



MNK Display board

Technical Dept

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General introduction

Name	Feature	Size (mm)
No display HCB		
MCTC-HCB-B	No display	70*84
Dot-matrix		
MCTC-HCB-F	Horizontal (red)	144*70*18
MCTC-HCB-H	Dot-matrix (red)	144*70*18
MCTC-HCB-H1	Dot-matrix (blue)	144*70*18
MCTC-HCB-H2	Dot-matrix (orange)	144*70*18
MCTC-HCB-Q1	Mini Dot-matrix (red)	74*67*10
MCTC-HCB-P1	7-segment (red)	144*70*18
MCTC-HCB-SL	Floor unit display board (red)	245*55
MCTC-HCB-IF2	Cyclo-dot-matrix (orange)	100*70*10
MCTC-HCB-R1	Thin dot-matrix (red)	144*70*10
MCTC-HCB-R2	Thin dot-matrix (orange)	144*70*10
LCD display		
MCTC-HCB-D1	Hall segment LCD	158*70*18
MCTC-HCB-D2 (blue background with white letter)	Hall thin segment LCD	144*70*10
MCTC-HCB-D3 (black background with yellow letter)	Hall thin segment LCD	144*70*10
MCTC-HCB-D4 (black background with white letter)	Hall thin segment LCD	144*70*10
MCTC-HCB-D5	Segment LCD for COP	139*100*23
MCTC-HCB-K	solid color LCD (blue background with white letter)	194*109*20

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Chapter 1 No display board

1.1 MCTC-HCB-B

1. Photo

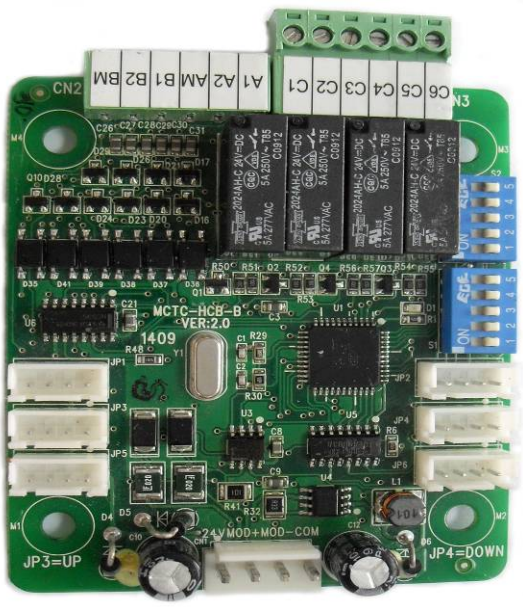


Fig 1-1-1MCTC-HCB-B

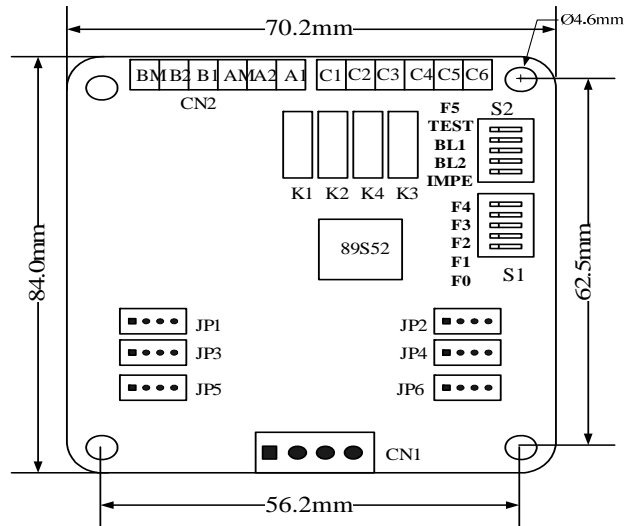


Fig 1-1-2 MCTC-HCB-size

2. Size diagram

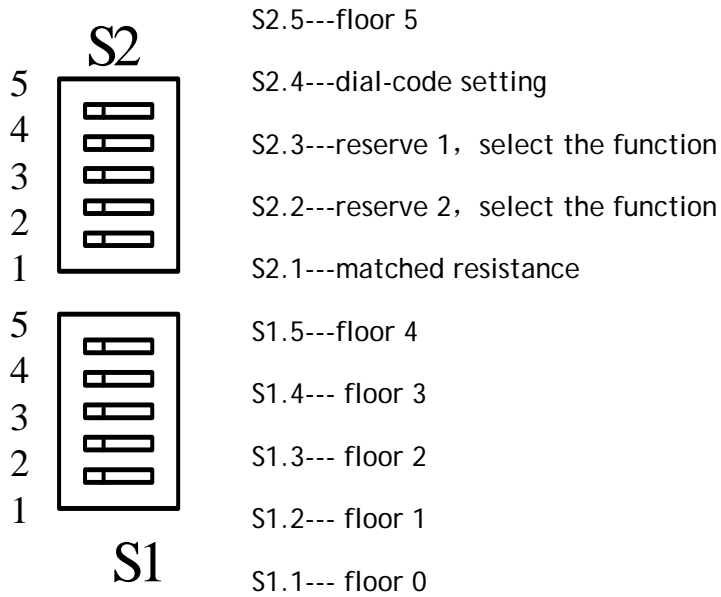
➤ Table 1 functions of dial-code switch

	S2.5	S1.1~S1.5	S2.1	S2.2	S2.3
HCB-B	Floor address setting, 0~40	Setting of the matched resistance of MOD BUS	OFF	ON	
HPB (SERIAL TO PARALLEL)	Floor address setting, 0~40	Setting of the matched resistance of MOD BUS	ON	OFF	
7-SEGMENT	Floor address setting, 0~40	Setting of the matched resistance of MOD BUS	OFF	OFF	

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3. Install

1) Dial-code setting



4. Function introduction

1) HCB-B function

Comptiable the function of original HCB-B completely

2) HPB serial change to parallel

3) 7-segment function

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Chapter 2 Dot-matrix display

2.1 MCTC-HCB-F

1. photo

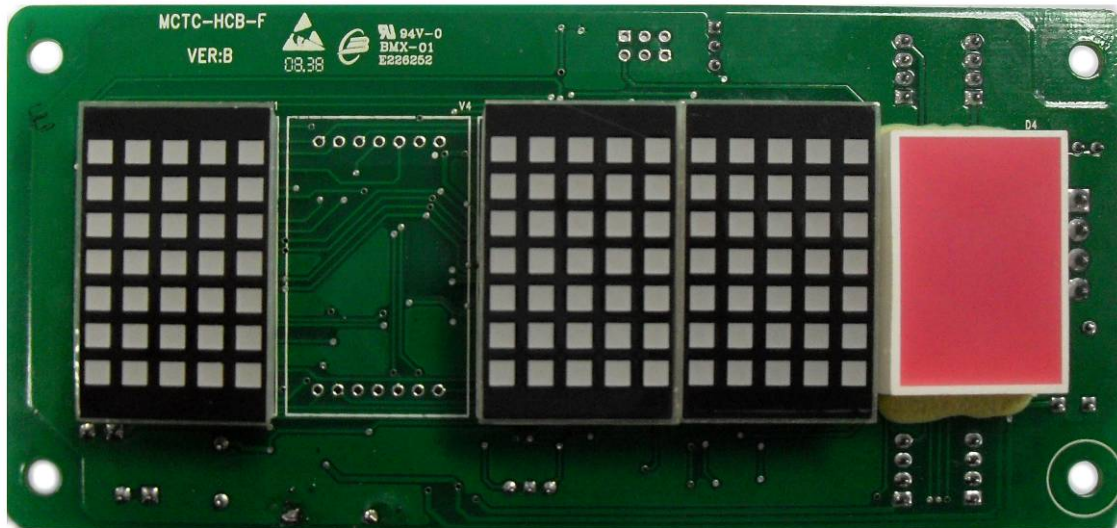


Fig 2-1-1 MCTC-HCB-F

2. size

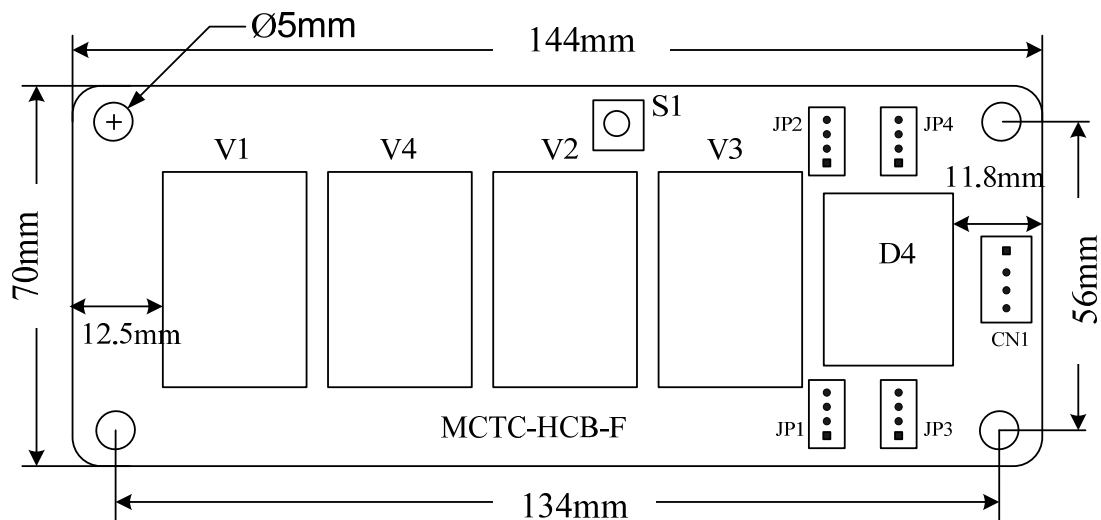


Fig 2-1-2 MCTC-HCB-F size

2. function

Red dot-matrix with high brightness, display the run direction with one 5*7 dot-matrix and

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display floor info with another 2.

➤ Output:

up button-light output, down button-light output, up arrival light and down arrival light.

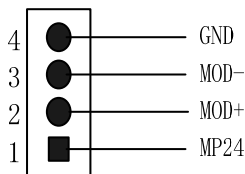
➤ Input:

lift-locking input、 fire-emergency input、 up call input、 down call input,

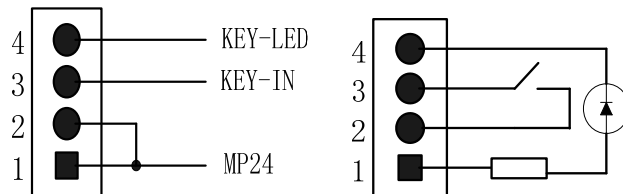
➤ floor address setting

push-button to save on the board.

➤ power and communication input terminal (CN1):



➤ general button input terminal (JP1-4)



1 and 2 are all 24V; 3 is button input signal; 4 is button light output

➤ I/O

Terminal Name	Function Definition
JP1	Switch Interface of locked lift, pin 2、3 are switch connection pins, pin 4 is lift lock indicator output
JP2	Switch Interface of fire fighting, pin 2、3 are switch connection pins, pin 4 is lift lock indicator output
JP3	Calling button interface of up running, pin 2、3 are switch connection pins, pin 1、4 are power supply pins, for controlling button light
JP4	Calling button interface of down running, pin 2、3 are switch connection pins, pin 1、4 are power connection pins, for controlling button light
CN1	Use for communicating with Modbus, pin 2、3 of 4Pin interface are for communication, pin 1、4 are for power connection

➤

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2.2 MCTC-HCB-H

1、photo

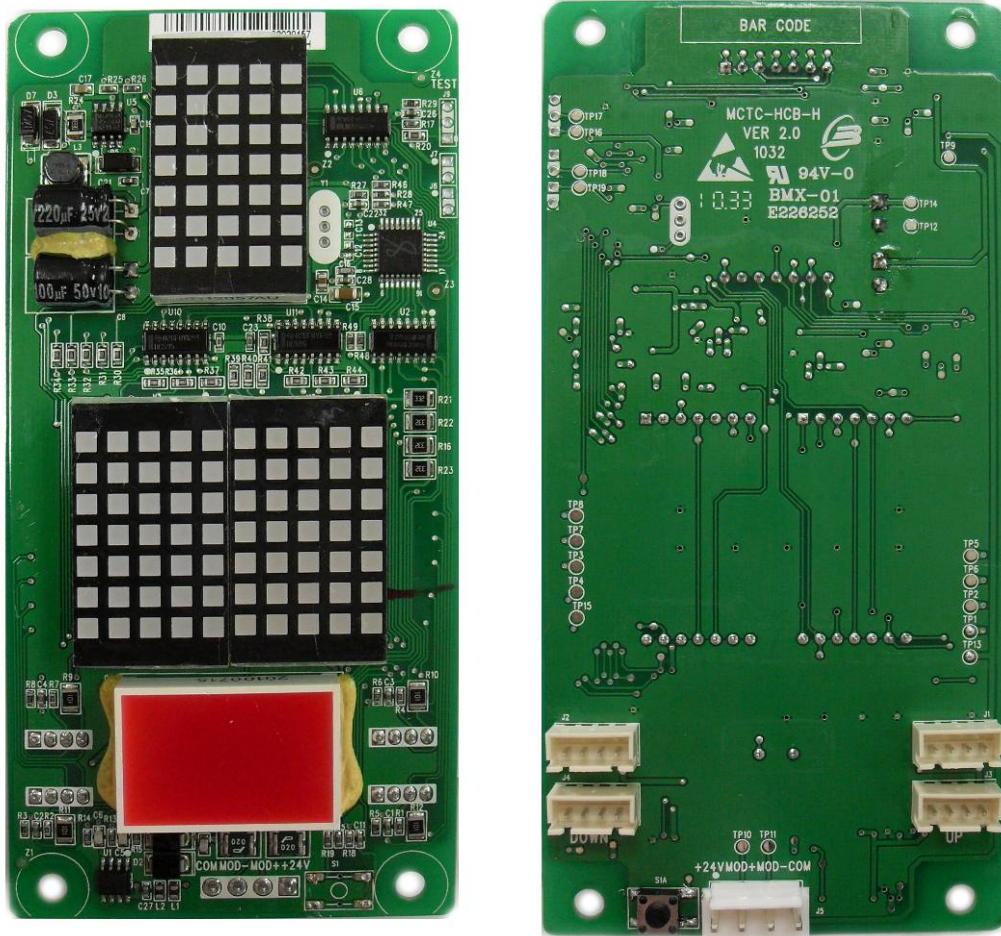


Fig 2-2-1 MCTC-HCB-H

2、 size

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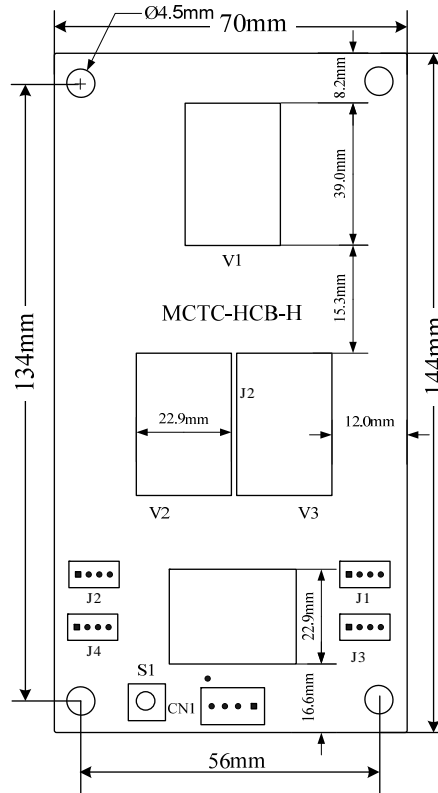


Fig 2-2-2 MCTC-HCB-H size

3、terminal

Name	Function
J1	Lift-locking switch interface, 2、3 is for the switching value wiring, 4 is up-arrival light output
J2	Fire-emergency switch interface, 2、3 is for the switching value wiring, 4 is down-arrival light output
J3	up call button interface, 2、3 is for the input switching value wiring, 1、4 is for the power wiring to control the button light
J4	Down call button interface, 2、3 is for the input switching value wiring, 1、4 is for the power wiring to control the button light
CN1	Modbus communication and power wire terminal, 4PIN interface, 2、3 for Modbus communication wire, 1、4 for power wiring
S1A	Push to save the floor info

4、display

- 1、“INS” for inspection
- 2、red when overload
- 3、Set the floor display with the FE group parameter on the main board

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2.3 MCTC-HCB-H1

Same size as MCTC-HCB-H, blue light.

2.4 MCTC-HCB-H2

Same size as MCTC-HCB-H, orange light.

2.5 MCTC-HCB-P1

1. Photo



Fig 2-5-1 (Front)

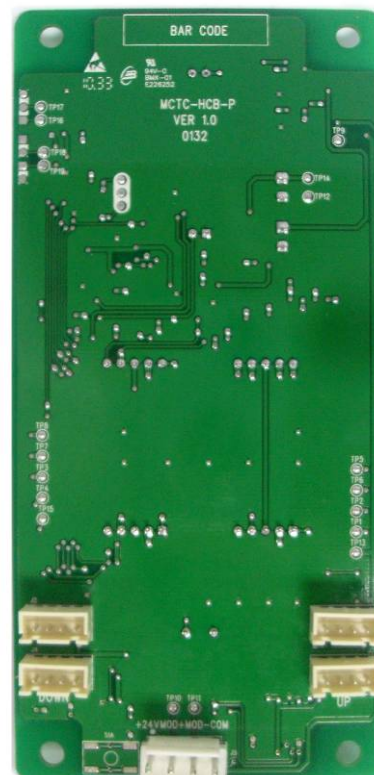


Fig2-5-2 (Backside)

2. Size

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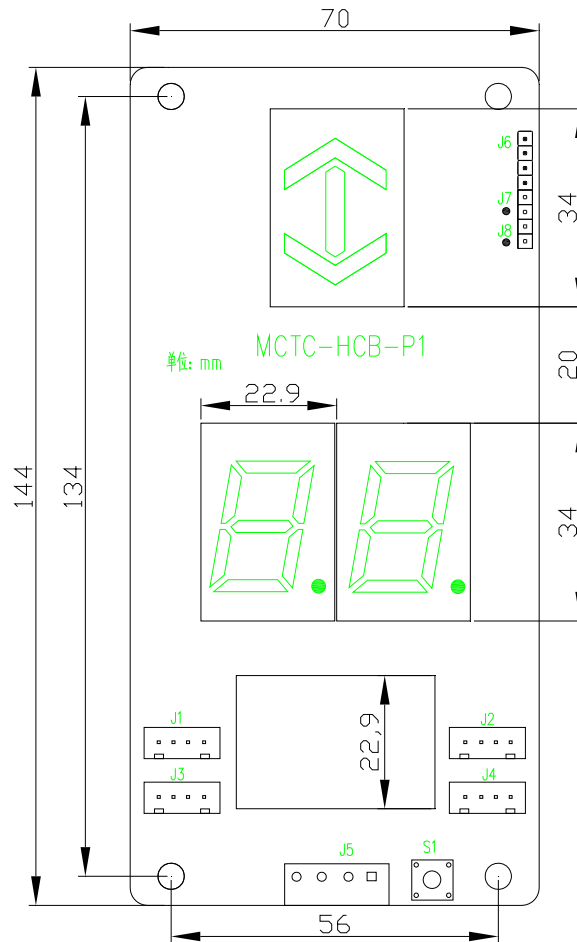


Fig 2-5-3 size

3. Terminal introduction

Name	Function
JP1	Lift-locking switch interface, 2、3 is for the switching value wiring, 4 is up-arrival light output
JP2	Fire-emergency switch interface, 2、3 is for the switching value wiring, 4 is down-arrival light output.1 is 24 v power+
JP3	up call button interface , 2、3 is for the input switching value wiring, 1、4 is for the power wiring to control the button light
JP4	Down call button interface , 2、3 is for the switching value wiring, 1、4 is for the power wiring to control the button light
CN1	Modbus communication and power wire terminal, 4PIN interface, 2、3 for Modbus communication wire, 1、4 for power wiring.1 is +24v power, 4 is COM
S1	Push to save the floor info

2.6 MCTC-HCB-Q1

1. PHOTO

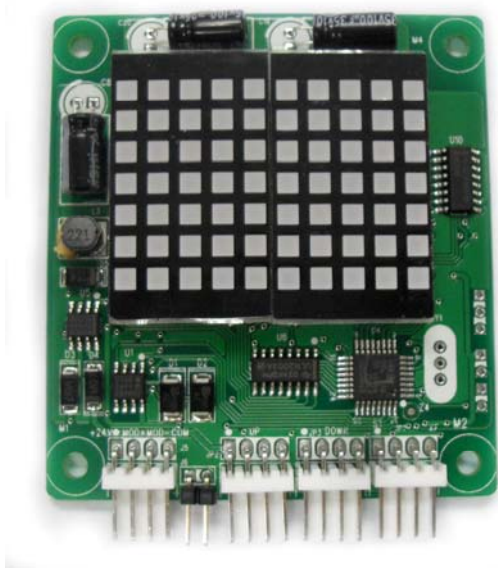


Fig 2-6-1 MCTC-HCB-Q1photo

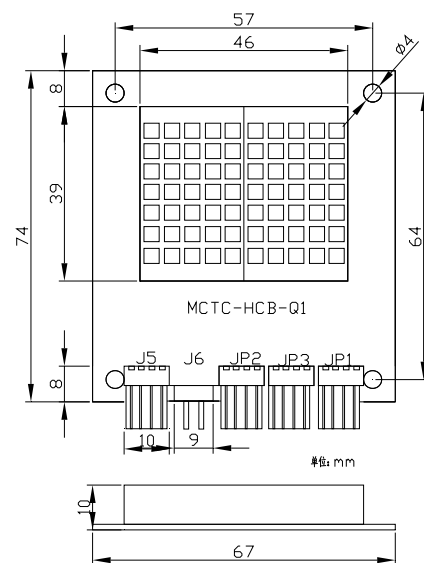


Fig 2-6-2 MCTC-HCB-Q1 size

2. Size

See fig. 2-6-2

3. Terminal

Terminal	Functions
JP1	Fire-emergency elevator-locking interface board, 1、2 is for the fire-emergency, 3、4 for the elevator-locking
JP2	Up call button interface, 2、3 is for the input switch-value wiring, 1、4 is for power wiring to control the button light , 1 is +24V, 4 is COM
JP3	Down call button interface, 2、3 is for the input switch-value wiring, 1、4 is for power wiring to control the button light , 1 is +24V, 4 is COM
J5	Modbus communication and power line terminal, 4PIN interface, 2、3 for Mod bus communcation wire, 1、4 is for power wiring, 1 is +24V, 4 is COM
J6	Connector pins for floor saving

2.7 MCTC-HCB-SL

2.7.1 Photo



Fig 2-7-1 MCTC-HCB-SLreal object

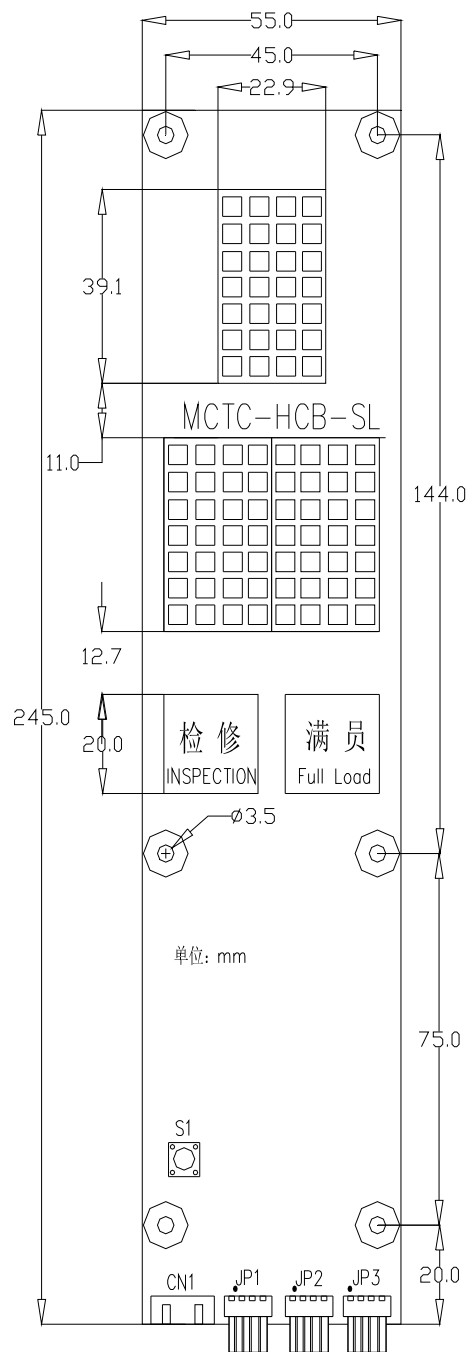


Fig 2-7-2 MCTC-HCB-SL size

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2.7.2 Size

See fig. 2-10-2

2.7.3 Terminal

Terminal	Function
JP1	1 is unconnected, 2 is for fire-emergency signal, 3 is elevator-locking signal, 4 is power supply.
JP2	Up call button interface, 2, 3 is for the input switch-value wiring, 1, 4 is for power wiring to control the button light.
JP3	Down call button interface, 2, 3 is for the input switch-value wiring, 1, 4 is for power wiring to control the button light
CN1	Modbus communication and power wire terminal, 4PIN interface, 2, 3 is MOD+, MOD- communication wire, 1 is +24V, 4 is COM.
S1	Push to save the floor

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2.8 MCTC-HCB-IF2

1、real object photo

Remark: HCB-IF2 is with orange light

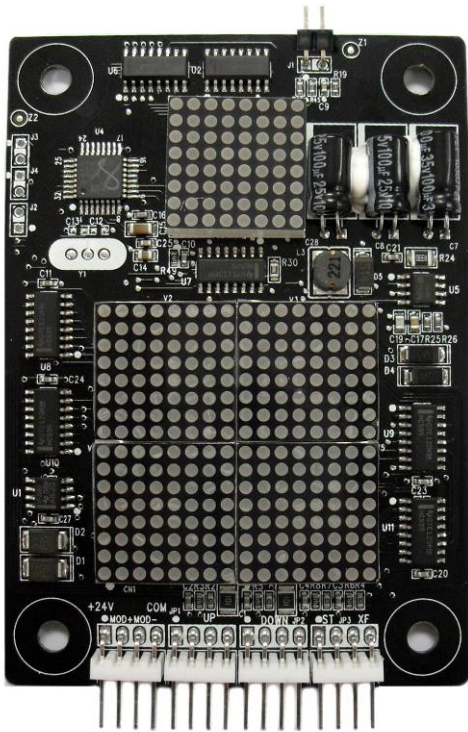


Fig 2-8-1 MCTC-HCB-IF2 real object

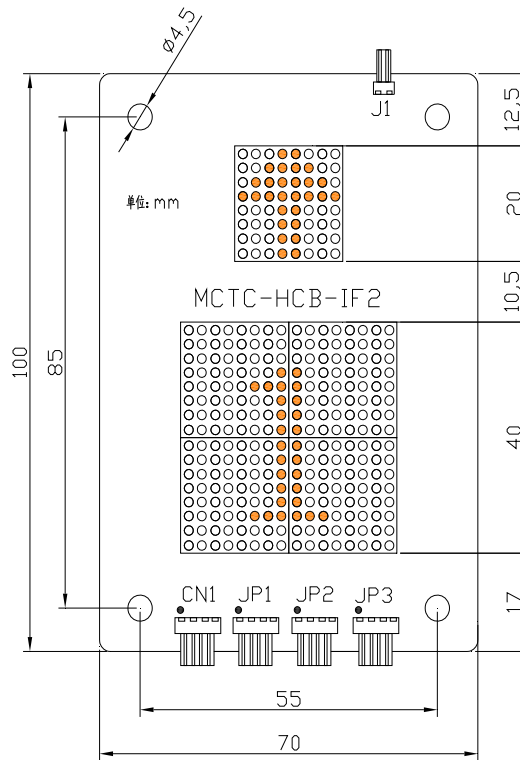


Fig 2-8-2 MCTC-HCB-IF2 size

2、size

Fig 2-8-2

3、terminal



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Terminal	Function
J1	Up call button interface, 2、3 is for the input switching value wiring, 1、4 is for the power wiring to control the button light
J2	Down call button interface, 2、3 is for the input switching value wiring, 1、4 is for the power wiring to control the button light
J3	1、2 elevator-locking input, 3、4 are fire-emergency input
CN1	Modbus communication and power wire terminal, 4PIN interface, 2、3 is for Modbus communication wire, 1、4 if for power wire
J1	Connector pin for floor saving

4、Display

- 1、Display FIRE and floor when fire-emergency occurs;
- 2、Display INS and floor when under the inspection mode;
- 3、Display FULL and floor when full or over-load;
- 4、No display when elevator locked;

2.9 MCTC-HCB-R1

1. Real object

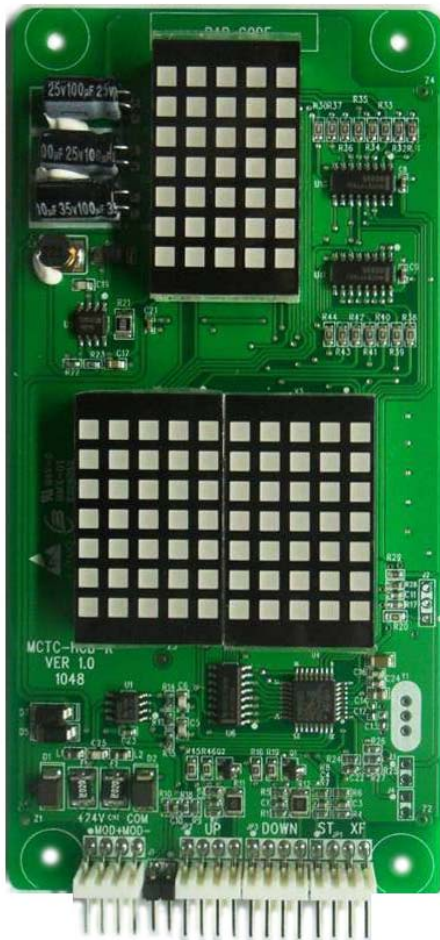


Fig 2-9-1 MCTC-HCB-R1 real object

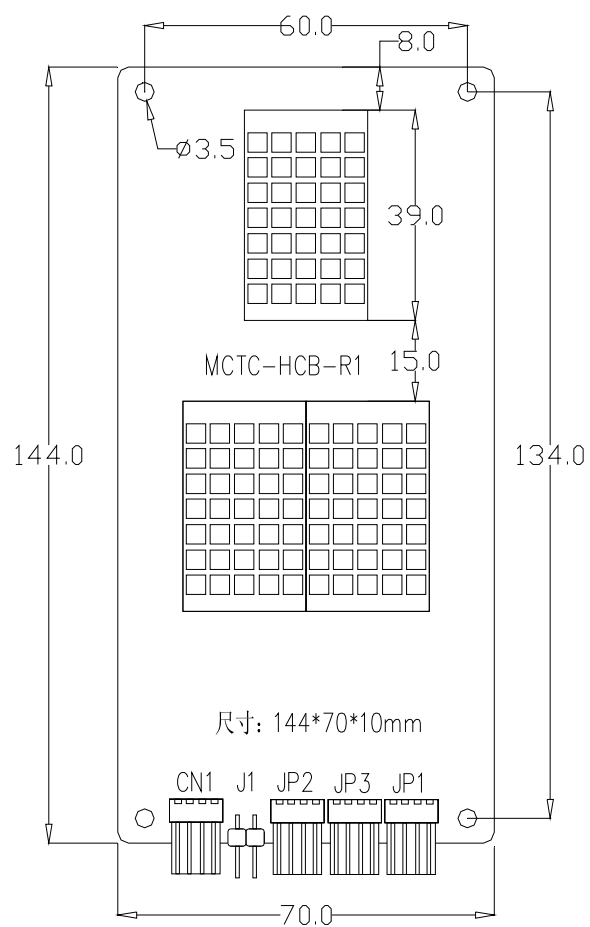
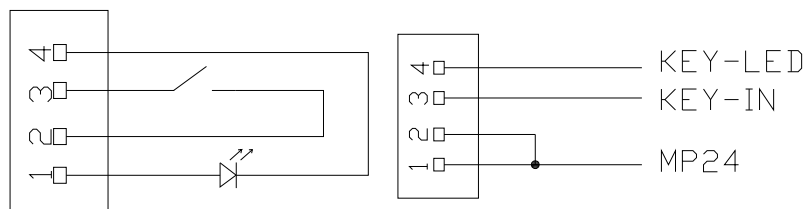


Fig 2-9-2 MCTC-HCB-R1 size

2. size

See Fig. 2

JP2, JP3 terminal wiring:



3. terminal

Terminal	Function
JP1	1 is for elevator-locking, 2 、 3 for power、 4 for fire-emergency。
JP2	Up call button interface, 2、3 is for the input switching value wiring, 1、 4 is for the power wiring to control the button light
JP3	Down call button interface, 2、 3 is for the input switching value wiring, 1、 4 is for the power wiring to control the button light
CN1	Modbus communication and power line terminal, 4PIN interface, 2、 3 is MOD+,MOD- communication wire, 1 is +24V, 4 is COM。
J1	Press to save the floor

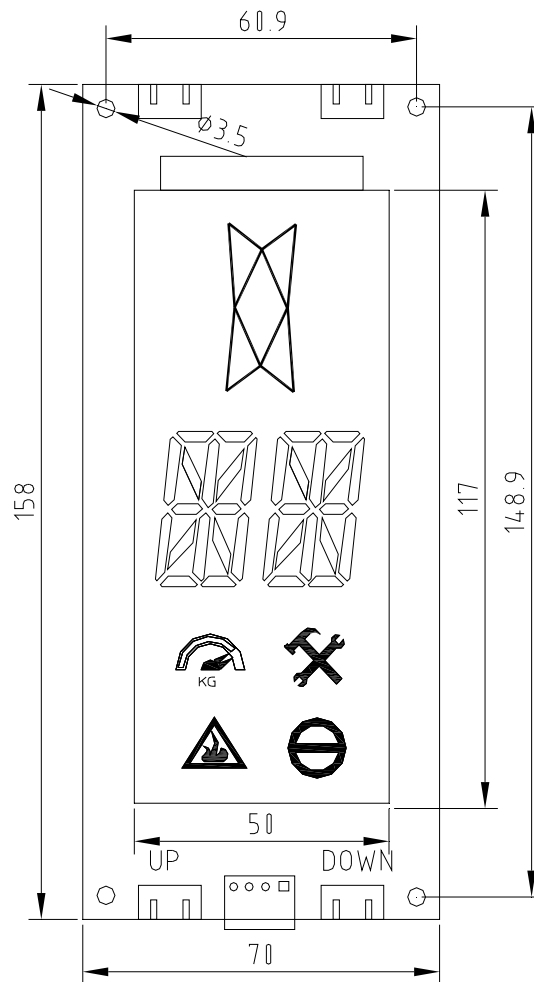
Chapter 3 LCD display board

3.1 MCTC-HCB-D1

1. Real object



Fig 3-1-1 MCTC-HCB-D1 real object



3-1-2 MCTC-HCB-D1 size

3. Display

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(1) floor



(2) Inspection (3) Fire-emergency: backlight always on, display the fire-emergency marks.



(4) full



(5) overload



(6) Error

2. Size

See fig. 3-1-2

3. Terminal

Terminal	Function
J1	Elevator-locking interface, 2 and 3 for switch-value wiring, 4 for up call arrival light output
J2	Elevator-locking interface, 2 and 3 for switch-value wiring, 4 for down call arrival light output
J3	Up call button interface, 2,3 is for the input switching value wiring, 1、4 is for the power wiring to control the button light. 1is +24v, 4 is COM

J4	Down call button interface, 2、3 is for the input switching value wiring, 1、4 is for the power wiring to control the button light. 1is +24V, 4 is COM
J5	Modbus communication and power line terminal, 4PIN interface, 2、3 is MOD+,MOD- communication wire, 1 is +24V, 4 is COM.
S1	Press to save the floor

3.2 MCTC-HCB-D2

LCD with color of blue background white letter.

1. Photo



Fig 3-2-1 MCTC-HCB-D2 photo

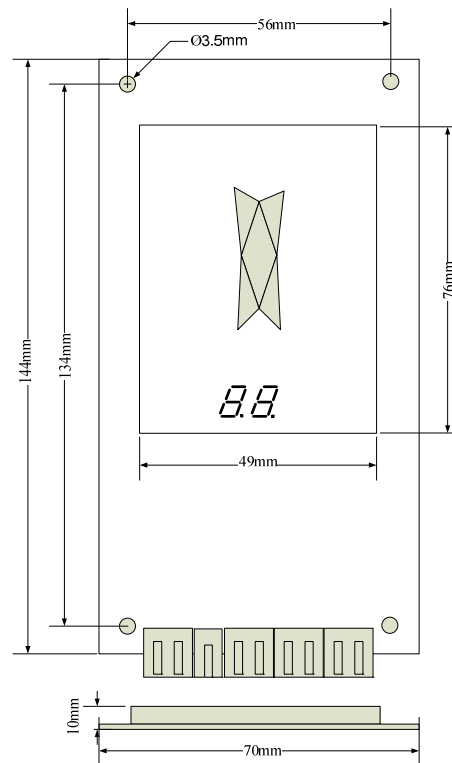


Fig 3-2-2 MCTC-HCB-D2 size

2. Size

See Fig 3-2-2

4. Terminal

Terminal	Function
JP1	Elevator-locking interface, 2 and 3 for fire-emergency, 4 for elevator-locking
JP2	Up call button interface, 2、3 is for the input switching value wiring, 1、4 is for the power wiring to control the button light. 1is +24v, 4 is COM
JP3	Down call button interface, 2、3 is for the input switching value wiring, 1、4 is for the power wiring to control the button light. 1is +24v, 4 is COM
CN1	Modbus communication and power line terminal, 4PIN interface, 2、3 is MOD+,MOD- communication wire, 1 is +24V, 4 is COM。
J1	Connector pin for floor save

4. Display



3.3 MCTC-HCB-D3

Same as MCTC-HCB-D2, LCD with black ground yellow letter。

3.4 MCTC-HCB-D4

Same as MCTC-HCB-D2, LCD with black ground white letter

3.5 MCTC-HCB-D5

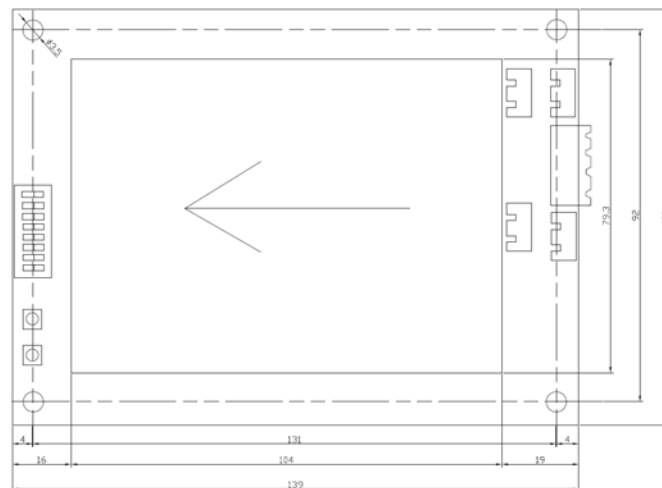
1. Photo

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图3-5-1 MCTC-HCB-D5 really object

2. Size

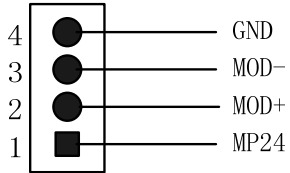


3-5-2 MCTC-HCB-D5 size

3.6 MCTC-HCB-K

1. Photo

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4. display

This board can display both vertically and horizontally with different modes.



Fig 3-6-3 vertical display



Fig 3-6-4 horizontal display