(Original) Use and maintenance manual

Type: Longitudinal press
Model: EPL-200

IMPORTANT:

Read this user manual and follow the instructions and warnings before operating this device.

Any modification or transformation performed on this machine may cause loss of the manufacturer's guarantee and liability.

This manual must always remain near to the machine and visible to all the operating and maintenance staff, for any future consultation, forming part of the equipment.

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- CE Declaration of conformity:

WE DECLARE, under our responsibility, that the machine:
- Type: Longitudinal press
- Brand: ERM Engineering
- Model: EPL-200
- Serial No.: xxxxxx
- Manufacturer date: 2021

Inspired by the directives of the Official Journal of the European Communities:

2006/42/CE Machinery Directive
2014/35/UE Low Voltage Directive
2014/30/UE Electromagnetic Compatibility Directive

Complies with the design and construction specifications of the European Standards on General Machine Safety:

EN 349 – EN 614-1 – EN 614-2 – EN 12100 – EN 11161-1 - EN 1005-1 – EN 1005-2 – EN 1005-3 - EN 1005-4 – EN 13849-1 – EN 13849-2 – EN 894-3 - EN 61310-1 - EN 13732-1 – EN 13850 - EN 13857 – EN 14120 – EN 60204-1

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Date: 2021/08

- Description of the equipment:

- Machine for heating through cartridge resistors especially designed for joining thermo-weldable belts.
- Closed cooling water circuit.
- Pressure with pneumatic cushion.
- Temperature control by PID for a fast and precise approach.
- Automatic system of activation of the joining time and beginning of cooling.

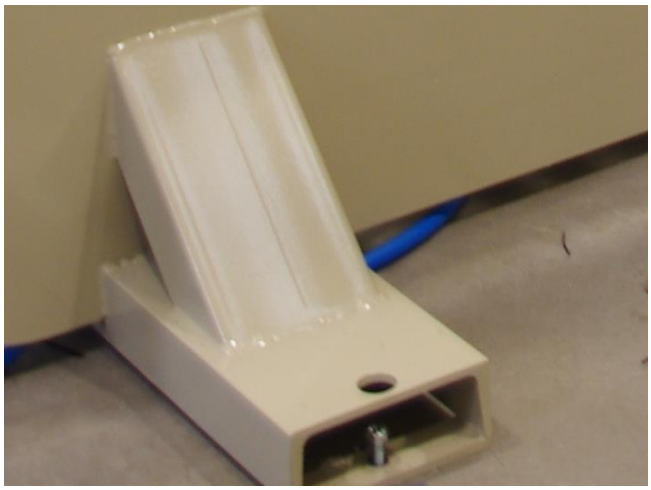
- Technical characteristics:

Data press	**EPL-200**
- Heating area	160x3500mm
- Dimensions (LxWxH)	3400x1820x1000mm
- Total weight	1240kg
- Power consumption	8800W
- Electric power supply	3x230 // 3x400V
- Frequency	50-60Hz
- Compressed air supply	2.5 bar
- Belt thickness max.	12mm
- Max. temperature	200ºC
- Cooling media	Water
- Mean heating time at 175º	7 min
- Water cooling time from 175º to 60º	1.5 min

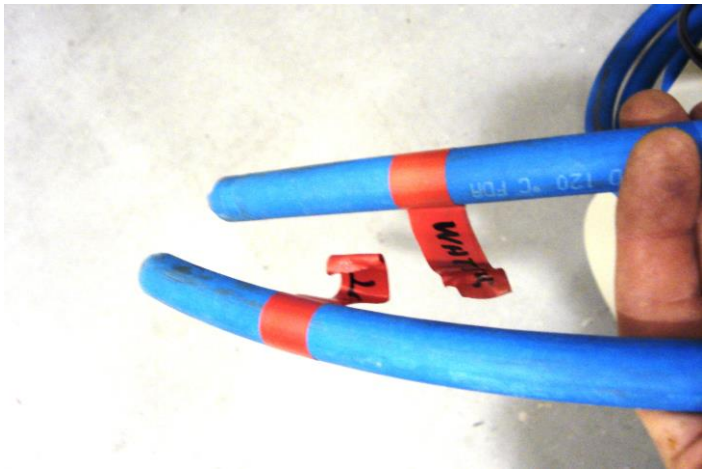
- Workshop installation:

Lift the press with a forklift truck inserting the blades into the top holes:

Place the press in the working area and level the support with the regulation screws located inside the four legs.



Connect the air black air tube in the air line.
Two blue hoses for input and output water.



Power supply 3x220 v
Connect control board CB-01
(For further information, consult the User Manual for CB-01)

Remove the two steel plates transport reinforcement.

NOTE:
In the case of several presses being connected to the same drainage lines, installation of a one-way valve at each press is recommended, thus avoiding water entering the other presses during the purge process.

- ## Instructions for use:

Open the press by pneumatic handle UP with the anchorage unlocking.

CAUTION: First to up the top plate, verify that black button is pulled (UNLOCK)

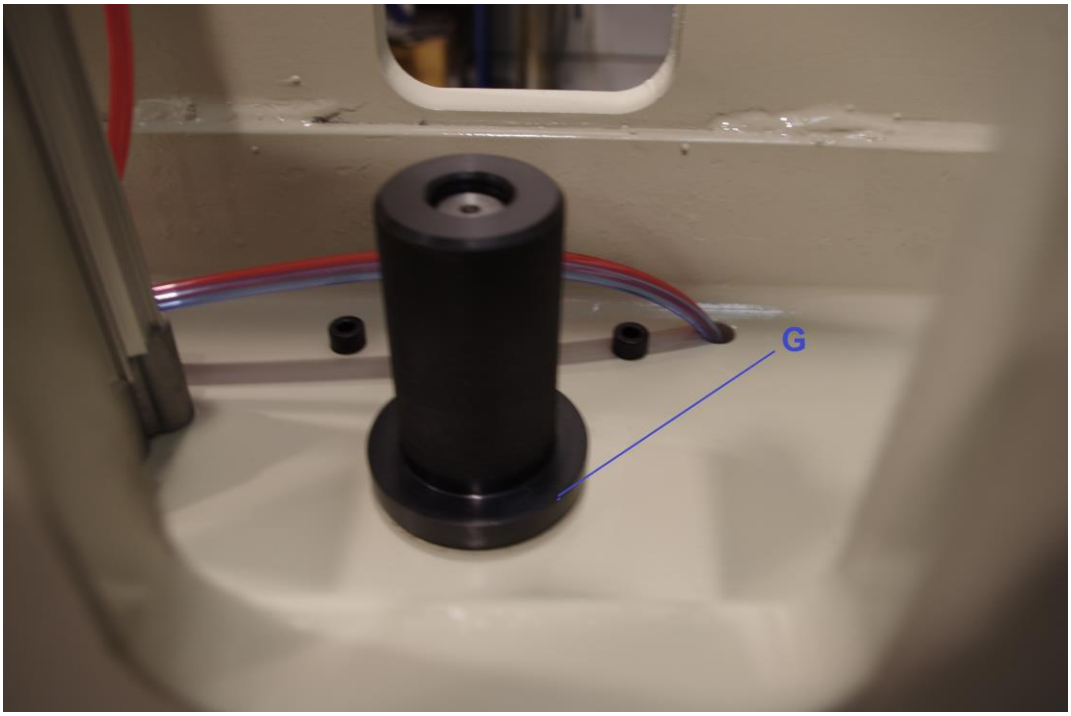
- ## Preparing the joint

Place the first end of the belt on the lower silicone, well centred on the support tray and making sure the joint is within the welding zone of the hotplate.

NOTE:
It is always recommendable to fill out the material, at least to 70% of the pressing surface, to avoid deformation in the plates or thickness differences in the welding.

Once the splice is inside the press, down the top plate with pneumatic handle DOWN.

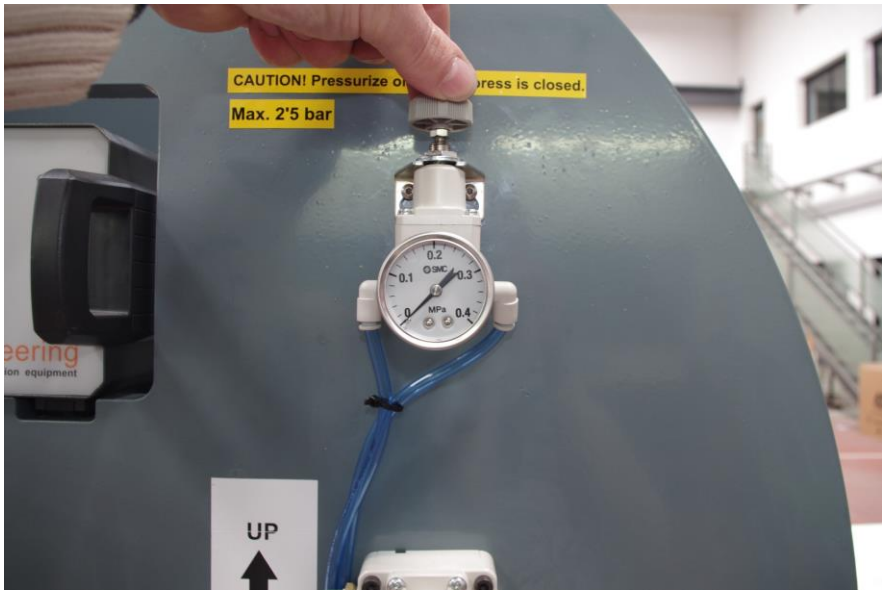
Adjust both (G) controls by screwing them clockwise till they reach the frame of the press.



NOTE:
If (G) Controls are blocked and you cannot screw them, lift the top plate a bit and try and free the G Controls by screwing them the other way, so that you can adjust them to the right height again.
Such adjustment of the G Controls should be made every time we try and splice a belt with a different thickness.

After adjusting the thickness, block the anchorage pushing black button.

After blocking the top plate, adjust the welding pressure with the regulator.



NOTE:
If there are any pressure in the dial of regulator is because one of the two anchorages are in wrong position. For security, the system will only allow to inflate the cushion when the press is complete blocked.

To open the press once the vulcanizing process has finalized, you need to release until 0 bar the air pressure firstly and secondly you need to unblock the anchorage pulling black button.

⚠ **WARNING: Be sure that the hooks are firmly press, before and after the blowing process. If not checked there is danger of explosion in the superior plate.**

Programming:

At the moment of starting up the board, the actual temperatures of both plates are displayed, and the welding time of the last programming.

To see the temperatures assigned, it shall suffice to press the relevant button for each plate.

To change these values, we must hold down the button for 3 seconds and change the value using the central keys.

The board shall memorise these values, showing the present ones again.

NOTE:
The minimum and maximum temperatures that may be programmed are 30 to 200 ºC.

We shall perform the same operation to program the welding time, ALWAYS IN MINUTES. The values shown are complete minutes without decimals.

That welding time shall always show the programmed value, except for starting the count, that shall show the count-down until ending.

Once the temperatures and time values are programmed, we press START.

NOTE:
To halt the process or to make any change after beginning with START, we must press STOP and the cycle will stop.

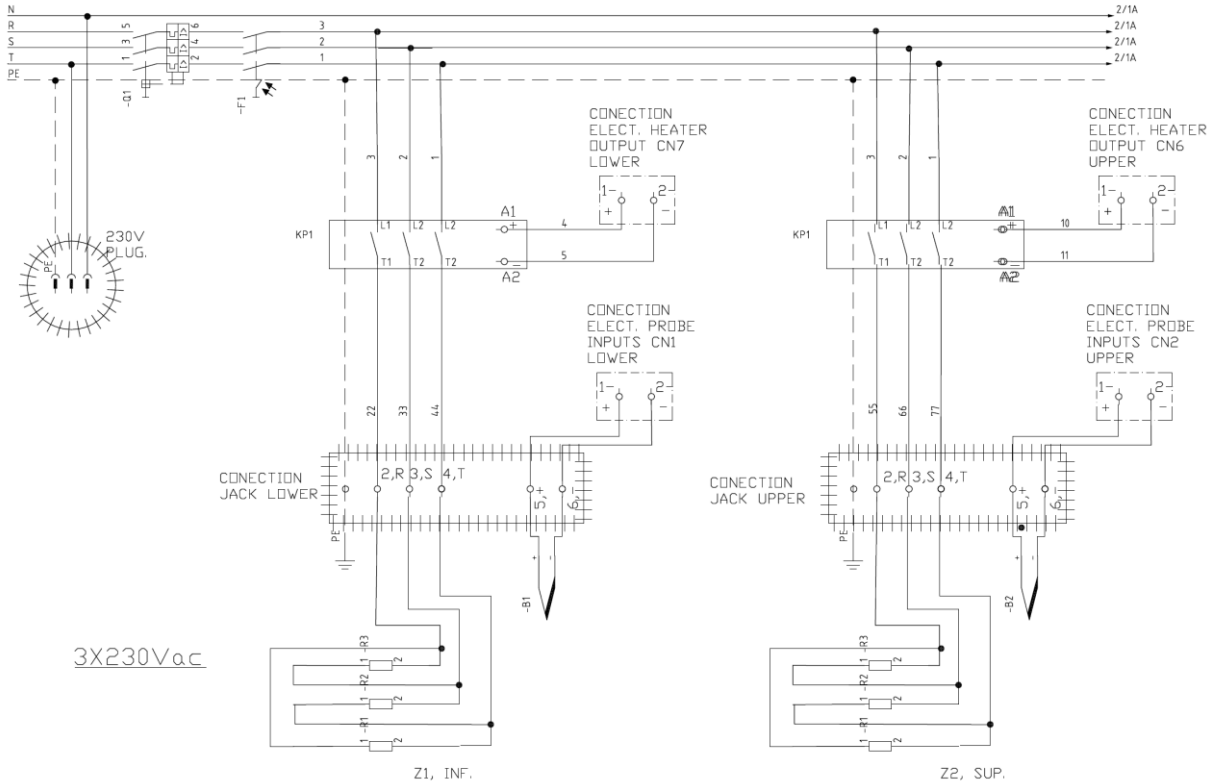
When the welding time ends, the relevant orange LED to start that operation shall turn on.

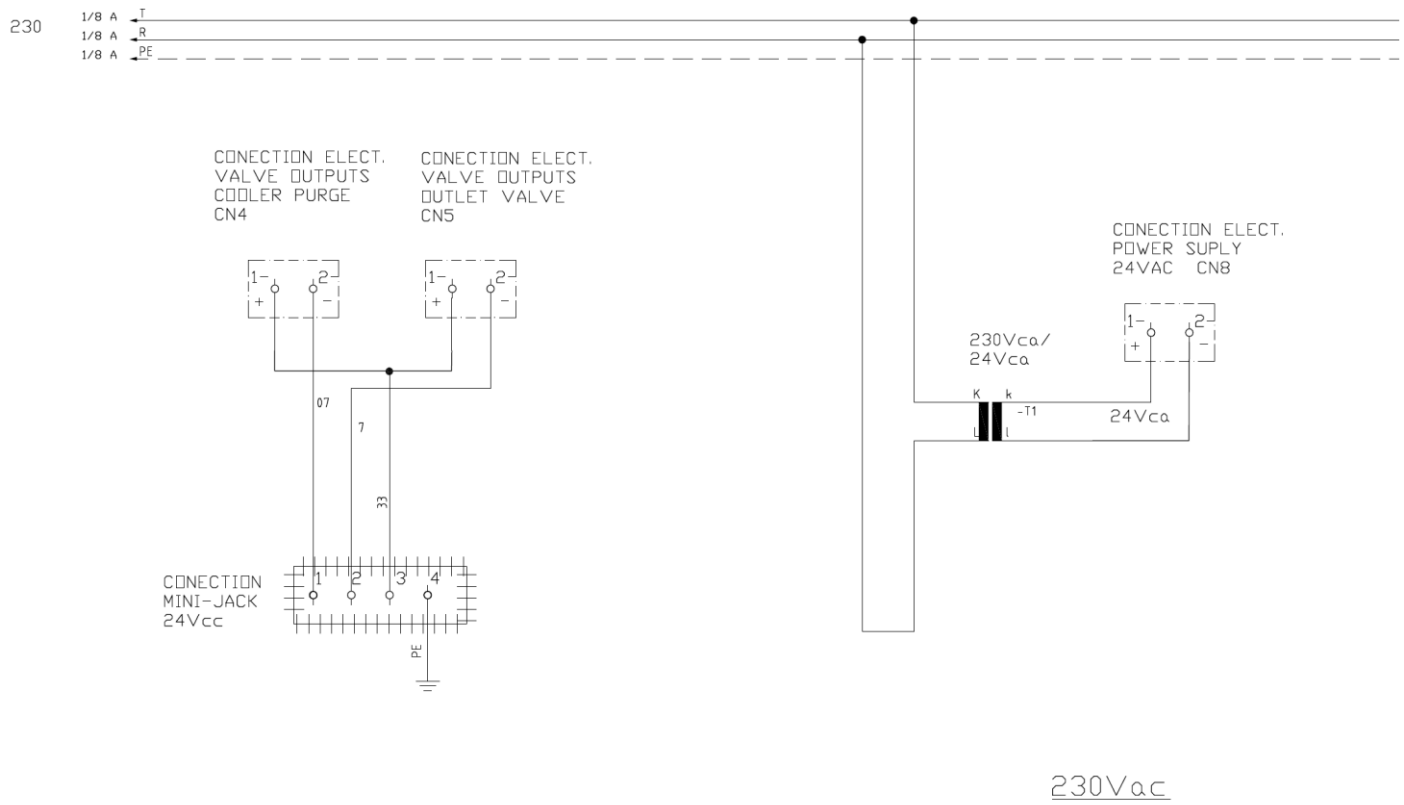
When the STOP led shows on the board, it means the operation has ended.

NOTE:
It is recommended to empty the water from the circuit inside the press after each welding, otherwise we may weld wrongly.

- **Electrical drawings:**

3 Ph x 230 V.

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PE
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VALVE OUTPUTS
COOLER PURGE
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VALVE OUTPUTS
OUTLET VALVE
CN5
CONECTION ELECT.
POWER SUPLY
24VAC CN8
230Vca/
24Vca
24Vca
-T1
07
7
33
CONECTION
MINI-JACK
24Vcc
PE
230Vac