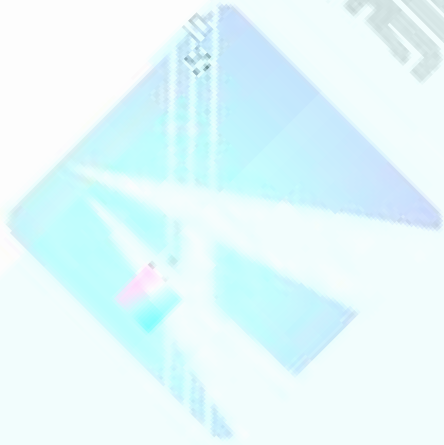
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赫兹电力  
HERTZ POWER



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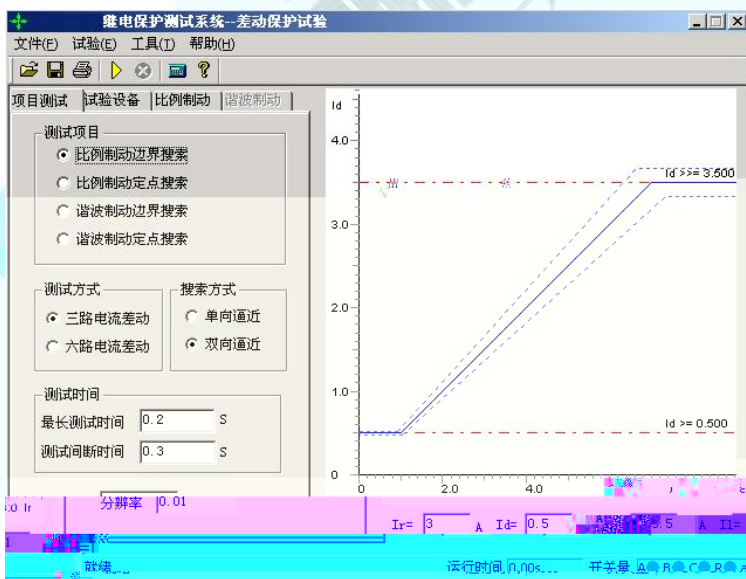
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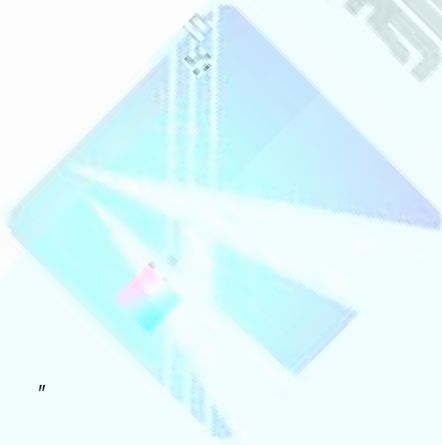
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" " "

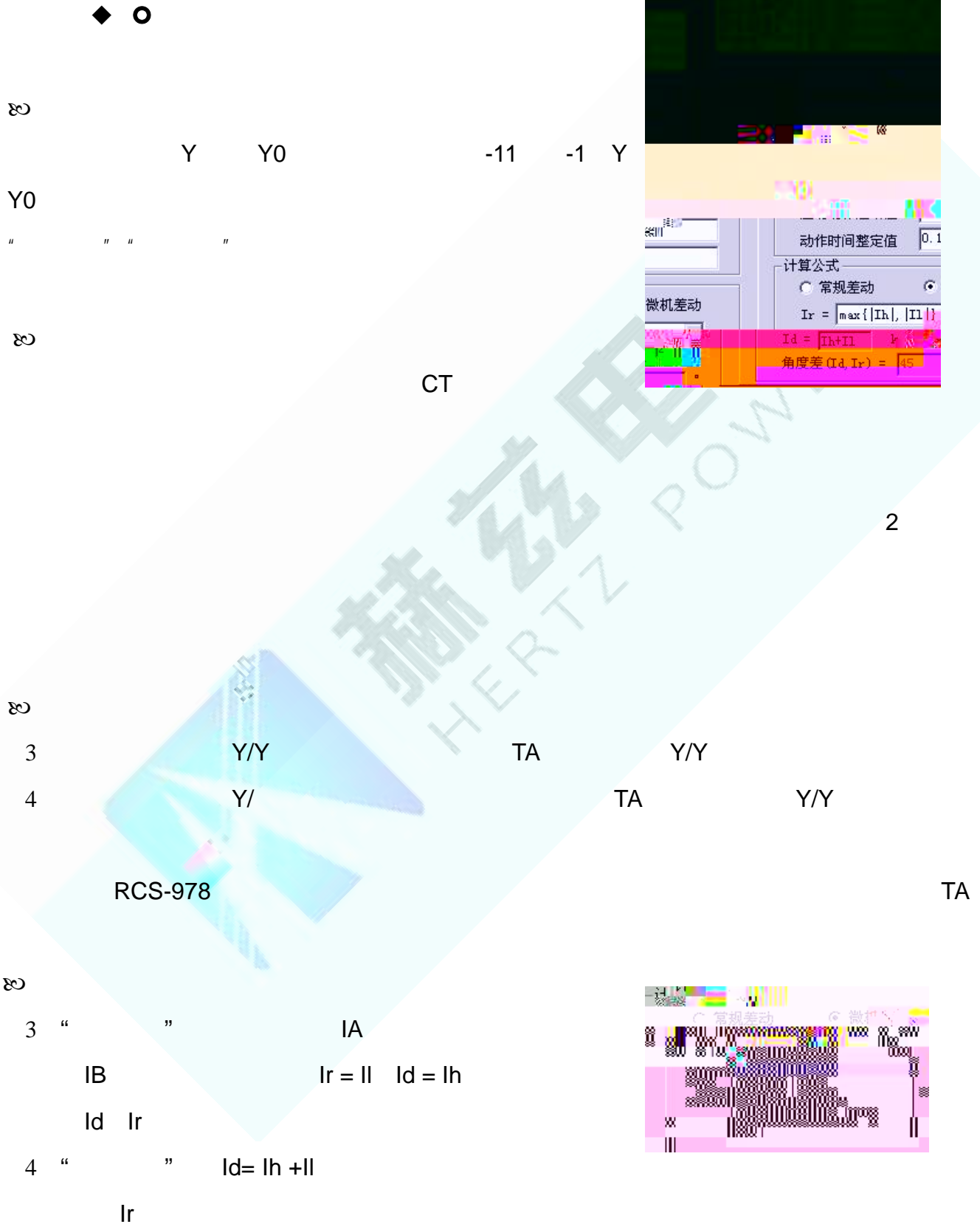
赫兹电力  
HERTZ POWER



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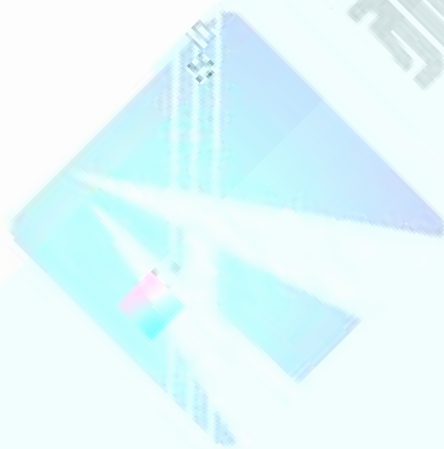
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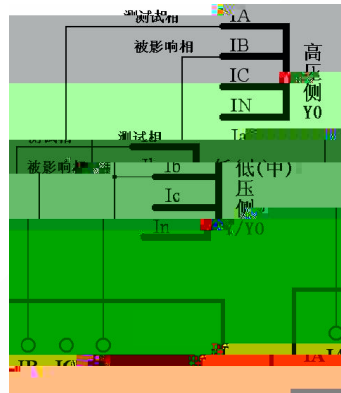
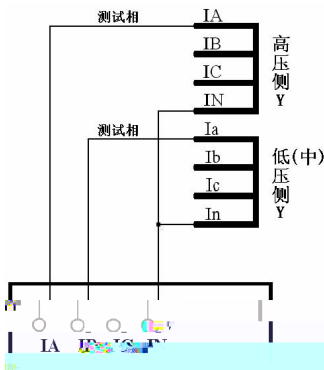


赫兹电力  
HERTZ POWER

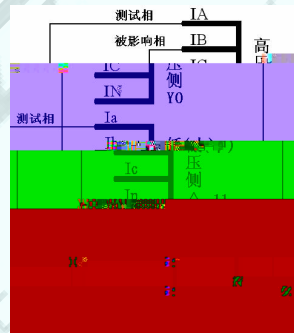
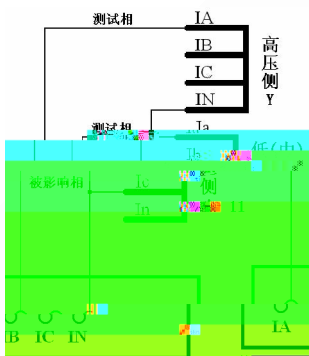
赫兹电力  
HERTZ POWER



## 1 Y Y0 /Y Y0



## 2 Y Y0 / -11



Y

$$|A_{\phi}| = |A - IB| \quad |B_{\phi}| = |B - IC| \quad |C_{\phi}| = |C - IA|$$

$$|a_{\phi}| = |a - Ic| \quad |b_{\phi}| = |b - Ia| \quad |c_{\phi}| = |c - Ib|$$

Y0 , Y



产品宗旨：技术领先，质量可靠，轻便易用  
服务宗旨：快速响应，客户满意，超过期望




赫兹电力  
HERTZ POWER

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 Kg4?Up1 30954 W4p EV4

Kg3 Kg4 ô ô K KK  
 Up ô ô  
 W3p W4p ô ô K KK  
 EV3 EV4 ô ô K KK EV

Kg3 Kg4 30954  
 Kg3 Kg3?Up1 30954 W3p EV3  
 30954

[1 [1 /33 M3 M4 M5

M3?3130954?20799

M4?W4p EV4 30954 W3p EV3

M4?W5p EV5 30954 W3p EV3

3

M3?3

M4?W4p EV4l W3p EV3

M4?30954 W5p EV5l W3p EV3

M3?3

M4?Kg3lKg4

M4? Kg3lKg5

M3	M4	M5 ô ô	K	KK	KKK	
kg3	kg4	kg5 ô ô	K	KK	KKK	
W3p	W4p	W5p ô ô	K	KK	KKK	
EV3	EV4	EV5 ô ô	K	KK	KKK	EV

TEU/;9:

Mr j ?Md, K4p/ okpl K4p Md? okp K4p/ oczlK4p/ okp 6

K4p K4p/ okp

K4p/ ocz

⊕

CST-141B -200B

[1 /33 Kf ?·K3 -K4· Kt ?·K3/K4·14

M3?3 M4?Mrn

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M3?3 M4?Mr o M5?Mrn

K3 K4 K5 ô ô

Mr o Mrn ô ô

⊕

PST-641

Y/ -11

225

027-83267669

$K_f \cdot K_3 - K_4 \cdot K_t \cdot K_3 / K_4 \cdot I_4$

$M_3 \cdot 30954 \quad M_4 \cdot K_g3 \cdot K_g4$

$K_g3 \quad K_g4 \quad \delta \quad \delta$

⊕ PST-621/622 Y/Y/ -11-12

$K_f \cdot K_3 - K_4 - K_5 \cdot K_t \cdot O_{cz} \cdot K_3 \cdot K_4 \cdot K_5 \cdot j$

$K_1 = 1.732 \quad K_2 = 1.732 \quad U_{2n} \quad CT_2 / U_{1n} \quad CT_1$

$K_3 = U_{3n} \quad CT_3 / U_{1n} \quad CT_1$

⊕

$I_d = |I_1 + I_2 + I_3| \quad I_r = \text{Max}\{|I_1| \quad |I_2| \quad |I_3|\}$

$K_1 = 1 \quad K_2 = U_{2n} \quad CT_2 / U_{1n} \quad CT_1$

$K_3 = U_{3n} \quad CT_3 / U_{1n} \quad CT_1$

⊕

$I_d = |I_1 + I_2 + I_3| \quad I_r = ||I_d| - |I_1| - |I_2| - |I_3||$

$K_1 = 1.954 \quad M_4 \cdot 30954 \quad f_{57} \quad M_5 \cdot f_{58}$

⊕ RCS-9671 Y/ -11

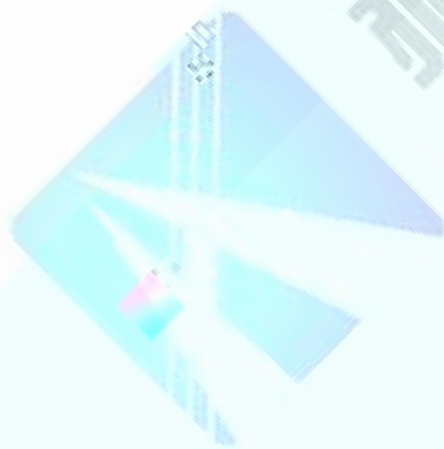
$K_f \cdot K_3 - K_4 \cdot K_t \cdot K_3 \quad \delta \quad K_4 \cdot I_4$

$M_3 \cdot 3 \quad M_4 \cdot W_4p \quad EV_4l \quad W_3p \quad EV_3$

⊕ RCS-978 985 Y/ -11



产品宗旨：技术领先，质量可靠，轻便易用  
服务宗旨：快速响应，**客户**到满意，**超过期**



赫兹电力  
HERTZ POWER

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赫兹电力  
HERTZ POWER

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<input type="checkbox"/> 接点B	<input type="checkbox"/> 接点b
<input type="checkbox"/> 接点C	<input type="checkbox"/> 接点c
<input type="checkbox"/> 接点B	

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赫兹电力  
HERTZ POWER

赫兹电力  
HERTZ POWER

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赫兹电力  
HERTZ POWER

赫兹电力  
HERTZ POWER

IA

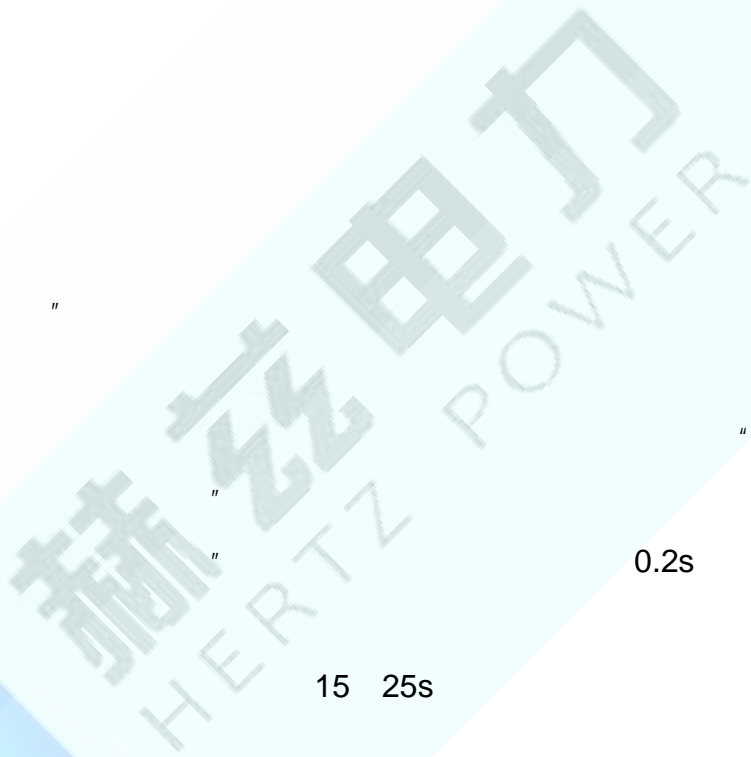
IA

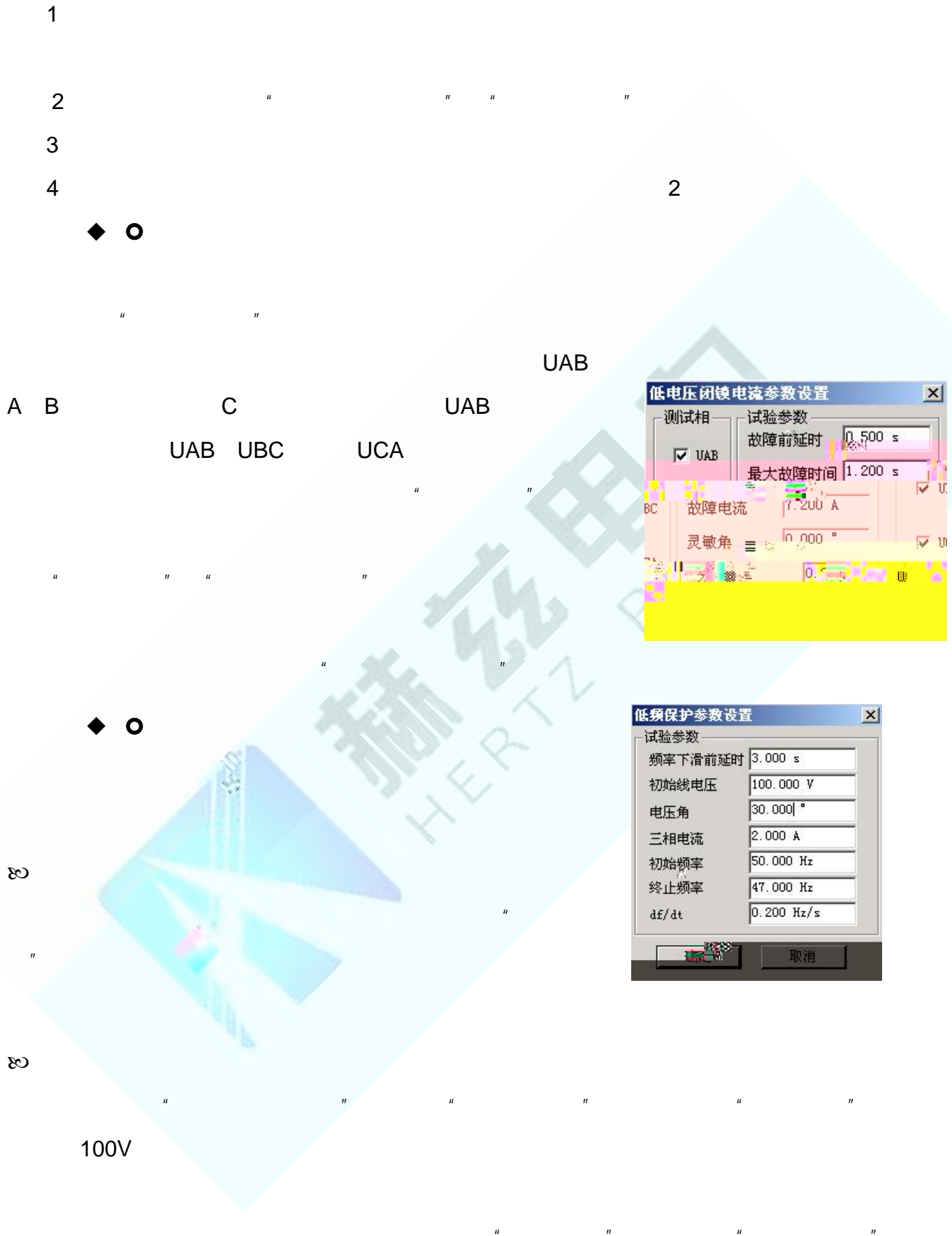


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0.2s

15 25s





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50Hz

0.5Hz

45Hz

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df/dt

0.1Hz"

0.01Hz /

0.2s"



df/dt

df/dt

5s

47Hz



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90° A IA

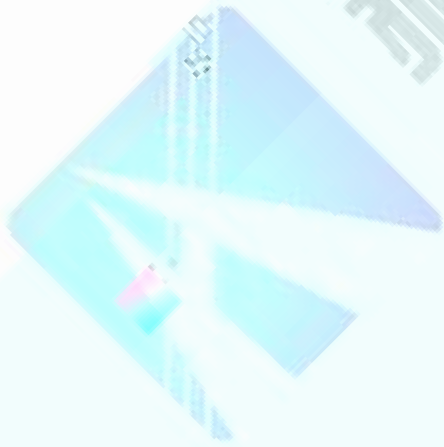
0 UB UC

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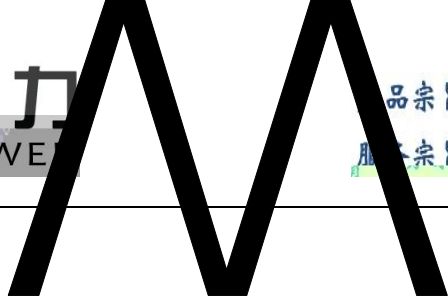


赫兹电力  
HERTZ POWER

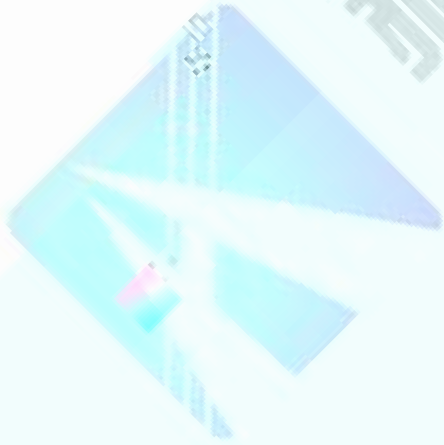


赫兹电力  
HERTZ POWER

产品宗旨：技术领先，质量可靠，轻便易用  
服务宗旨：快速响应，客户满意，超过期望



赫兹电力  
HERTZ POWER

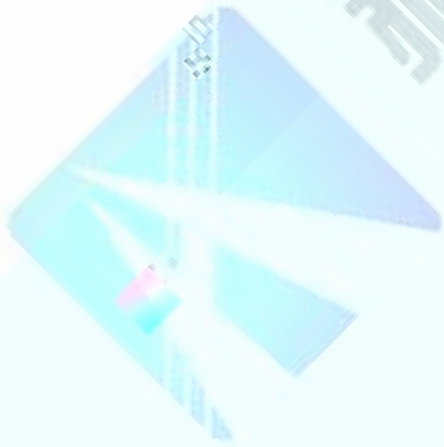




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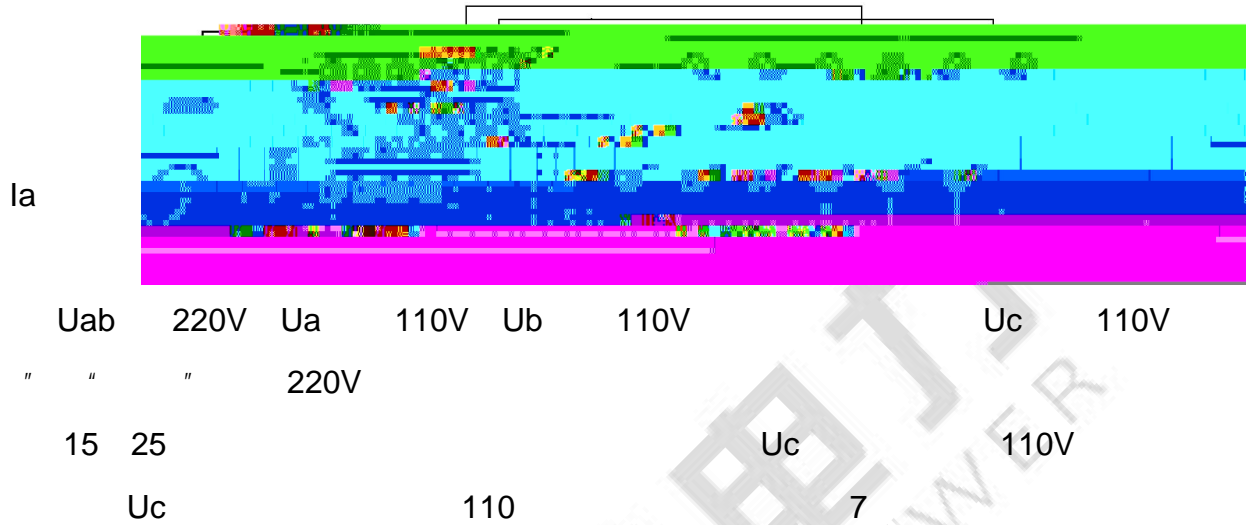
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赫兹电力  
HERTZ POWER



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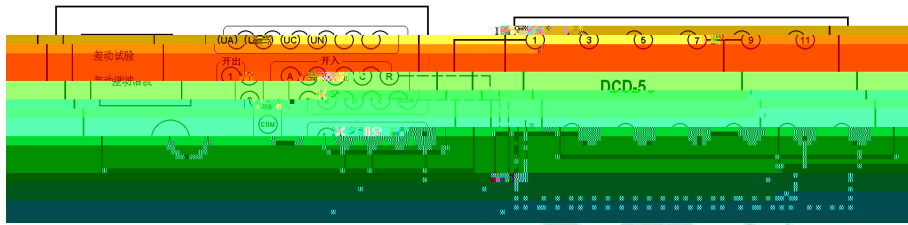
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lzd

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IDZ



