

Electric Kiln Door

Operational Instruction

Qingdao Electric Door Factory

June 2010

Electric Kiln Door Operational Instruction

The Electric Kiln Door is the associate product especially designed and manufactured for your new type of construction material production line, and it is a special door facility.

Conditions:

1. The working temperature shall be no higher than 95℃ (inner side);
2. The working humidity of 100% is permitted (inner side);
3. Slight positive pressure on the inner side is permitted;
4. The power supply is of 3-phase and 5-wire system (50Hz 380V).

Main structure:

1. The door is of hinge jointed multi-leaf upward structure with steel tube framework, color galvanized steel plate outer side, cold rolled steel plate inner side and foam plastic heat preserving layer in the middle.
2. The most inner side is of integrative heat-resistant rubber sheet heat preserving sealing layer.
3. The guiding tracks on both sides are channel steel of 63mm, and the inner side is fixed with side sealing rubber bars.

4. Upper style traction shaft for door opening.
5. Electric door opener with braking device and manual device.
6. The door moves up and down with the traction of standard industrial transmission chain.

Working principle:

1. While opening the door, press the opening button (or send electric opening signal through controlling computer), then the opening contactor within the electric control box starts to work to connect the power supply, and the opening motor starts to revolve positively and drive the door upwards through the traction chain. When the door moves to the appointed position, the upper limit switch within the door opener starts to work, then the opening contactor within the electric control box is released to cut the power off, the motor stops, and the door is kept on the appointed position.
2. While closing the door, press the closing button (or send electric closing signal through controlling computer), then the closing contactor within the electric control box starts to work to connect the power supply, and the opening motor starts to revolve negatively and drive the door downwards through the traction chain. When the door moves to the appointed position, the lower limit switch within the door opener starts to work, then the closing contactor within the electric

control box is released to cut the power off, the motor stops, and the door is kept on the appointed position.

Caution:

1. Before operation, it must be checked that the voltage of power supply is normal, the phase sequence is correct, the opening/closing buttons accord with actual movements.
2. The power shall be cut off if the door is not used for one day or more.
3. If manual opening is required upon power failure or other circumstances, insert the attached special handle into the end of door opener, but the upper limit for normal opening must not be exceeded!
4. After opening the door manually, the handle shall be taken off immediately.
5. If manual closing is required upon power failure or other circumstances, directly pull the steel ring on the end of door opener to release braking, and then the door will decline automatically, but the lower limit for normal closing must not be exceeded!

Maintenance:

1. Regularly inspect the position directly under the door, and there shall be no sundries.

2. Add a little water-resistant lubricant grease into the guiding tracks on both sides every month to reduce abrasion and noise.
3. Add a little water-resistant lubricant grease into the oil nozzle of guiding axles on both sides every month.
4. Add a little lubricant into the hinge joints every month.
5. Add lubricant to each transmission chain once every three months.
6. Inspect transmission chains and all fasteners and eliminate malfunctions once every six months.
7. Inspect abrasion of sealing rubber bars once every six months, and repair or replace the parts with serious abrasion and invalid sealing.

Elimination of malfunctions:

1. If the door can not reach, or exceeds the appointed positions while moving upwards and downwards, inspect and debug the upper/lower limit switches within the door opener.
2. If the door makes clear noise, inspect the lubrication.
3. If the left side and right side are not parallel, inspect and debug the bolts of chains and joints under closing condition.

Safety reminder:

1. No person shall stay under the door. Upon maintenance, make

necessary support protection to avoid injuries caused by accidental fall of the door.

2. No person shall enter the kiln. If kiln entry is necessary, special staffs shall be appointed to prevent the persons entering the kiln are locked inside the kiln. Before entering the kiln, it must be checked that the corresponding control box is power off, and relevant cautions shall be posted to prevent injuries.
3. Inspect the pressurized parts such as transmission chains every month, and replace the cracked and deformed parts immediately.
4. Inspect the grounding of electric control system every month, and handle the problems immediately.

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June 08, 2010