

## Air Compressor Control System HMI-600T Interface Manual V1.0

The air compressor control system HMI-600T developed by our company has rich interface display, powerful function and simple use, which can easily realize the human-computer interaction function of the air compressor control system. Thank you for your choice!



### 1、Hardware parameters

#### 1.1 Installation dimension and overall dimension

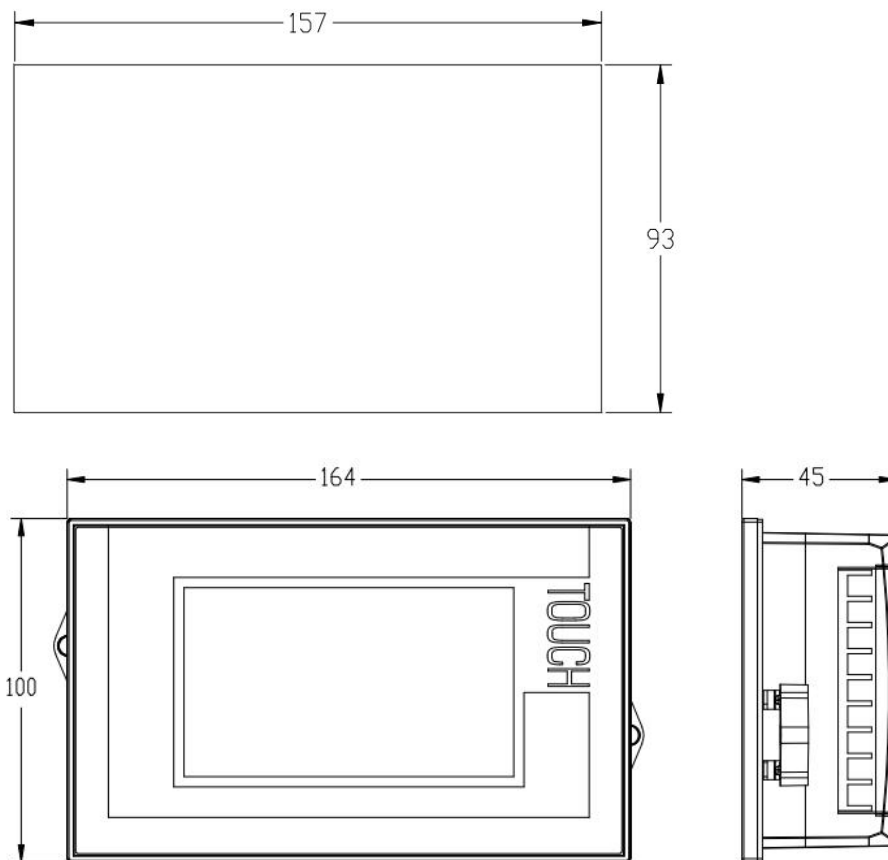


Fig. 1 Structure Diagram

#### 1.2 Wiring terminal diagram

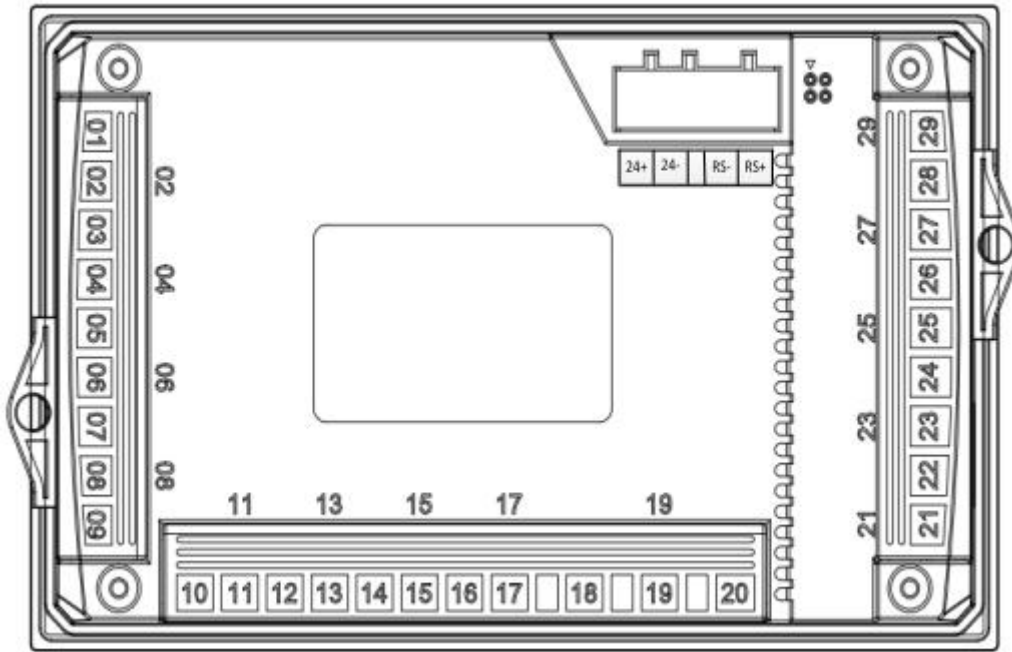


Figure 2 Terminal Definition

Note: Please install the corresponding terminal wiring. Wrong wiring will cause damage to the touch screen.

## 2、 The system starts

Supply power to the touch screen, the power supply is DC24V, wait for a few seconds to complete the system data loading, and enter the main interface, as shown in Figure 3:

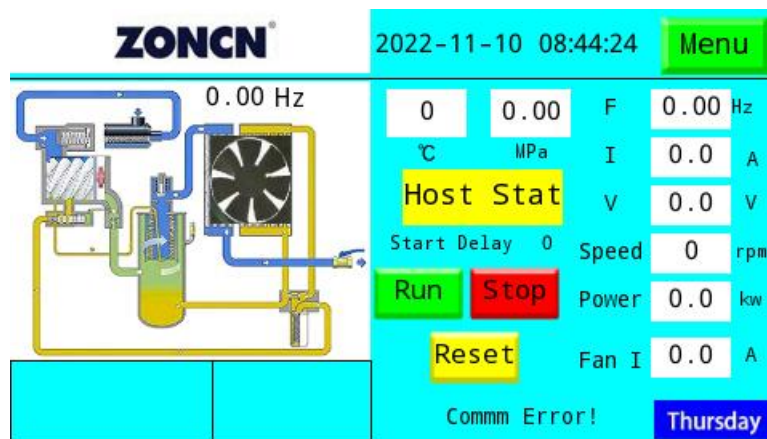


Figure 3 Main interface of the system

### 2.1 System settings

#### (1) The system main interface

① System startup is completed, enter the main interface, main show air compressor running commands (start, stop, and reset), running parameters (temperature, pressure, output frequency,

output current, output voltage, output speed and output power, electricity, fan current , operating time 、 motor temp and motor temperature.).

② The lower left corner has multiple fault display functions. When the communication between the touch screen and the frequency converter is interrupted, the communication fault is displayed at the lower end of the reset button.

③ Current time display, the lower right corner display includes the current year, month, day and week display, long press "year" display for 3 seconds, can enter the time adjustment mode.

## (2) System to the main menu

Click "menu" option, a pop-up in the main menu including user parameters, timing control, fault records, maintenance parameter, ptions such as manufacturer parameters and manufacturer information.

Into the part of the menu to enter the password in the interface, including the "users" parameters "timing control" "maintenance parameters" parameters "manufacturer" as shown in figure 4:

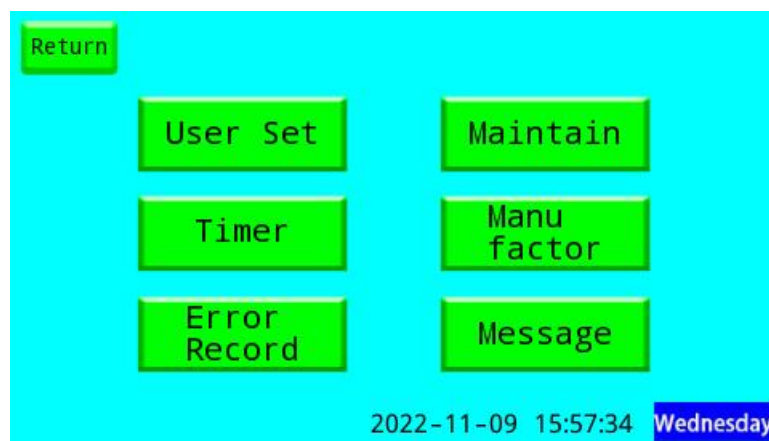


Figure 4 The main menu

## (3) User Set

Click on the "user set" option, "password" interface, enter the password to enter parameter interface, as shown in figure 5 :

Figure 5 The password input

Enter a password to enter the "user parameters" interface, users can set in the "user preferences" delay, pressure and fan control parameters, as shown in figure 6:

Delay		Press		Tempture	
Start Delay	0 s	Load Press	0.00 MPa	Start Tempture	0.0 °C
Load Delay	0 s	Unload Press	0.00 MPa	Stop Tempture	0.0 °C
Unload Delay	0 s	Inverter Press	0.00 MPa	Motor Alarm	0.0 °C
Stop Delay	0 s	Sleep Press	0.00 MPa	Target Tempture	0.0 °C
Restart Delay	0 s				

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Figure 6 User Set

#### (4) Timing control

"Timing control" function can be set up the system in week timing boot and shutdown time, realize the automatic operation of the system. In the corresponding input box input time Settings, click the corresponding "tick" set to complete; Do not use this function, all the "tick" no choice; As shown in figure7:

Day	Status	Time
Mon	ON	0 H 0 M
Tue	ON	0 H 0 M
Wed	ON	0 H 0 M
Thu	ON	0 H 0 M
Fri	ON	0 H 0 M
Sat	ON	0 H 0 M
Sun	ON	0 H 0 M

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Figure 7 Timing control

(5) Fault record query

Click on the "failure record" "fault record" interface, real record system fault type and fault time, as shown in figure 8:



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Figure 8 Fault record query

(6) Maintain parameter

Click on the "maintenance parameter" option, "password" interface, enter the password to enter parameter interface, as shown in figure 9 :

	SET		CUR		Manu.
Air Filter Set	0	H Air Filter Used	0	H Load Time	0 H
Oil Filter Set	0	H Oil Filter Used	0	H Unload Time	0 H
Separator Set	0	H Separator Used	0	H Kwh Use	0 kwh
Lubricate Oil Set	0	H Lubricate Oil Used	0		
Grease Set	0	H Grease Used	0		

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Figure 9 Maintain parameter

(7) Manufacturer of parameters

Click on the "manufacturer" parameters, the pop-up interface "password", enter the password to enter parameter interface, as shown in figure 10:

Return next page Manu factor Detection temp 0.0 °C

Stop Press	0.00 MPa	Press Range	0.00 MPa	Para Set (No Point)	
Stop Temp	0.0 °C	Temperature Ratio	0.0 %		
Upper Limit Freq	0.00 Hz	Fan motor I ratio	0.0	%Code	0
Low Limit Freq	0.00 Hz	Kwh Ratio	0	%Data	0
Run Time	0 H	Fan Motor	0.00 A	Alarm	ON
Fan Min Freq	0.00 Hz	<div>Advanced Para</div> <div>Other Para</div> <div>Motor Debug</div>			

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Figure 10 Manufacturer of parameters

Main features include: motor debugging, the function parameter Settings, analog keyboard and information.

### ①.Motor Debugging

Click "motor debugging", "Motor debugging" into the interface as shown in figure:11

Return Motor Debug

Max Freq	0.00 Hz	Upper Limit Freq	0.00 Hz	Low Limit Freq	0.00 Hz
Motor Type	0	Rated Power	0.0 kW	Rated V	0 V
Rated Current	0 A	Rated Freq	0.00 Hz	Rated Speed	0 rpm
Back EMF	0.0 V	Acc Time	0.0 S	Dec Time	0.0 s
Rs	0 Ω	Ld	0 mH	Lq	0 mH

Study

Jog On

Jog Off

Fan On

Fan Off

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Figure 11 The motor parameters

Main features include: set motor related parameters, self-learning, inching commissioning and fan start-stop control.

### ② Motor since the study

Click "study", and under the conditions of machine downtime, system of motor, automatically self learning, learning is completed, the system prompt "studying", if learning fails, then the system prompt "study error", the interface is shown in figure 12:

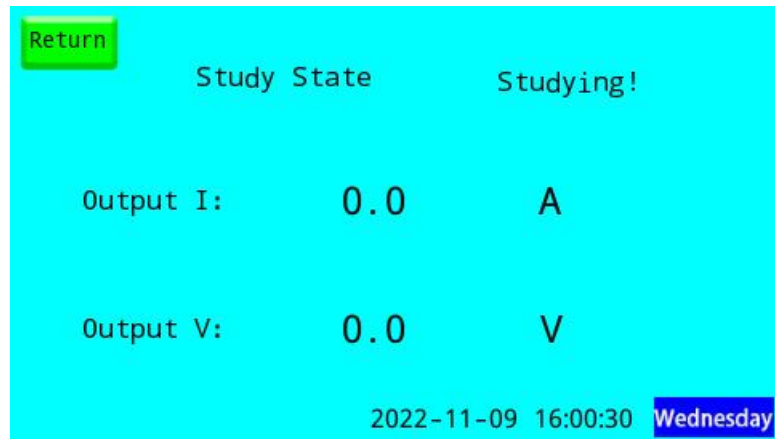


Figure 12 Motor since the study

Learning success and then click the back button, enter the machine debugging interface, inching test used to test the motor steering, the default run at 10 Hz, observe the motor turned to whether it is right, such as steering error in time click on the "point move to stop" button, change the motor line, debug step motor to appeal.

Fan, debugging, and click "run" fan, fan to observe whether it is right, such as working properly, then stop running, back to the main interface, such as reverse operation is changing any two fan thread.

### ③ Information

Click on "information" button, enter the interface system parameters, the password used for manufacturer and user password change, as shown in figure 13:



Figure 13 Information

### (8) Information

Click on the "Information", "Information" into the interface, as shown in figure 14:



Return		Message	
Running Time	0	H	Production Number
	0	M	Production Date
Vrs	0.0	V	
Vst	0.0	V	Motor 0.0 °C
Vtr	0.0	V	
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Figure 14 Information

**Note: the above function if you have deviation with the actual use, is the function of the software version upgrades, please refer to use.**

### 3、System debugging/operation

