MICROTEC

ATLAS ULTRA QUICK GUIDE

AT48-APS

ATLAS ULTRA 40×48 Pneumatic Sublimation Double-Station Press

One picture per step. Scan a QR code or tap “Watch” to see that exact step in our video.



Safety first

The heat plate gets very hot
Up to 437°F. Never reach inside the machine. Keep children and pets away.

3-phase 220V — electrician only
Grounded 3-phase 220V, 60 Hz. The machine draws up to 30 A. Never use an extension cord.

Plates move by themselves
Keep hands and body out of the plate path. Start with both hands on the two green buttons.

Indoors, dry, airy room
Level, solid floor. 41–104°F room. Away from water, dust and anything that can burn.

Emergency? Press a red **EMERGENCY STOP** button on the plate frame. The lower plate drops and pressing stops at once. A moving plate stops right away. The machine switches to Manual mode. Then turn off the power switch.

1 Unbox



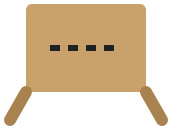
1. Check the shipment before you sign

It comes by freight truck. If anything looks damaged, write it on the delivery paper.



2. Move it with a forklift or pallet jack

It is very heavy. Never push or lift it by the plate frame or the control panel.



3. Unpack it where it will be used

Remove all packing material and straps.



4. Keep all packaging

You will need it if the machine ever has to come back for service.

---

2 Set up



1. Set it on a level, solid floor

Leave room in front for the plate to slide all the way out, and room on the left side to reach the air gauge and power connection.



2. Have an electrician connect 3-phase 220V power

This machine needs 3-phase 220V, 60 Hz, 30 A, grounded. It does not plug into a regular wall outlet. The power cord comes out low on the left side (shown). Only an electrician should wire it.



3. Connect the air hose to the air gauge

Run a hose from your air compressor to the inlet of the air gauge on the left side of the machine. The press cannot work without air.







4. Connect the exhaust port

Duct the round exhaust port at the back to your exhaust or ventilation system.

5. Turn on the power switch

Red switch on the left side of the control panel box. The screen lights up. Check: power, air and exhaust — 3 connections.

6. Set the air pressure to 4–6 kg/cm²

Turn the black knob on the air gauge until the needle reads 4–6 kg/cm² (0.4–0.6 MPa, about 57–87 psi). Clockwise ↻ = more pressure, counter-clockwise ↺ = less. If the knob won't turn, pull it up first; push it down to lock. Turn a little at a time and watch the gauge.

3 Know your machine



1 Touchscreen
Temperature, time, mode and heating.

2 Power switch
Turns the machine on and off.

3 Air gauge and regulator
Sets and shows the air pressure. Clockwise ↻ = more pressure, counter-clockwise ↺ = less.

4 Power cord
3-phase 220V. Connected by an electrician.

5 Lower plate (outside)
Load your material here. It slides into the machine to press.

6 EMERGENCY STOP buttons
Red. One on each side of the plate frame.

7 Green start buttons
Press both together with both hands (Semi Auto mode).

8 Motor speed control
At the back. Sets how fast the lower plate moves.

9 **Exhaust port**
At the back. Connect to your exhaust or ventilation.

10 **Electrical cabinet**
At the back. Holds the electrical parts. Do not open — call us.

Double station: while one plate is inside pressing, the other plate waits outside so you can load it.

4 Touchscreen



1 **Temperature #1 – #4**
Four heat zones. Actual Value = temperature now. Set Value = the temperature you set.

2 **Time**
Actual Value = countdown. Set Value = press time in seconds.

3 **Auto / Semi Auto / Manual**
Choose how the machine runs.

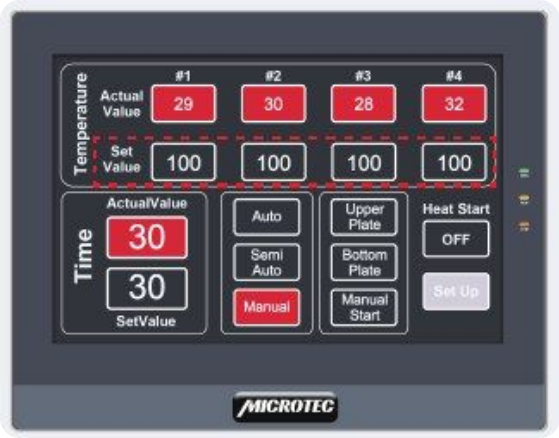
4 **Upper Plate / Bottom Plate**
Manual mode: hold to move that plate all the way into the machine.

5 **Manual Start**
Manual mode: tap to start the press.

6 **Heat Start**
Tap to turn heating ON or OFF.

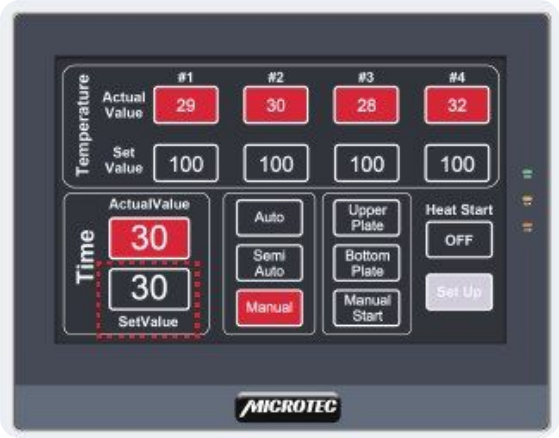
7 **Set Up**
°F / °C and counter reset. It needs an access code — call us.

Set temperature and time



1. Set the temperature

Tap each Set Value box (#1 to #4), type the number, confirm.



2. Set the time

Tap the Time Set Value box, type the seconds, confirm.



3. Turn on Heat Start

Tap Heat Start so it shows ON. The machine warms up.

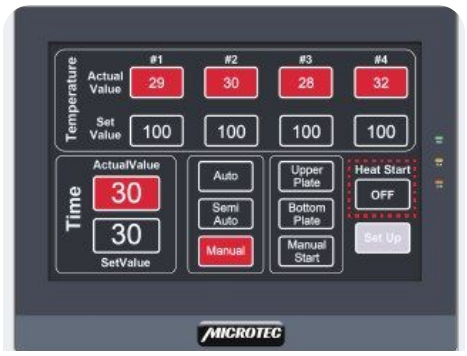
> ⚠ Do not change any other settings inside Set Up. It can make the machine run wrong.

Quick reference

I WANT TO…	DO THIS
Change the temperature	Tap Set Value #1–#4 → type → confirm
Change the press time	Tap Time Set Value → type → confirm
Turn heating on / off	Tap **Heat Start**
Run one press at a time with the green buttons	Tap **Semi Auto**
Run nonstop	Tap **Auto**
Move a plate inside by hand	**Manual** → hold **Upper Plate** or **Bottom Plate**

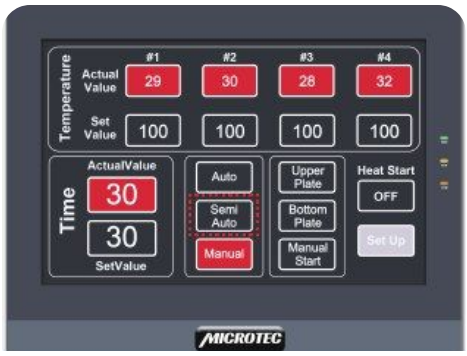
Ranges: temperature 50–437°F · time 0–999 sec.

5 Your first press (Semi Auto)



1. Turn on Heat Start and wait

Wait until the actual temperatures reach your set temperature.



2. Tap Semi Auto

Semi Auto = one press each time you push the green buttons.



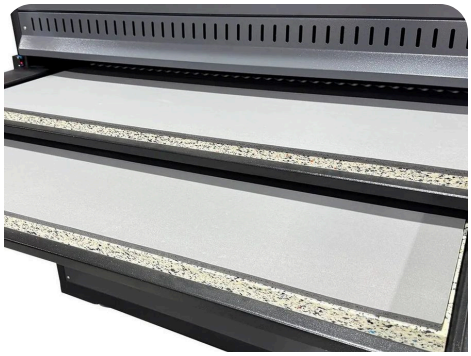
3. Lay your material on the outside plate

Flat and smooth, with the transfer paper in place.



4. Press both green buttons together

The plate slides into the machine and presses.



5. While it presses, load the other plate

Keep your hands clear when a plate moves.



6. Unload and repeat

When a pressed plate comes out, take off the finished item and press the green buttons again.

⚠ **Auto mode** runs nonstop: the plates keep feeding in by themselves. Use it only when you are ready, and keep hands clear.

✓ Green buttons do nothing? A plate is not all the way in place. Tap **Manual**, hold **Upper Plate** or **Bottom Plate** until it stops, then choose Semi Auto again.

6 If something is wrong

Won't turn on

1. Check the 3-phase 220V power to the machine.
2. Turn on the power switch on the control panel box.
3. Still nothing? Call us.

Green start buttons do nothing

1. Make sure Semi Auto is selected.
2. Tap Manual, hold Upper Plate or Bottom Plate until the plate stops inside.
3. Choose Semi Auto again.

Stopped after EMERGENCY STOP

1. The machine is now in Manual mode.
2. Choose Semi Auto or Auto again to continue.

Won't press / weak press

1. Check the compressor is on and the hose is connected.
2. Check the gauge reads 4–6 kg/cm².

Plate moves too fast or too slow

1. Adjust the motor speed control at the back of the machine.

Specifications

	AT48-APS
Plate size	39.4″ × 47.2″
Power	220V 3-phase · 9.0 kW · 30A · 60Hz
Air supply	4–6 kg/cm² (0.4–0.6 MPa)
Temperature	50–437°F
Timer	0–999 s
Controller	PLC touchscreen (XD3-16T-E + SK-102QT)

Still stuck? Call us.

Phone

(714) 261-9498

Mon–Fri · 7:30 am – 5:00 pm Pacific

Email

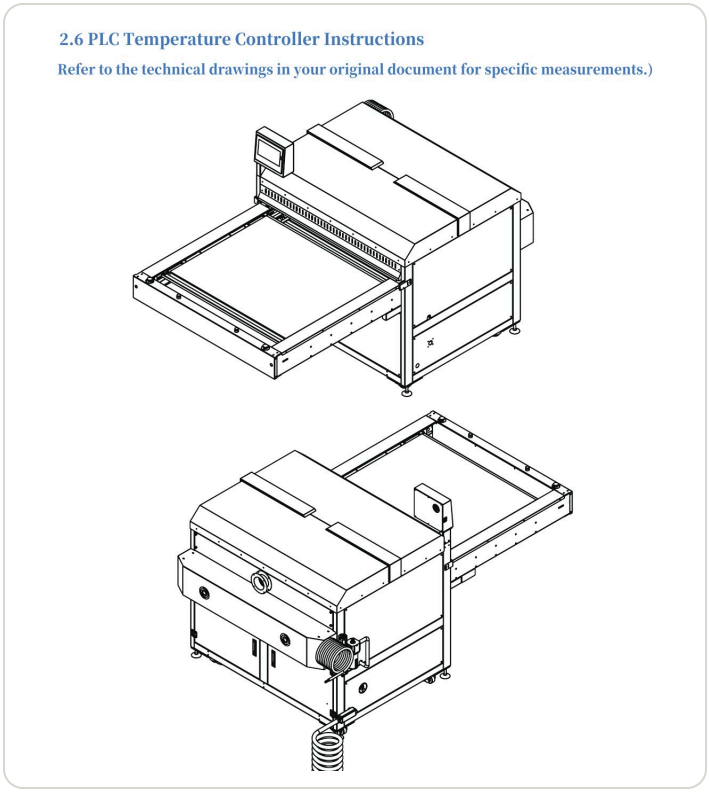
sales@microtecusa.com

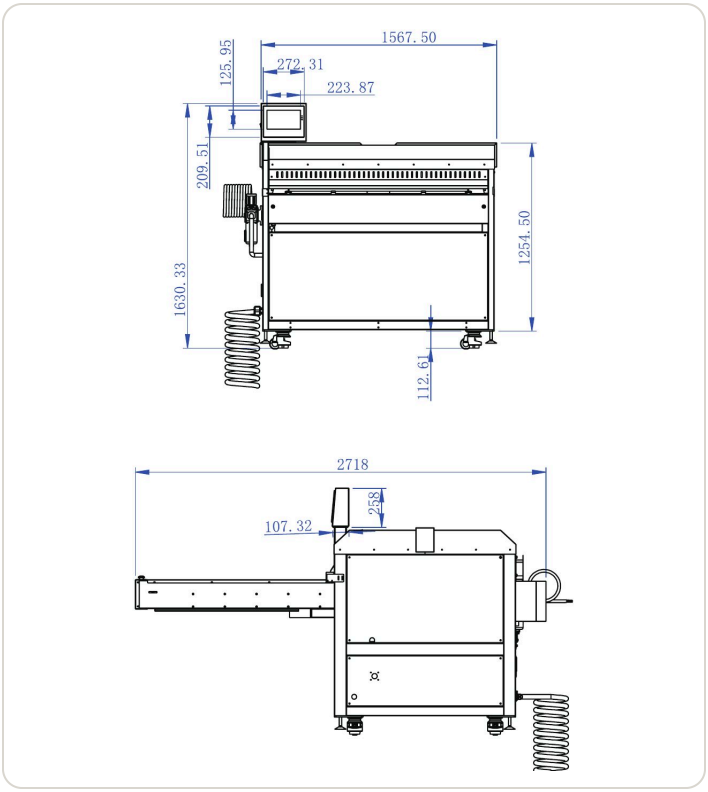
Free lifetime tech support

Dimensions & diagrams

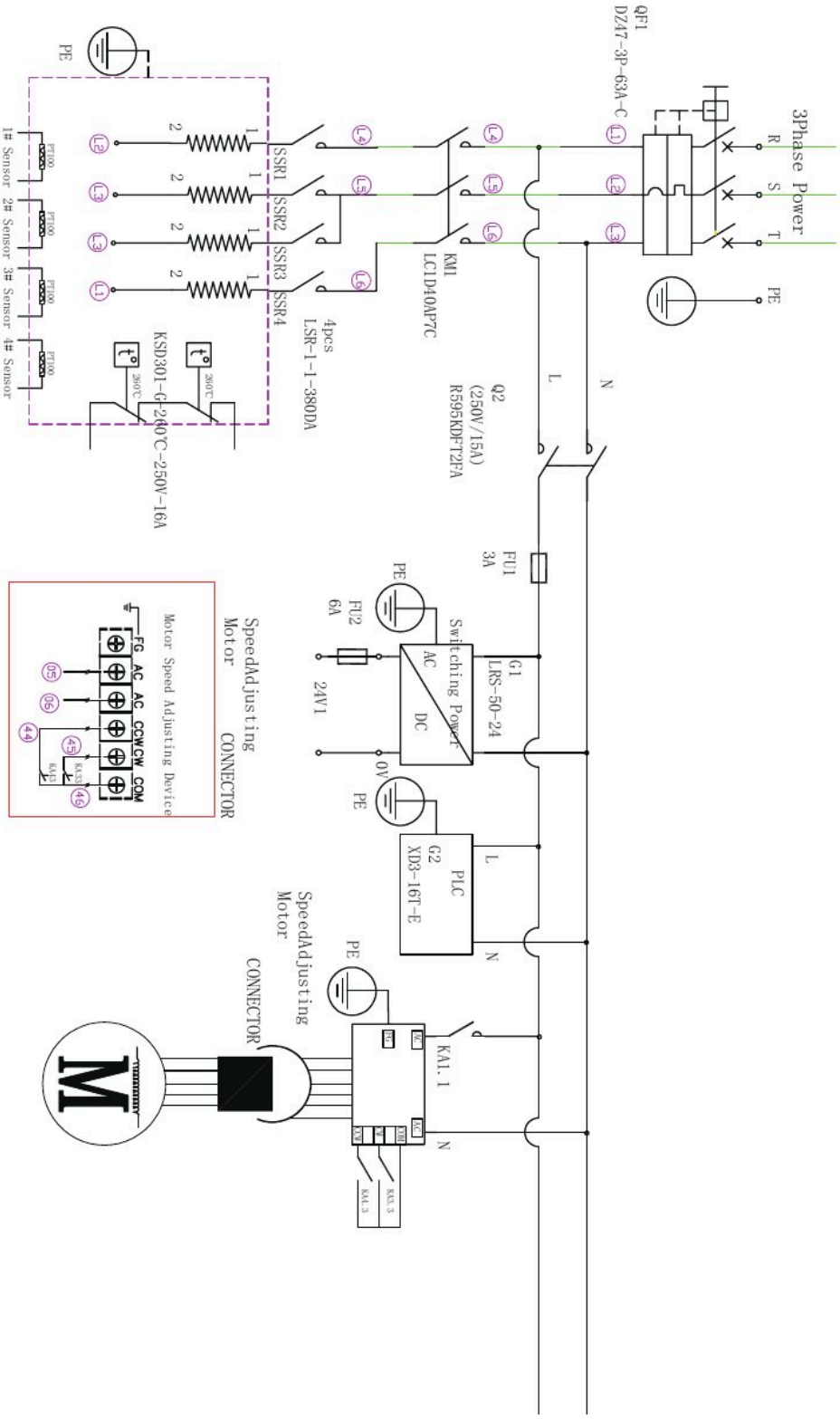
For service technicians. **Unplug the machine** and **disconnect the air** before opening any cover.

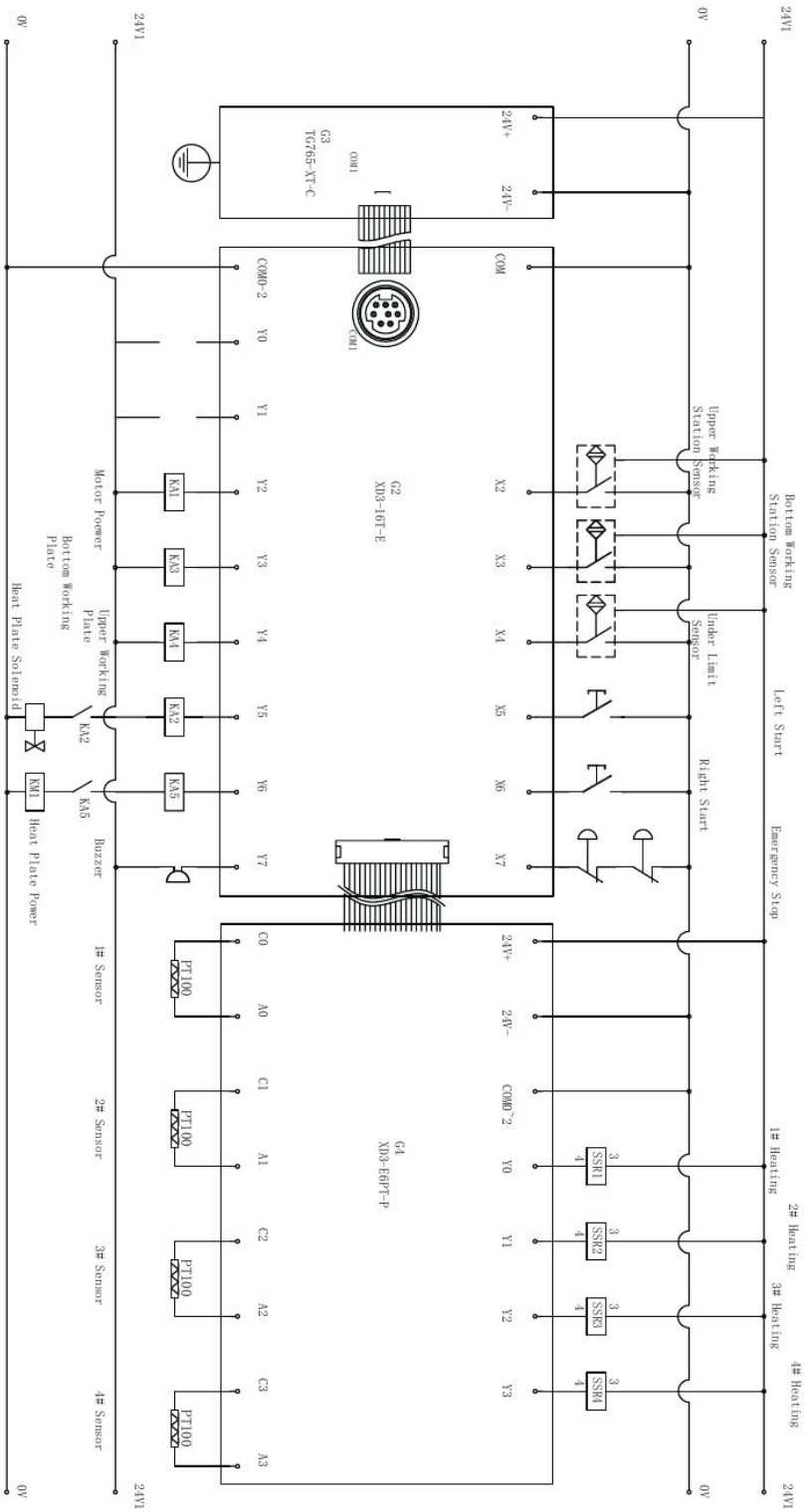
Dimensions (mm)



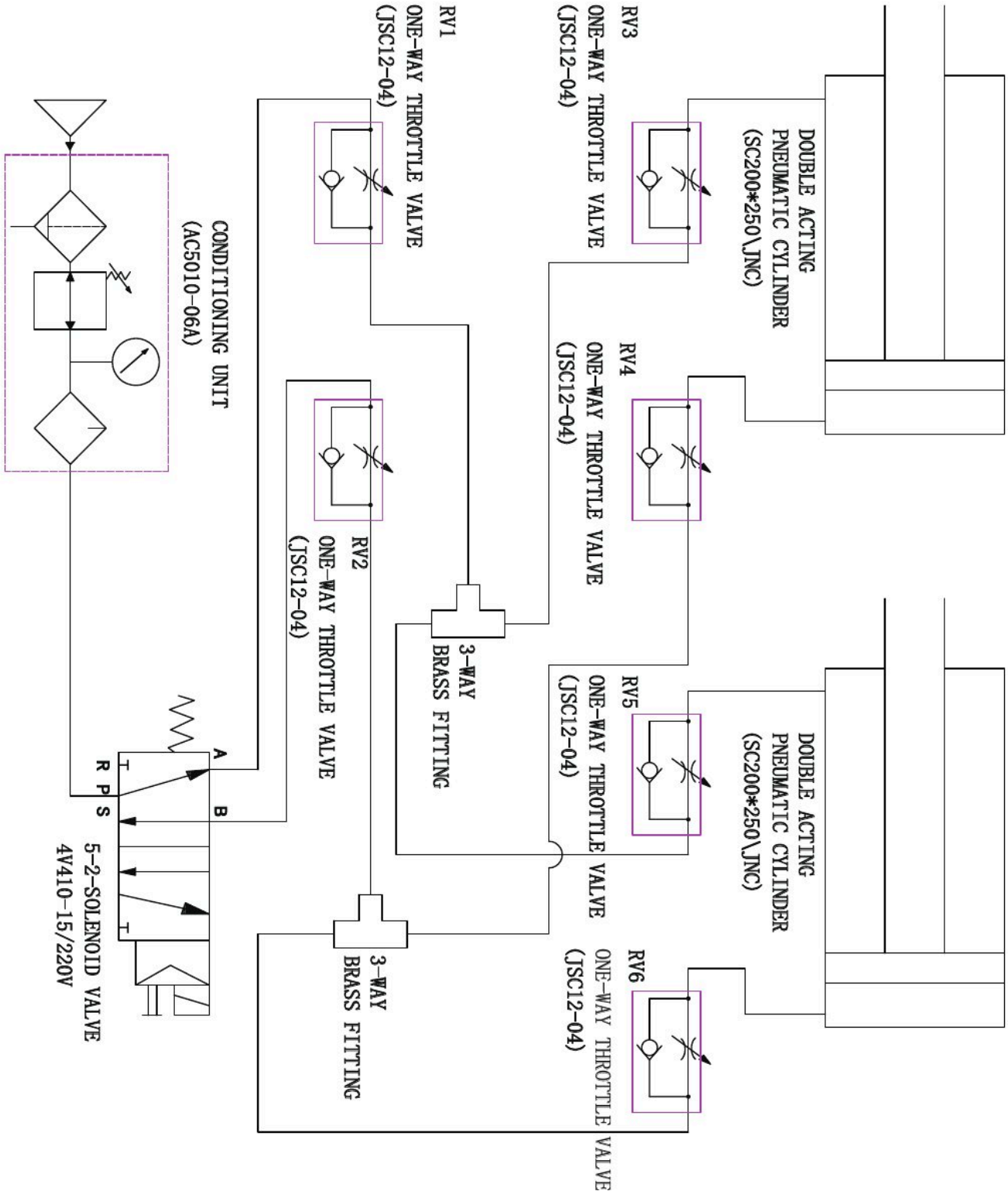


Wiring diagram




24V1
0V
Bottom Working Station Sensor
Upper Working Station Sensor
Under Limit Sensor
Left Start
Right Start
Emergency Stop
1# Heating
2# Heating
3# Heating
4# Heating
G3
TG765-XT-C
COM1
24V+
24V-
G2
XD3-16T-E
COM
COMO-2
Y0
Y1
Y2
Y3
Y4
Y5
Y6
Y7
X2
X3
X4
X5
X6
X7
KA1
KA3
KA4
KA2
KA5
KM1
Motor Powmer
Upper Working Plate
Bottom Working Plate
Heat Plate Solenoid
Buzzer
Heat Plate Power
G4
XD3-E6PT-P
C0
A0
C1
A1
C2
A2
C3
A3
COMO~2
PT100
1# Sensor
2# Sensor
3# Sensor
4# Sensor
SSR1
SSR2
SSR3
SSR4

Air diagram


DOUBLE ACTING
PNEUMATIC CYLINDER
(SC200*250\JNC)
DOUBLE ACTING
PNEUMATIC CYLINDER
(SC200*250\JNC)
RV3
ONE-WAY THROTTLE VALVE
(JSC12-04)
RV4
ONE-WAY THROTTLE VALVE
(JSC12-04)
RV5
ONE-WAY THROTTLE VALVE
(JSC12-04)
RV6
ONE-WAY THROTTLE VALVE
(JSC12-04)
RV1
ONE-WAY THROTTLE VALVE
(JSC12-04)
RV2
ONE-WAY THROTTLE VALVE
(JSC12-04)
3-WAY
BRASS FITTING
3-WAY
BRASS FITTING
CONDITIONING UNIT
(AC5010-06A)
A
B
R P S
5-2-SOLENOID VALVE
4V410-15/220V