

# KINGZO®

## Certificate of quality

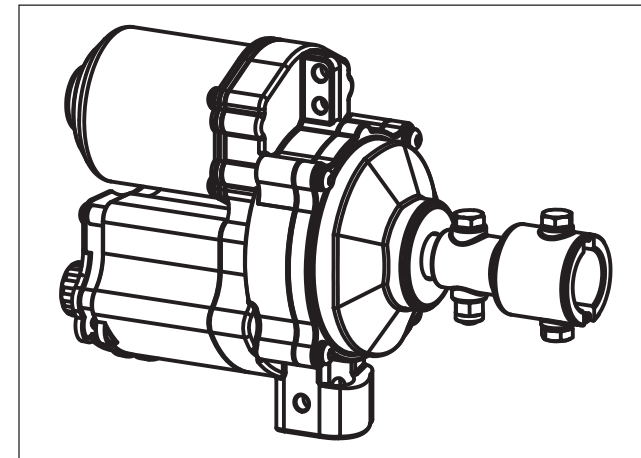
This product has been tested and proved to be qualified for delivery.

Inspected by:

Inspection date:



## GMA100-S/GMA60-S Electric Film Reeler Manual



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Dear Customers,

We are grateful for your continuous trust and support over the decades. We will do our best to continue the all-round service and quality products.

Beijing Fenglong is a high-tech company with high R&D investment, supplying equipments ranging from modern greenhouses to livestock houses. Fenglong has been leading the trends of mecho-electro products in Chinese facility agriculture.

Fenglong established and follows strict quality control and follow-up systems. Fenglong obtains ISO9001, ISO14001 and OHSAS18001 certificates, ensuring all the products are qualified with possibility to track them down.

## CERTIFICATE OF PRODUCT QUALITY

Dear Customer:

Our company have obtained ISO 9001 certificate. The Kingzo® electric film reelers are all inspected and each parameter is followed according to our company electric film reelers standards.

We hereby certify that when the film reeler is correctly installed, the guarantee period of the products is 3 years (from the time of purchase). Products with quality problem within the guarantee period would be solved free of charge or replaced.

EXEMPTION CLAUSE: \_\_\_\_\_

- 1、 Operation against this manual.
  - 2、 Improper usage, maintenance, storage or damage on purpose.
  - 3、 Damages out of unauthorized un-installation, repairment.
  - 4、 Damage by force majeure.
  - 5、 Usage out of rolling ventilation and curtaining.
- \_\_\_\_\_

## 8、Wiring distribution table

220V60W (GMA60-S)				
Installation Distance Control Mode	50m	75m	100m	150m
Each circuit controls 1 set	4*0.5mm <sup>2</sup>	4*0.5mm <sup>2</sup>	4*0.5mm <sup>2</sup>	4*0.5mm <sup>2</sup>
Each circuit controls 2 sets	4*0.5mm <sup>2</sup>	4*0.5mm <sup>2</sup>	4*0.5mm <sup>2</sup>	4*0.5mm <sup>2</sup>
Each circuit controls 3 sets	4*0.5mm <sup>2</sup>	4*0.5mm <sup>2</sup>	4*0.5mm <sup>2</sup>	4*0.75mm <sup>2</sup>
Each circuit controls 4 sets	4*0.5mm <sup>2</sup>	4*0.5mm <sup>2</sup>	4*0.75mm <sup>2</sup>	4*1mm <sup>2</sup>
Each circuit controls 5 sets	4*0.75mm <sup>2</sup>	4*0.75mm <sup>2</sup>	4*1mm <sup>2</sup>	4*1.5mm <sup>2</sup>
Each circuit controls 6 sets	4*1mm <sup>2</sup>	4*1mm <sup>2</sup>	4*1.5mm <sup>2</sup>	4*1.5mm <sup>2</sup>
Each circuit controls 7 sets	4*1mm <sup>2</sup>	4*1mm <sup>2</sup>	4*1.5mm <sup>2</sup>	4*2.5mm <sup>2</sup>
Each circuit controls 8 sets	4*1.5mm <sup>2</sup>	4*1.5mm <sup>2</sup>	4*1.5mm <sup>2</sup>	4*2.5mm <sup>2</sup>
Each circuit controls 9 sets	4*1.5mm <sup>2</sup>	4*1.5mm <sup>2</sup>	4*2.5mm <sup>2</sup>	4*4mm <sup>2</sup>
Each circuit controls 10 sets	4*1.5mm <sup>2</sup>	4*1.5mm <sup>2</sup>	4*2.5mm <sup>2</sup>	4*4mm <sup>2</sup>
220V100W (GMA100-S)				
Installation Distance Control Mode	50m	75m	100m	150m
Each circuit controls 1 set	4*0.5mm <sup>2</sup>	4*0.5mm <sup>2</sup>	4*0.5mm <sup>2</sup>	4*0.5mm <sup>2</sup>
Each circuit controls 2 sets	4*0.5mm <sup>2</sup>	4*0.5mm <sup>2</sup>	4*0.75mm <sup>2</sup>	4*1mm <sup>2</sup>
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Notice: Wire is the standard copper one.				

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## Note:

The products are subject to design and performance updates, so it might be a little different from this manual book. But it will not affect your usage; The book is also subject to modification without further notice. Please read this book before use.

## 1、Safety tips

- 1.1 Proper using and maintenance will help to extend the life of film reeler.  
Please operate in accordance with this instruction Manual.
- 1.2 Input Voltage of this product is AC220V, Please connect the wire under guidance of the professional.
- 1.3 Do not use voltage over AC220V, the maximum voltage fluctuations should not exceed  $\pm 10\%$ . The installation must be equipped with reliable grounding cable, the grounding cable and the neutral cable are prohibited to have any connection with each other.
- 1.4 Please keep the children far away from the working area, in case of accident or electrocution.
- 1.5 Please off the power before installing and repairing the product, in case of electrocution.
- 1.6 Do not put the product in the water or in the wet environment for a long time, and if you find the water inside the motor, please stop using it and return it back to our factory for testing.
- 1.7 Please do not throw, drag and drop the motor, or make other dangerous actions, to avoid the impact of the product.
- 1.8 When it is thundering, please turn off the power, in case of damage caused by lightning.
- 1.9 The customer should keep the working area clean, clear the snow, leaves, in case of damage of overloading.
- 1.10 If the connecting wire needs to be lengthened, please make sure that the connector is safe and reliable, in case of fire and dangerous.
- 1.11 Please check the bolt and nuts regularly, in case of looseness from the motor.
- 1.12 The electric motor must keep in a direct line with the roll up tubing, and the bending degree should not be too large, or this will cause the damage of overloading.
- 1.13 When installing, please note the mounted position of wire cord, to prevent the wire winding.

## 6、Regular problems & solution

No.	problem	Analysis
1	Motor doesn't rotate	No power connection
		The left and the right knob touch the micro switch at the same time
		The motor will be destroyed if the power cord is misordered
2	Limit not accurate	Lock bolts loose
		Inner parts damage
3	Noise	Incorrect installation
		Overload

## 7、Packing list

GMA100-S/GMA60-S

No	PART NAME	QTY	MARK
1	Electric Film Reeler body	1	
2	Coupling	1	
3	Suit	1	
4	Plug	1	
5	Self-locking nut M8	1	
6	Hexagon bolt M8×12	2	
7	Hexagon bolt M8×45	1	
8	Self-locking nut M6	1	
9	Bolt M6×50	1	
10	Wiring Diagram	1	
11	Assemble instruction	1	

1. The packing list only contains the standard accessories and documents, it doesn't include the other accessories you choose. If you have ordered other accessories, please check it when you receive the order. The production date is on this packing list.
2. To insure your interest and rights please keep this packing list for future service.

- 4.2.3 When the motor is rolling up the plastics, rotate any of the knobs slowly, and make the gear pin touch the micro switch ( with click sound) , if the motor stops running, It means this adjust ring controls the direction of the rolling.If the motor doesn't stop running, the other adjust ring is used to control the direction of the rolling.
- 4.2.4 When the motor is rolling up the plastics, the pipe arrives at the required position, at this time rotate the knob which controls the rolling status and make the gear pin touch the micro switch( with click sound), hold on and fasten the lock bolt by a cross head screw-driver.
- 4.2.5 When the motor is rolling down the plastics, the pipe arrives at the required position, at this time rotate the knob which controls the rolling status and make the gear pin touch the micro switch( with click sound) , hold on and fasten the lock bolt by a cross head screw-driver.
- 4.2.6 The above steps would set up the motor's limit range. Turn on the power and check if the range setup is correct. If it is not correc, please review the manual carefully and do the setup again.

## 5、Maintenance

- 5.1 Check the bolts on each connection regularly. Replace the bolts which is deformed or snapped.
- 5.2 No need to refill the gear oil during the life duration of this product.
- 5.3 This product could be used for greenhouse rolling ventilation and curtaining system. For other usage, please consult our company first.

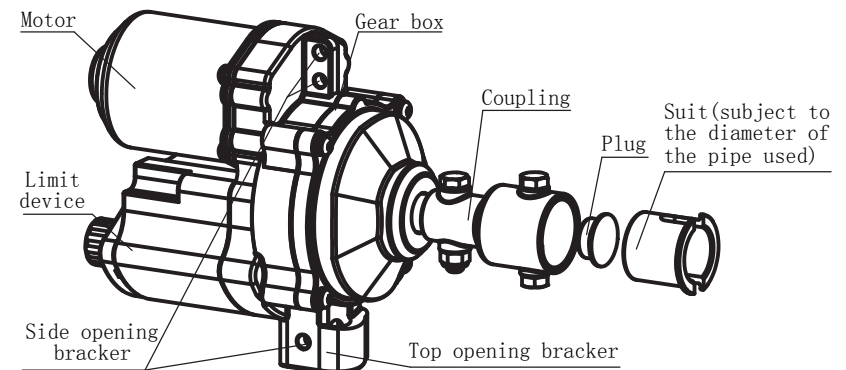
- 1.14 Please do not switch the power too fast, to avoid damage to the motor.
- 1.15 If the user don't operate the motor according to the Manual and Cautions  
Our company will not undertake all the consequences that arise.

## 2、Product features and performance data

### 2.1 Product features

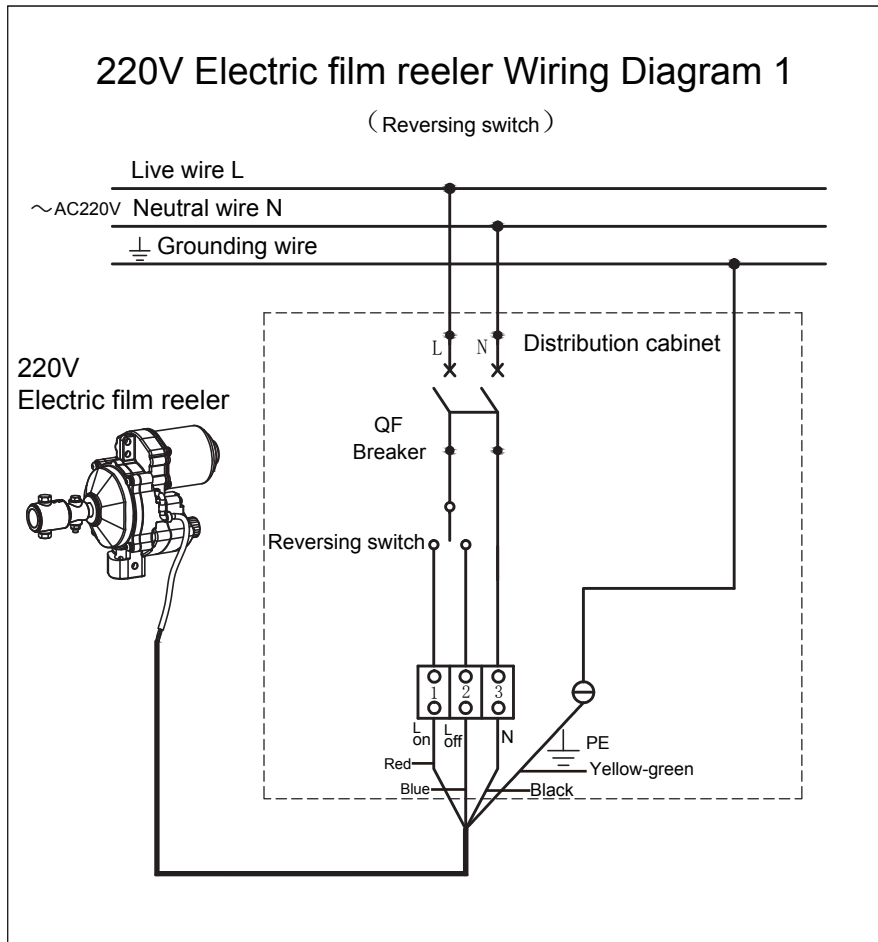
This product is compact in structure, reliable in performance, convenient in installation and operation, adjustable reversing switch, with reversing-lock function.

### 2.2 Outside drawing



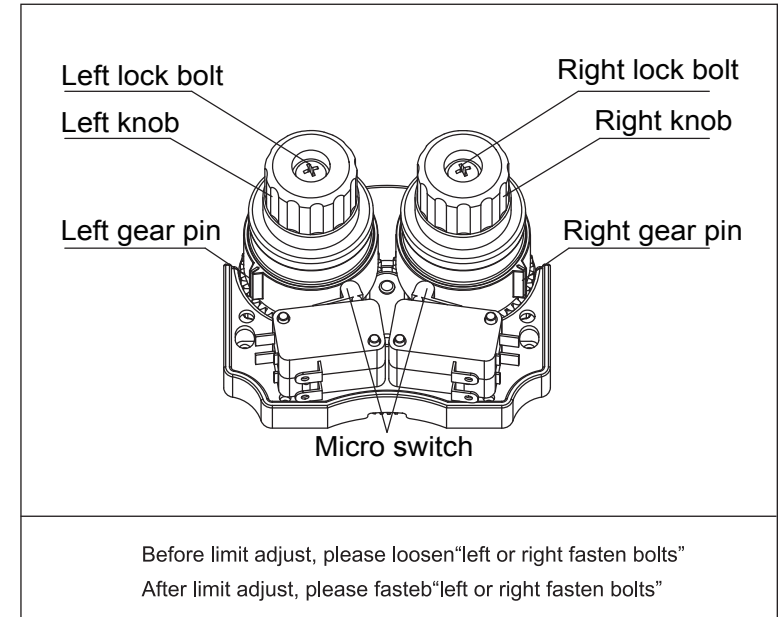
## 2.3. Circuit diagram

Distribution principle: AC220V currency supplies power through the circuit breaker, the commutator switch controls the operations of opening, closing and stop. When the AC220V power is connected with open L and N, the winch rotates in a positive direction. When the AC220V power is connected with closed L and N, the winch rotates in a reverse direction.



## 4. Limit range adjusting

### 4.1 Limit switch illustration



CAUTION: After the limit adjust is finished, please fasten the bolts. Or the limit will not be accurate and there would be dange of power shock.

### 4.2 Limit switch adjusting

- 4.2.1 Loosen the left and right lock bolts by a cross head screwdriver, at the same make sure the gear pins don't touch the micro switch.
- 4.2.2 Turn on the power, and make the motor run, confirm the status of the rolling pipe, is it rolling up or rolling down.



## 2.4 Parameters

Model	GMA100-S		GMA60-S	
Power	100W		60W	
Torque	100N・m		60N・m	
Current	≤0.77A		≤0.46A	
Voltage	AC220V±20V（50Hz/60Hz）			
Speed	50N・m	3.3 r/min	30N・m	3.3 r/min
	100N・m	2.8 r/min	60N・m	2.8 r/min
Rolling tube (Roofing/Side)	3/4"（OD:Φ27）or 1"（OD:Φ33.5）			
Rolling range (Recommendation)	3/4" Rolling tube			
	100m(L)×4m(H)		75m(L)×4m(H)	
Guide tube (Roofing)	3/4"（OD:Φ27）			
Maximum range (output shaft)	38 Rounds			
Protection degree	IP55			

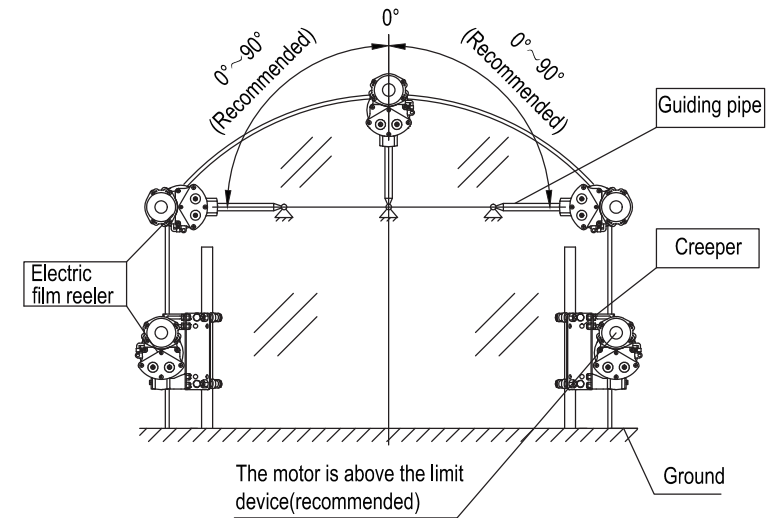
## 3. Installation instructions

3.1 First please fasten the pipe and this product with the bolts. Then fix the film into the pipe by the film hoop, please keep the pipe and the output shaft of this product on the same line; then start the motor and operate the opening and closing the films.

3.2 Two types of pipe could be used for this motor, the diameter is Φ27, Φ33.5. When the Φ27 pipe is used, the suit is needed, the Φ33.5 pipe doesn't need it.

## 3.3 Installation illustration

Recommended installation diagram:



Not recommended installation diagram:

