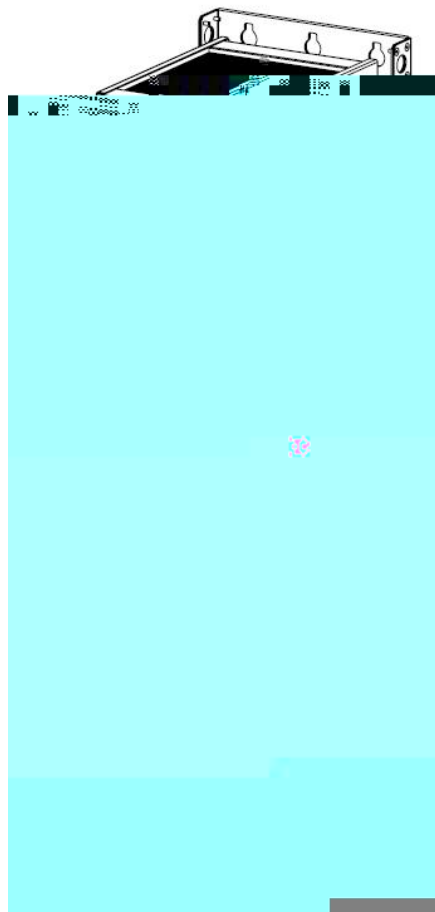


# HF680NLC

690V

1.00

Wuhan GUIDE Technology Co.,Ltd





RTG



|       |    |
|-------|----|
| 1     | 10 |
| 1.1   | 10 |
| 1.2   | 12 |
| 1.3   | 13 |
| 1.3.1 | 13 |
| 1.4   | 14 |
| 1.5   | 15 |
| 1.6   | 15 |
| 2     | 16 |
| 2.1   | 16 |
| 2.2   | 16 |
| 2.3   | 17 |
| 2.4   | 18 |
| 2.4.1 | 18 |
| 2.4.2 | 18 |
| 3     | 19 |
| 3.1   | 19 |
| 3.2   | 21 |
| 3.2.1 | 5  |

|     |       |    |
|-----|-------|----|
| 8.2 |       | 49 |
| 8.3 |       | 49 |
| 8.4 | ..... | 50 |
| 8.5 | ..... | 50 |

---

1

2

3

“ ” “ ” “ ”

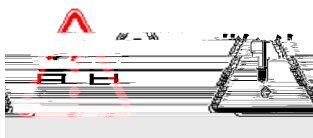
4



10

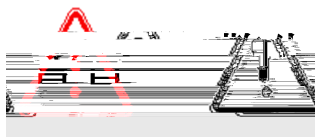
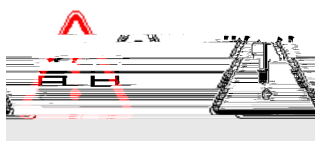


1

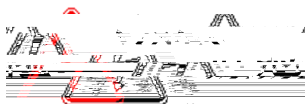




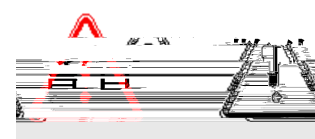
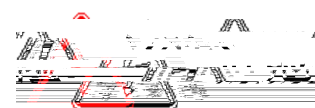
3



IEC



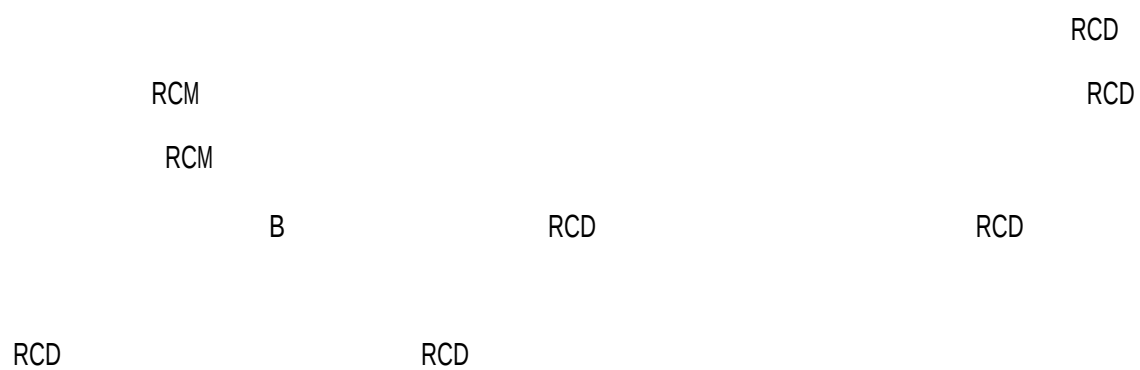




Q

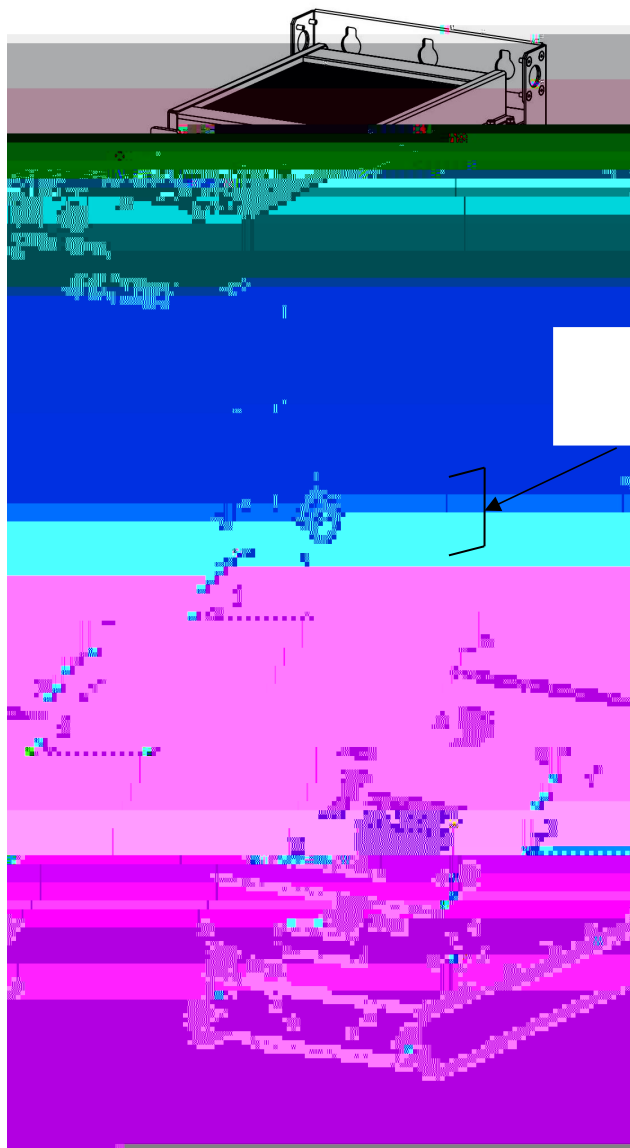
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**1**



**2**

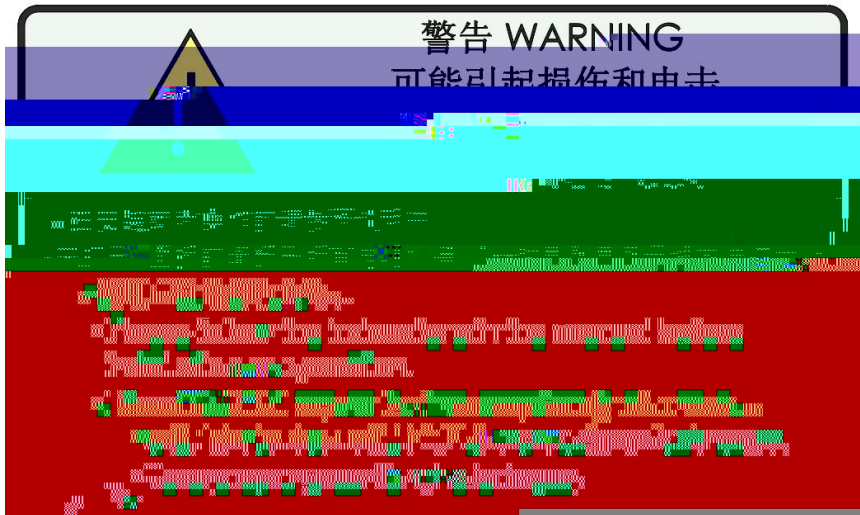
**3**



HF680NLC04M-1935-6



HF680NLC04M-1935-6



1.2

(1) (SCR: Silicon Controlled Rectifier)

(2)

(3)

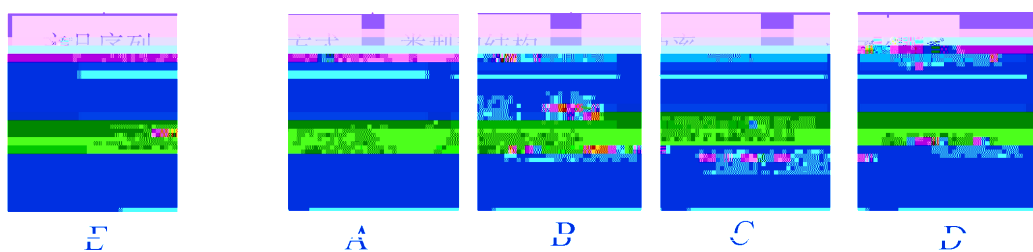
(4)

|     |            |              |
|-----|------------|--------------|
|     |            |              |
| LVD | 2014/35/EU | EN 61800-5-1 |
| EMC | 2014/30/EU | EN 61800-3   |

1.3

1  
1.1

HF680N 1000mm 1000mm 1000mm 1000mm 1000mm



A HF680N

B - m "



|    |            |                           |          |             |
|----|------------|---------------------------|----------|-------------|
| PN | GDHF-APNX1 | GDHF-APNX1<br>HF680NLC04M | Profinet | RJ45        |
|    | GDHF-AKZY1 | GDHF-AKZY1                | LCD      |             |
| 2  | 2.8*8.8 2  | 2.8*8.8 2                 |          | HF680NLC04M |

1

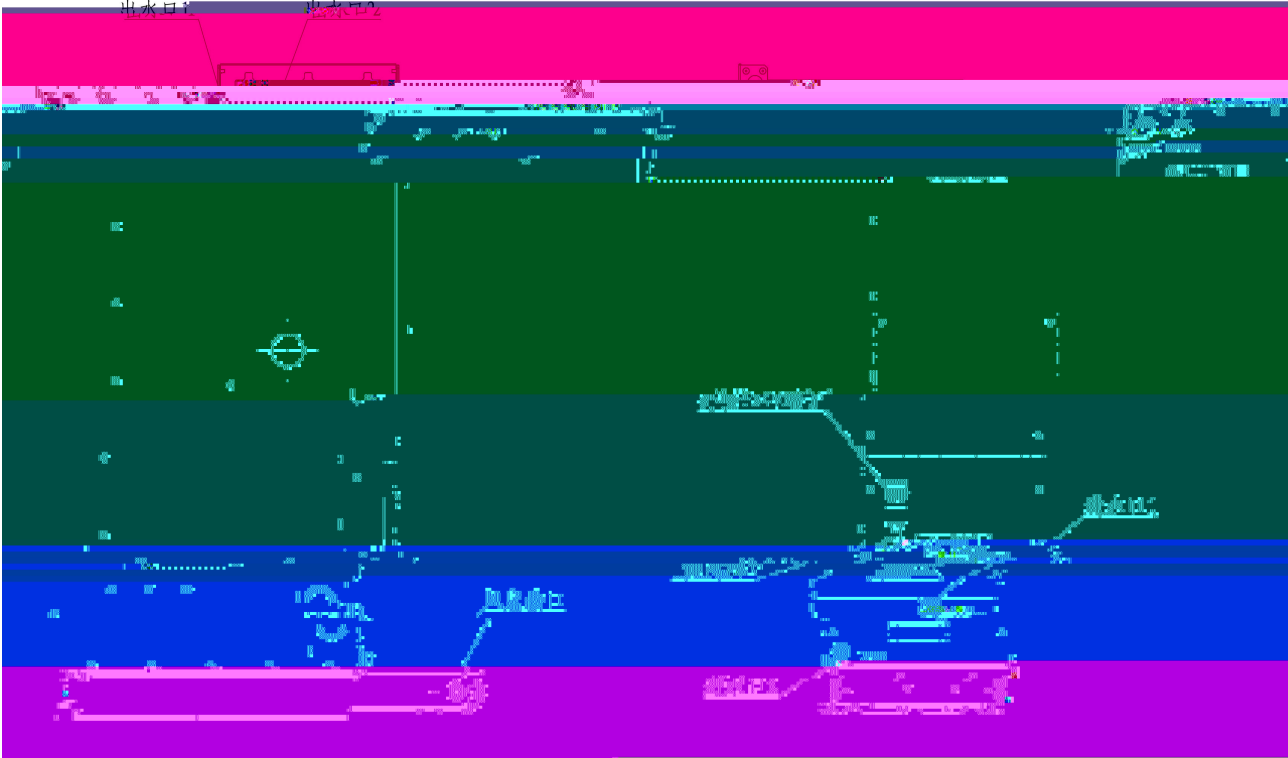
HF680NLC01M-1233-6+PN01

690V/1233kW

Profinet

1.2

HF680NLC04M

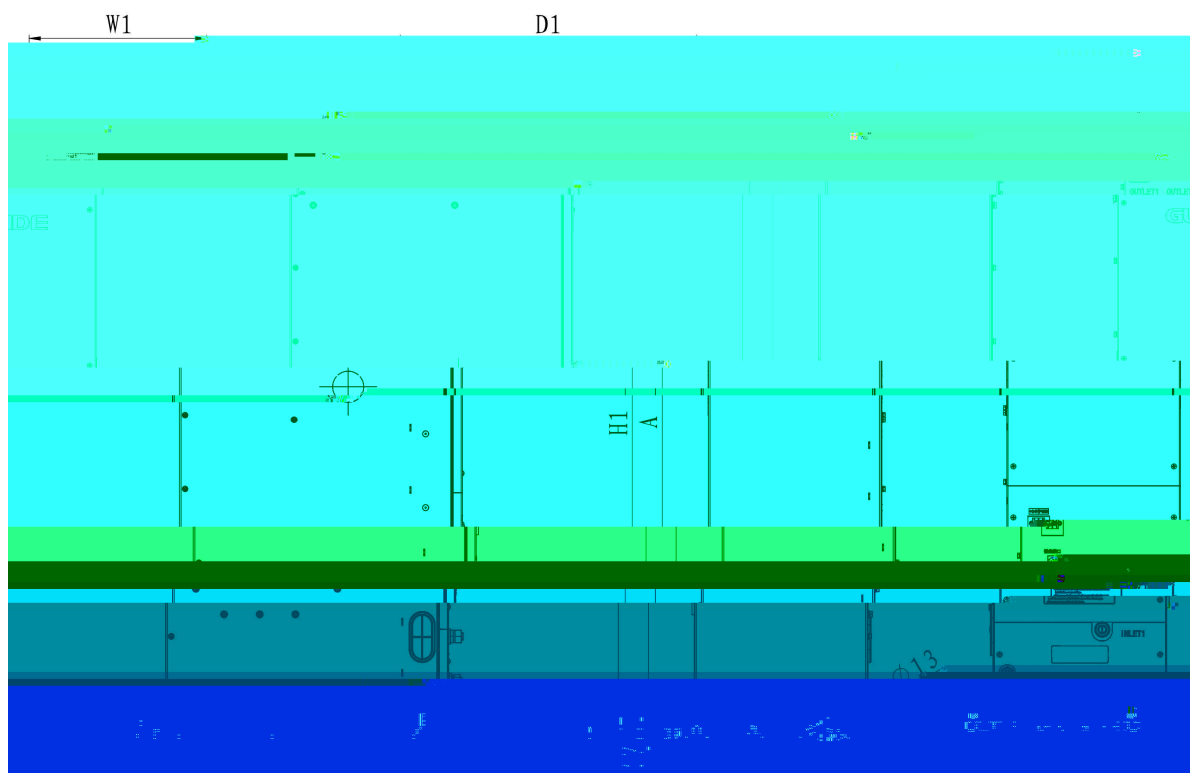


|      |      |              |     |
|------|------|--------------|-----|
|      |      |              |     |
| +24V | Ø3.2 |              |     |
| 1    | 1    | KFG2H1613-03 | SMC |

|   |   |              |     |  |
|---|---|--------------|-----|--|
| 1 | 1 | T1613W       | SMC |  |
| 2 | 2 | KFG2H1209-03 | SMC |  |
| 2 | 2 | T1209W       | SMC |  |

## 1.3

### 1.3.1



|                    | mm       |     |     |     |     | mm   |     |            | 8.8   | kg  |
|--------------------|----------|-----|-----|-----|-----|------|-----|------------|-------|-----|
|                    | H1       | W1  | W2  | D1  | D2  | A    | B   |            |       |     |
| HF680NLC03C-1233-6 | 110<br>0 | 320 | 307 | 525 | 500 | 1064 | 200 | 6- φ<br>13 | 6-M12 | 260 |
| HF680NLC03C-1935-6 |          |     |     |     |     |      |     |            |       |     |

---

1.4



---

---

2.3

---

## 2.4

### 2.4.1

|                    | A    | /<br>mm <sup>2</sup> | A    | A    |
|--------------------|------|----------------------|------|------|
| HF680NLC04M-1233-6 | 1250 | 500*2                | 1250 | 1800 |
| HF680NLC04M-1935-6 | 2000 | 630*2                | 2000 | 3000 |

### 2.4.2

mm<sup>2</sup>    AWG

\*    L1   mm    L2   mm     $\Phi d$    mm     $\Phi D$    mm

---

3

1. / “ ”

/

2.

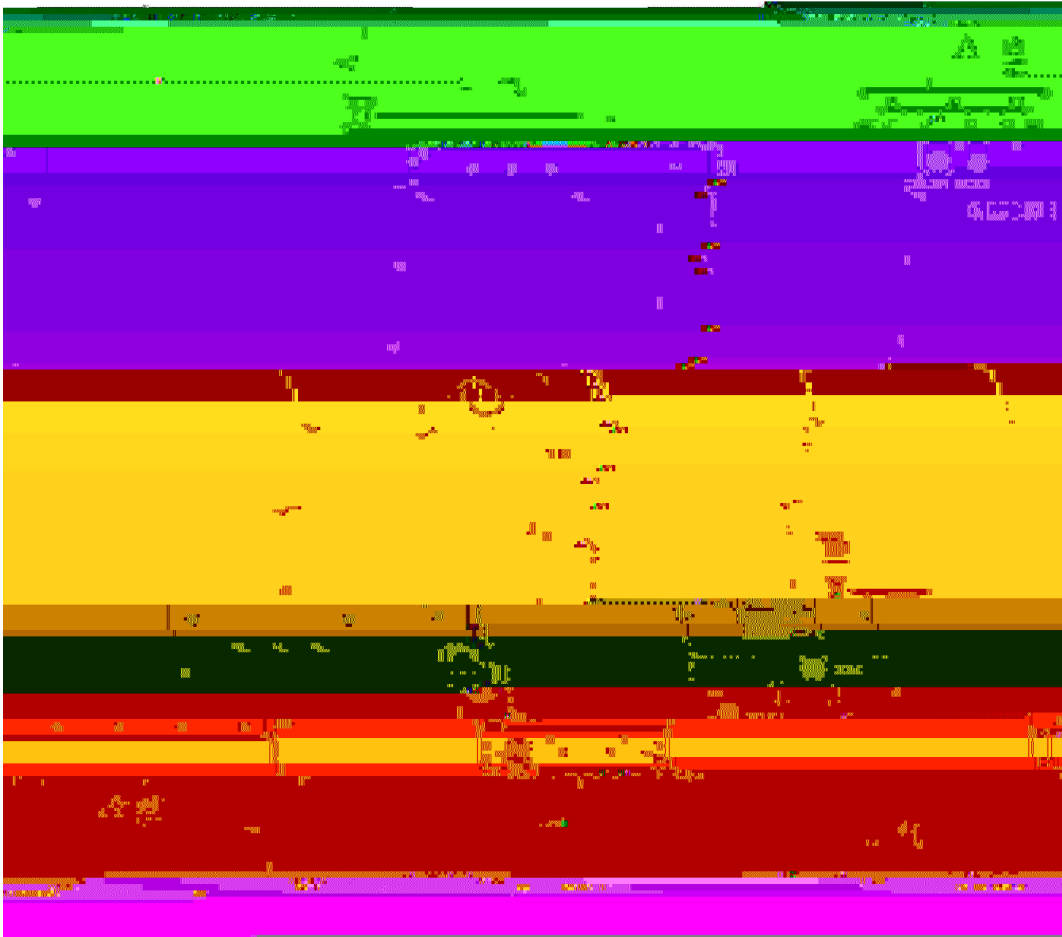
30 ð ~~RECEIVED BY THE COMPANY~~ ( " ° ñ @ñ ðñi



|  |                                                                        |                                                                        |                               |
|--|------------------------------------------------------------------------|------------------------------------------------------------------------|-------------------------------|
|  | -10 +40<br>40<br>1 1%<br>50<br>-10                                     | -20 +60<br>1 /                                                         | -20 +60                       |
|  | 70 106 kPa<br>0.7 1.05                                                 | 70 106 kPa<br>0.7 1.05                                                 | 60 106 kPa<br>0.6 1.05        |
|  | 10Hz ≤ f ≤ 57Hz<br>0.075mm<br>57Hz ≤ f ≤ 150Hz<br>9.8 m/s <sup>2</sup> | 10Hz ≤ f ≤ 57Hz<br>0.075mm<br>57Hz ≤ f ≤ 150Hz<br>m/s <sup>2</sup> 9.8 | II                            |
|  |                                                                        | 100m/s <sup>2</sup> 11ms                                               | 100m/s <sup>2</sup> 11ms      |
|  |                                                                        | 250mm <100kg<br>100mm ≥ 100kg                                          | 250mm <100kg<br>100mm ≥ 100kg |
|  | 95%RH                                                                  |                                                                        |                               |
|  | 1000                                                                   | 1000<br>3000                                                           | 100 1%                        |
|  | 2                                                                      |                                                                        |                               |
|  |                                                                        |                                                                        |                               |

3.2

3.2.1



|  |                       |
|--|-----------------------|
|  |                       |
|  | $A \geq 250\text{mm}$ |

50mm

### 3.2.2

1

2



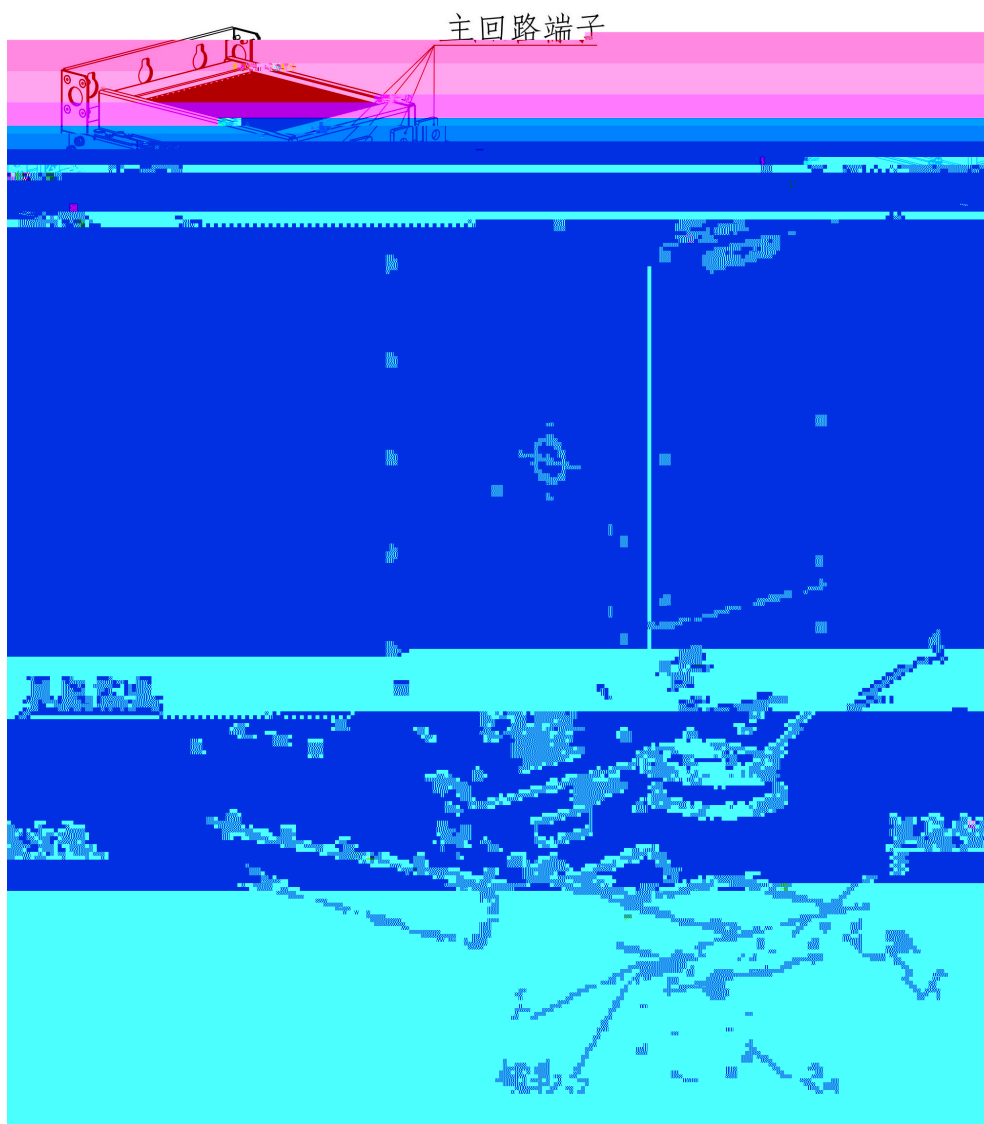
HF680NLC04M-1935-6

### 3.2.3

4 2

2 1

4 3 4



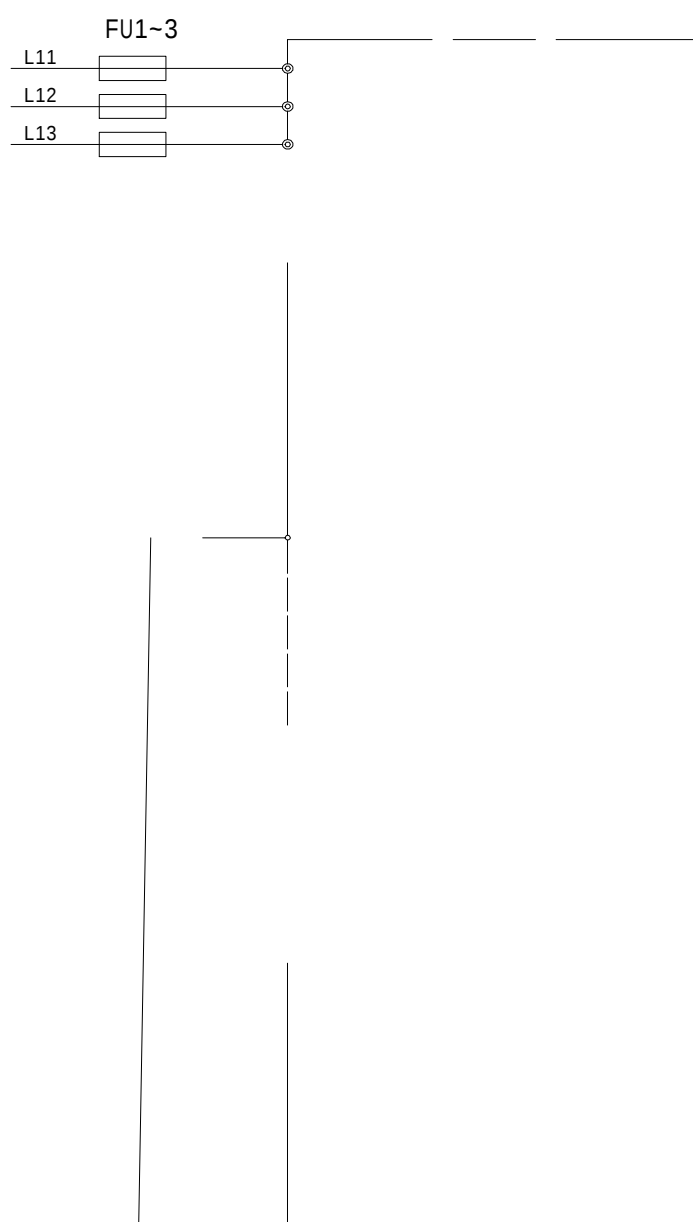
HF680NLC04M-1935-6

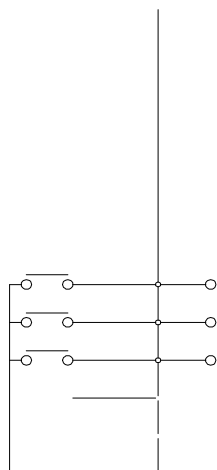
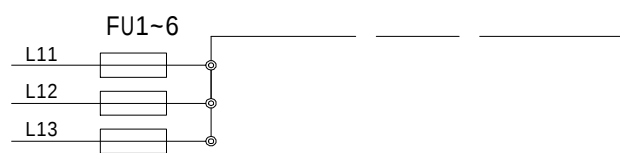
---

## 3.3

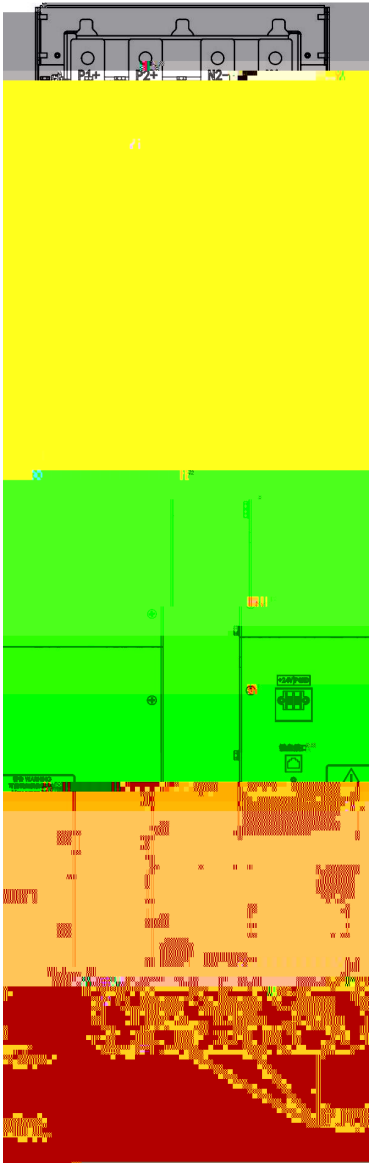
### 3.3.1

6





3.3.2



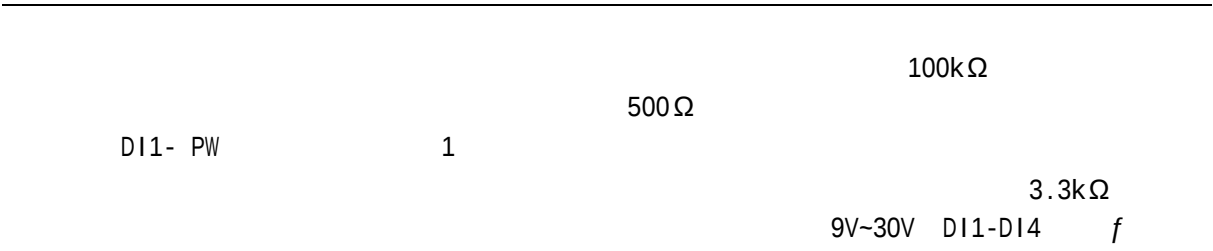
| P1+ P2+           |  |
|-------------------|--|
| N1- N2-           |  |
| R1 R2 S1 S2 T1 T2 |  |
| PE                |  |

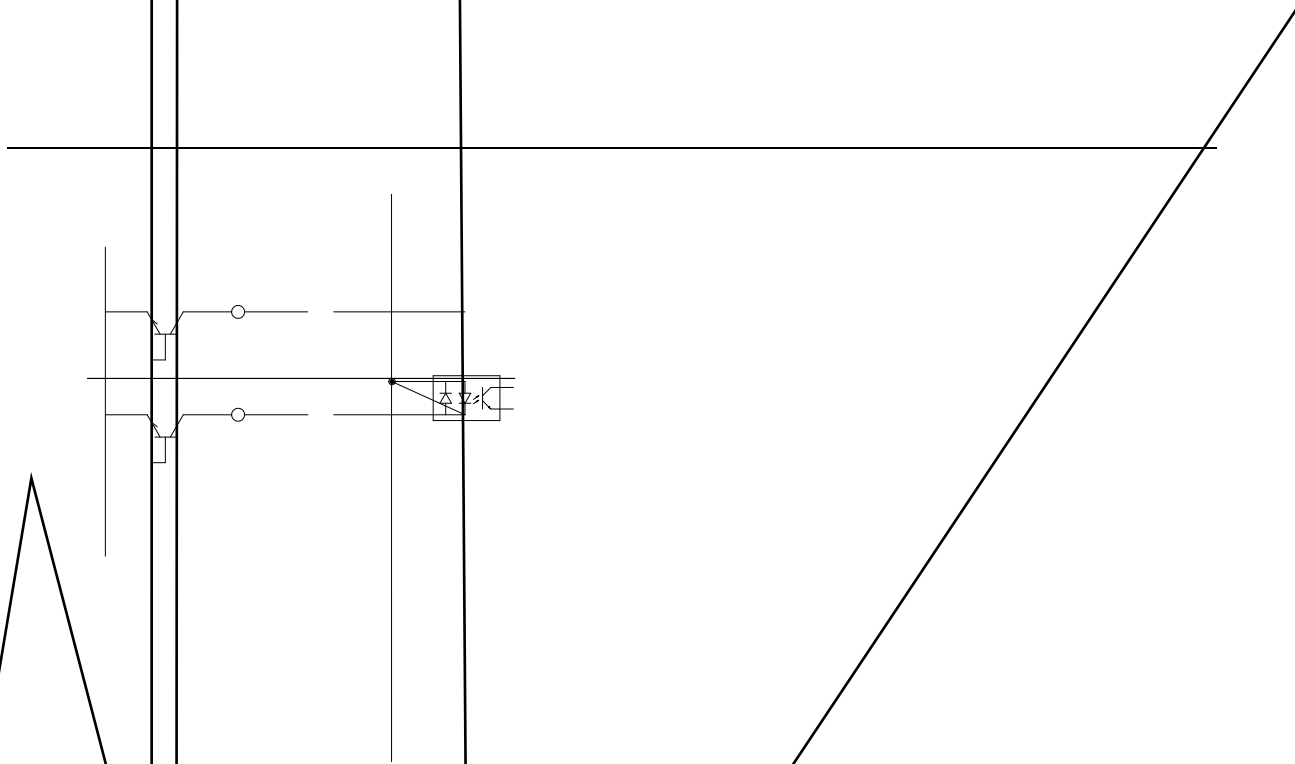
### 3.3.3

|   |                     |  |
|---|---------------------|--|
|   |                     |  |
| 1 |                     |  |
| 2 | 10                  |  |
| 3 |                     |  |
| 4 | 10cm                |  |
| 5 | 0.75mm <sup>2</sup> |  |
|   | 50m                 |  |
| 6 | 10cm                |  |
| 7 |                     |  |
| 8 |                     |  |

### 3.3.4

|  |          |     |                              |
|--|----------|-----|------------------------------|
|  |          |     |                              |
|  | +10V-GND | 10V | +10V 50mA<br>1kΩ~5kΩ         |
|  | +24V-COM | 24V | +24V 200mA                   |
|  | PW       |     | 24V<br>DI1~DI5 DO1 PW<br>24V |
|  | AI1-GND  | 1   | DC -10V~10V<br>100kΩ         |
|  | AI2-GND  | 2   | -10VDC~10VDC/0mA~20mA<br>J1  |





4

HF680NLC04M

F1

LOCAL/REMOTE

F2

RUN

STOP

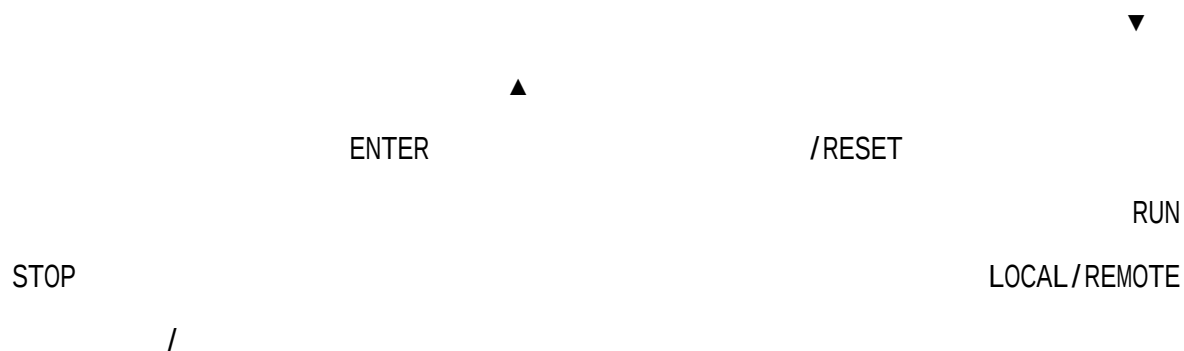
/RESET

ENTER



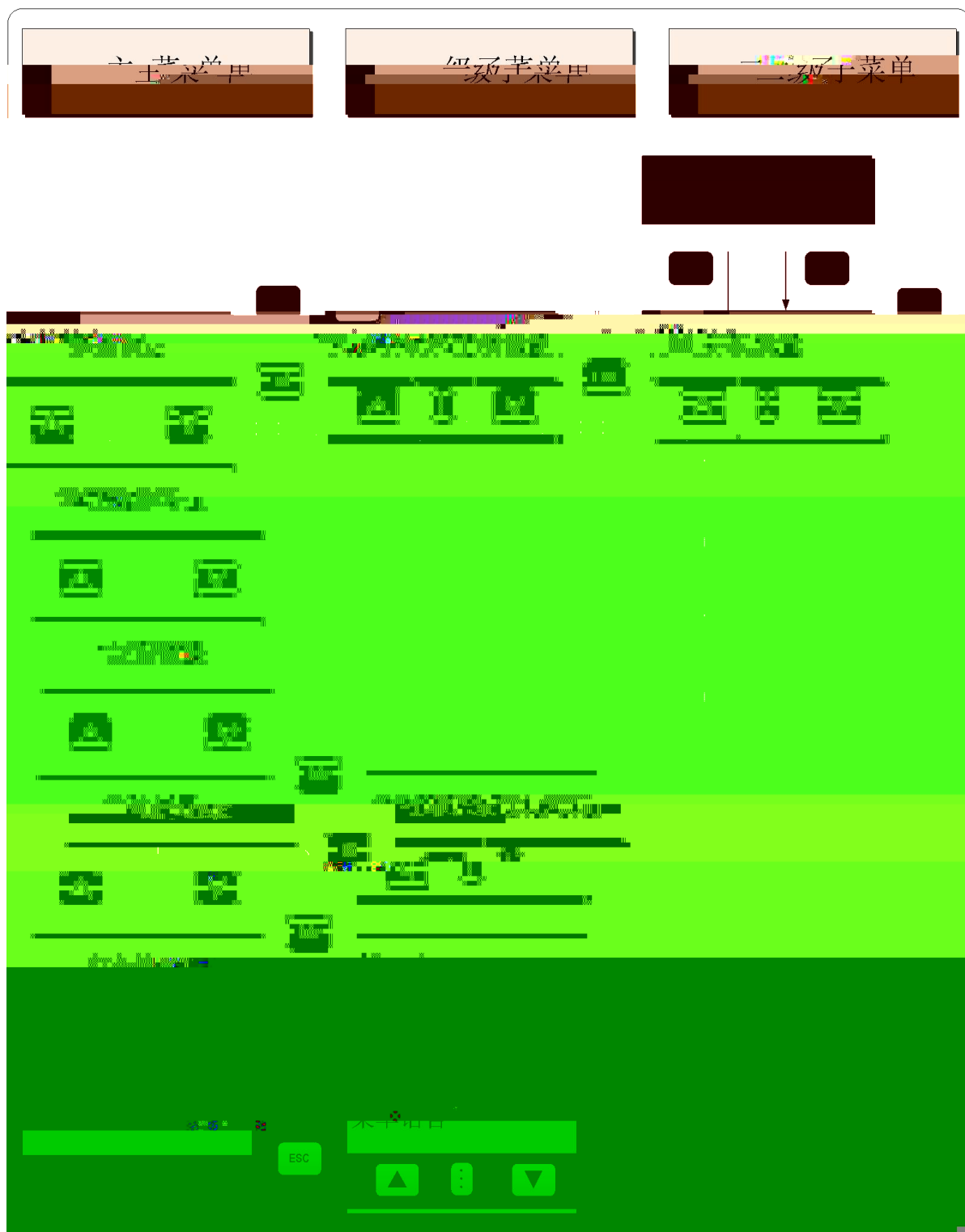
---

## 4.1



## 4.2

|                 |                                     |              |
|-----------------|-------------------------------------|--------------|
|                 |                                     |              |
| Drive Monitor   | Speed Power                         | I/O          |
| Parameter Edit  | P0 ~ P49                            |              |
| Function Set    | System reset Backup<br>Restore Para |              |
| Error Event Log | Error Log                           |              |
| Security        | Security Edit                       | Access Level |
| Display Edit    | Display Edit                        |              |



4.3

1 Drive Monitor

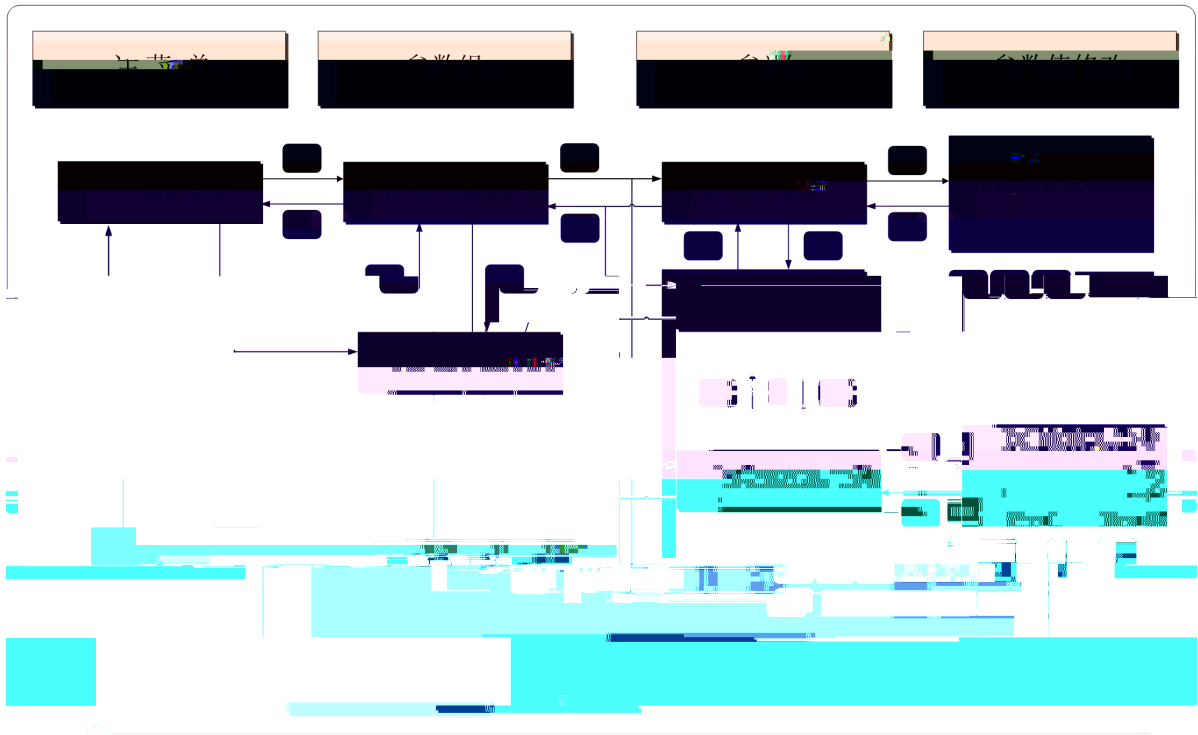
(I/O)



|     |    |   |
|-----|----|---|
|     | V  |   |
|     | V  |   |
|     | kW |   |
| H:L |    |   |
| H:L |    |   |
| 1   | %  | 1 |
| 2   | %  | 2 |
| 1   | V  | 1 |
| 1   | A  | 1 |
| 2   | V  | 2 |
| 2   | A  | 2 |
|     | V  |   |
| A   | A  | A |
| B   | A  | B |
| C   | A  | C |
|     | A  |   |

2

Parameter Edit



3

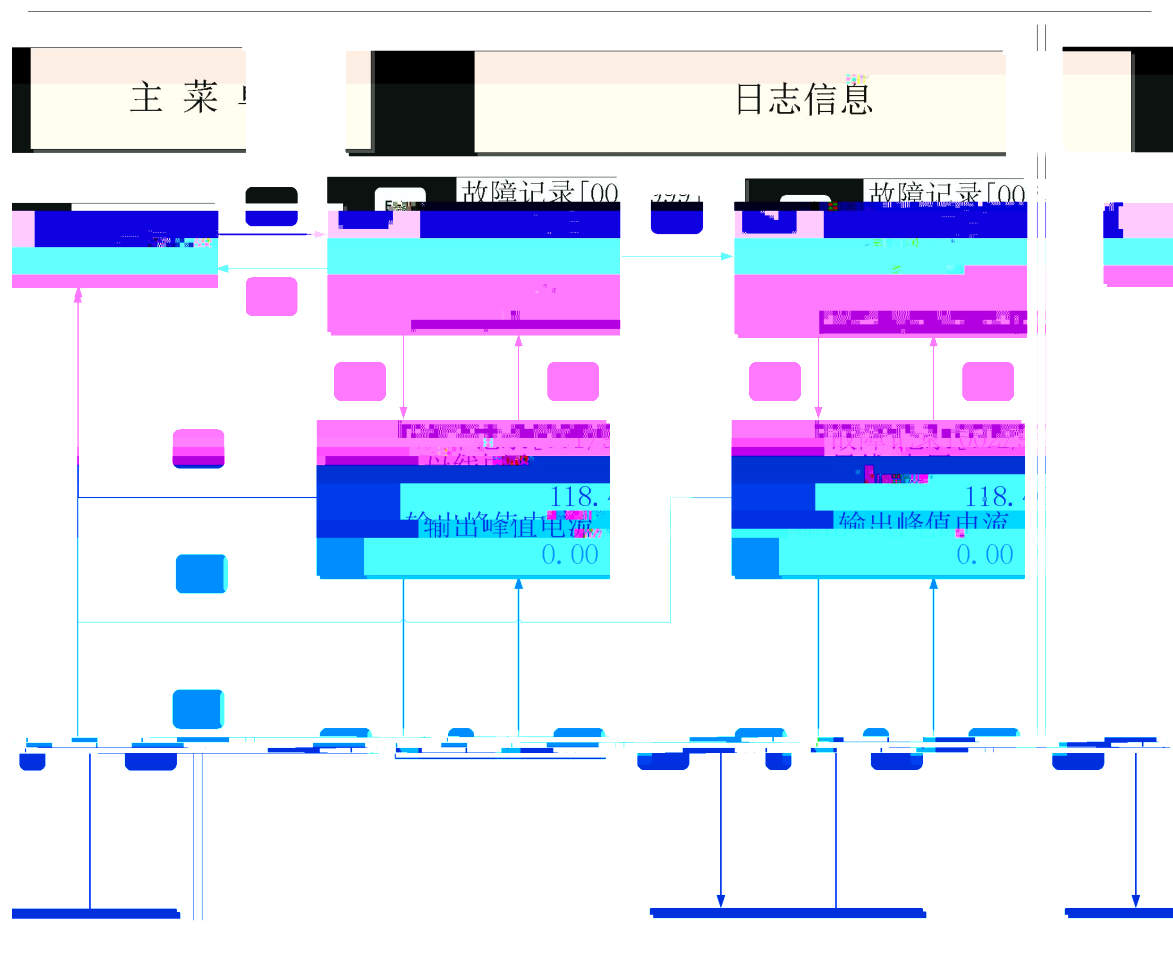
Function Set

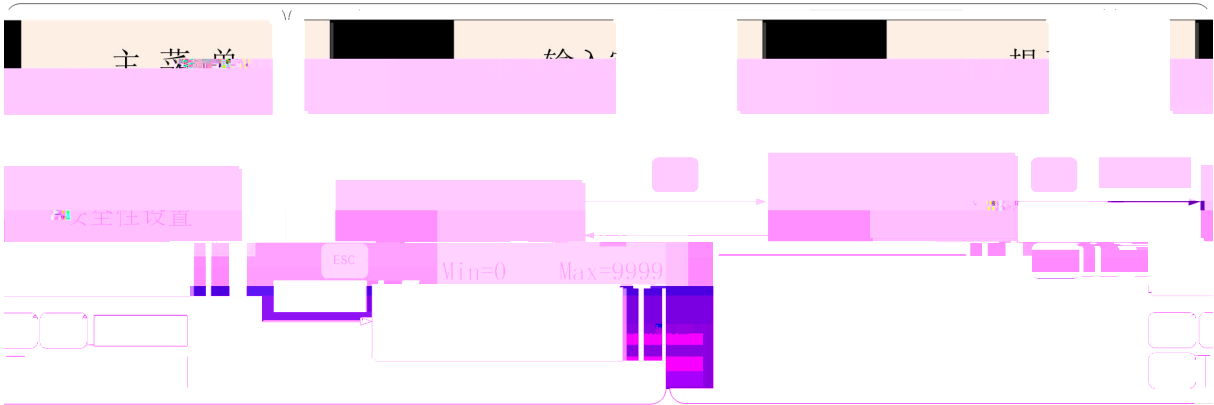
Function Set

|              |  |  |
|--------------|--|--|
|              |  |  |
| Function Set |  |  |
|              |  |  |
|              |  |  |
|              |  |  |
|              |  |  |
|              |  |  |
|              |  |  |



▼ ▲





|  |  |  |
|--|--|--|
|  |  |  |
|  |  |  |





5

5.1

DI1 DI2  
D05  
1

690V 24V  
P0.1 “ ” “ ”

690V

|          |    |  |
|----------|----|--|
|          |    |  |
| P3.0     | 1  |  |
| P3.1     | 5  |  |
| P4.3 D04 | 1  |  |
| P4.4 D05 | 2  |  |
| P16.11   | 5  |  |
| P16.12   | 10 |  |
| P16.0    |    |  |
| P24.4    | 0  |  |

24V

690V “  
AFE ” “ AFE ” 49.5~50.5Hz

DI1 \*1.41  
\*1.41  
P24.4  
1

---

## 6

### 6.1

#### 6.1.1

|      |   |  |      |   |  |
|------|---|--|------|---|--|
|      |   |  |      |   |  |
| P3.0 | 1 |  | 0 32 | 1 |  |
| P3.1 | 2 |  | 0 32 | 2 |  |
| P3.2 | 3 |  | 0 32 | 5 |  |
| P3.3 | 4 |  | 0 32 | 6 |  |
| P3.4 | 5 |  | 0 32 | 7 |  |
| P3.5 | 6 |  | 0 32 | 8 |  |
| P3.6 | 7 |  | 0 32 | 0 |  |
| P3.7 | 8 |  | 0 32 | 0 |  |

|    |     |       |
|----|-----|-------|
|    |     |       |
| 0  |     |       |
| 1  |     |       |
| 5  |     | </RST |
| 14 |     |       |
| 15 | .NC |       |

---

### 6.1.2

|      |   |      |   |
|------|---|------|---|
| P4.0 | 1 | 0 64 | 0 |
| P4.1 | 2 | 0 64 | 0 |
| P4.2 | 3 | 0 64 | 0 |
| P4.3 | 4 | 0 64 | 0 |
| P4.4 | 5 |      |   |

|       |   |   |                  |              |  |
|-------|---|---|------------------|--------------|--|
| P7.50 | 2 | 2 | 0.0 300.0<br>[%] | 200.0<br>[%] |  |
| P7.51 | 2 | 2 | 0.00 5.00<br>[s] | 5.00<br>[s]  |  |
| P7.95 |   |   | 0.0 20.0<br>[s]  | 15.00<br>[s] |  |

#### 6.1.4

|      |  |                                         |     |   |  |
|------|--|-----------------------------------------|-----|---|--|
|      |  |                                         |     |   |  |
| P8.0 |  | [0]<br>[1]<br>[2]DP<br>[3]MODBUS<br>[4] | 0 4 | 0 |  |

#### 6.1.5

|        |  |     |                       |            |     |
|--------|--|-----|-----------------------|------------|-----|
|        |  |     |                       |            |     |
| P16.0  |  |     | 580 800<br>[V]        | 690<br>[V] |     |
| P16.2  |  |     | 0.0<br>4000.0<br>[kW] | [kW]       |     |
| P16.4  |  |     | 0.0<br>6500.0<br>[A]  | [A]        |     |
| P16.11 |  | 5   | 0 5                   | 0          | [5] |
| P16.12 |  | 10K | 1~15                  | 10         | 10K |



# 7

|     |                 |          |    |
|-----|-----------------|----------|----|
|     |                 |          |    |
| W01 | SYS_NOT_RDY     | (Ready)  |    |
| W02 | NO_DRV_ENABLE   | [ ]      | P3 |
| W03 | LOCAL_EM        | [ ]      | P3 |
| W04 | REMOTE_EM       | [ ]      | P3 |
| W06 | O.T             | P7.14( ) |    |
| W09 | DP<br>P/B ALARM | DP       | DP |

---

## 7.1

|        |                   |       |          |
|--------|-------------------|-------|----------|
| [E100] | OV                |       | P7.12( ) |
| [E110] | OC                |       |          |
|        |                   | P7.95 |          |
| [E139] | Pre_Charging Fail |       | P16.0    |
| [E140] | Line UV           |       | P16.0    |
| [E141] | Line OPEN         |       |          |
| [E145] | Line OV           |       | P16.0    |
| [E146] |                   |       |          |

8

|                                                                                   |      |
|-----------------------------------------------------------------------------------|------|
|  |      |
| 1                                                                                 |      |
| 2                                                                                 |      |
| 3                                                                                 |      |
| 4                                                                                 |      |
|  |      |
| 1                                                                                 | CMOS |
| 2                                                                                 |      |
| 3                                                                                 |      |

8.1

---

## 8.2

- 1.
- 2.

- 1.
- 2.

1. > 40  
< 95%
- 2.

- 1.
2. , | ( ( ( ( ( i

---

8.4

5

- 1            40
- 2            80%
- 3            24     /

8.5

1

2

5



HF680NLC

690V

1.00

1

2

3

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6

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