

## I. Tech-data

State power: 220-240V/50Hz

Motor voltage: DC 24V

Motor diameter: 59mm

Adaptive external barrel: Round tube with inner 82 or 70mm

Current: 8A Input power: 192W

Output power: 58W Torque: 30N.m & 10N.m

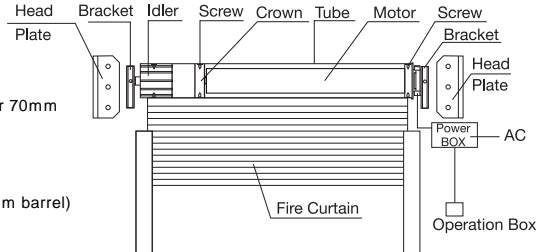
Lift capacity 8kg to 60kg (82mm barrel) and 70kg (70mm barrel)

Speed: 18rpm Level of protection: IP44

Continuous running time S2: 10min

Standby time of batteries back-up while suspending curtain: 24 hours

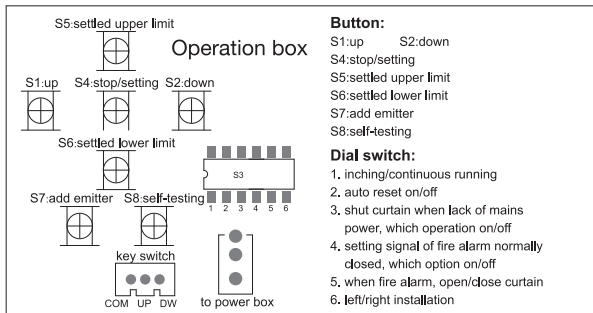
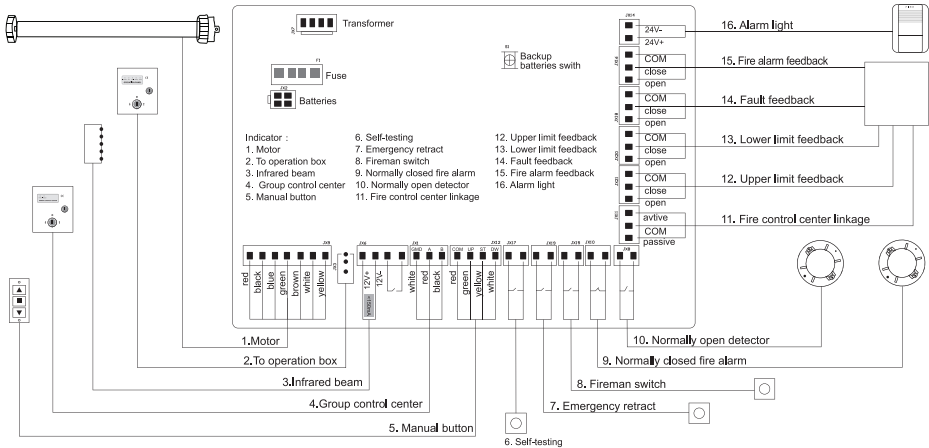
Standby time of batteries back-up while released curtain: 96 hours



## II. Wiring diagram

Wiring JX5 which mark "to power box" of operation box to JX3 (port 2) of power box which means "to operation box" to complete panel connection.

According to colors wiring the cable of motor to (port 1) to complete motor connection.



### III. Features

**1.Gravity fail-safe without power, protection of short circuit and break circuit.** Any situation of when without any power, when motor cable wires touched together or broken in fire burned, the curtain automatically runs to bottom by gravity. Drop speed between 0.06 and 0.15m/s.

#### **2. Electronic limit and staged deployment.**

2.1 Pressing S1 button inside operation box until get at upper limit position you want, release S1 and press S5 once.

When sounded 3 short beeps, the upper limit has been settled.

2.2 Pressing S2 until get at middle stop position you want, release S2 and press S4 once. When sounded 2 short beeps, the middle stop position has been settled.

2.3 Pressing S2 again until get at lower limit position you want, release S2 and press S6 once. When sounded 2 short beeps and a long beep, the lower limit has been settled.

2.4 Reset limit, long pressing S5 5 seconds, after a long beep, entering into mode of limit setting.

2.5 Reset upper and lower limit, same method of 2-1 and 2-3.

2.6 Reset only upper limit. Running to upper limit position you want, press S5 once. After beeps sounded, press S5 again.

2.7 Reset only middle position. Running to middle stop position you want, press S4 once. After beeps sounded, press S4 again.

2.8 Reset only lower limit. Running to lower limit position you want, press S6 once. After beeps sounded, press S6 again.

2.9 Recover defaulted setting (without limit), pressing S5 5 seconds, press S5 once again and press S6 once again.

#### **3. Delayed deployment.**

3.1 With standby status, press S4 once to activate LED. The first digit position of LED represents which sort of timer to be settled, "0" represents delayed time of fire alarm to be settled, "1" represents time of middle stop, "2" represents hold time of top during fireman switch utility which refers to 14-1.

3.2 Rest three digit positions of LED are thousands to tens digit of time setting by left to right, The rightmost digit 1 unit represents 10 seconds. Immediately run is a method of setting these three digits to zero.

3.3 S5 and S6 to change number of the first digit position, when chosen digit to setting, press S4, the fourth digital glinting. Then, press S1 and S2 to change which digit to glint, S5 and S6 to adjust time of each digit position. Press S4 to settled and quit setting.

**4. Inching/continuous option.** Turn on the first dial switch of S3 to inching run, turn off to continuous run. Defaulted inching.

**5. Auto-reset.** Turn on the second dial switch, the curtain automatically runs to upper limit position when fire alarm disappeared. Defaulted off.

**6. Turn on the third dial switch,** when without mains supply, even though remains batteries back-up, the curtain automatically close. Defaulted off.

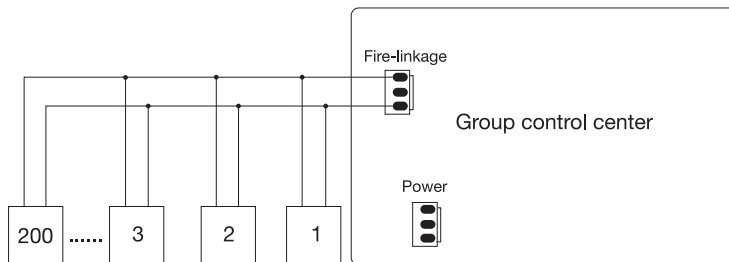
**7. Turn on the fourth dial switch to get opened signal from normally closed fire alarm which refer to 16-3.**Defaulted off.

**8. Close/open option of the curtain operation when fire alarm.** Turn on the fifth dial switch to open or turn off to close the curtain when fire alarm. Defaulted close.

**9.Left/right installation.** Turn on the sixth dial switch for left installation and turn off for right installation. Defaulted right.

#### **10. Group control.**

Correspond A and B of fire linkage (port 4) of each panel box with group control center in parallel connection to synchronously operate multiple motors within 200 units. Max distance < 400 meters,with repeater 1200 meters.



## 11. Remote control.

11.1 Press S7 a second, sounds a beep, release it to enter into emitter addition.

11.2 Press any button of emitter 2 seconds, after a long beep, it has settled.

11.3 Long press S7 8 seconds, remove all emitters.

11.4 One emitter can be encoded with multiple panels in order to the emitter can group control multiple motors within radiate scope.

Max control distance < 30 meters.

## 12. Self-testing button.

12.1 Press S8 inside operation box, the curtain automatically runs a circle.

12.2 Alternatively, connect an unnecessary switch to self-testing (port 6) of power box as same works.

12.3 Times of self-testing have displayed on standby status of LED and number is not able to reset.

## 13. Emergency retract switch (port 7) to escape and be placed interior of building, wiring it normally open (NO).

13.1 See item 4 inching/continuous option, if with the inching mode, hold the retract switch to run up, release it to run down.

13.2 If with the continuous mode, once press the retract switch, the curtain automatically runs to upper limit position then drop again.

13.3 When fire alarm, any button of up, down, stop alter to function of escape switch for avoid invisible in smoke.

13.4 The function is repeatable at any time and position when fire alarm.

13.5 The emergency retract switch doesn't work unless when fire alarm.

## 14. Fireman switch (port 8) to rescue and be placed exterior of building, wiring it normally open (NO).

14.1 Once press it, the curtain automatically runs to upper limit position and hang on a while which its method of time setting refer to item 3, then drop again.

14.2 The function is repeatable at any time and position when fire alarm.

14.3 It doesn't work unless when fire alarm.

## 15. Signal feedback.

15.1 When at upper limit, the upper feedback (port 12) relay has closed.

15.2 When at lower limit, the lower feedback (port 13) relay has closed.

15.3 Without mains power, or batteries power less than 23V, or limit fault, the fault feedback (port 14) relay has closed.

15.4 When fire alarm, fire alarm feedback (port 15) relay has closed.

## 16. Conditions of fire alarm action.

16.1 When signal from normally open of fire alarm.

16.2 When signal from fire linkage.

16.3 When signal from normally close of fire alarm with turn on the fourth dial switch which refer to item 7.

## 17. Actions after fire alarm.

17.1 With turn on the fifth dial switch which refer to item 8, when fire alarm, the visible and audible alarm light works.

Meanwhile, the curtain automatically runs to upper limit.

17.2 With turn off the fifth dial switch, when fire alarm, alarm light works. Meanwhile, the curtain automatically runs down after a while or drop immediately. At the middle stop position, the curtain stops for a while or without delay then drop to lower limit.

17.3 About diverse limit settings, each timer setting of delay or immediate action refers to item 2 and 3.

## **IV. Supplement**

1. There has a key switch (JX4) on the panel to run curtain and it is also allowed to add extra-unnecessary manual switch (port 5) to box.

2. Necessary pack list of main product includes motor with fireproof cable, power box, operation panel box, steel idler and installation brackets.

3. Five indicator lights.

3.1 First indicator light of box, light indicating in limit setting mode, extinction indicating standby, and glint indicating run.

3.2 Fire light indicates fire alarm.

3.3 Fault light indicates fault.

3.4 Battery light of glint light indicates low power.

3.5 Power light of glint light indicates without mains power.

4. Design of separated power box and operation box to children safeguard.

5. Be allowed connect with smoke detector, temperature detector (port 10), alarm light (port 16 DC 24V < 300mA), safe infrared beam (port 3 DC12V < 150mA) and so on.

## **V. Note**

1. It doesn't work normally with no-load adjustment unless 15kg weight rail loading.

2. When without mains power, it intelligently alters to supply of batteries. So don't use that backup batteries switch unless need to adjust curtain at spot far away from power.

3. Don't try to lengthen original cable of motor, rather adjustable-length cable between power box and operation box convenient to install.

4. The product applies to vertical shutter, unavailing to horizontal shutter.

5. Please check left/right installation dial switch setting correct which refer to item 9 when you install motor on the end, otherwise cause issue of single direction that the curtain can not run upward.