

Auto-loader

Instruction Manual



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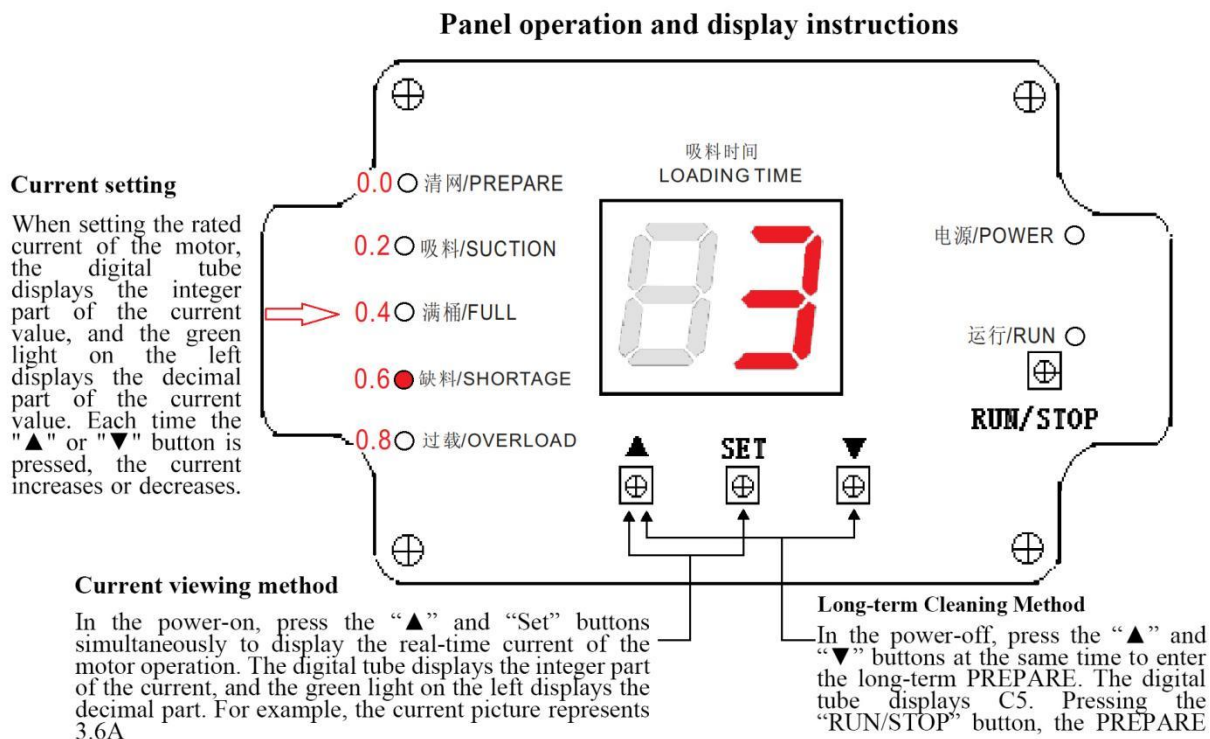
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1. Control panel operation and wiring diagram

A. Control panel operation diagram:



1.1 Function Introduction

- The large digital tube display the material suction time directly.
- Motor current detection and overload automatic protection.
- Automatically memorize specifications after power outage.
- Loading time is adjustable.

2. Working status and parameter setting

2.2 RUN/STOP:

Turn RUN: After powering on, the power indicator light turns on, press the "RUN/STOP" button once, the running indicator light turns on, controller starts running.

Turn STOP: Pressing the "RUN/STOP" again, controller stop running.

Power-off memory: User parameters and power-on status can be memorized after the power off.

Current viewing: In power-on, press the "▲" and "Set" buttons simultaneously to view the real-time current of the current motor operation. The digital tube displays the integer part of the current value, and the green light on the left displays the decimal part of the current value. Automatically exit the normal running interface after 10 seconds

2.2 Parameter setting:

2.2.1 Loading mode selection:

SUCTION mode selection: In power-off, press the "Set" button to select the suction mode. There are C1, C2, C3, C4, C6 and C7 modes to choose from.

SUCTION time setting: In power-off, press the "Set" button to select the suction mode. After selecting the suction mode, directly press the "▲" or "▼" button to directly adjust the suction time. All loading times are set in C1, C2, C3 and C4 modes. The blanking time is directly set in C6 and C7 modes, and the suction time is also set in C1, C2, C3, and C4 modes. After setting, press the "RUN/STOP" button to save and start.

Loading mode description:

C1 Mode: Automatic and continuous suction without prepare. Alarming after 3 consecutive material shortage.

C2 Model: Prepare first and then automatic suction, prepare once after 10 times of suction. Alarming after 3 consecutive material shortage.

C3 Model: Prepare first and then automatic suction, prepare once after 3 times of suction. Alarming after 3 consecutive material shortage.

C4 Model: Prepare first and then automatic suction, prepare once after 1 times of suction. Alarming after 3 consecutive material shortage.

C6 Model: Automatic suction continuous, no prepare. Alarming after 1 consecutive material shortage.

C7 Model: Automatic suction continuous, no prepare. Blanking waiting time is minutes, Alarming after 1 consecutive material shortage.

Note: In power-off, press the "▲" and "▼" buttons at the same time to enter long-term prepare. At the same time, the digital tube displays C5. After pressing the "RUN/STOP" button, the PREPARE will stop.

2.2.2 Advanced user parameter adjustment:

Enter the advanced user parameter adjustment mode: In the power-off, press and hold the "Set" button for 5 seconds to enter the advanced user parameter setting mode.

Change parameters: After entering the advanced user parameter mode, press the "Set" button to select the parameters that need to be adjusted. Press the "▲" or "▼" button to adjust the corresponding parameters. After the modification is completed, press the "RUN/STOP" button to save and exit. And automatically power on.

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3. Advanced user parameter list:

Parameter	Meaning	Setting time range	Default value	Parameter Description
F1	Motor rated current setting	0~35 A	0 A	The rated current setting of the motor. Setting it to 0A means turning off the current detection function.
F2	Motor current detection delay	2~99 Second	3 Second	The delay when starting the motor current detection is how many seconds it takes to start detecting the motor current fault.
F3	C1, C2, C3, C4 Mode blanking time	2~99 Second	20 Second	The blanking waiting time after each material is loaded in C1, C2, C3 and C4 modes
F4	Time of material shortage alarms	0~99 times	3Times	The number of material shortage alarm settings means a shortage of report should be after how many times the shortage of material. "0" means that there will be no alarm for material shortage. This setting only applies to C1, C2, C3, C4 modes
F5	Dust removal method	1 or 2	2	Selection of dust removal methods
				1--pulsation dust removal
				2 means motor backflush dust removal
F6	Dust removal time	1~99Second	18 Second	Running time of each dust removal
F7	Interval time between material load and dust removal	1~99Second	30 Second	Waiting time between suction and dust removal
F8	Alarm output mode	1 or 2	1	Alarm output method
				1 indicates that the alarm output is pulse mode
				2 indicates that the alarm output is a long-sucking method.
F9	Material door switch closed to eliminate vibration	1~99 Second	1 Second	The debouncing time of each closing of the material door
Fa	Cutting (pigging) valve working type	ON or OF	ON	Selection of normally open and normally closed cut-off valve, ON means normally closed, OF means normally open

Fb	Cutting (pigging) time	0~99 Second	0 Second	Cutting time setting, "0" means no cutting function
Fc	Equipment working mode select	1	1	Can not set
Fd	The blanking time after loading is forced to wait	OF or ON	O F	Whether a mandatory waiting time is required after each material is loaded.
				OF means no forced waiting. ON means forced waiting.

4. Fault list:

Fault Code	Meaning	Alarm method	Approach	Elimination method
E1	Motor overload	The digital tube displays "E1"	Turn off motor	Automatic reset
E2	Material shortage failure	The digital tube displays "E2"	Turn off motor	Automatic reset
E3	Motor current is too high fault	The digital tube displays "E3"	Turn off motor	Manual reset
E4	Motor current is too low fault	The digital tube displays "E4"	Turn off motor	Manual reset

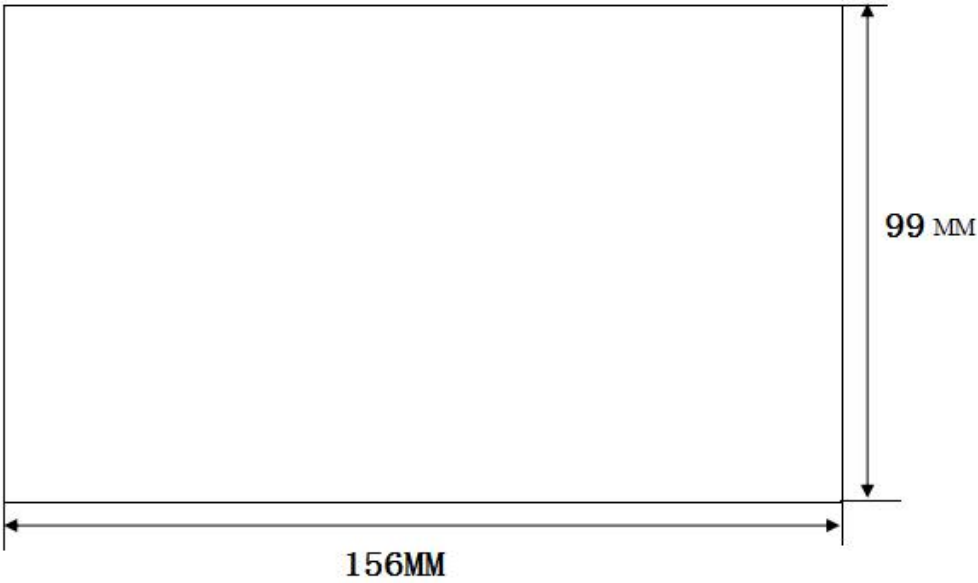
Notes:

A. When setting the rated current of the motor, the digital tube displays the integer part of the current value, and the green light on the left displays the decimal part of the current value. Each time the "▲" or "▼" button is pressed, the current value increases or decreases by 0.2A.

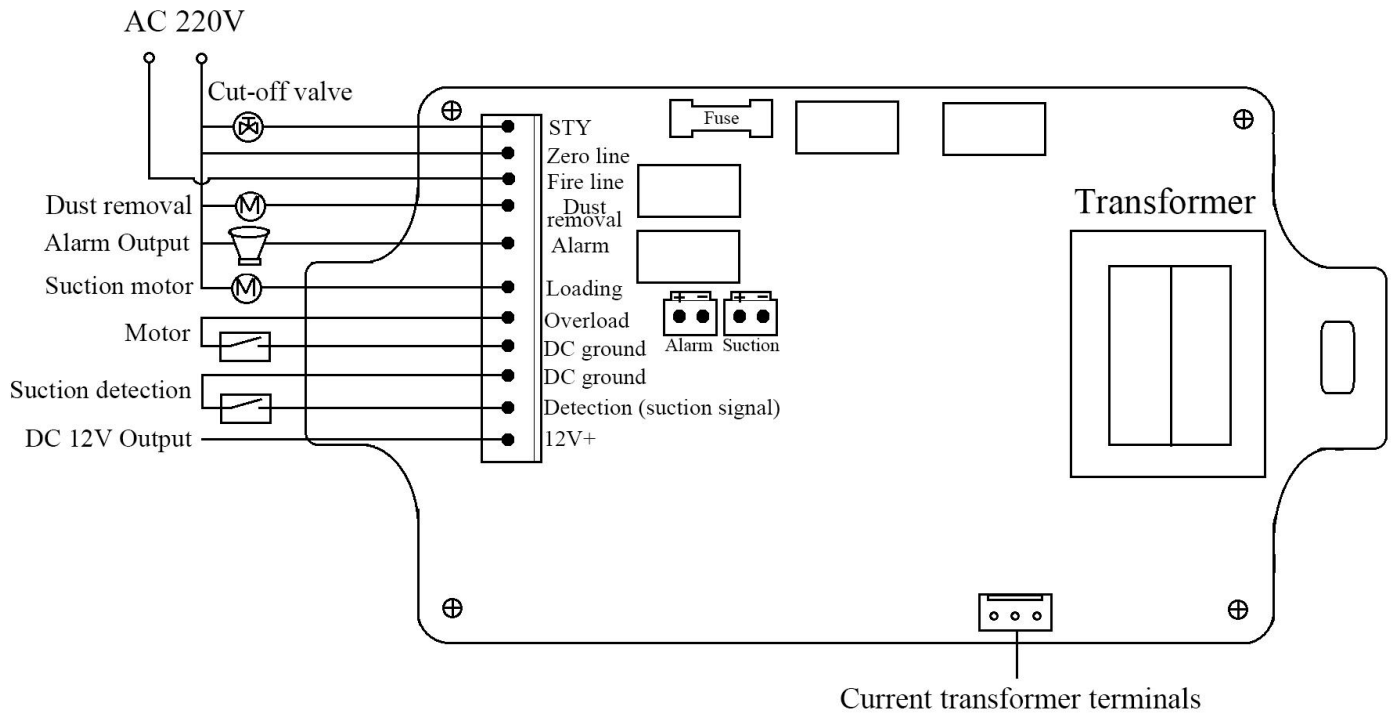
B. After the parameter Fb device working mode is selected as 2, this mode can only work with our company's motor drive board. The motor drive board replaces the conventional AC contactor (can replace motors below 2.5KW), which can save equipment assembly time and material costs. (This is an optional feature)



5. Installation hole size diagram:



6. Computer board wiring diagram:



The Guarantee of equipment

All equipment sold by **Dongguan Dingyuan Industrial Co.,Ltd** to _____.
provide one year warranty. Within 1 year from the date of equipment opening day or shipping the equipment day(whatever occurs first.).

1. Within this guarantee period, except the situation listed in the Sixth, Labor cost and spare parts cost are payment by the Supplier.

2. Unscheduled maintenance during the guarantee period.

- 1) we will send technical personnel to check the system operation.
- 2) Arrange some necessary examined, checked, and routine maintenance.

3. Dongguan Dingyuan Industrial Co.,Ltd provide response-- 24 hours a day. Response content:

- 1) According to the customer's specific requirements, the professional engineer provide solutions.
- 2) Know the fault condition.
- 3) Methods to solve the problem.
- 4) Notify professional engineers to arrive at the site for repair time: Unless anything turns up, engineers rushed to the scene within 12 working hours of the city. Arrived to the scene within 48 working hours in other provinces. Mutual agreements the time in long-distance customers.
- 5) This service is for 24 hour, 7 days a week, 365 days a year.

4. After commissioning, providing basic operation/ maintenance training for user maintenance personnel.

5. After this guarantee period, Dongguan Dingyuan Industrial Co.,Ltd promises that will provide a pay-needed maintenance service for life. A variety of service methods for users to choose.

1) After the expiration of this guarantee period, the user's demand for spare parts is provided by the **Dongguan Dingyuan Industrial Co.,Ltd** in the establishment of the customer service center. The spot supply does not exceed two weeks of delivery; the futures delivery period does not exceed 3 months, and the arrival notice is available before arrival.

2) **Dongguan Dingyuan Industrial Co.,Ltd** are provided to the user at a preferential price of original spare parts, to ensure the accuracy and supporting for the products, and the spare parts purchased by the customer

are guaranteed for 6 months.

3) Freely provide the technology information and provide information on new products of the **Dongguan Dingyuan Industrial Co.,Ltd.**

6. The free guarantee during the guarantee period does not include the following:

- 1) Failure caused by human accident or abuse due to improper use or inadvertent use;
- 2) The seller shall not be held liable for any problem in consequence of any Force Majeure incidents(Such as: typhoon, floods, fire, and earthquake, etc.)
- 3) Losses due to third party installation, wiring, repair and exchange;
- 4) Failure due to commissioning of not Dongguan Dingyuan Industrial Co.,Ltd engineer.
- 5) Due to the use of spare parts repair equipment not provided by our company, which causes equipment failure or equipment performance does not meet design specifications.

This guarantee shall become effective upon signing and sealing of the Dongguan Dingyuan Industrial Co.,Ltd.

Dongguan Dingyuan Industrial Co.,Ltd.

12.2023

