reserves the right to change product design and specifications without prior notice.

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ELECTRIC HOIST CONTROLLER

USER OPERATION MANUAL

To our esteemed users

Sincerely thank you for purchasing the JDP electric hoist controller.

Please be sure to read the usage and maintenance management methods.



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REPAIR WITH ELECTRIC HOIST

If abnormal conditions are found in the process of checking and confirming the electric hoist, please cut off the controller power supply and make a fault sign to carry out maintenance and repair.

Routine maintenance:

- 1. Check whether the nameplates and labels have fallen off and whether the labels are clear. Clean, repair or replace them in time.
- 2. Check whether the cabinet body is significantly deformed, damaged, defective or cracked, and replace deformed, damaged, defective or cracked parts in a timely manner
- 3. Check whether the nuts and bolts on the cabinet are loose or falling off, and install them securely.
- 4. Check whether the power supply is connected poorly or disconnected, and whether it is installed securely.
- 5. Check the touch screen for any damage, crash, black screen, and no boot phenomenon. If there is such a situation, please contact the manufacturer.

Function verification

- 1. Press the rise and fall button of the screen, whether the electric hoist gives the corresponding action.
- 2. After pressing the emergency stop key of the screen, whether the electric hoist gives the corresponding action.

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①Side label: The product specifications, models, maximum output power and other information are clearly stated on it, which helps operators to ensure the load of the connected equipment to ensure safety.

② ⑥ Main power interface: The power supply is: A C380V50HZ 3PH+N+PE Both the main cabinet and the auxiliary cabinet need to supply the same power at the same time. It is necessary to ensure that the power supply sequence of the two cabinets is consistent, so as to ensure the same direction of operation and ensure safe operation.

3 Cautions: Clarified all the precautions that need to be taken before starting up to ensure the reliability and safety of the operation."

④ ⑤: Power output interface: Each interface is connected to an electric hoist. The connection number of the main cabinet corresponds to the 1-12 electric hoist selection key of the touch screen of the control panel, and the connection number 1-12 of the auxiliary cabinet corresponds to the 13-24 electric hoist selection key of the touch screen operating platform, and so on. The corresponding number 1-12 of the third sub-cabinet corresponds to the 25-36 electric hoist selection key on the operating table, which is very convenient to select the hoist in turn.

The operation method of the touch screen is the same as that of the touch screen of the low-voltage control cabinet above.

PERFACE

This manual covers information to help you properly install and operate your purchased JDP chain electric hoist controller and keep your hoist operating safely at optimum efficiency.

Before you start using the controller, please carefully read the contents of this manual, the correct use process and operation mode, and the implementation of preventive maintenance, you will get accurate and reliable service.

EXCEPTION FROM LIABILITY

The Company shall not be liable for any damages caused by natural disasters such as fire, earthquake and lightning strikes, behaviors of third parties, other accidents, intention or negligence of users, misoperation, and other environmental conditions beyond use.

The Company shall not be liable for any collateral damage arising from the use of this product or its failure to use it.

The Company shall not be liable for any damage arising from non-compliance with the records in the user manual and beyond the specified scope.

The Company shall not be liable for any damage caused by the combination of the machinery not involved.

RESTRICTION ON USE

This product is only used to control the operation of our company's production of matching electric hoist design and production. Do not use for other mechanical operation.

This product is under the usual use conditions, control the operation of the electric hoist, pay attention to rain and snow prevention, do not use in an extremely harsh environment.

REGARDING OPERATION AND USE OF PERSONNEL

Please read this user manual and the operation instructions of related products carefully, and operate and use them on the basis of understanding their contents.

Operators and users should wear prescribed clothing and protective equipment.

SAFETY PRECAUTIONS

Before installation, operation, use, and maintenance check, be sure to read this user manual thoroughly and use it correctly. Please use it after mastering the mechanical knowledge, safety information, precautions, etc.

Please read the operating instructions for electric hoists and other mechanical devices related to the operation of the controller and follow the instructions therein.

About operational safety and management

Danger warning!

Personnel other than maintenance manager, please do not disassemble and repair the product. Do not modify the product or accessories

Please be familiar with the contents of the user manual before operation and use. Put warning labels on all parts of the product. Follow the warning label. When it is used in combination with old products, please refer to the recorded "New and old product combination manual", carried out by personnel with professional knowledge or maintenance management personnel, or consult the service provider.

1. CONVENTIONAL CONTROLLER OPERATION METHOD

1. Conventional high voltage synchronous group controller wiring elementary diagram



Model: JG-G-06

Size specification:

Model	Size(L*W*H Excluding outer packaging)mm
JK-G-04(2channel, 4channel)	450*350*240
JK-G-06(6channel, 8channel)	550*570*340
JK-G-10(10channel, 12channel)	710*630*440
Other	Customized

- (7) (15) All down button: This key is used by standby design. When the distance between the operating table and the control cabinet is far and all the electric hoist needs to be lifted or the touch screen console fails, the 'All down button' can be used to lower all hoists connected to the controller;
- ®Emergency stop button: when the misoperation or electric hoist control system out of control and other emergency situations, press this button, the control system will all power off, all electric hoist stop running; (The cabinet emergency stop and the console emergency stop are unified function keys. Pressing either one will cut off the power to the entire control system. To restart, keep both emergency stop buttons in the pop-up state).
- ③ Signal output interface: Similarly, the signal output interface of the secondary cabinet can also be connected to the second secondary cabinet to achieve the purpose of unified control screen operation for more channels.



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Secondary cabinet control panel

①Drawer: The space is used for transportation and daily storage of the touch screen console. Unused signal cables can also be placed inside. The cables and touch screen console are placed to prevent them from being damaged during transportation..

② ①Liquid crystal voltmeter: When the equipment is powered on normally, the voltmeter displays three thermal power voltages, and the values all show 380±10, which is the normal voltage. If the displayed voltage value is too low or too high, please check whether the power supply is connected correctly and adjust it to the normal value before use...

31 Main power switch: Control the total power supply to each cabinet.

Signal input interface: The touch screen console is connected to the signal interface of the control cabinet, and is equipped with a locking device to facilitate operation and ensure smooth signal.

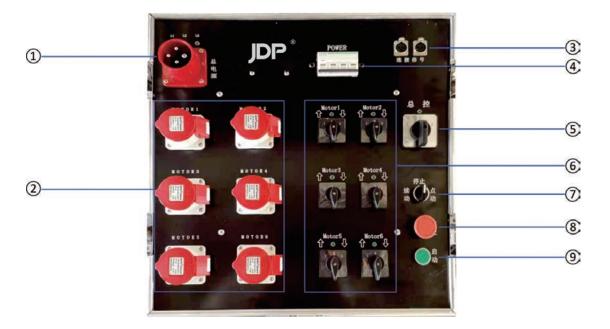
(5) Key switch: When the cabinet is powered on normally and the main power switch is closed, turn the key to the right to the open position to power on the control system and light up the screen..

(6) (4) All up button: This key is used by standby design. When the distance between the operating table and the control cabinet is far and all the electric hoist needs to be lifted or the touch screen console fails, the 'All up button' can be used to lift all hoists connected to the controller.

2. Side label



3. High voltage synchronous controller internal interface



- 1: Power supply: AC380V 50HZ 3PH+PE Aviation Connector(2-4 channel 16A 4core, 6-8 channel 32A 4 core, 12 channel 63A 4 core)
- (2): Electric hoist power connection aviation connector
- 3: Serial signal cable connection port
- 4: Main power switch
- (5): Master control knob
- 6: Electric hoist up and down knob
- (7): Jog and continue knobs
- 8: Emergency stop
- 9: Start button

4. High voltage synchronous controller use method:

Please convert the phase sequence of the extension wire of the hoist to be consistent (the ground wire is unchanged, and the color of L1L2L3 at both ends of the line is consistent with the phase sequence).

- 1.Turn on the main power switch and keep the emergency stop activated.
- 2. Turn the master control knob to "1". Step by step test whether the upper and lower phase sequence of each hoist is consistent.

The method is as follows:

- ①Turn the "Jog" "Continue" knob to "Jog".
- ②Turn the knob switch of the first gourd to the " \uparrow " (up) position, and then click the start button to check whether the operation is normal.
- ③"Similarly, check to ensure that the up and down operation directions of all the hoists are consistent."
- 4 Adjust a gourd individually, the method is the same as above.
- 3. Synchronous lifting.

The method is as follows

- ① UP: Turn the knob switches of all hoists to the " ↑" (upward) position. Select either "jog" or "continuous" mode, then press the start button. (In jog mode, you need to keep pressing the start button, the finger needs to leave the start key when stopping. In continuous mode, press the start button once to begin operation, and turn the "jog" or "continuous" knob to the middle position to stop.)
- ② DOWN: Turn the knob switches of all hoists to the " \downarrow " (downward) position. Choose either "jog" or "continuous" mode. Once the desired position is reached, select stop.
- ③ DOWN: When the upward phase sequence of all hoists is consistent, if you choose to drop, you can directly turn the total control knob from "1" to "2".Long press the start key in "jog" mode, and directly drop in "Continue" mode. Select stop when you reach the specified position.
- (4) All hoists are pointing upward, but the hoists are running downward. At this time, please check that the phase sequence in the aviation connector of the main power cord is correct (any two of the three fire wires can be switched).
- 2. When two controllers are connected in series

Nameplate

The image below shows the side label:

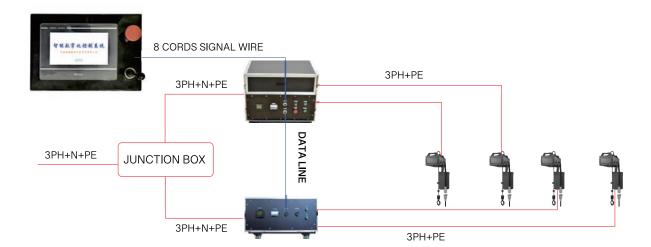


Panel interface:



Main cabinet control panel

Digital controller high voltage control wiring schematic diagram



For mobile performance, touch screen digital controller: JK-C-G-10 CHANNEL

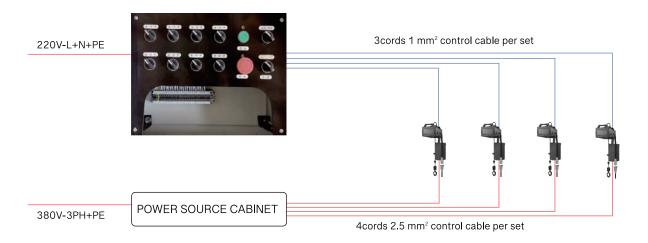
Model	Size(mm)	
JK-C-G-10channel main cabinet	730*810*620	
HGK-C-G-10 channel secondary cabinet	730*810*620	
For every 10 additional channel in the control cabinet, add a secondary		

cabinet, Size 730*810*620

The method is as follows:

- ① Connect the two control cabinets in series lines.
- ② Keep the main power on. If the number one controller is used as the main console, press the emergency stop on the number two auxiliary cabinet.
- ③ The lifting and lowering of the electric hoist follows the same method as described above. Both the start and emergency stop operations are performed on the main console.
- ④ In case of an emergency, press the emergency stop button.
- ⑤After the hoist has finished running, turn all the knob switches to the middle position and switch off the main power.
- (6) Please read the manual carefully before use. Only proceed with the lifting operation after adjustments to avoid danger.

5. Conventional low voltage synchronous group controller wiring elementary diagram



Model: JK-D-08

-24-

6. Side label:



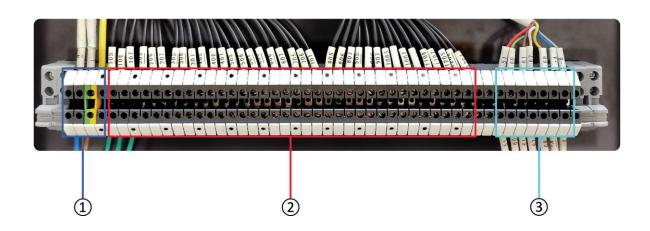
7. Low voltage synchronous controller cabin internal interface:



-6-

- 1: Electric hoist switch knob
- 2: Wiring terminal input power: AC220V 50HZ L+N+PE power 50W

Controller Internal Interface:



- ①Control system power supply interface: L is the live wire (red), N is the neutral wire (blue), and the two-color line is the earth wire;
- 2 Electric hoist signal line interface: 105, 106 and 107 are a group, corresponding to the control signal line of the No. 1 hoist, 105 is connected to the No. 5 line of the electric hoist signal line, 106 is connected to the No. 6 line of the electric hoist, and 107 is connected to the No. 7 line of the electric hoist, similarly: the signal interface corresponding to the No. 2 hoist is: 205, 206, 207, and so on, the signal line interface of No. 24 hoist is 2405, 2406, 2407. (Note: All signal wires must be connected correctly to ensure the proper operation direction of the electric hoist, otherwise it will cause confusion in the direction of operation).
- 3LCD signal interface, Non-professional personnel should not handle this wire to avoid unnecessary damage and affect the operation of the electric hoist.

The touch screen operation method is the same as the one for the low-voltage control cabinet touch screen usage method mentioned above.

Appearance:



- ①Handheld Controller, The table cabinet can be separated, the extension line is 10 meters, and it can be operated within 10 meters;
- 2 Desktop control cabinet wiring door, Internal assembly controller power supply terminal, electric hoist signal output terminal;
- 3 Desktop cabinet maintenance door, Internal assembly control circuit board, power switch and other electrical appliances,

Below is the side label:



- ③: Start button
- 4: Jog and continue knobs
- ⑤: Emergency stop button
- 6: Electric hoist up and down knob

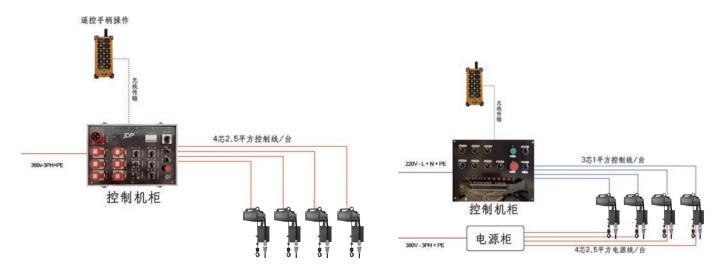
Low voltage controller instructions:

- 1. Connect a 220V single-phase power supply to the wiring terminals marked L, N, and PE. After the power is connected, the emergency stop indicator will light up.
- 2.Connected with the electric hoist control line::
- ①: The control wiring terminal numbers are 105, 106, 107, 205, 206, 207, and so on. The numbers 1, 2, ... represent the hoist numbers, such as Hoist 1, Hoist 2, ...; 5 is the common line, 6 is for upward motion, and 7 is for downward motion.
- ②: The control wires of the electric hoist are marked with serial numbers 5, 6, and 7, and should be connected to the corresponding terminal numbers on the controller. Make sure to connect them correctly and do not mix up the wiring.
- 3.Turn the electric hoist switch knob to the open position (when using several hoists, turn several corresponding switches to the open position), select the Jog and continuous mode..
- 4. Select the up and down mode, press the start button to start the operation.
- 5.Please read the manual carefully before use. Only proceed with the lifting operation after adjustments to avoid danger.

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2. REMOTE CONTROL CABINET OPERATION METHOD

1. Wireless remote control synchronous group controller wiring elementary diagram



Model: JK-W-G-06 (high voltage 6 channel)

Model: JK-W-D-06 (low voltage 6 channel)

Size specification:

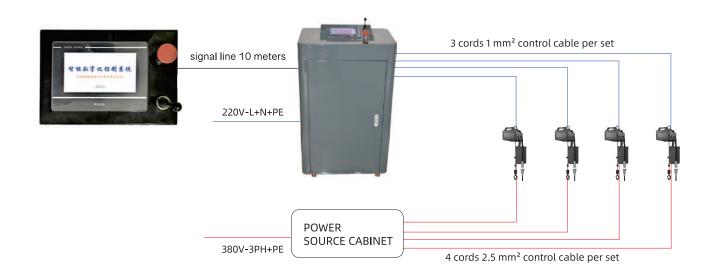
Model	SIZE: L*W*Hmm (Excluding outer packaging)	Model	SIZE: L*W*Hmm (Excluding outer packaging)
JK-W-G-04 (4channe l)	450*350*470	JK-W-D-06 (below 8 channel)	500*400*200
JK-W-G-06 (6/8channel)	550*570*550	JK-W-D-10 (10-14 channel)	600*500*200
JK-W-G-10 (10channe l)	710*630*650	JK-W-D-16 (16-30 channel)	800*530*200
Other	Customized	Customized	Customized

2. Side label:





Low-voltage portable touch screen control cabinet wiring elementary diagram



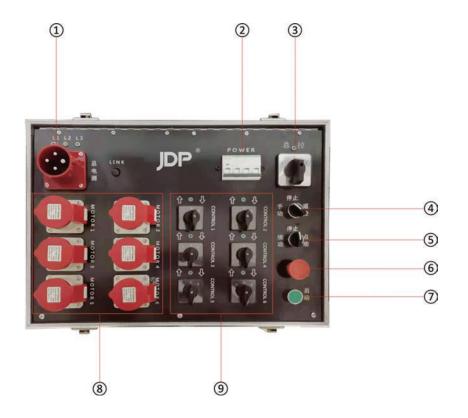
JK-C-D-T-24 channel

Desktop movable touch screen electric hoist digital control system wiring: The control-ler needs to be connected to a 220V-L+N+PE power supply to provide power to the control system. A 3-core 1mm^2 cable should be connected between the control cabinet and each electric hoist to ensure independent signal transmission to each hoist. The power supply for the electric hoists comes from the on-site power cabinet, with a 2.5mm^2 4-core power cable used between the power cabinet and each hoist (Power supply: 380 V-3 PH+PE, cable specification: $3 \times 2.5 + 1 \times 1.5$).

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- (6) Emergency stop button, when the misoperation or electric hoist control system out of control and other emergency situations, press this button, the control system will all power off, all electric hoist stop running;
- Telectric hoist number selection key, when you need to lift a single or multiple electric hoists, you need to click the required electric hoist number. (Note: When the number is selected, it is green, and when it is not selected, it is red), during the lifting operation, the electric hoist with the green interface number begins to operate;
- Note box, the purpose of each point can be marked to reduce the time to find the use
 of each electric gourd on the drawings, and carry out quick operation. Note are Chinese
 and English letters, which is intuitive and reliable;
- Modify note key, when you need to make notes on the purpose of each point, press
 and hold this key for three seconds, then enter the note interface of each point, click the
 note box, and make notes on the point function;
- ①Lifting joystick, automatic return joystick, when the electric hoist point to be raised is selected on the LCD screen, push the joystick up, the electric hoist will rise, release the electric hoist to stop running, the joystick returns to the middle, pull the joystick down, the electric hoist will descend, release the joystick, the electric hoist will stop running, the joystick returns to the middle, specially designed misoperation delay function, when the push rod is pushed up or pulled down, the direction is changed instantly, and the control system will delay the response action for three seconds to ensure the safety of operation;
- 11) External control cabinet signal interface: quick connector design for quick installation and disassembly of signal connections.

3. High voltage remote control internal interface:



- ①Power supply: AC380V 50HZ3PH+PE 4 c o r e aviation connector
- (2-4channel: 16A; 6-8channel: 32A; 10-12channel: 63A.)
- 2 Main power switch
- (3) Master control knob
- (4):Manual and remote control mode selection
- ⑤:Jog and continue mode selection
- 6: Emergency stop
- (7):Start button
- 8:Electric hoist power connection aviation connector
- 9:Electric hoist up and down mode selection

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4. Low voltage remote control internal interface:



- ①:Electric hoist switch control knob
- 2:Manual remote control selection
- ③:Wiring terminal input power: AC220V 50HZ L+N+PE power 50W.
- 4: Jog and continue mode selection
- ⑤:Start button
- 6:Electric hoist up and down mode selection
- 7:Emergency stop

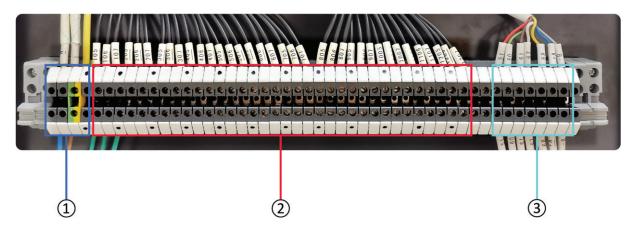
Handheld Controller:



- ①Folding handle, ergonomic design with folding handle, hand-held operation comfortable and no pressure, operation on the stage folding does not take up space;
- **2** Controller operation up indicator: when the up key is pressed, the indicator button appears green, stop operation, and the indicator turns red;
- 3 Controller operation down indication, when the down button is pressed, the indicator button turns green; when the operation stops, the indicator changes to red;
- (4) Select all key, when there are many electric hoist positions to be selected, the "Select All" key can select 12 electric hoists on the same interface at one time, without the need to select each position, saving operation time (If there are more than 12 channels, you need to press the "Next Page" button to enter the next interface for operation);
- ⑤Cancel key, when the operation is completed, the cancel button can cancel the selection of all electric hoist points on the same section with one click, saving operation steps and selection time for the next single-point operation. (If there are more than 12 channels, you need to press the "Next Page" button to enter the next interface for operation);

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Connection terminal:



JK-C-D-F-12 Channel, JK-C-D-Y-12 Channel

①Control system power supply interface, L is the live wire (red), N is the neutral wire (blue), and the two-color line is the earth wire;

②Electric hoist signal line interface,105, 106 and 107 are a group, corresponding to the control signal line of the No. 1 hoist, 105 is connected to the No. 5 line of the electric hoist signal line, 106 is connected to the No. 6 line of the electric hoist, and 107 is connected to the No. 7 line of the electric hoist, similarly: the signal interface corresponding to the No. 2 hoist is: 205, 206, 207, and so on, the signal line interface of No. 12 hoist is 1205, 1206, 1207. (Note: All signal wires must be connected correctly to ensure the proper operation direction of the electric hoist, otherwise it will cause confusion in the direction of operation)

③LCD signal interface, non-professional personnel should not handle this wire to avoid unnecessary damage and affect the operation of the electric hoist.

5. Remote control appearance



- 1: Emergency stop
- 2: Electric hoist select button
- 3: Start button
- 4: Up mode selection
- (5): Down mode selection

Note: Remote control power supply: No. 5 battery 2-4 pcs.

The manual mode of the high voltage remote control cabinet is the same as that of the high voltage common cabinet.

The manual mode of the low voltage remote control cabinet is the same as that of the low voltage common cabinet.

6. Remote control instructions are as follows:

- 1: Turn all the knob switches on the control box to the middle position, keep the emergency stop button in the released state, and turn the "Manual" / "Remote" knob on the control box to the remote control mode.
- 2: Pick up remote control.
- 3: When adjusting a hoist, press the green start button on the remote control. The indicator light below will flash green. Select Hoist 1, and the indicator light below will also flash green. Then press start, followed by the upward button, and the hoist will begin operation. Once the desired position is reached, release the upward button and press the stop

button. The indicator light below will flash red. (Note: after stopping, you must press the stop button. Otherwise, when selecting another hoist, hoist 1 will operate simultaneously.)

- 4: The method of adjusting other hoists is the same as above, and the stop key must be pressed before adjustment.
- 5: When all hoists are controlled synchronously, make sure the stop button has been pressed first! Press the start button, and the indicator light below will flash green. Then select the hoists to be lifted simultaneously (Hoist 1, Hoist 2, Hoist 3, Hoist 4, etc.). Press the start button again, followed by the upward button. The selected hoists will move to the designated position. Release the upward button once the position is reached. Similarly, to lower the hoists, press the downward button. Once the designated position is reached, press the stop button.

6: In case of emergency, please press the emergency stop button.

7: After the hoist is finished running, please turn all the knob switches to the middle position and turn off the main power switch.



JK-C-D-Y-12 channel

① Main power switch, push up to power the control system, and pull down to power off. After the operation of the electric hoist, the total power supply shall be turned off;

②This is the digital control system operation LCD screen, select the electric hoist point, remarks electric hoist point uses are completed in this interface

3Wiring Compartment Cover Plate: The cover plate is specially designed for safe operation to prevent electric shock and ensure safety. After the control cabinet installation is complete, the cover plate must be opened before connecting the control signal wires for each hoist in order to perform the wiring operation;

④Up control key, when the point of the electric hoist to be selected on the LCD screen, press this button, the electric hoist to rise action, release the electric hoist to stop operation;

⑤Down control key, when the electric hoist point to be lowered is selected on the LCD screen, press this key, and the electric hoist drops down, release the electric hoist to stop operation;

©Emergency stop button, when the misoperation or electric hoist control system out of control and other emergency situations, press this button, the control system will all power off, all electric hoist stop running;

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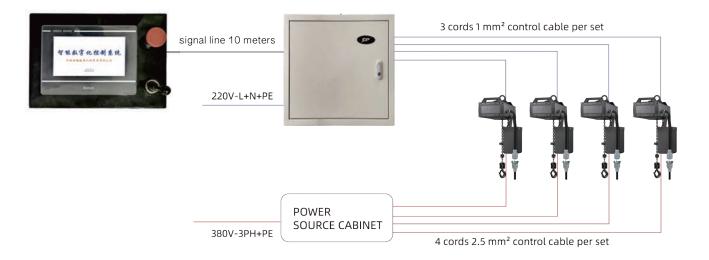
JK-C-D-F-12chanel

- ① Main power switch, push up to power the control system, and pull down to power off. After the operation of the electric hoist, the total power supply shall be turned off;
- ②All up button, this key is used by standby design. When the distance between the operating table and the control cabinet is far and all the electric hoist needs to be lifted or the touch screen console fails, the 'All up button' can be used to lift all hoists connected to the controller;
- (3) All down button, this key is used by standby design. When the distance between the operating table and the control cabinet is far and all the electric hoist needs to be lifted or the touch screen console fails, the 'All down button' can be used to lower all hoists connected to the controller;
- **(blue)**, and the two-color line is the earth wire;
- ⑤ Electric hoist signal line interface,105, 106 and 107 are a group, corresponding to the control signal line of the No. 1 hoist, 105 is connected to the No. 5 line of the electric hoist signal line, 106 is connected to the No. 6 line of the electric hoist, and 107 is connected to the No. 7 line of the electric hoist, similarly: the signal interface corresponding to the No. 2 hoist is: 205, 206, 207, and so on, the signal line interface of No. 12 hoist is 1205, 1206, 1207. (Note: All signal wires must be connected correctly to ensure the proper operation direction of the electric hoist, otherwise it will cause confusion in the direction of operation)
- (6)LCD signal interface,"Non-professional personnel should not handle this wire to avoid unnecessary damage and affect the operation of the electric hoist."

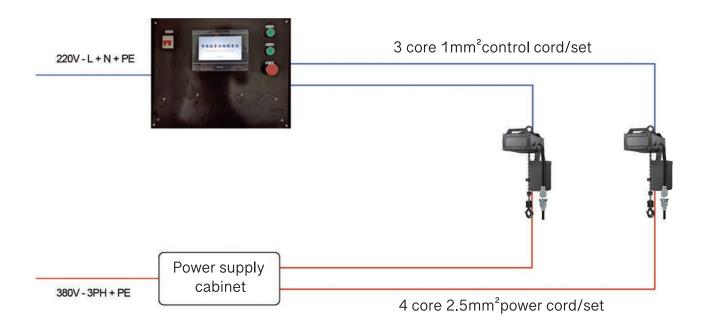
3. DIGITAL CONTROLLER OPERATION METHOD

1. Digital controller low-voltage control wiring elementary diagram

Be suitable for JK-C-D-F- (? channel) JK-C-D-Y- (? channel)



JK-C-D-F-12 channel



JK-C-D-Y-12 channel

Wiring for the touchscreen electric hoist digital control system: The controller needs to be connected to a 220V-L+N+PE power supply to provide power to the control system. A 3-core 1mm² cable should be connected between the control cabinet and each electric hoist to ensure independent signal transmission to each hoist. The power supply for the electric hoists comes from the on-site power cabinet, with a $2.5 \, \text{mm}^2$ 4-core power cable used between the power cabinet and each hoist (Power supply: $380 \, \text{V}$ -3PH+PE, cable specification: $3 \times 2.5 + 1 \times 1.5$).

MODEL	JK-C-D-Y-	JK-C-D-F-	JK-C-D-T-
channel	SIZE (m m)	SIZE(mm)	SIZE(mm)
12 channel	600*500*200	520*400*200	/
14-24channel	800*530*200	1290*620*220	515*400*1050
25 channel above	Customized	Customized	Customized

2. Machine type and the name of each part and the method of use

Chassis Appearance:



Be suitable for JK-C-D-F-12 channel JK-C-D-Y-12 channel

- ① Split cabinet door, turn on when in use, and turn off when not in use.;
- ② Side label, marking product name, model, specification, power, etc.;;
- ③ Cabinet door lock, to prevent improper operation by non-professional personnel, the operator can lock the door after powering off once the operation is completed.
- 4 External contact screen signal interface, quick connector design for quick installation and disassembly of signal connections.

Nameplate- Below is the side label



JK-C-D-F-12 Channel



JK-C-D-Y-12 Channel

-14-