LIFTING DOOR PULSE VACUUM STERILIZER

(HA-BV SERIES)

INSTALLATION MANUALS

Installation and Debugging

Note: The correct installation of equipment plays an important role in its normal operation and must not be ignored.

1. Unloading equipment:

Lift the equipment to the installation site and install the equipment by referring to the schematic diagram of the nozzle orientation (if the actual object does not match the schematic diagram of the nozzle orientation, the actual nozzle shall prevail).

Precautions for lifting equipment:

- Do not stand under lifting equipment;
- Keep a sufficient safety distance when hoisting equipment;
- Only use qualified lifting equipment.

2. Equipment Installation:

Equipment in place

✓ Remove the packaging bag and take out the random accessories. Random documents should be kept properly;

✓ **Transport the equipment to the selected location;**

The hoisting and positioning of equipment must not damage equipment decoration and exposed pipes, configurations, control systems etc.

Professional construction personnel should be responsible.

Adjust level

The equipment should be in place according to the designated position, leaving room around it, and the low plane of the equipment sterilization chamber should be adjusted to a level.

3. Install the piping system

According to the building facilities, the steam inlet pipe, water inlet pipe, compressed air inlet pipe, discharge pipe and power cord should be properly prepared.

The steam inlet, water inlet, compressed air inlet and discharge port in the piping system of the sterilization cabinet are respectively connected to the user's own pipeline interfaces. Pressure gauges should be installed on the steam inlet, water inlet, and compressed air inlet pipelines to control and display the pressure of each pipeline.

Note: The discharge port is not allowed to be connected to other pipelines to avoid causing back pressure in the pipeline.

4. Compressed Air Requirements

✓ **The compressed air pressure** requirement of the sterilization cabinet is 0.4~0.7MPa. If the pressure exceeds the maximum pressure, a pressure reducing valve should be installed. At the same time, a pressure gauge should be installed on the easily observed pipeline to indicate the actual pressure of the external compressed air source.

In order to extend the service life of pneumatic components and the performance of sterilization equipment, the compressed gas needs to be processed to make it clean, oil-free, and water-free.

Insufficient compressed air will affect the sealing of the door and the opening action of the valve.

✓ **Requirements for steam source**

The steam pressure requirement of the sterilizer is 0.3~0.6MPa. If the pressure exceeds the maximum pressure, a pressure reducing valve should be installed. At the same time, a pressure gauge should be installed on the easily observed pipeline to indicate the actual pressure of the external steam.

If the steam source pressure is too high, the superheated steam will damage the sealing gasket, causing it to age faster and lead to leakage.

At the same time, the steam pneumatic valve may be pushed open and lose control. Therefore, the steam pressure entering the equipment is not allowed to be too high. If it is too high, a pressure reducing valve must be installed.

5. Cleaning after equipment installation

✓ Clean up the garbage around the sterilization equipment and maintain environmental sanitation of the sterilization equipment;

✓ Clean up the debris left behind by the pipeline installation inside the sterilization room, and clean the sterilization equipment itself;

✓ Clean the dust on the outer surface of the pipeline, outer cover, door cover, electrical control box and other components to keep the equipment clean.

6. Equipment inspections that must be carried out before commissioning

✓ Whether the power connection condition meets the design requirements and electrical standards (such as whether the ground wire and neutral wire are complete).

✓ Whether the connections of the piping system are loose and whether the opening status of each valve is good.

✓ Check whether the door opening and closing action of the sealed door and the door seal are normal.

✓ Check whether the vacuum pump turns in the same direction as the mark.

✓ Check whether the setting of the pressure controller complies with the rated working pressure.

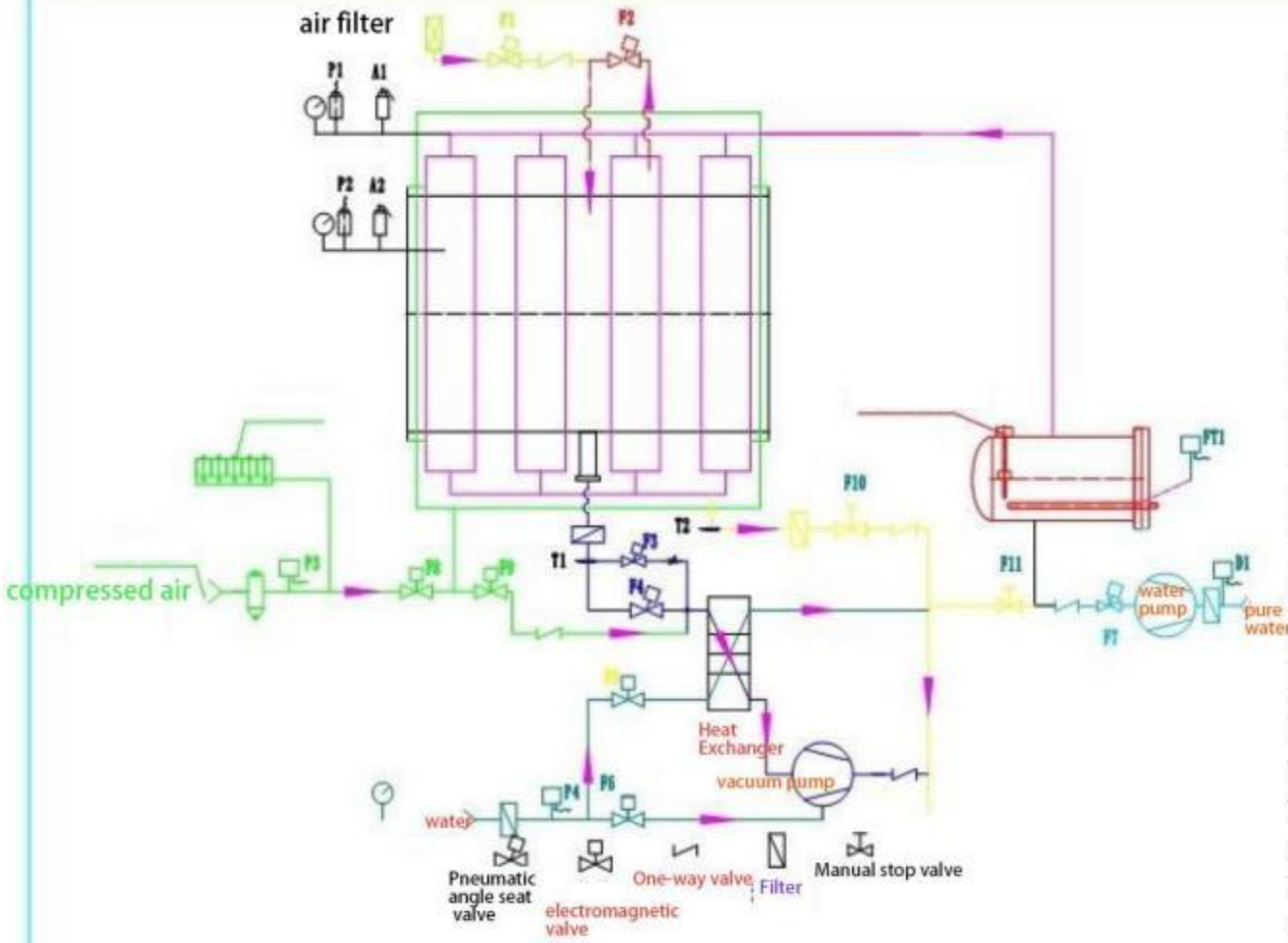
7. Equipment should have reliable grounding

Connect one end of an insulated wire with a cross-sectional area of no less than 4mm2 to the M10 copper protective grounding screw under the instrument, and the other end to the earth reliably.

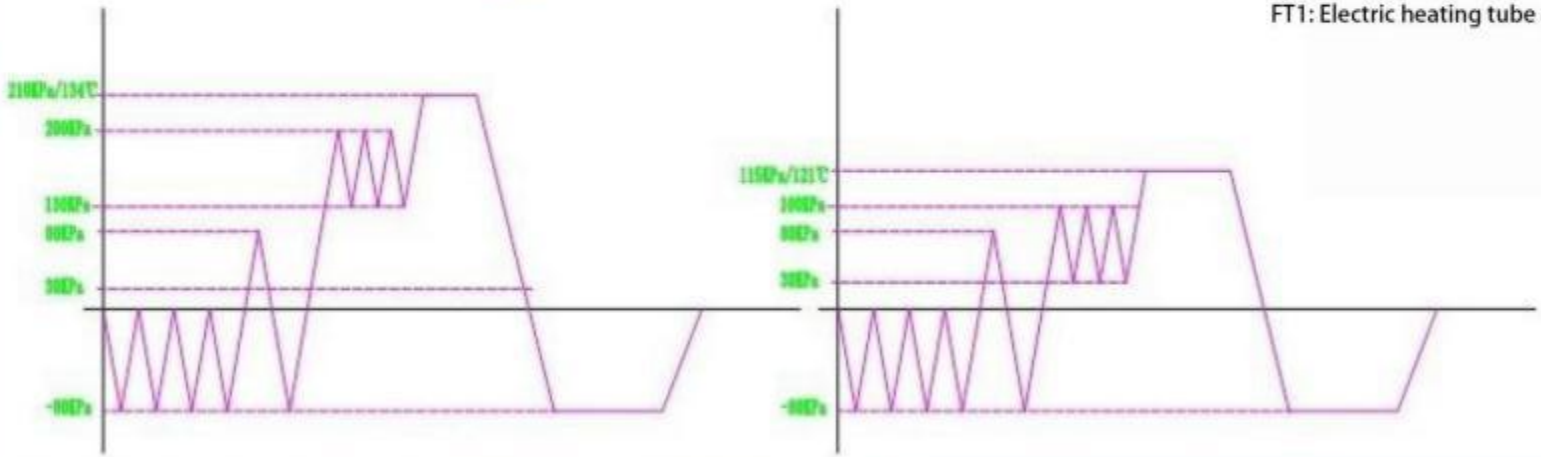
8. Debugging

After the equipment is installed, conduct a trial run of the program. If there are any questions, adjust and correct according to the technical parameters until the program is normal before it can be put into trial operation.

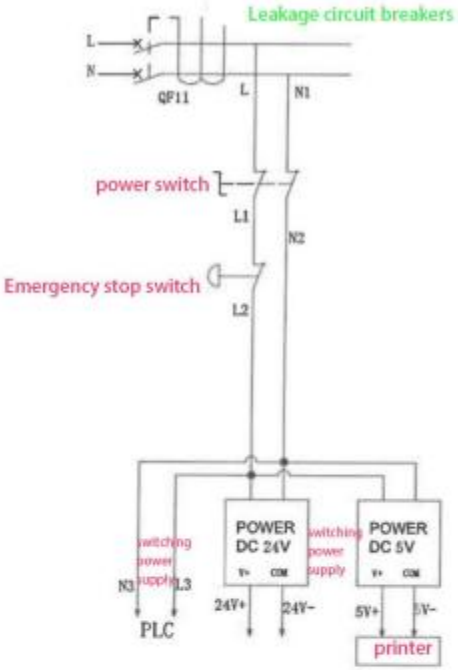
Check the attachment for Pipeline diagram, Electrical wiring diagram

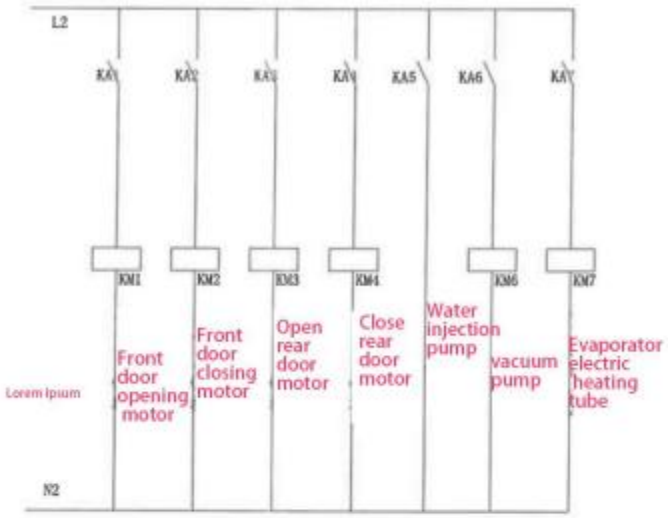


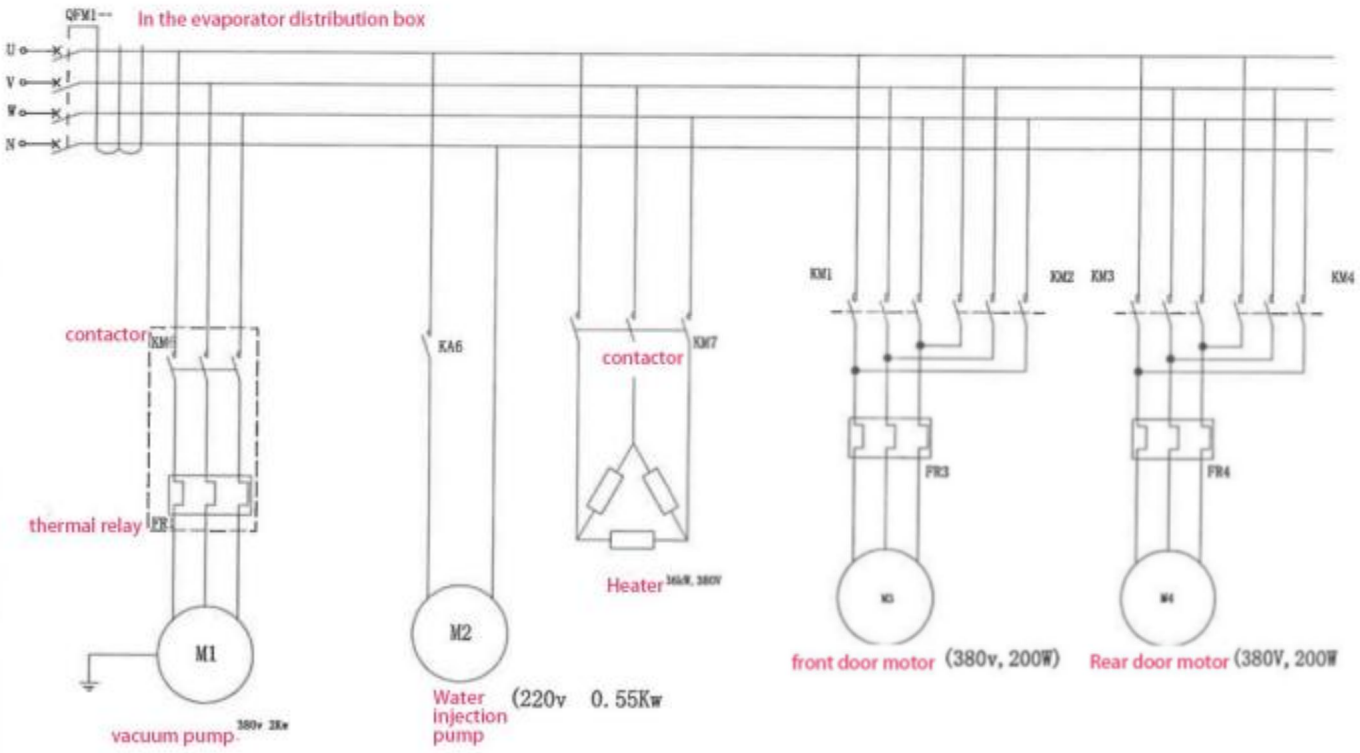
F1: Return air angle seat valve DN15
F2: Inner chamber steam inlet angle seat valve DN15
F3: Inner chamber vacuum quick exhaust angle seat valve DN20
F4: Inner chamber exhaust steam trap angle seat valve DN15
F5: Heat exchanger water inlet solenoid valve DN15
F6: Vacuum pump water inlet solenoid valve DN15
F7: Evaporator water inlet angle seat valve DN15
F8: Solenoid valve (door seal inflation) DN15
F9: Solenoid valve (door seal vacuum) DN15
F10: Jacketed hydrophobic manual ball valve DN15
P11: Evaporator drain manual ball valve
P1: Mezzanine pressure transmitter
P2: Inner chamber pressure transmitter
P3 compressed air pressure switch
P4: Tap water pressure switch
T1: Inner room temperature
T2: Jacket temperature
A1: Sandwich safety valve
A2: Inner chamber safety valve
D1: Soft water quality monitoring switch
FT1: Electric heating tube anti-dry heating thermostat

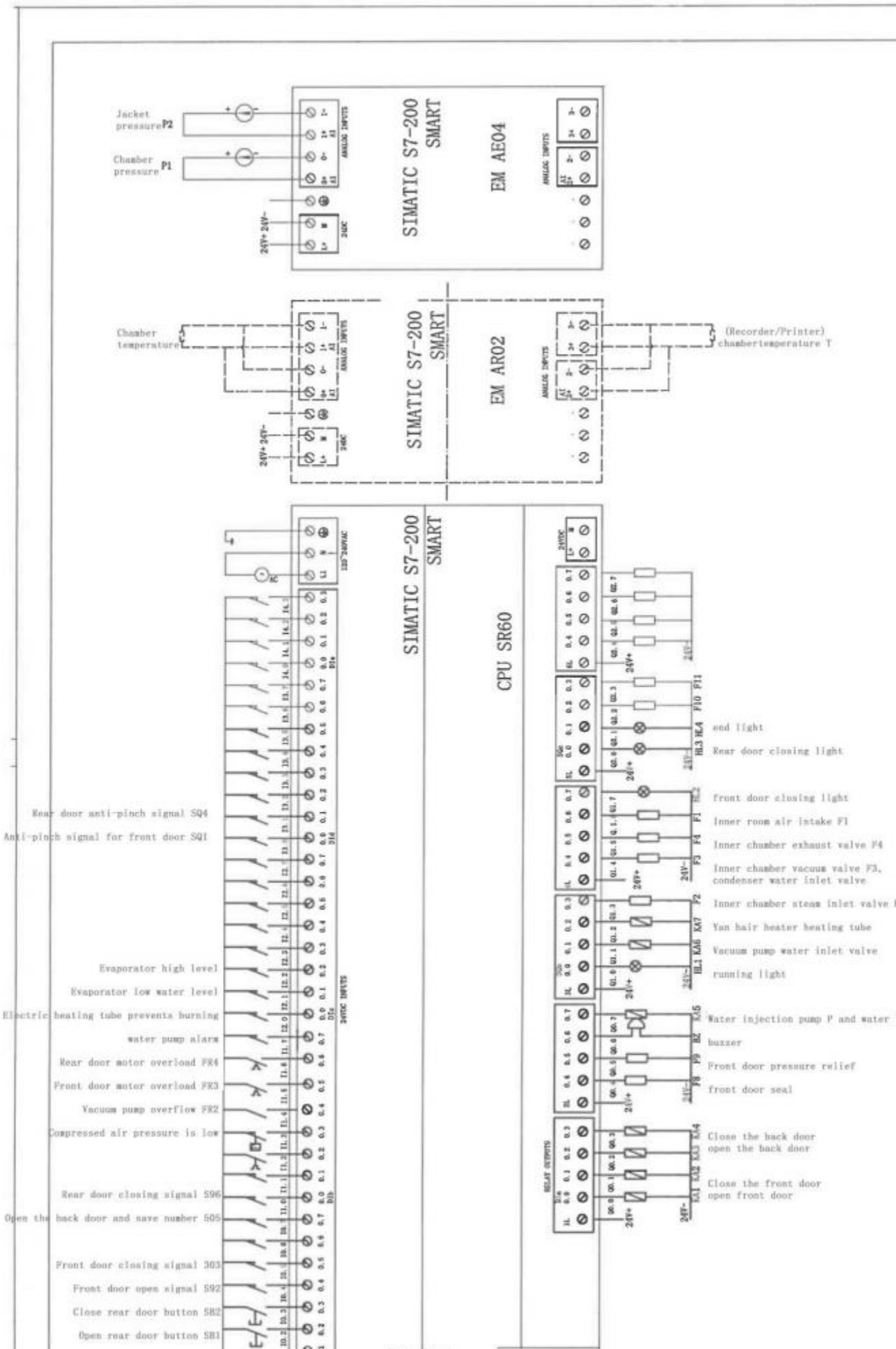


Electrical wiring diagram








Jacket pressure P2
Chamber pressure P1
SIMATIC S7-200 SMART
EM AE04
Chamber temperature
EM AR02
(Recorder/Printer) chambertemperature T
CPU SR60
Rear door anti-pinch signal SQ4
Anti-pinch signal for front door SQ1
Evaporator high level
Evaporator low water level
Electric heating tube preventa burning
water pump alarm
Rear door motor overload FR4
Front door motor overload FR3
Vacuum pump overflow FR2
Compressed air pressure is low
Rear door closing signal S96
Open the back door and save number S05
Front door closing signal 303
Front door open signal S92
Close rear door button SB2
Open rear door button SB1
end light
Rear door closing light
front door closing light
Inner room air intake F1
Inner chamber exhaust valve F4
Inner chamber vacuum valve F3, condenser water inlet valve
Inner chamber steam inlet valve
Yan hair heater heating tube
Vacuum pump water inlet valve
running light
Water injection pump P and water
buzzer
Front door pressure relief
front door seal
Close the back door open the back door
Close the front door open front door