MICROTEC

APEX QUICK GUIDE

X8

APEX X8 8-Station Fully Automatic Rotary Heat Press

One picture per step. Follow the steps in order.



! Safety first

The heat plates get very hot

Up to 450°F. Never touch them. Keep children and pets away.

This machine moves by itself

The table turns and the heads press down on their own. Stay outside the safety guardrail. Keep hands, hair and loose clothes away.

Reaching in? Stop the machine first

Press an EMERGENCY STOP button before you clear a jam or touch a station.

220V 3-phase power — electrician only

Must be grounded: less than 4 ohms, ground wire thicker than 4 mm², no longer than 65 ft (20 m).

Indoors, dry, level floor

32–104°F, humidity 80% or less. Away from water, heavy dust and anything that can burn.

Emergency? Press a red **EMERGENCY STOP** button — on the control panel or on a press head. The machine stops at once and the light turns red. When the problem is cleared: twist the button to release it, then press the green **START** button.

1 Set up



1. Pick a level, open floor area

The machine is about 120″ (3000 mm) across and weighs 2409 lb. Leave walking room all the way around, and a spot next to it for the water chiller.



2. Have an electrician connect the power cable

The power cable and the air line both come out low on the base, under the guard rail (photo). Power: 220V 3-phase, 23 A, grounded. It does not plug into a regular wall outlet — only an electrician should wire it.



3. Connect dry compressed air to the air line

Same spot as the power cable. Your compressor must supply 40 CFM of dry air. Without air the heads cannot press.







4. Hook up the water chiller

The chiller (CW-5200) keeps the cooling platen cold. Check its water hoses to the cooling platen are connected and tight, and plug in the chiller's own power cord. Fill it with ordinary tap water, up to the level its own manual shows.

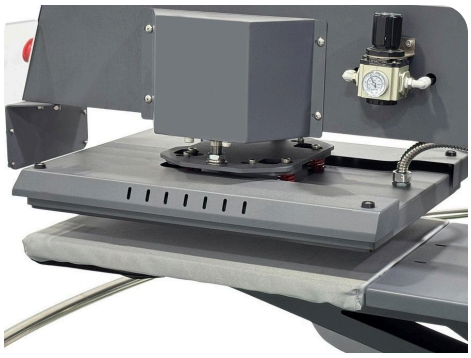
5. Turn on the water chiller

Red switch on the front of the chiller.

6. Turn the POWER switch on

Check first: power cable wired, air line connected, chiller hoses and chiller power connected. The POWER switch is on the control panel. The home screen comes up.





7. Tap Homing

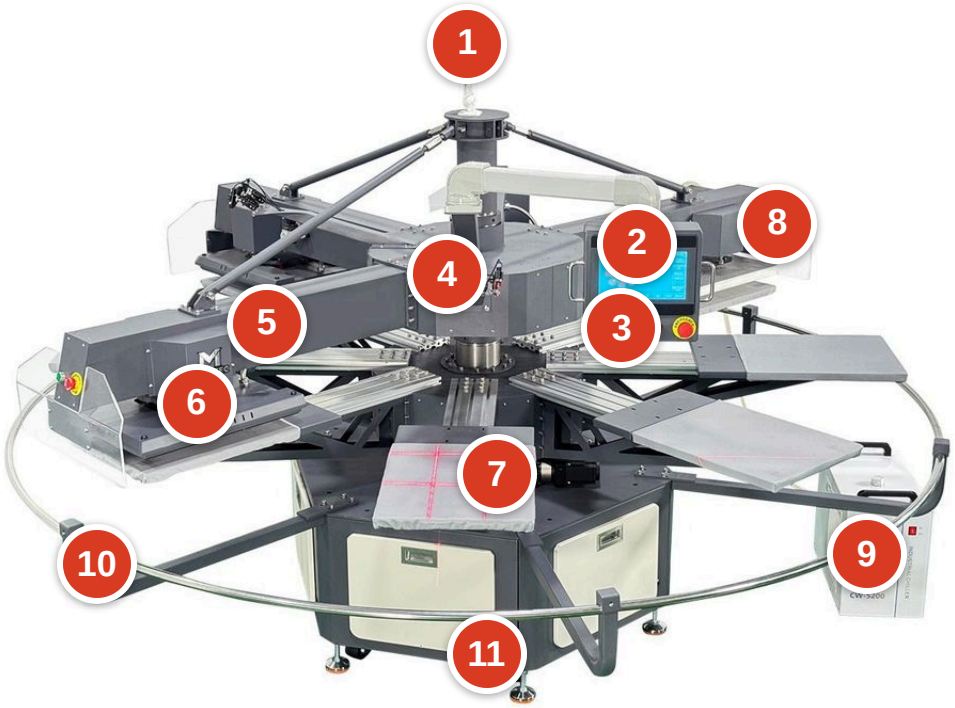
In Manual mode. The table turns back to its home position.

8. Set the pressure for each head

Each head has its own regulator and gauge. 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.

Optional film units: automatic film feeding and peeling / unloading units (sold separately) can be connected. Their labels then show on the screen.

2 Know your machine



1 Status light
Shows green, yellow or red. Red = emergency stop or alarm.

2 10″ touch screen
Set time and temperature, run and test the machine.

3 POWER · START · STOP · EMERGENCY STOP
Under the screen. Another emergency stop is on the press heads.

4 Red laser positioning
Shows lines on the platen so you can place the garment fast.

5 Pressure regulator + gauge
One per head. Sets that head's pressing pressure. Clockwise ↻ = more pressure, counter-clockwise ↺ = less.

6 Heat plate (HOT) — 3 heads
Flatten, Transfer 1 and Transfer 2. Do not touch.

7 Platen (8 stations)
Lay the garment here. The table turns it from head to head.

8 Cooling platen
Presses the print cool after transfer.

9 Water chiller
Keeps the cooling platen cold.

10 Safety guardrail
Stay outside it while the machine runs.

11 **Power cable · air line**
At the base of the machine.

⚠ **Light turns red?** An emergency stop is pressed or there is an alarm. Tap **INFO** on the screen to read it.

3 Touch screen



1. **Station picture with SET keys**
   Tap a head's SET key to set its time and temperature.

2. **Temperature list (top)**
   Actual (PV) and set (SV) temperature of the 3 heads.

3. **Count**
   Hold to reset to 0.

4. **AUTO / Manual**
   Tap to switch modes.

5. **Homing**
   Manual mode: turns the table back to its home position.

6. **°C / °F**
   Switch temperature units.

7. **Reversal off**
   Turns reverse rotation on. Optional film units can't be used then.

8. **M1 – M6 · INFO · Reset**
   Recipes · alarm messages · clear old job data.

Common jobs



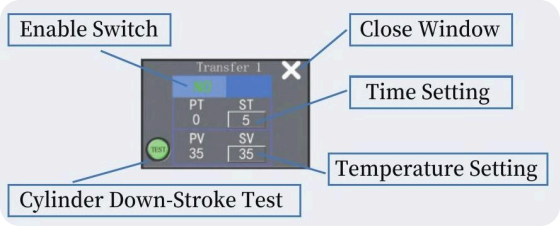
1. Pick a recipe

Tap **M1** – **M6**. Then set Flatten, Transfer 1 and Transfer 2 in order. Settings save by themselves.



2. Open a head's settings

Tap the **SET** key on that head in the picture. A window opens.



3. Set time and temperature

Top bar = heat ON / OFF. **ST** = seconds. **SV** = temperature. **TEST** = press down once. ✕ = close.



4. Manual mode and Homing

Tap **AUTO** so it shows Manual. Tap **Homing**. Hold the center **M** 2 sec to turn one station.



5. Clear old job data

All stations empty? Tap **Reset**, then **YES**.



6. Reset the counter

Hold the **Count** area.

Reverse rotation: in Manual mode tap **Reversal off** to turn it on, then switch to Auto and start. The table now turns the other way.

Quick reference

I WANT TO…	DO THIS
Start automatic running	Screen on **AUTO** → green **START** → **YES**
Stop at the end of work	Press red **STOP**
Change °F / °C	Tap **°C**
Turn the table one station	Manual: hold **M** 2 sec

Ranges: temperature 0–450°F · time 0–999 sec.

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4 Run automatic production



1. Turn on heat, set time and temperature

Use your transfer supplier's settings. Wait until PV (actual) reaches SV (set).



2. Switch the screen to AUTO

The mode key must show AUTO.



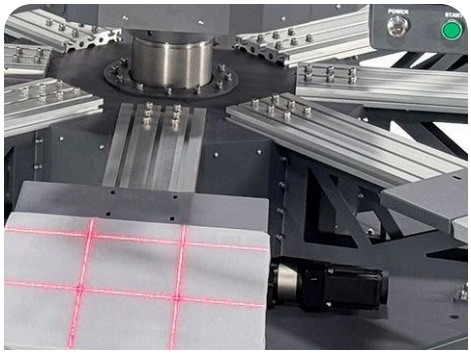
3. All stations empty? Tap Reset → YES

This clears the old job data before a new start.



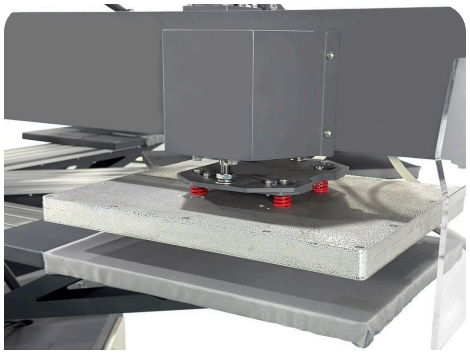
4. Press the green START button

Check that nobody is inside the guardrail. Then tap YES. (NO = cancel.)



5. Load the garment on the platen in front of you

Line it up with the red laser lines. Keep your hands off once the table starts to turn.



6. The machine turns and presses by itself

Flatten → Transfer 1 → Transfer 2 → Cooling platen.



7. To finish: press the red STOP button

The machine finishes the pieces already loaded, then stops step by step.

⚠ STOP is the normal way to finish. EMERGENCY STOP is only for danger.

5 If something is wrong

Light is red / alarm

1. Check that no EMERGENCY STOP button is pressed in.
2. Tap INFO and read the message.
3. Fix what it says.

Won't start in Auto

1. Release any EMERGENCY STOP button.
2. Manual mode → Homing.
3. Switch to AUTO. Stations empty? Reset → YES.
4. Press START, then YES.

A head doesn't heat

1. Tap its SET key.
2. Top bar OFF? Tap it to turn heat ON.
3. Check SV (set temperature).

Heads don't line up with platens

1. Switch to Manual.
2. Tap Homing.

Won't turn on

1. Check the 3-phase supply and the breaker.
2. Turn the POWER switch on.
3. Still nothing? Call us.

Specifications

	X8
Stations	8 (3 heat heads + 1 cooling)
Platen size	15.7″ × 19.7″
Power	220V 3-phase · 8500 W · 23 A
Air	40 CFM
Temperature	0–450°F
Timer	0–999 s
Machine size	120″ × 120″ × 75″
Net / shipping weight	2409 lb / 3334 lb
Shipping size	122.5″ × 84.6″ × 88.6″
Working room	32–104°F · ≤80% RH

Still stuck? Call us.

Phone

(714) 261-9498

Mon–Fri · 7:30 am – 5:00 pm Pacific

Email

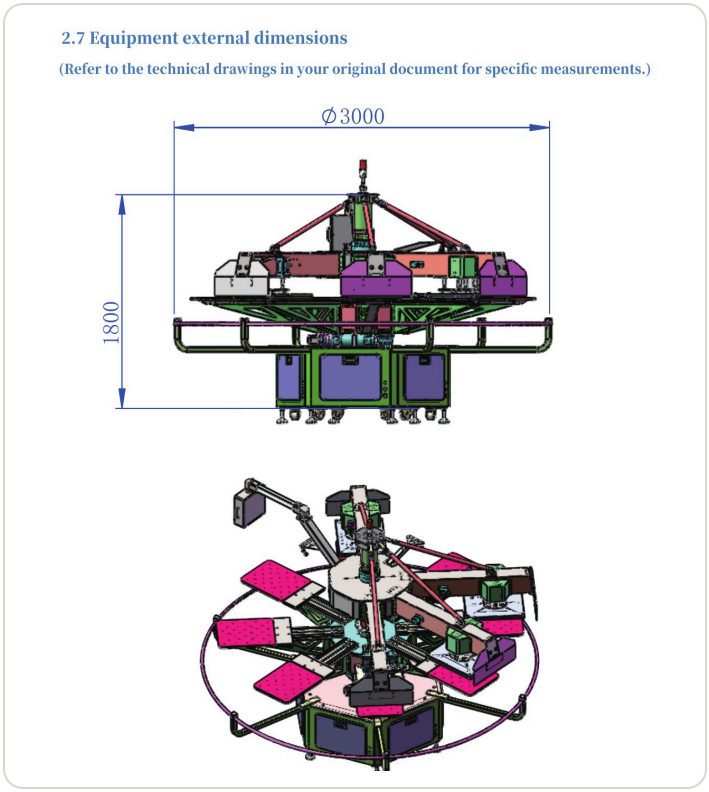
sales@microtecusa.com

Free lifetime tech support

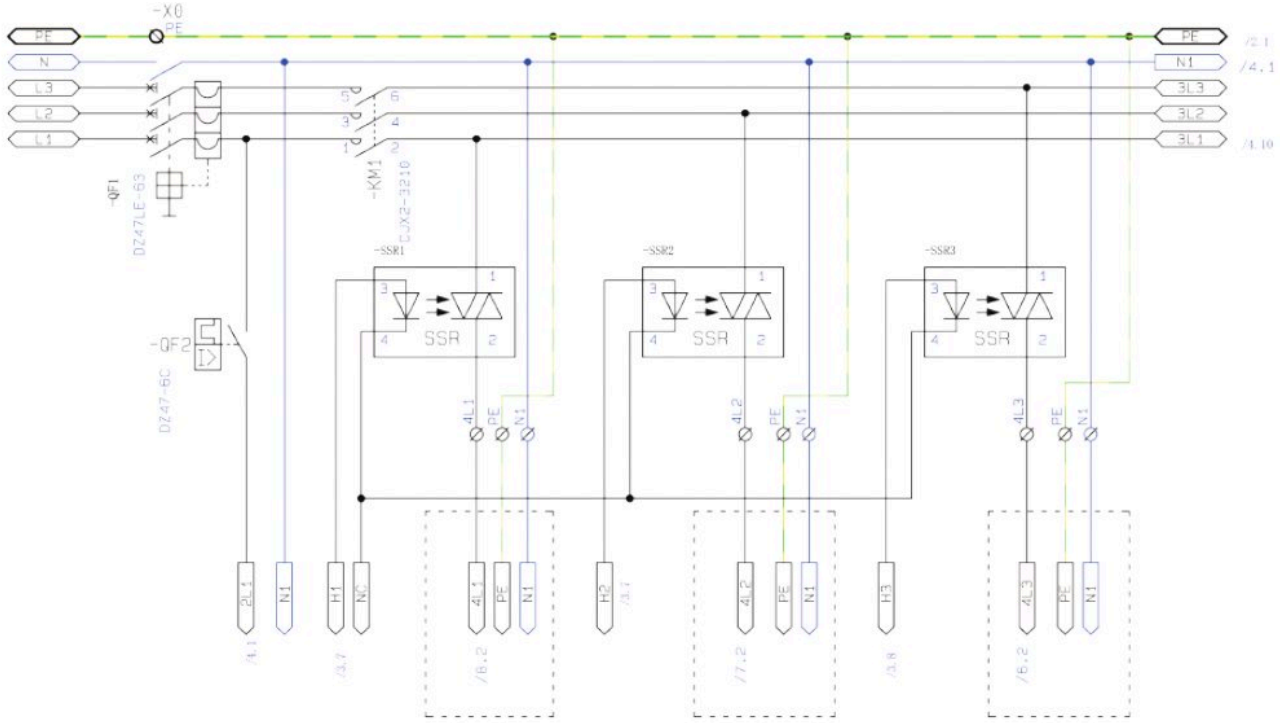
Dimensions & diagrams

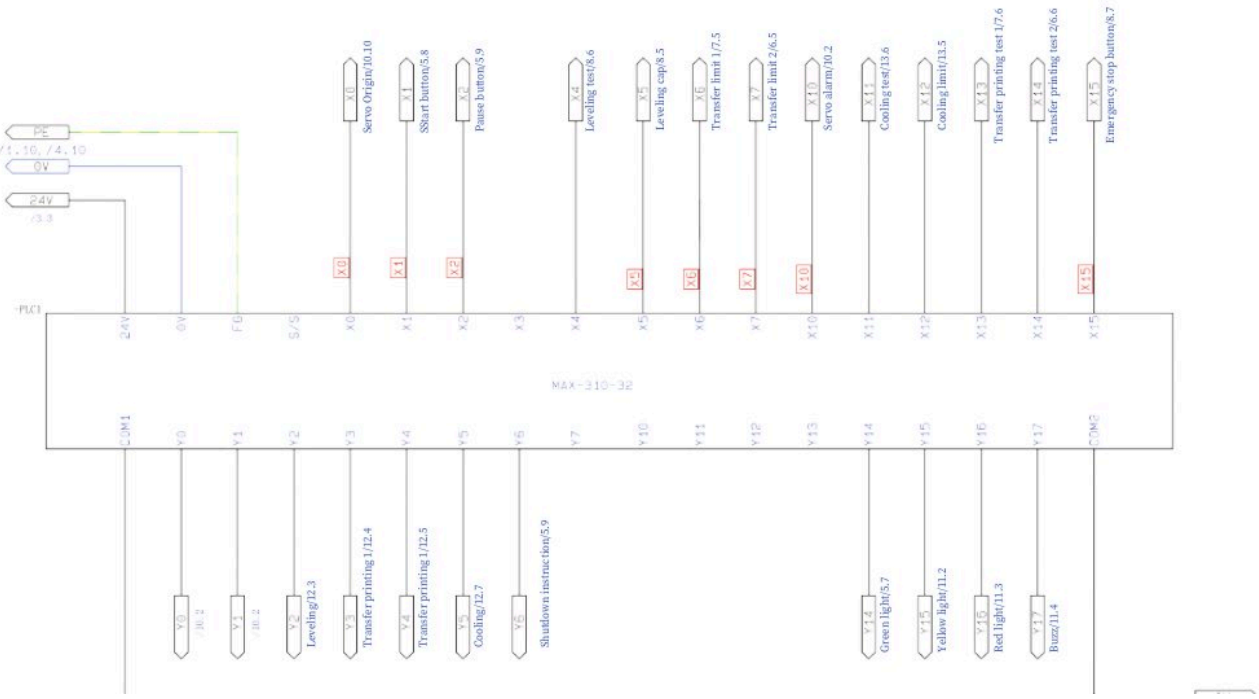
For service technicians. **Unplug the machine** before opening any cover.

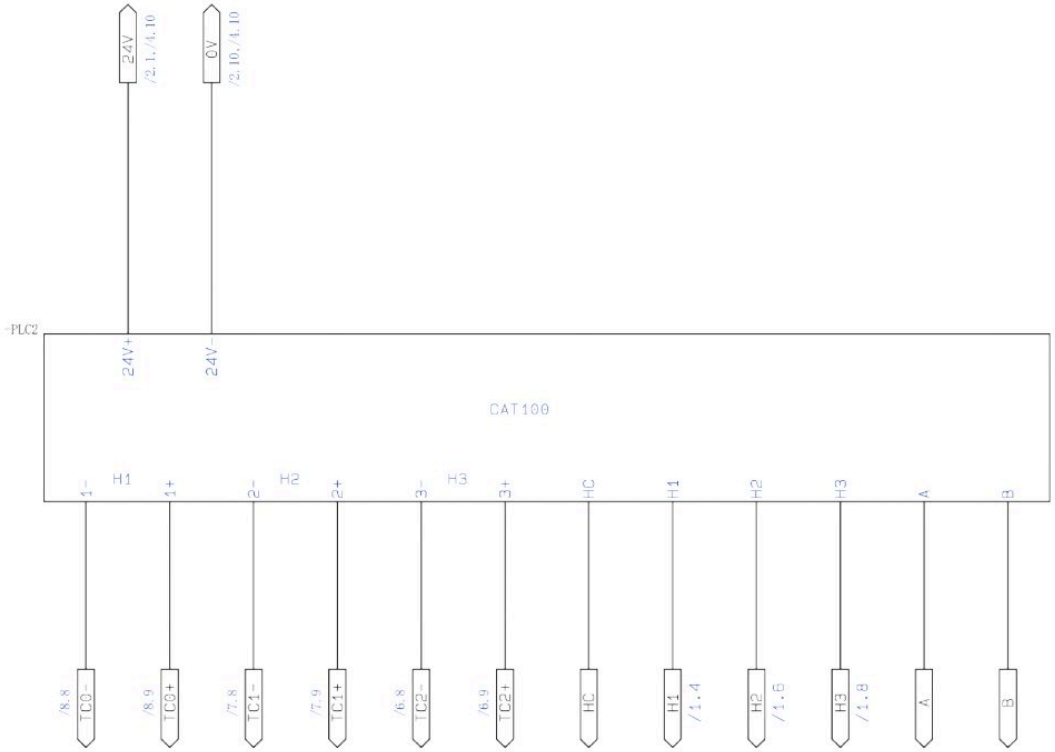
Dimensions (mm)

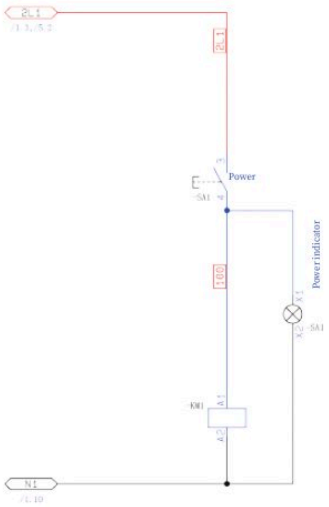


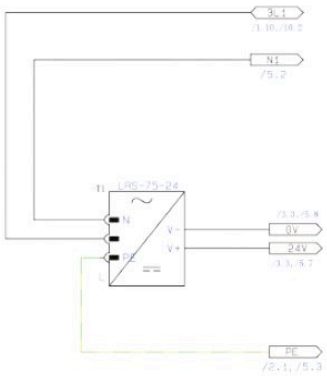
Wiring diagram

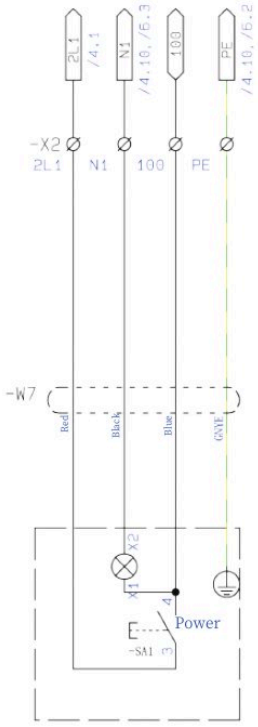


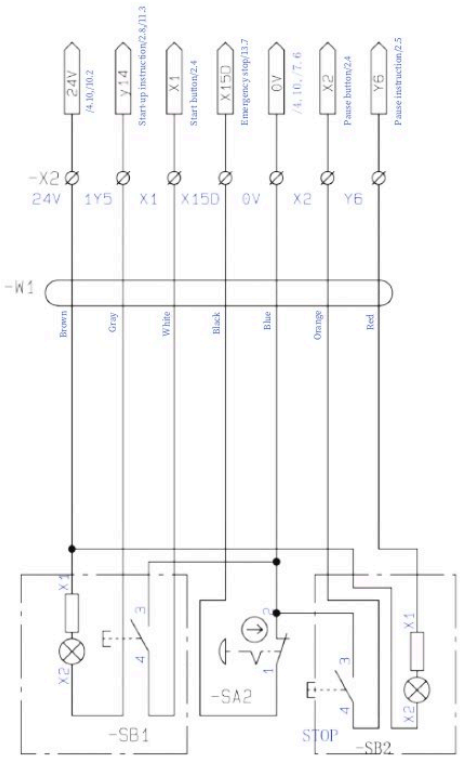


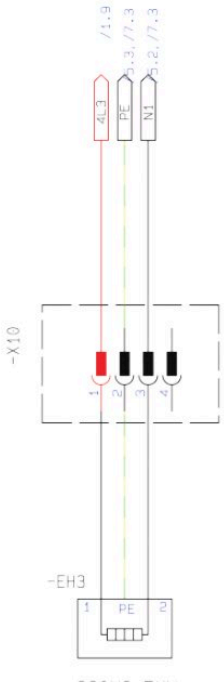

24V
/2.1./4.10
0V
/2.10./4.10
-PLC2
24V+
24V-
CAT100
1-
H1
1+
2-
H2
2+
3-
H3
3+
HC
H1
H2
H3
A
B
/8.8
TC0-
/8.9
TC0+
/7.8
TC1-
/7.9
TC1+
/6.8
TC2-
/6.9
TC2+
HC
H1
/1.4
H2
/1.6
H3
/1.8
A
B
Leveling position thermocouple
Transfer printing thermocouple 1
Transfer printing thermocouple 2

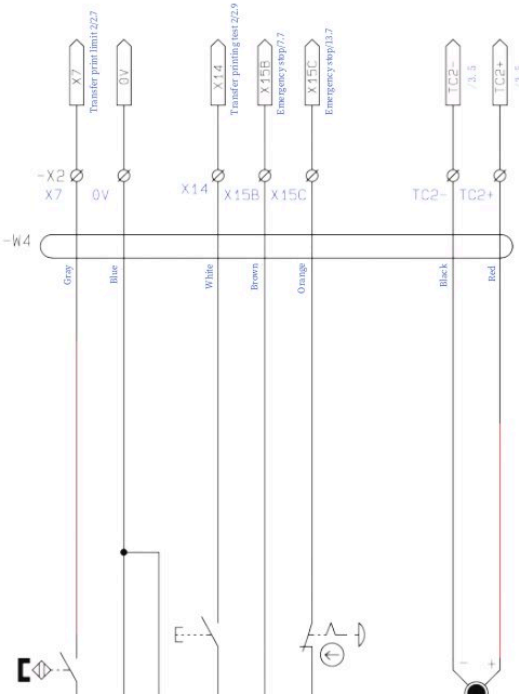

2L1
/1.3./5.2
2L1
Power
-SA1
100
Power indicator
-X1
-X2
-SA1
-KM1
A1
A2
N1
/1.10

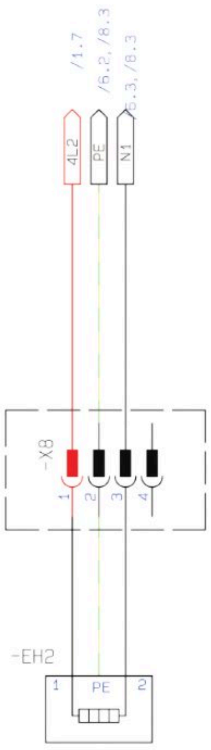

3L1
/1.10./10.2
N1
/5.2
-T1
LRS-75-24
N
V-
V+
0V
24V
/3.3./5.8
/3.3./5.7
PE
/2.1./5.3


2L1
/4.1
N1
/4.10, /6.3
100
PE
/4.10, /6.2
-X2
2L1
N1
100
PE
-W7
Red
Black
Blue
GNYE
X2
X1
4
Power
-SA1
3

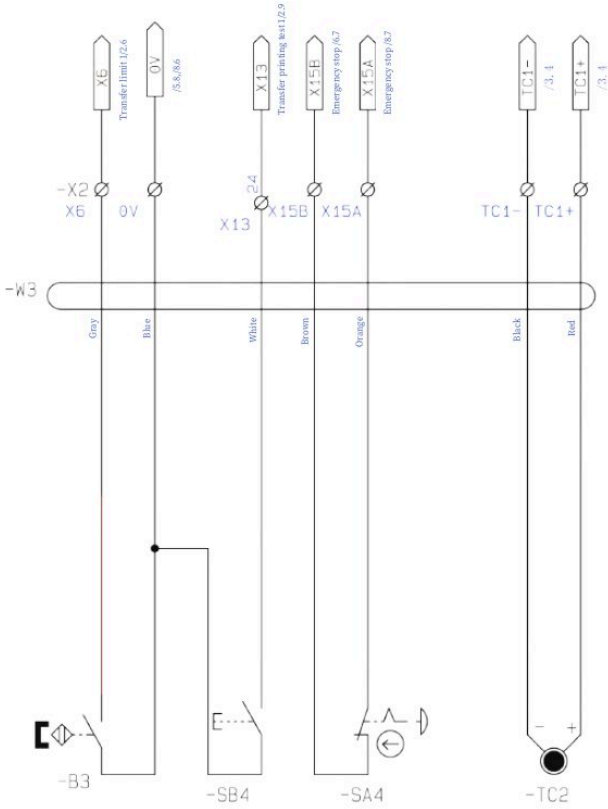

24V
/4.10, /10.2
y14
Start up instruction/2.8, /11.3
X1
Start button/2.4
X15D
Emergency stop/13.7
0V
/4.10, 7.6
X2
Pause button/2.4
Y6
Pause instruction/2.5
-X2
24V
1Y5
X1
X15D
0V
X2
Y6
-W1
Brown
Gray
White
Black
Blue
Orange
Red
X1
X2
3
4
-SB1
-SA2
1
2
STOP
-SB2

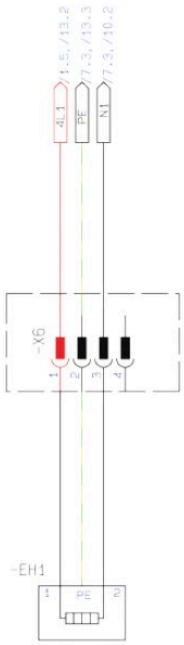

/1.9
5.3, /7.3
5.2, /7.3
4L3
PE
N1
-X10
1
2
3
4
-EH3
1
PE
2

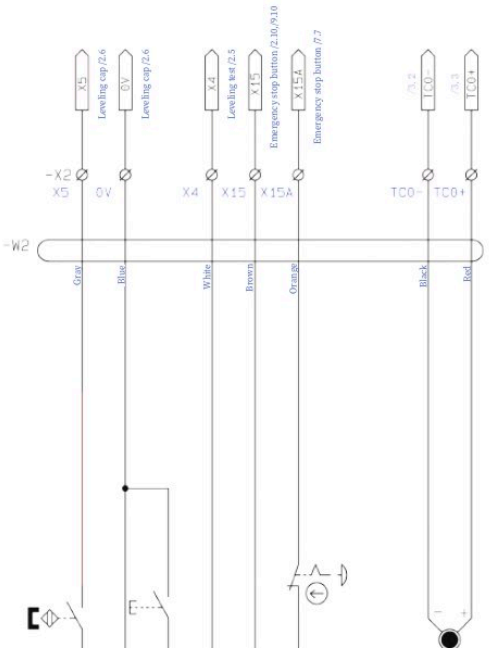

X7
Transfer print limit 2/2.7
0V
X14
Transfer printing test 2/2.9
X15B
Emergency stop/7.7
X15C
Emergency stop/13.7
TC2-
/3.5
TC2+
/3.5
-X2
X7
0V
X14
X15B
X15C
TC2-
TC2+
-W4
Gray
Blue
White
Brown
Orange
Black
Red

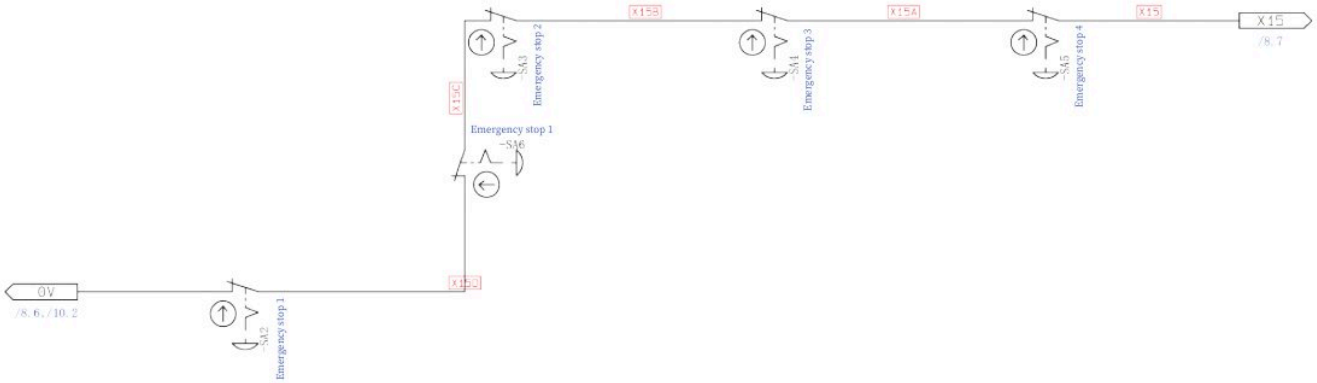

/1.7
/6.2,/8.3
/6.3,/8.3
4L2
PE
N1
-X8
1
2
3
4
-EH2
1
PE
2

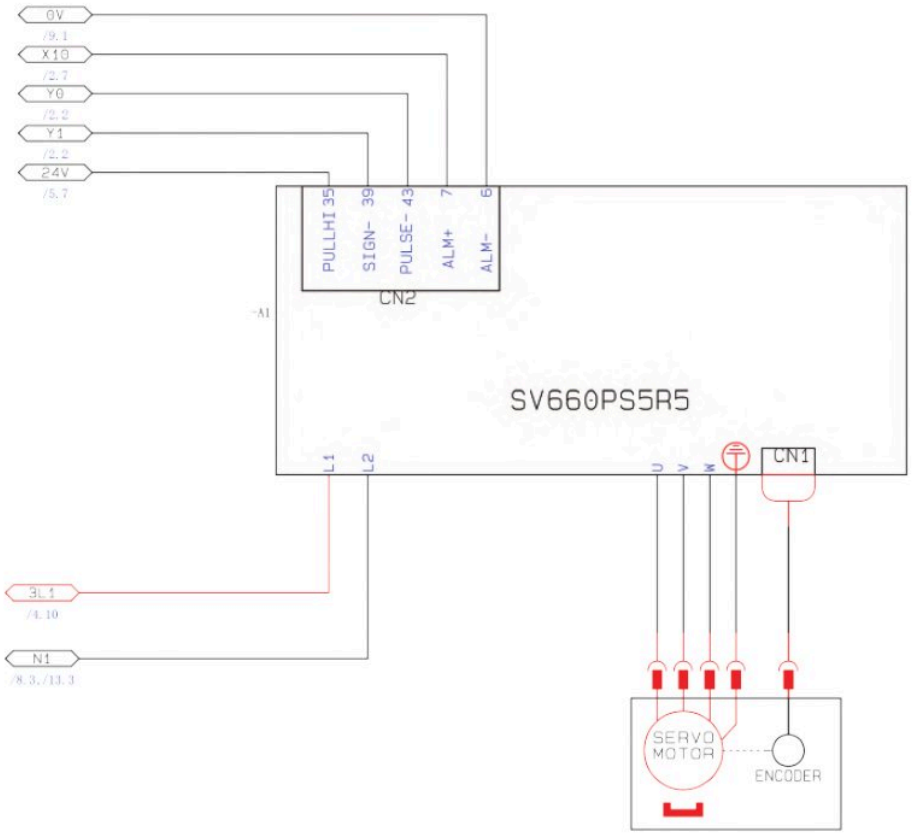
220V2.5KW

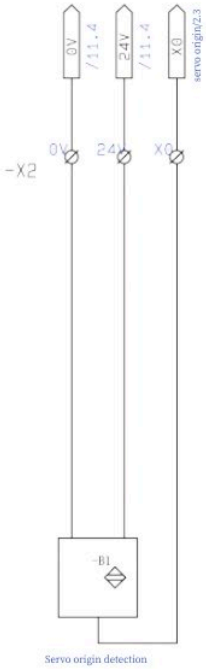

X6
Transfer limit 1/2.6
0V
/5.8,/8.6
X13
Transfer printing test1/2.9
X15-B
Emergency stop /6.7
X15-A
Emergency stop /8.7
TC1-
/3.4
TC1+
/3.4
-X2
X6
0V
2.4
X13
X15B
X15A
TC1-
TC1+
-W3
Gray
Blue
White
Brown
Orange
Black
Red
-B3
-SB4
-SA4
-TC2

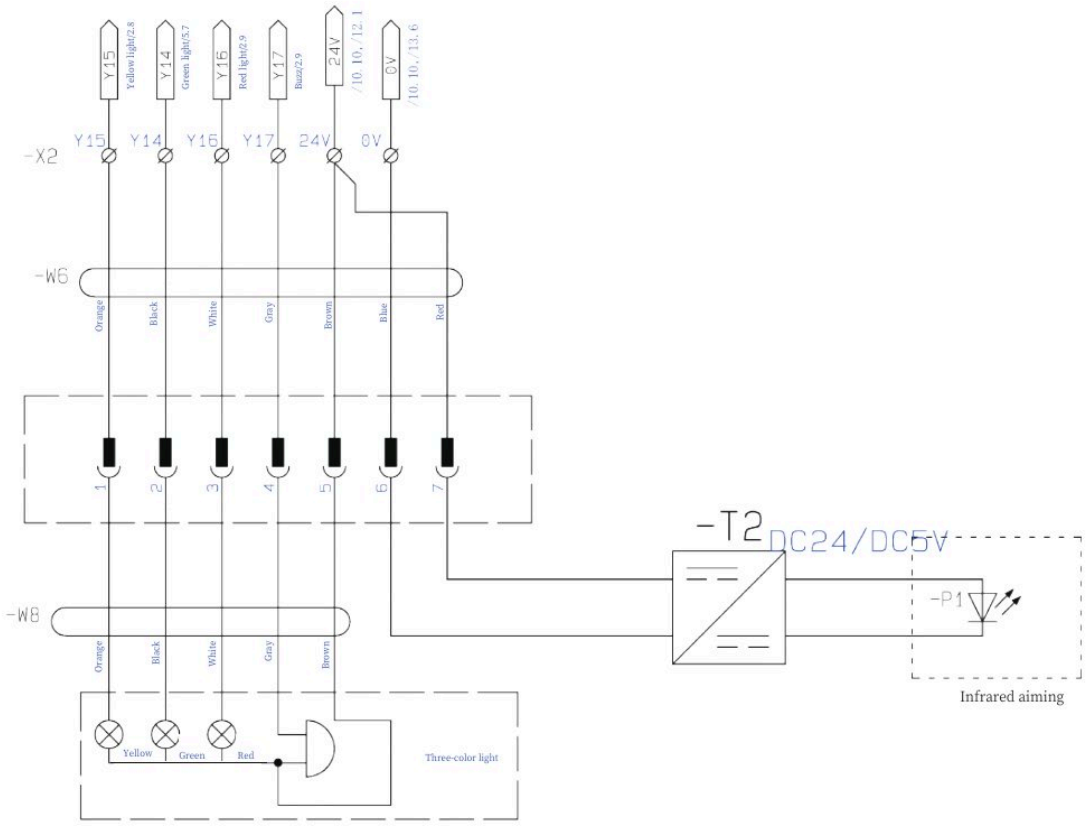

/1.5,/13.2
/7.3,/13.3
/7.3,/10.2
4L1
PE
N1
-X6
1
2
3
4
-EH1
1
PE
N

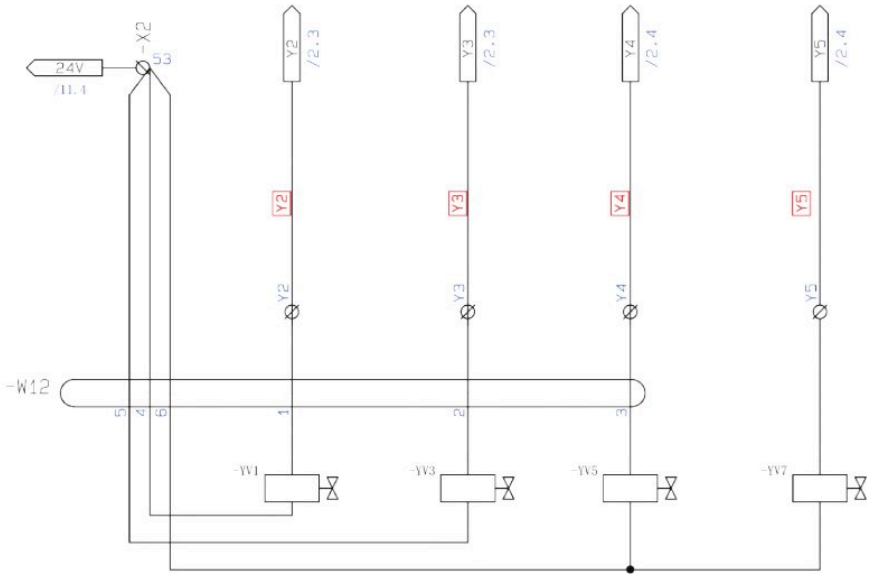

X5
Leveling cap /2.6
0V
Leveling cap /2.6
X4
Leveling seat /2.5
X15
Emergency stop button /2.10,/9.10
X15-A
Emergency stop button /7.7
/3.2
TC0-
/3.3
TC0+
-X2
X5
0V
X4
X15
X15A
TC0-
TC0+
-W2
Gray
Blue
White
Brown
Orange
Black
Red

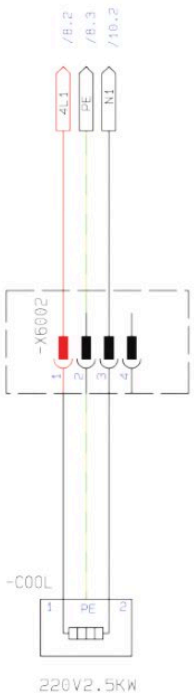

X15B
X15A
X15
X15
/8.7
Emergency stop 2
-SA3
Emergency stop 3
-SA4
Emergency stop 4
-SA5
X15C
Emergency stop 1
-SA6
0V
/8.6./10.2
X15D
-SA2
Emergency stop 1

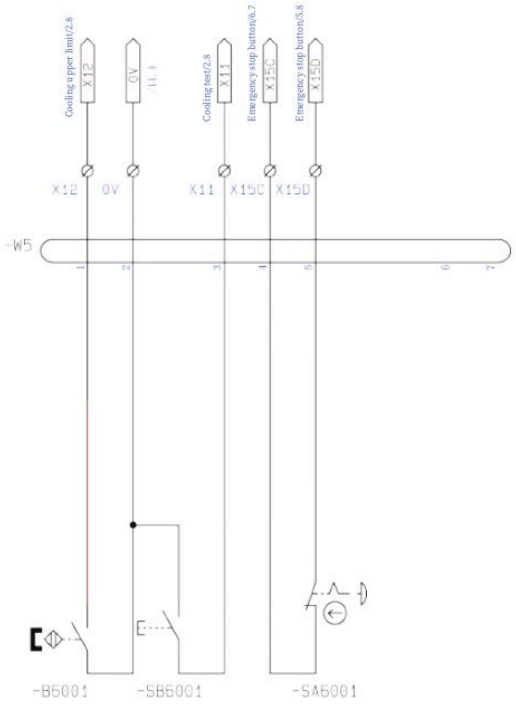

0V
/9.1
X10
/2.7
Y0
/2.2
Y1
/2.2
24V
/5.7
PULLHI 35
SIGN- 39
PULSE- 43
7
ALM+
6
ALM-
CN2
-A1
SV660PS5R5
L1
L2
U
V
W
CN1
3L1
/4.10
N1
/8.3./13.3
SERVO MOTOR
ENCODER

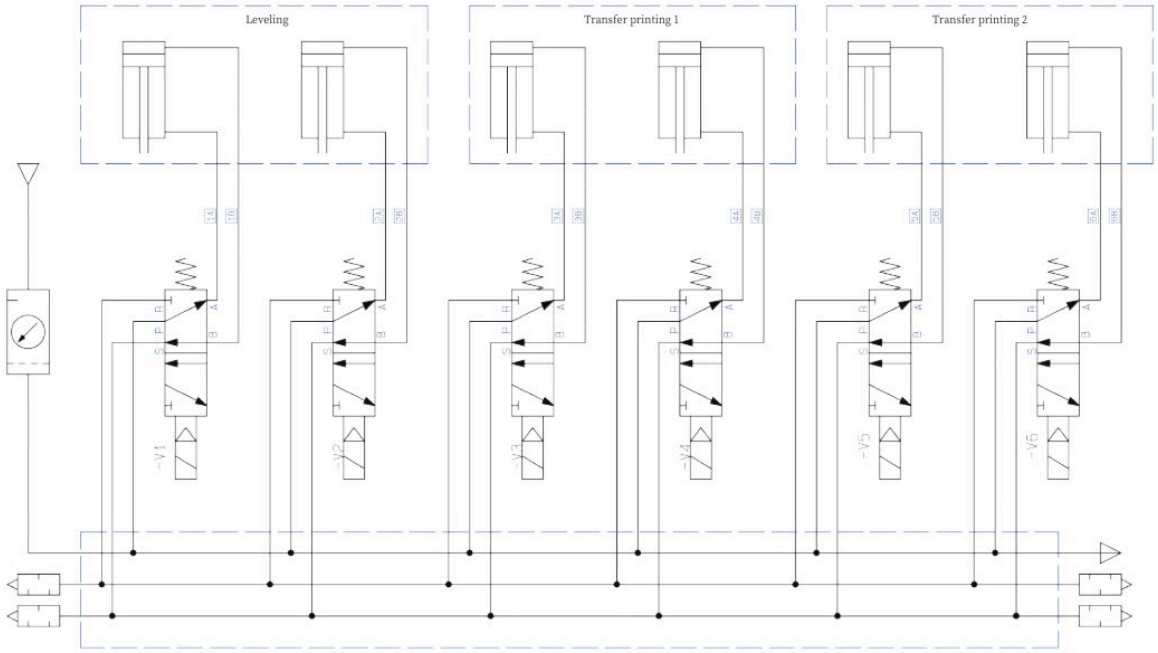

0V
/11.4
24V
/11.4
X0
servo origin/2.3
-X2
0V
24V
X0
-B1
Servo origin detection

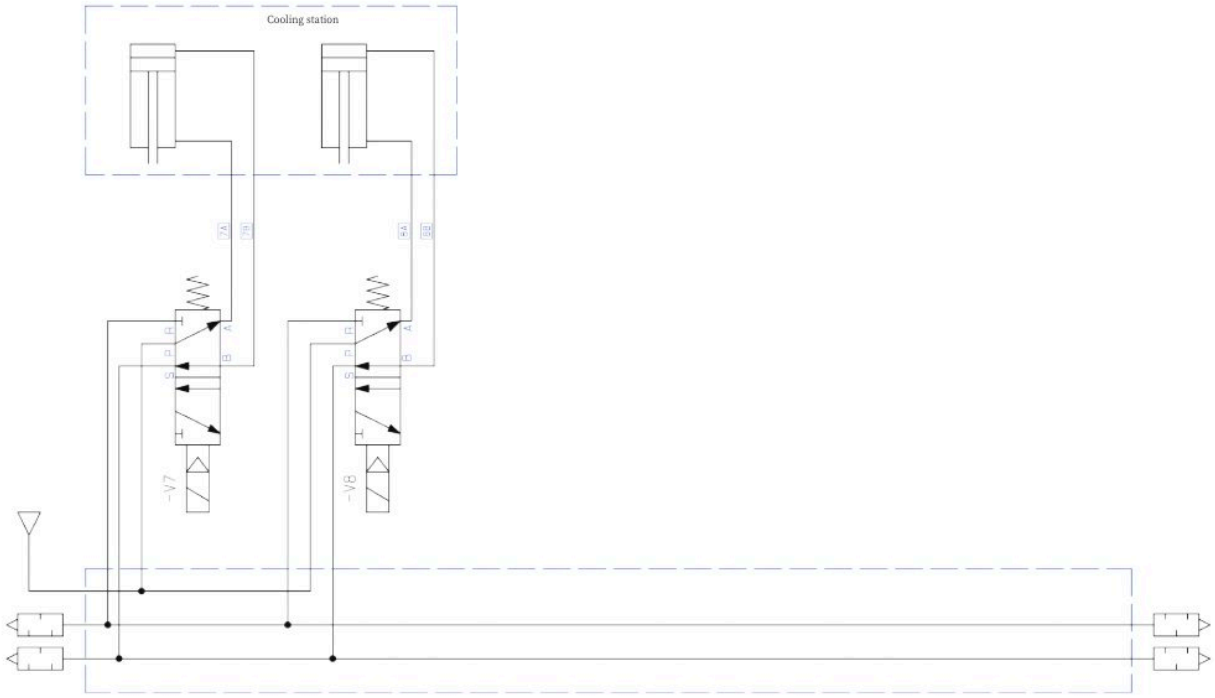

Y15
Yellow light/2.8
Y14
Green light/5.7
Y16
Red light/2.9
Y17
Buzz/2.9
24V
/10.10./12.1
0V
/10.10./13.6
-X2
-W6
Orange
Black
White
Gray
Brown
Blue
Red
-T2
DC24/DC5V
-P1
Infrared aiming
-W8
Yellow
Green
Red
Three-color light

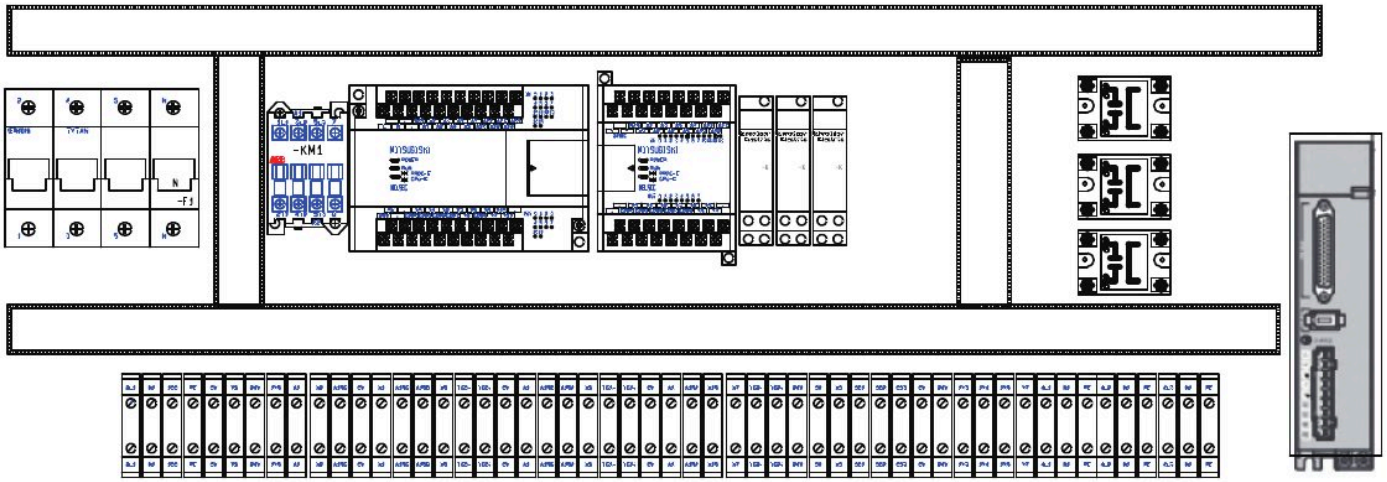

24V
/11.4
-X2
Y2
/2.3
Y3
/2.3
Y4
/2.4
Y5
/2.4
-W12
-YV1
-YV3
-YV5
-YV7


/8.2
/8.3
/10.2
4L1
PE
N1
-X6002
1
2
3
4
-COOL
1
PE
2
220V2.5KW


Cooling upper limit/2.8
X12
0V
11.4
Cooling test/2.8
X11
Emergency stop button/6.7
X15C
Emergency stop button/5.8
X15D
X12
0V
X11
X15C
X15D
-W5
1
2
3
4
5
6
7
-B6001
-SB6001
-SA6001


Leveling
Transfer printing 1
Transfer printing 2
-V1
-V2
-V3
-V4
-V5
-V6


Cooling station
-V7
-V8


-KM1
-F1