

(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.

Index:

	Page
- CE Declaration of conformity:	3
- Description of the equipment:	4
- Technical characteristics:	4
- Workshop installation:	4
- Instructions for use:	9
- Preparing the joint	9
<i>Programming:</i>	<i>11</i>
- Electrical drawings:	15
<i>3x400V</i>	<i>16</i>
- Spare parts:	17

- CE Declaration of conformity:

WE DECLARE, under our responsibility, that the machine:

- Type: Longitudinal press
- Brand: ERM Engineering
- Model: EPL-200
- Serial No.: 20592
- Manufacturer date: 2026

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

General Manager: Eduardo Ramos Martínez



ermengineering
belting fabrication equipment

Arenys de Munt (Barcelona)-SPAIN

Date: 2026/02

- 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	160x2100mm
- 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	200°C
- Cooling media	Water
- Mean heating time at 175°	7 min
- Water cooling time from 175° to 60°	1.5 min

- Workshop installation:

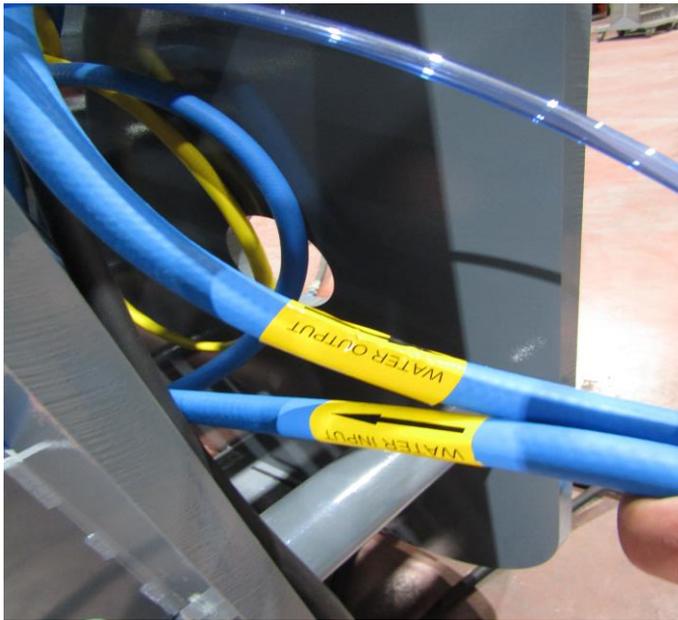
Lift the press with a forklift truck inserting the blades into the top holes:



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



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



Power supply 3x400 v

Connect control board 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.

- **Connection of the Control Box:**

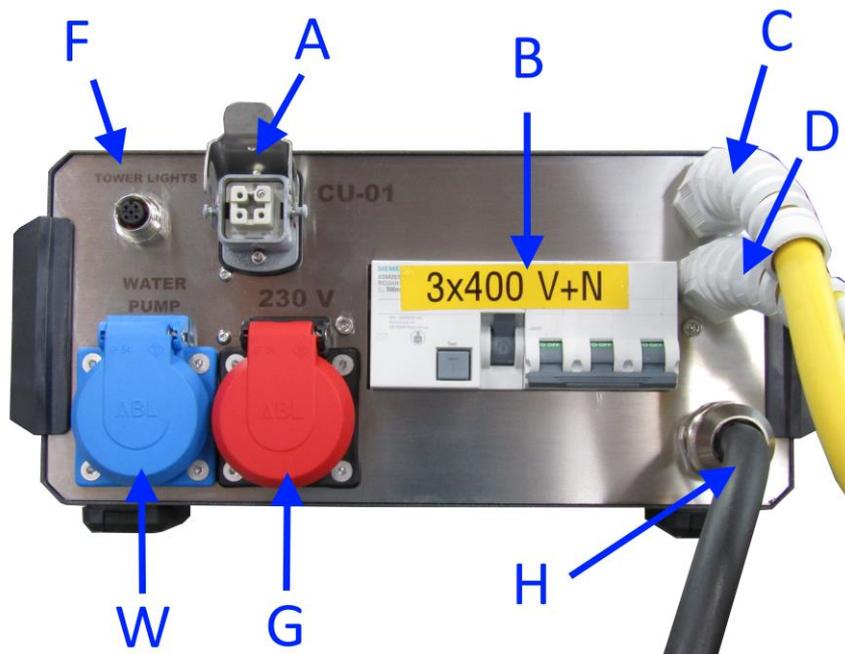
Before connection to the mains, make sure the rear magneto-thermal lever is down.

- Before connecting the power cable of equipment **H** to the mains, check the voltage recorded on the characteristics plate of the unit, located on the rear label of the board.
- Connect the power cables of press **C** and **D** to the respective top and bottom plates.

NOTE: If we turn on the equipment without the power cables connected to the press, the temperature controls will show a reading error.

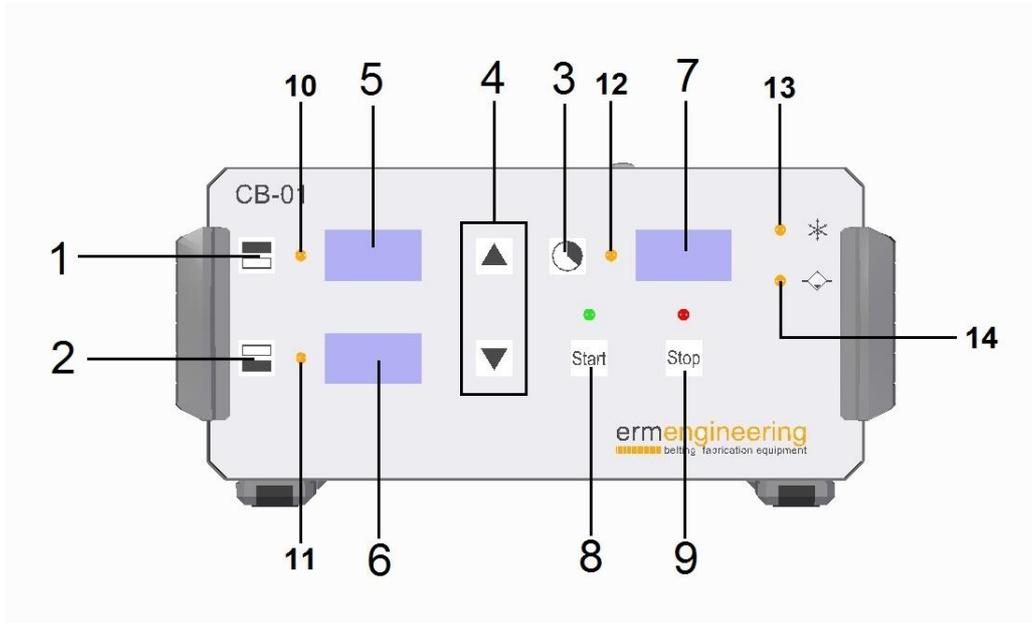
Activate the rear lever of the safety magneto-thermal device and its differential switch **B**.

When the equipment is switched on, it will show the values programmed when last used, by default.



- A- Connector of control unit CU-01 Cooling and purge
- B- Protection thermal differential
- C- Top element connection cable
- D- Bottom element connection cable
- F- Auxiliary connector for light in frames
- G- Socket with permanent voltage 230v
- H- Power cable
- W- Socket for water pump (automated function)

- **Equipment identification:**



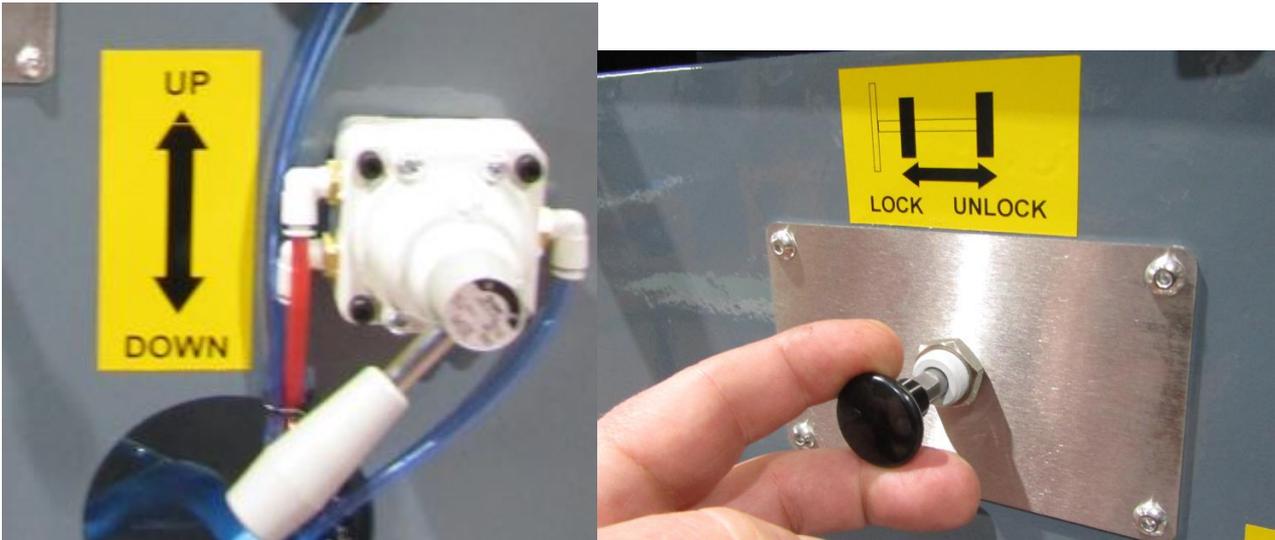
- A- Temperature selection button, top element C°
- B- Temperature selection button, bottom element C°
- C- Welding time selection button
- D- Modify value buttons (increase or decrease)
- E- Top element temperature
- F- Bottom element temperature
- G- Welding time in minutes
- H- Start welding cycle button
- I- Button to halt or stop the process
- J- Power induction marker of the top element
- K- Power induction marker of the top element
- L- Timer start marker
- M- Element cooling process marker
- N- Water circuit purge process marker

NOTE: The 5 and 6 temperature display always show the present temperature of the heating elements. To visualise the value programmed, just press either of the two buttons of each element, 1 and 2.

The display of timer 7 always shows the value programmed in minutes, except when commencing welding time, that will be displayed in countdown mode.

- **Instructions for use:**

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



CAUTION: First to up or down the top plate, verify that black button is pulled (UNLOCK) and the manometer pressure is in 0.

- **Preparing the joint**

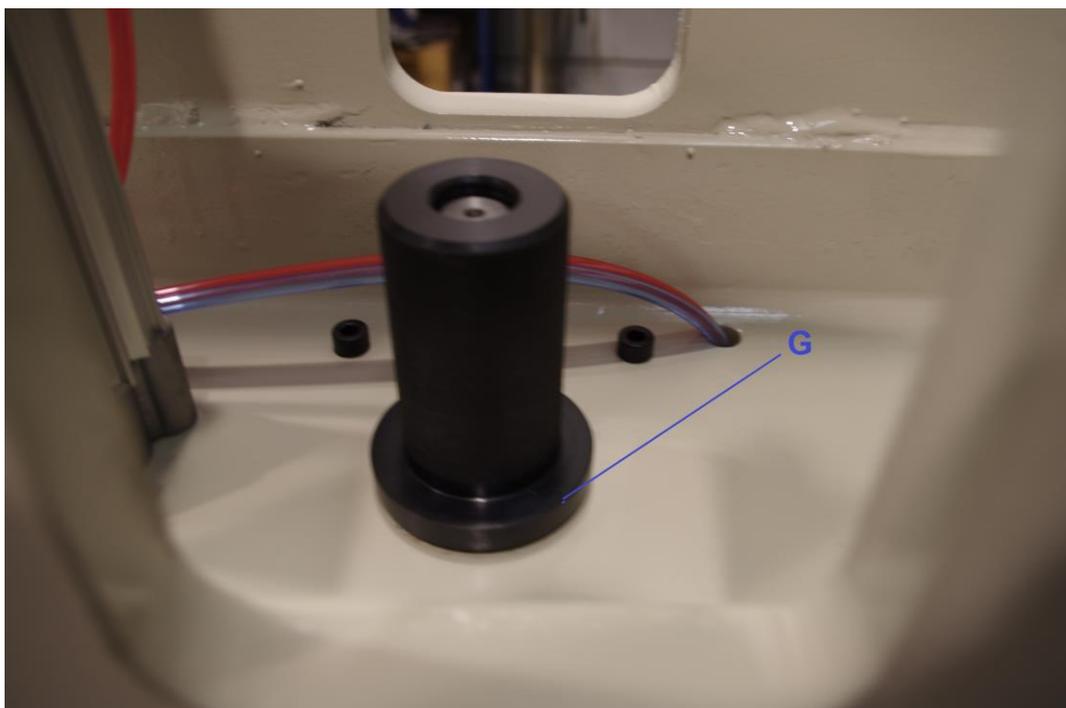
Place the first end of the belt on the lower silicone, well centred on the support tray and making sure the joint is within the welding zone of the hotplate.

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:

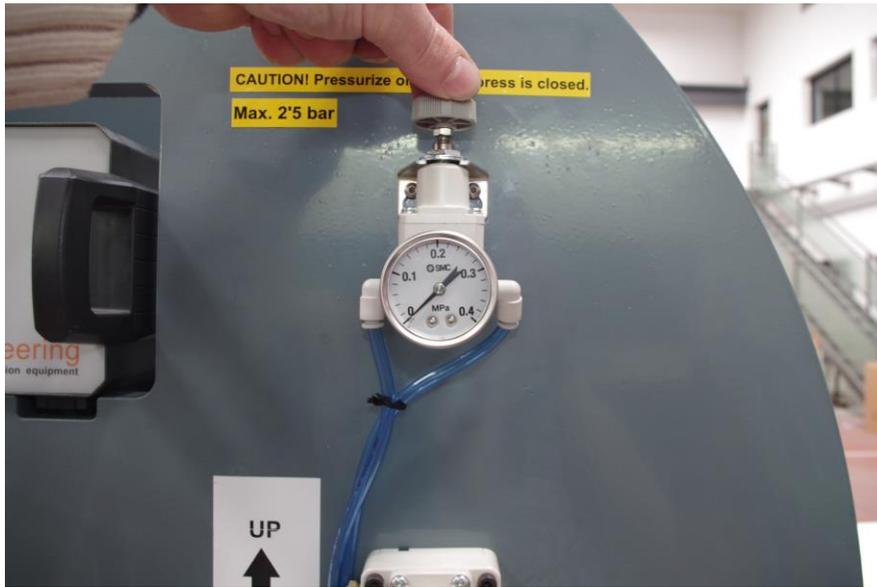
If (G) Controls are blocked and you cannot screw them, lift the top plate a bit and try and free the G Controls by screwing them the other way, so that you can adjust them to the right height again.

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 by 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 °C.

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.



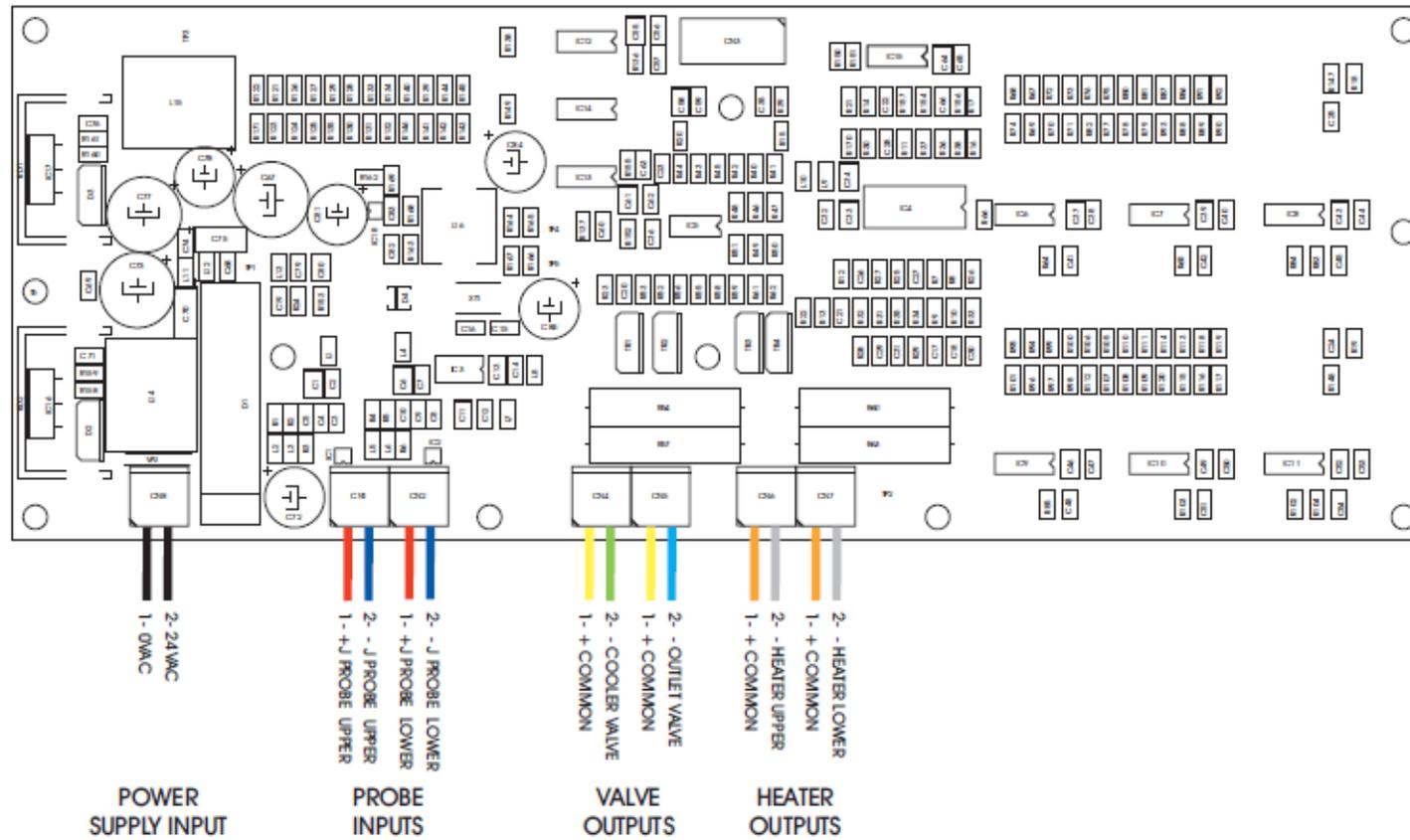
When the STOP led shows on the board, it means the operation has ended.



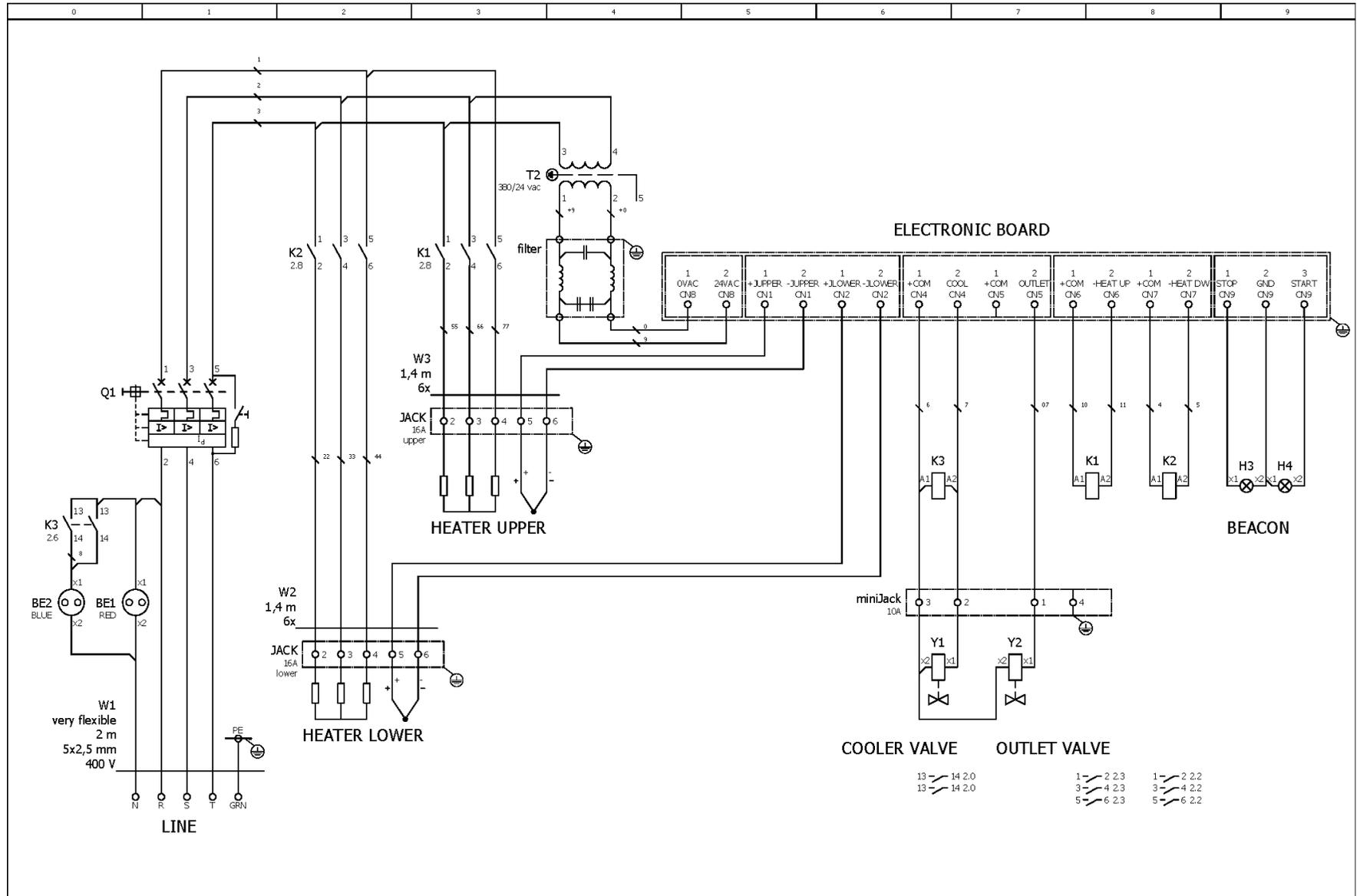
NOTE:

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

- **Electrical drawings:**



3x400V



1	Cliete	Ermengineering	Fecha	17/08/2022
	Alimentación	400 ac	Tecnico	Eduardo Viejo
	Linea	5x2,5 mm²	Responsable	Gines Pedrero

HANDLING

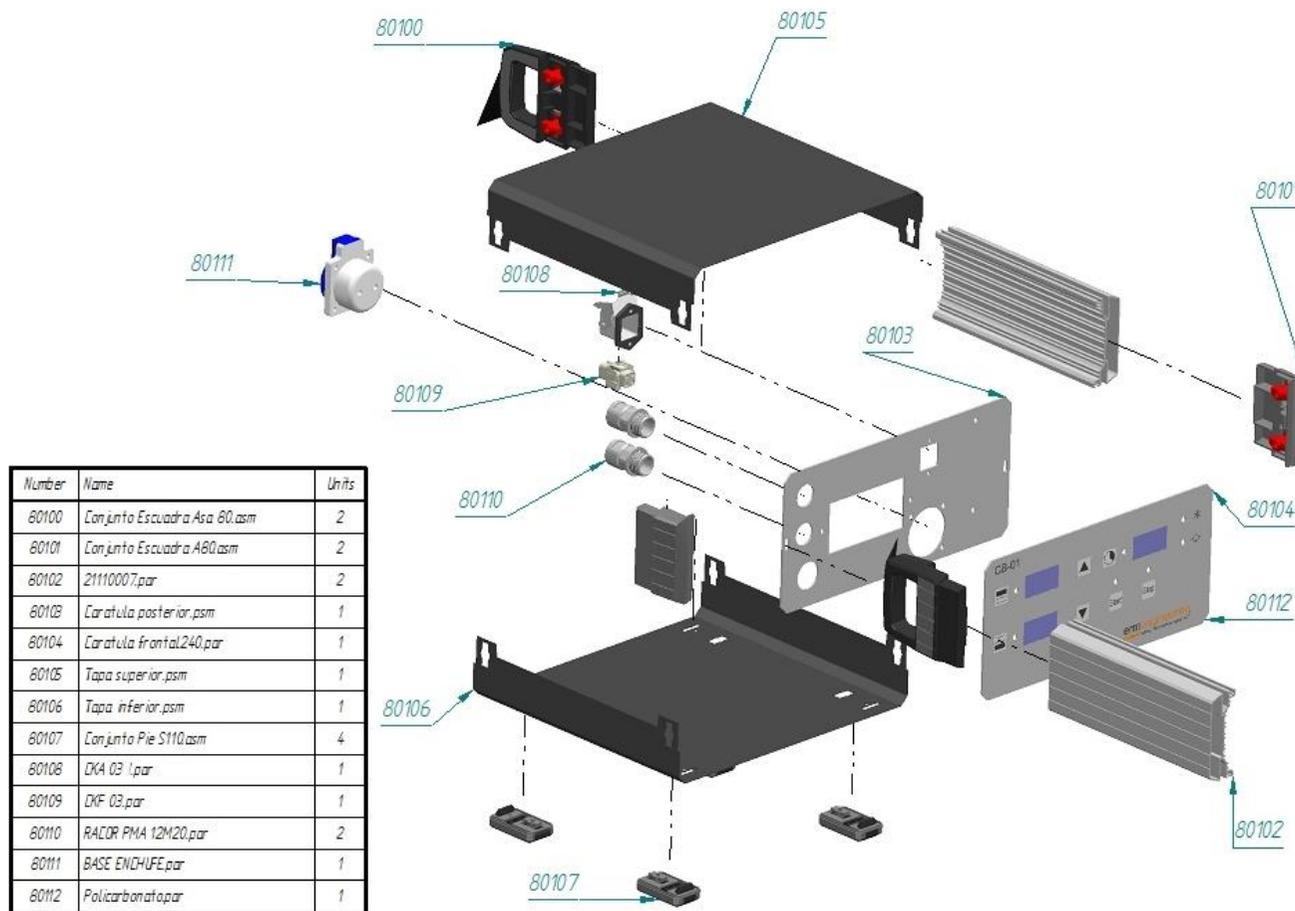
Hornos Industriales
 Proyectos y
 Construcciones



CB-01/3 3x400
 N° Fabricación

Departamento Eléctrico
 Tel: +34 938 467 984
 FXXXXX
 Page 2 / 2

- Spare parts:

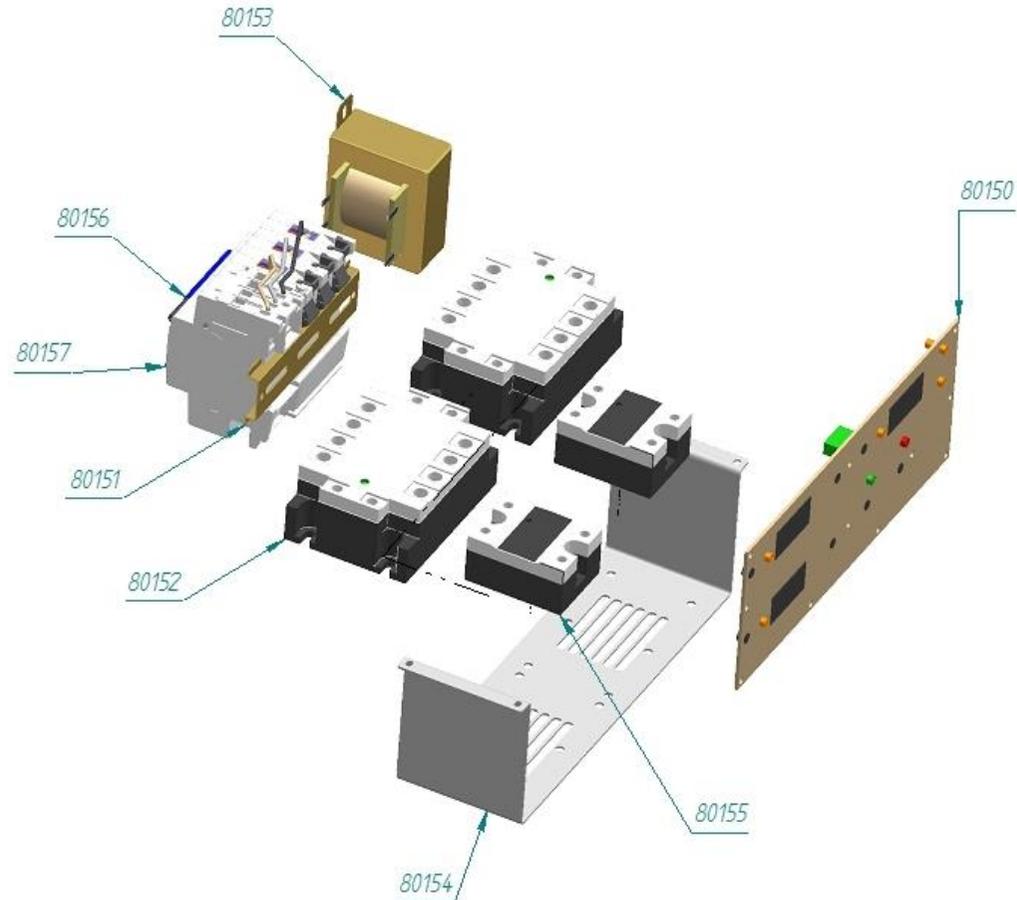


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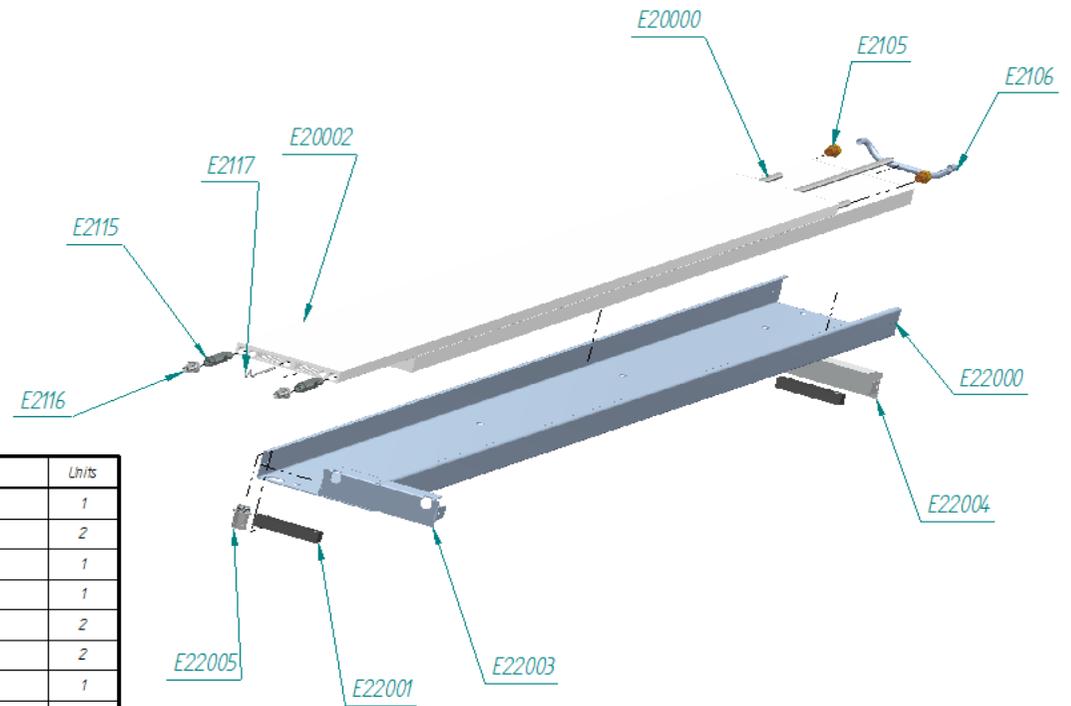
Number	Name	Units
80150	Pieza6.par	1
80151	OMEGA ABB.par	1
80152	Rele 3 fases.par	2
80153	Trafo.par	1
80154	Base contactores.psm	1
80155	Rele 1 fases.par	2
80156	MAG_ABB.asm	1
80157	DIF_ABB.asm	1



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Number	Part name	Units
E20002	Aislante 2000.par	1
E2105	Bicono SMC.asm	2
E2106	Bypas agua 45.par	1
E22000	Cajon 2100.psm	1
E22001	Daoo Lhion cajon.par	2
E2116	KK4P_02FHHI.par	2
E20004	Perfil plato 2000.par	1
E22005	Pma M-20-17	1
E20000	Resistencia.par	3
E2117	Sonda .j.par	1
E22003	Tapa cajon 11.psm	1
E22004	Tapa cajon 12.psm	1
E2115	TUBO SALIDA AGUA.par	2