# Abest Electric | Product User Manual |

## AS-FJ2/HF Intelligent Fan Controller

**ABEST ELECTRIC CO.,LTD.**





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## Product description

Dual-speed fan controller FJ2/HF with heat retaining valve, has the function of opening and closing the heat retaining valve. It is mainly used in exhaust air,pressurization air supply,fire smoke exhaust, etc.
It can control fans such as inlet fans,exhaust fans,return fans, fresh air units,air conditioning units, cooling tower fans, small capacity blowers,induced draft fans and jet fans.

This product is suitable for motors with power below 22KW (AC contactor 50A).

Note: When AC contactor > 50A need to add general relay.

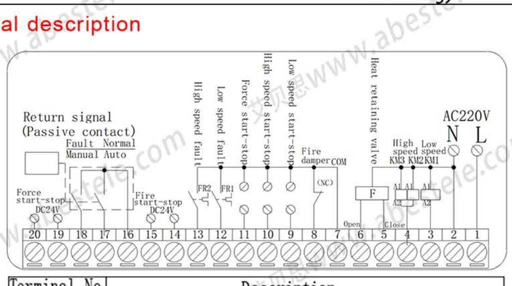
## Shape & Size drawing

Hole Size:145×83





## Terminal description




| Terminal No. | Description |
|---|---|
| 1 | Working power supply AC220V Live line(L) |
| 2 | Working power supply AC220V Neutral line(N) |
| 3 | Low speed contactor coil control terminal |
| 4 | High speed contactor coil control terminal |
| 5 | AC 220V heat retaining valve close |
| 6 | AC 220V heat retaining valve open |
| 7 | Common signal control terminal |
| 8 | Fire damper(NC),no fire damper short connect |
| 9 | Low speed start-stop |
| 10 | High speed start-stop |
| 11 | Force start-stop |
| 12 | Low speed overload protection terminal |
| 13 | High speed overload protection terminal |
| 14<br>15 | Fire start-stop in Auto mode(DC24V) |
| 16 | Common signal control terminal |
| 17 | Passive contact/Auto(ON) / Normal(ON) |
| 18 | Passive contact/Manual(ON) / Fault(ON) |
| 19<br>20 | Force start-stop(DC24V) |

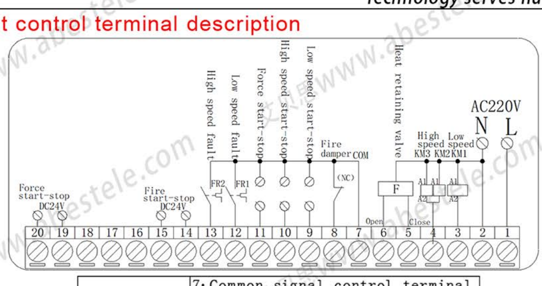
### 9/10/11 terminal function select

P03=1 Low speed start-stop (9#)、High speed start-stop (10#)、Force start-stop (11#)
P03=2 Click to start low speed (9#)、Click to start high speed(10#)、Click to shutdown (11#)





## Output control terminal description




| | | |
|---|---|---|
| Auto | 7: Common signal control terminal | |
| | 9: Low speed start-stop<br>10: High speed start-stop | P03=1 |
| | 14,15: DC24V high speed start-stop | |
| Auto/Manual | 7: Common signal control terminal | |
| | 9: Click to start low speed<br>10: Click to start high speed<br>11: Click to shutdown | P03=2 |
| | 11: High speed start-stop | P03=1 |
| | 19,20: DC24V high speed start-stop | |

## Control Key

| | |
|---|---|
| Set | Setting parameter code and parameter values |
| Manual/Auto | Manual mode selection、Auto mode selection<br>Save the modified parameter values and exit the setting |
| Low start | Low speed start key of the fan in manual mode,<br>parameter code increment、parameter value increment |
| Low stop | Low speed stop key of the fan in manual mode,<br>parameter code decrement,parameter value decrement |
| High start | High speed start key of the fan in manual mode,<br>Set password or unlock shift mouse |
| High stop | High speed stop key of the fan in manual mode,<br>Set password or unlock shift mouse |





## Indicator

| | |
|---|---|
| ●Power | Indicator blink on:the controller is powered on |
| ●Fire damper | Indicator ON:Fire damper normally-closed contact disconnect |
| ●Manual | Indicator ON: in manual mode |
| ●Auto | Indicator ON: in Auto mode |
| ●Low | Indicator ON: fan works at low speed |
| ●Low fault | Indicator ON: low speed fault of the fan |
| ●High | Indicator ON: fan works at high speed |
| ●High fault | Indicator ON: high speed fault of the fan |
| ●Valve open | Indicator blink on:heat retaining valve open |
| ●Mute | Indicator on:code P11=2(fault alarm without sound) |
| ●Basic | Indicator on:code P01=1(fault shutdown) |
| ●Fire | Indicator on:code P01=2(fault only alarm without stopping output) |

## Parameter setting

| Code | Factory default | Description |
|---|---|---|
| P01 | 1 | 1=Basic (fault shutdown) 2=Fire (fault only alarm without stopping output) |
| P02 | 1 | Fault protection type select 1=NO 2=NC |
| P03 | 1 | 9/10/11 terminal function select<br>1=Low speed start-stop/High speed start-stop/Force start-stop<br>2=Low speed start/High speed start/Stop (Button box control) |
| P04 | 5 | Fan stop,heat retaining valve delay closing time, range 1～120S |
| P05 | 1 | 16/17/18 terminal function select 1= Auto/manual feedback<br>2= Normal/fault feedback |
| P07 | 10 | Heat retaining valve is open,fan delay starting time,range 1～120S |
| P08 | 9600 | Communication baud rate 2400、4800、9600 |
| P9 | n81 | Communication data format:n81、e81、o81 |
| P10 | 1 | Communication address range 1～247 |
| P11 | 1 | 1=fault alarm 2=fault mute |
| P25 | 000 | Controller unlock password range 000～999.When set to 000, there is no password |

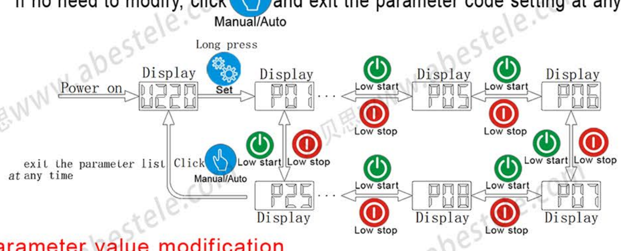




## Parameter code setting

Long press (Set) to enter the parameter code display,

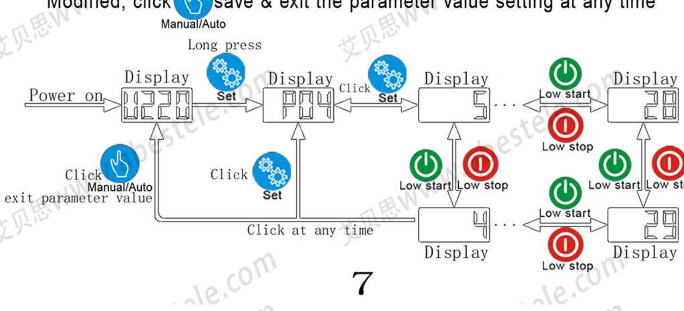
click (Low start) or (Low stop) to select the parameter code you want to modify (Long press for quick selection).
If no need to modify, click (Manual/Auto) and exit the parameter code setting at any time




## Parameter value modification

Take the modification of fan stop,heat retaining valve delay closing time(code P04)as an example:

Long press (Set) to enter the parameter code display,then click (Set) to enter the parameter value,
click (Low start) or (Low stop) to select the parameter code you want to modify (Long press for quick selection).
Modified, click (Manual/Auto) save & exit the parameter value setting at any time

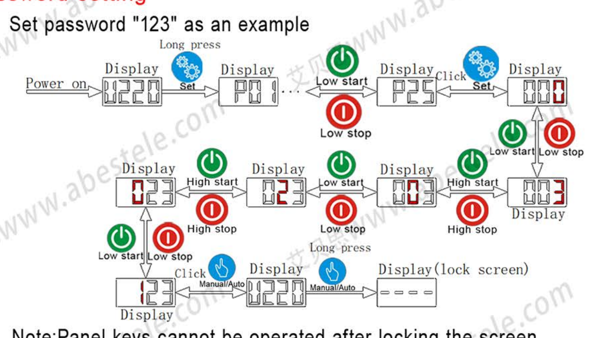


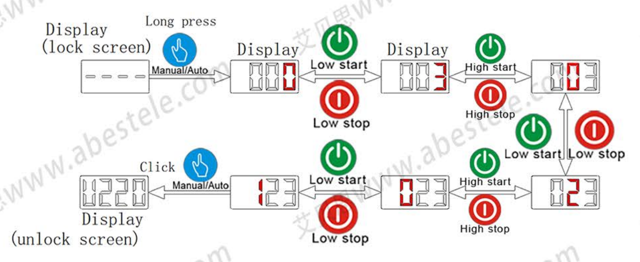





## Password setting

Set password "123" as an example




Note:Panel keys cannot be operated after locking the screen

## Unlocking operation