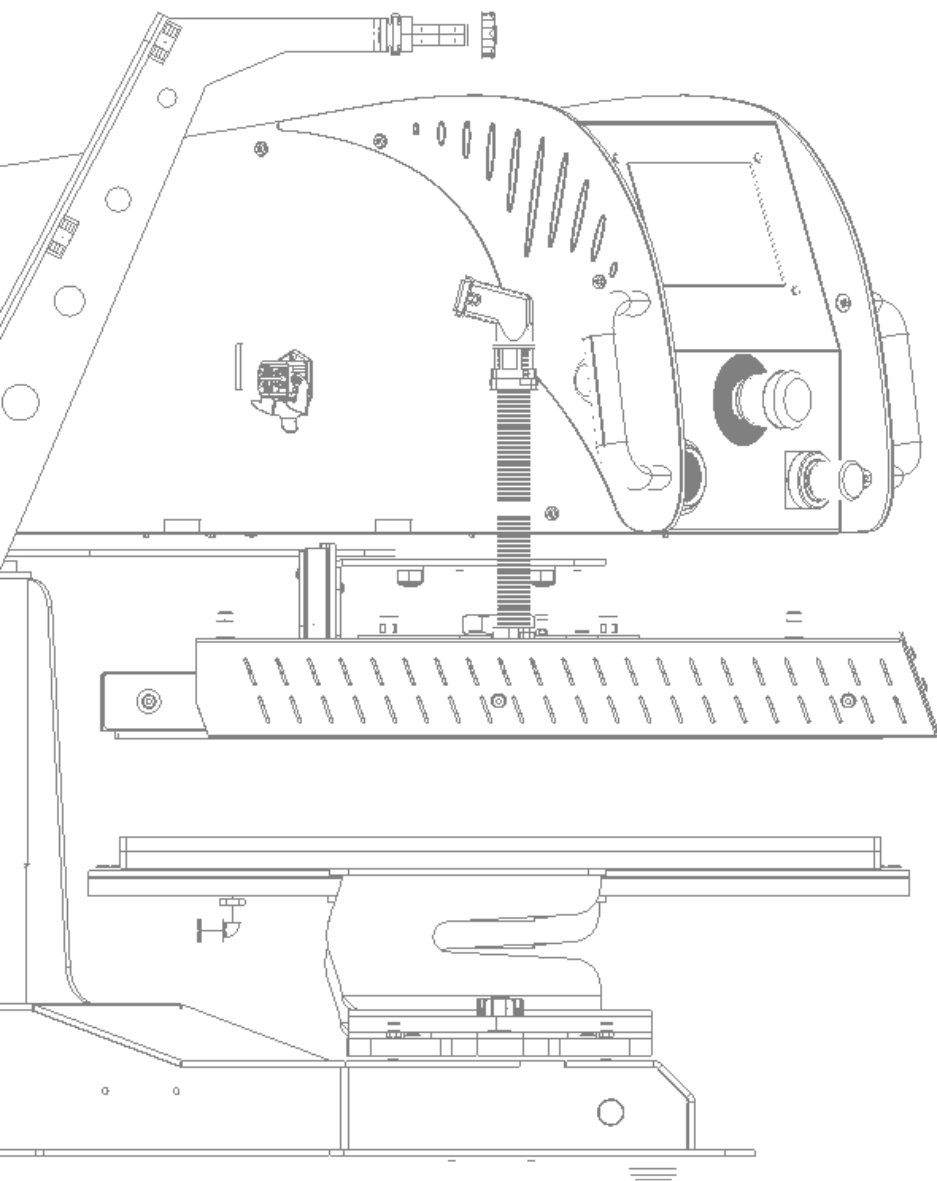




HEAT TRANSFER TECHNOLOGIES

User guide

SEFA Duplex Pro heat press machine 40x50



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WARRANTY TERMS

The warranty period shall come into effect on the day on which the equipment is brought into service at the user's premises, as attested on the returned warranty certificate and the delivery note, and shall run for two years, based on a standard equipment operating schedule of 8 hours per day, i.e. 3,000 hours.

The warranty is strictly limited to our equipment, and covers faulty materials and workmanship, which the purchaser shall be required to substantiate. Our liability shall be limited to making good or replacing free of charge parts that are acknowledged by us to be defective, and no claims for damages for any reason may be made against us.

Parts replaced under warranty shall:

- Remain our property
- Be invoiced on consignment

A credit note will be issued upon return of the faulty parts.

Returns must be made NO LATER THAN ONE MONTH after the work is performed under warranty.

THIS WARRANTY DOES NOT COVER :

Commercially sourced consumables such as:

- Fuses, LEDs, seals, hoses, nozzles, filters, etc.
- Material and equipment not manufactured wholly by us, which are covered by the warranty of the manufacturer thereof.

THIS WARRANTY DOES NOT EXTEND TO :

Replacements or repairs arising from fair wear and tear of the appliances or machines, damage or accidents arising from negligence, lack of supervision or maintenance, improper use or alterations made without our written consent.

Defects arising from material provided by the purchaser or mandatory design requirements issued by the purchaser.

Repairs made necessary by damage or accidents arising during carriage.

Normal maintenance and adjustment procedures required during use of the machine, as set out in the maintenance instructions, such as:

- adjustment of intermediate components
- tightening of pipes, hoses, etc.



Any traces of detergent oil in the air system of pneumatic machines shall invalidate the aforementioned warranty terms.

Quote the machine reference and serial number when making technical enquiries or ordering spare parts.

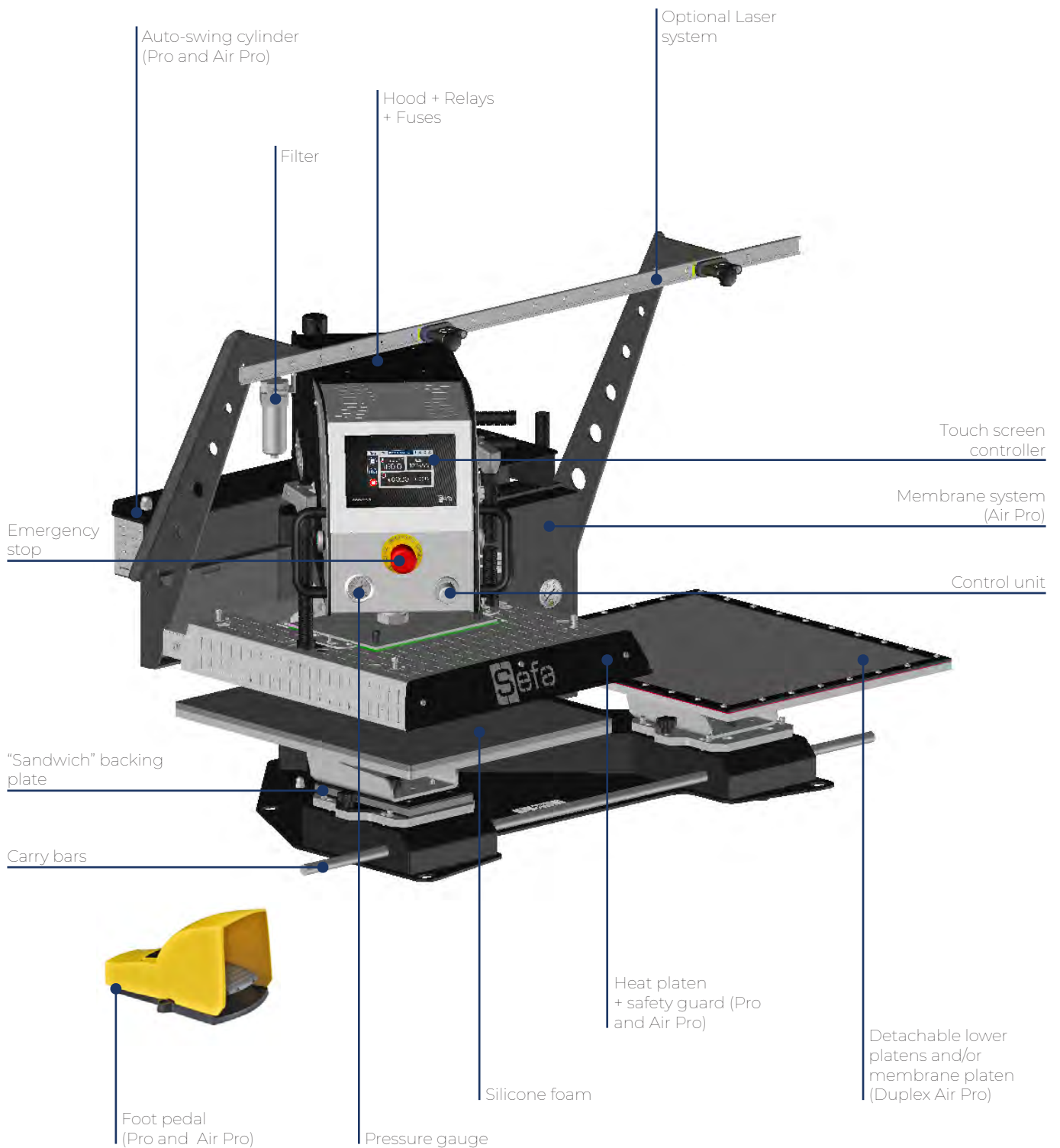
TECHNICAL DATA

Technical data	
Weight in working order	193 kg
Height	751 mm
Depth	1005 mm
Width	1071 mm
Platen size	400 x 500 mm
Power supply	220/240 V single phase + ground 50/60 Hz
Power consumption	3200 W
Amp rating	14 A
Power supply (US version)	110/120 V single phase + ground 50/60 Hz
Power consumption (US version)	1750 W
Amp rating (US version)	16 A
Air supply	4 - 8 bars
Pressing	2 - 7,5 bars (membrane : 8 bars)
Membrane inflation (Air Pro)	0,5 bars
Electronic temperature controller	
Accuracy	+/- 1%
Setting range	0 °C - 220 °C
Electronic timer	
Accuracy	+/- 1%
Setting range	0 s - 59 min 59 sec
Operating conditions	
Noise level	< 70 dB (A)
Ambient operating temperature	10 °C - 35 °C
Humidity	< 90%
Maximum pressing force	925 daN

Non-contractual document : we reserve the right to alter our product specifications in line with advances in technology.

OVERVIEW

This heat press has been designed to operate at high output without risk to operator safety in accordance with article L 233-5 of the French labour code. It has been designed for use by a single operator positioned in front of the machine.



SAFETY

Please read the Operating Manual carefully before operating the press. The press should be operated by a qualified person who is aware of the potential dangers arising from improper use of the equipment. The factory-installed pneumatic, electrical and mechanical settings programmed by our technicians and the safety features must not be altered under any circumstances. SEFA accepts no liability for problems that may be caused by the machine if such alterations are made.

THIS MACHINE IS DESIGNED FOR USE BY A SINGLE QUALIFIED OPERATOR

a. International symbols



b. Important safety precautions

Personal Protective Equipment (PPE) must be worn (e.g. gloves and safety glasses).

Do not touch hot parts of the machine during use. Do not place hands between the platens when the machine is switched on. Make sure the operator is not exposed to risks of burns, electrocution or other hazards when handling the machine.

Check the machine each day before use. Make sure there is nobody in the vicinity of the machine before starting work. If the machine mal-functions, cut the power supply and look for the cause of the problem (see the Servicing section of this manual).



c. Safety features

No changes must be made to the safety covers and safety systems. They must be refitted if they are removed for servicing work. They must be kept in place and in good condition during normal use. Presses are fitted with safety systems to protect the operator from pinch-point hazards. The main safety components are:

- Front-mounted button that switches the machine off when pressed.
 - Two contact switches are located on top of the upper heat platen.
- This system helps safeguard the operator against pinch points and crushing hazards.

If the system detects an obstacle, it raises the heat platen, immediately shuts off the swing function and puts the press into safe mode.

To restore the machine to operating mode, press the red area on the «Alarm» page, position the arm over one of the lower platens and depress the pedal.

Test the emergency shut-off and the safety guard daily. After an emergency stop, make sure there are no other unresolved problems preventing use before restoring the machine to normal operating mode. Turn the red button to release the emergency stop. The machine will be reset automatically.

Technical parts documents are supplied with the machine. Please read them before starting to use your SEFA machine.

OPERATION

a. Setting up the machine

TO BE PERFORMED BY QUALIFIED PERSONNEL



DO NOT CARRY THE MACHINE BY THE PLATES



Cut the packing straps and undo the cover and dome retaining screws.

Remove the cover and then the dome from the case.

Remove the plastic bag from the machine.

Remove the anchor bolts securing the machine to the pallet.

With the packaging removed, take off the safety screw using the 4 mm Allen key provided.

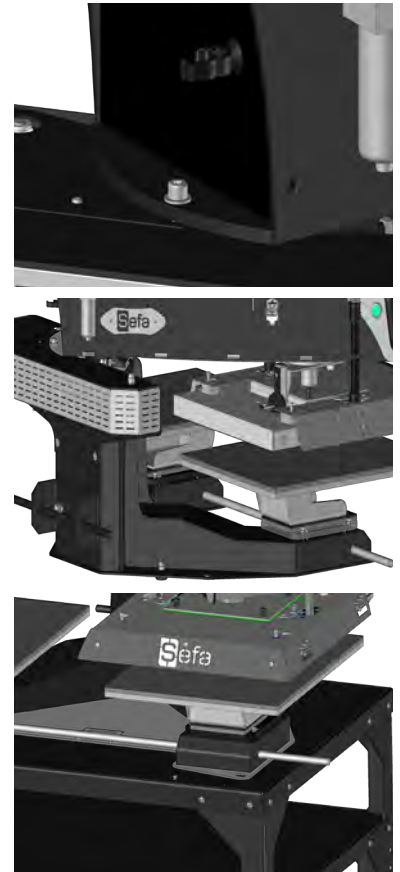
Align the machine in the centre of the two posts.

Attach the carry bars. The machine must only be carried using these bars.

Use the carry bars to carry the machine and attach it to a stable, level table.

Fit and secure the lower platens in place if they are not already installed.

Remove the carry bars and store them with the packing case for future use.



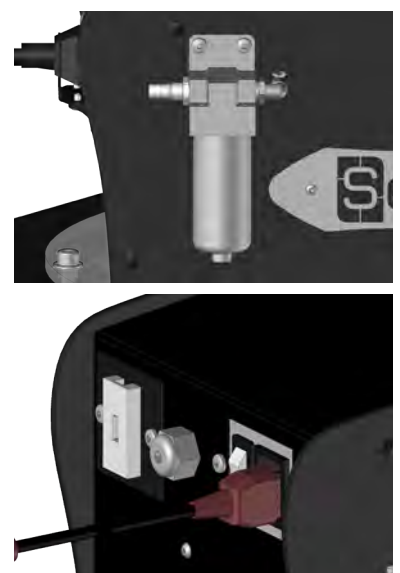
b. Switching on

Switch on the compressed air supply to the machine. The compressor must deliver at least 4 bars of compressed air pressure.

Fit a padlockable pneumatic shut-off valve. Plug in the machine using the power lead provided. Press the switch at the back of the arm to «I» and make sure that the emergency stop button at the front is not engaged.

Press the main switch at the back of the machine to turn the power on.

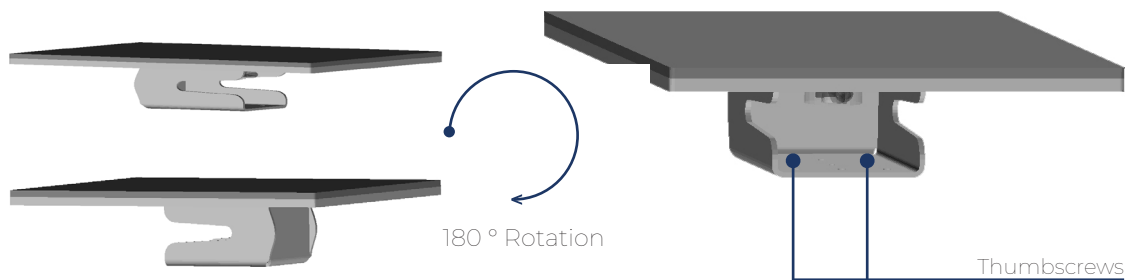
The control panel page will be displayed on the touch screen. This machine must be used by qualified personnel. Switching on the machine turns on the temperature control, electronic board and electrical power supplies.



c. Selecting a working direction

This press is fitted as standard with a lower platen mount that pivots through 180° so that you can thread the workpieces on from the front or back.
To fit the mount the other way:

- Undo the 2 thumbscrews between the mount and the lower platen.
- Turn the mount around 180°.
- Tighten the 2 thumbscrews underneath the lower platen

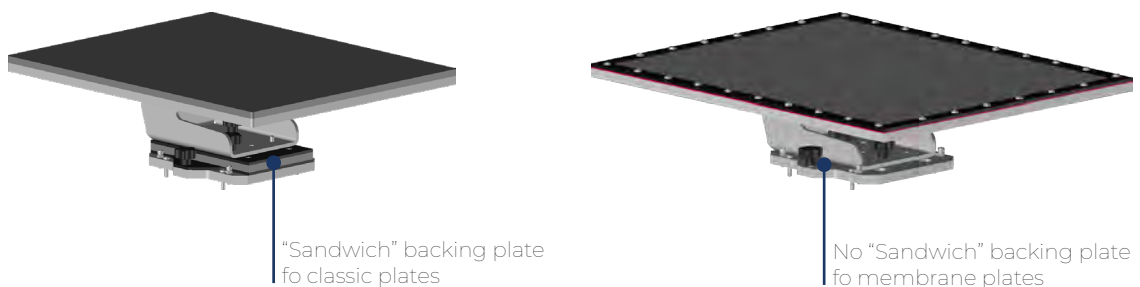


d. Membranes (Duplex Air Pro Only)

To use the membranes, both the standard lower platen and the “sandwich” backing plate (steel and black foam plates) must be removed.

Make sure the plates are fitted correctly

As soon as the membranes are fitted, the black Ø8 air lines must be attached to the plates. The thumbwheel on the right side of the membrane housing is used to set the pressure of both membranes to 0 to 0.5 bar. Finally, the membrane(s) must be activated in the machine settings menu via the control screen.



e. Changing the work platen

There are two placement guides on the underside of the lower platen to place your hands on and make the platen easier to lift off for changing.



f. Operating cycle

Duplex Lite

1. Place the work item on the lower platen.
2. Position the transfer sheet correctly.
3. Move the arm over the platen you are working on.
4. Press and hold both dual-handed buttons.
5. The heat platen will lower and start the timer.
6. Use this time to prepare the next work item on the other workstation.
7. The heat platen will lift open when the timer has finished.
8. Move the arm over the other platen.
9. Repeat from step 4 above.

Pressing the on-screen stop button during a cycle will stop the cycle.

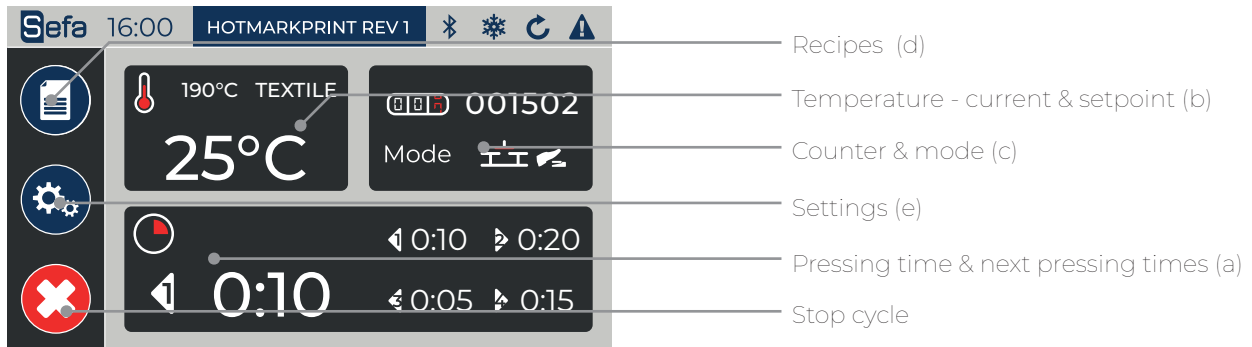
Duplex Pro / Air Pro

1. Place the work item on the lower platen.
2. Position the transfer sheet correctly.
3. Depress the cycle start pedal. The swing arm will move into place over the platen, the heat platen will lower and the press timer will start.
4. Use this time to prepare the next work item and transfer sheet on the second workstation.
5. The heat platen will lift open when the timer has finished.
6. Depress the pedal if the machine is not in «FULL AUTO» mode. If the machine is operating in Full Auto mode, the platen will swing away automatically after it has lifted clear and the post-press timer has finished its countdown.
7. Remove the work item from the first workstation and get the next one ready.
8. Repeat from step three above.

Depressing the pedal or one of the green push buttons during a cycle will stop the cycle and move the swing arm to the other side.

Pressing the on-screen stop button during a cycle will stop the cycle.

SMART TOUCH ® CONTROL SCREEN



a. Pressing time

Press here to set the machine's pressing time.

Use the left and right arrow keys to increase and decrease the setting.

You can also have 4 consecutive pressing times (cf. "settings (e)") on single-platen presses and up to 4 times for dual-platen presses.

You can also change this setting by pressing the time display and entering the required time from the touch pad (4 characters must be entered).

Once you have entered the required time, press the "confirm" key in the bottom right corner of the screen.



b. Temperature settings

Press the "temperature" menu (b).

You can select the temperature you require in the same way as for the pressing time, using the arrow keys on the left and right of the temperature display. You can also click on the reading and manually select a temperature. When typing in a temperature below 100°C, enter a "0" first (e.g. 090°C).

You can also slide the blue cursor left and right with your finger to lower and raise the temperature respectively, and then adjust it using the arrows. Select the profile you wish to press (Textile, Rigid or DTG).



c. Item counter / Operating mode (Duplex Pro/Air Pro)

This menu shows how many items the machine has printed. When you click on this icon, two counters are displayed. See the table below.

You can also select the operating mode on Duplex models: single-platen, dual-platen actuated by button/pedal for each press stroke, and dual-platen auto mode.

The first counter shows the partial count and can be reset to zero by pressing the arrow to its right. The second counter shows the total number of items printed since the machine was installed. This count is permanent and cannot be reset.



d. Recipes

Pressing the “Recipes” icon (d) brings up the menu shown opposite.

Use the left and right arrows to select one of the 10 pre-configured recipes. To use (load) a recipe, press the floppy disk icon with the arrow pointing to the right. Once selected, press the arrow in the bottom left corner to return to the main menu.

To create or alter a recipe, you must first set the time and temperature from the main screen and then select a memory slot (1 to 10) from the recipe (d) screen. To rename a recipe, press the pencil icon. Give your recipe a name and press the arrow in the bottom right corner to confirm. To finish, press the floppy disk icon with the arrow pointing to the left to save your choice/setting.

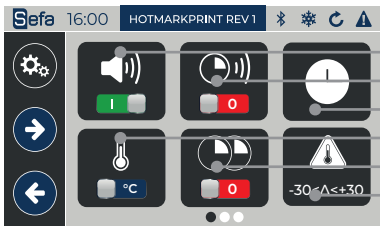
An asterisk(*) at the start of the name of the current recipe on the indication bar means that the current settings are not the same as the original settings for this recipe, and the settings that are currently being applied have not been saved to the recipe.



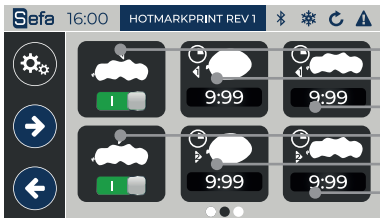
e. Settings

Press icon (e) in the main menu to go to the machine settings. There are 6 available options. The gear wheel button lets you change the machine's technical aspects.

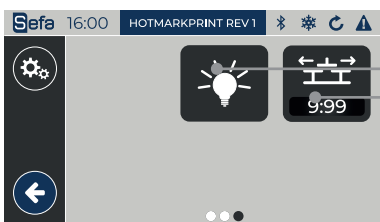




- Switch the sound on or off. Warning sounds will still be emitted if needed.
- Switch the 2-second end-of-cycle notification signal on or off.
- Internal clock setting (date and time).
- Choose between Celsius or Fahrenheit.
- Choose 1 (OFF), 2 or 4 different timers.
- Operating temperature range setting.



- Switch the left platen membrane on or off (Duplex Air Pro).
- Left membrane inflation time before platen down (Duplex Air Pro).
- Left membrane deflation time before platen up (Duplex Air Pro).
- Switch the right platen membrane on or off (Duplex Air Pro).
- Right membrane inflation time before platen down (Duplex Air Pro).
- Right membrane deflation time before platen up (Duplex Air Pro).



- Screen backlight setting.
- Duplex Pro/Air Pro: dwell time before platen switch (Auto mode).

f. Other settings

The green leaf icon is used to set energy-saving mode. The operator can use two energy-saving modes :

- Hibernate
 - ▶ Hibernate start time
 - ▶ Heating restart time
- Sleep
 - ▶ Sleep temperature (40°C (104°F) to 140°C (284°F))
 - ▶ Idle time before sleep mode

The board will only switch to eco mode if it is on the home screen. If the user leaves the press on another screen, the screen is presumed to be in the process of being altered. Simply touch the screen or start a cycle to exit energy-saving modes that are currently running.



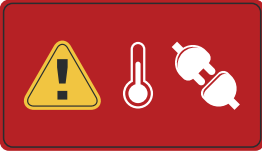






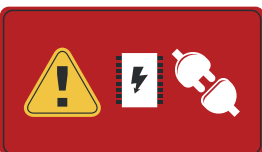

The "i" at the top right provides key information about the software version and SEFA contact details.



The diagnostic button brings up the machine status so you can see if there are currently any malfunctions. If there are, contact your distributor.



g. List of alarms / events

Alarm 01: Probe PT100		Probe signal lost (sensor or cable). The heating control is instantly disabled.
Alarm 02: Overheating. Temperature above 220°C		Temperature reading above 230°C. The heating control is instantly disabled.
Alarm 03: Platen safety system triggered		Detection is immediate. The heating control and pressing operation are instantly disabled.
Alarm 06: Upper pressing sensor not reached		Signal not detected after 5 seconds. Caused by faulty sensor, lack of compressed air supply, jamming (mechanical, etc).
Alarm 07: Lower pressing sensor not reached		Signal not detected after 5 seconds. Caused by faulty sensor, lack of compressed air supply, jamming (mechanical, etc).
Alarm 08: Right rotation sensor not reached		Signal not detected after 5 seconds. Caused by faulty sensor, lack of compressed air supply, jamming (mechanical, etc).
Alarm 09: Left rotation sensor not reached		Signal not detected after 5 seconds. Caused by faulty sensor, lack of compressed air supply, jamming (mechanical, etc).
Alarm 10: Communication error		Communication lost between power board and screen board. Contact your stockist.
Alarm 13: Temperature not reached.		Blocks first cycle start request. Permits cycle start at second request (forced start despite setpoint not being reached).

Press the red/orange area to clear the fault.

SERVICING

TO BE PERFORMED BY QUALIFIED PERSONNEL

THE MACHINE MUST BE SWITCHED OFF AND LOCKED AND TAGGED PRIOR TO SERVICING (ELECTRIC AND PNEUMATIC POWER SOURCES DISCONNECTED)

The following tools should be available at hand:

- Phillips and flat-blade screwdrivers
- Set of open-ended spanners and box spanners
- Set of Allen keys
- Multimeter

a. Replacing worn parts

- Silicone foam pads

Check that the platen is cold.

Make sure the surface of the platen is clean.

The surface can be cleaned using soapy water. Suitable personal protective equipment must be worn.

Use RTV-1 glue to stick the foam pad to the aluminium platen (NB: read the instructions for use on the packet).

The pad and the platen must be clean and dry before they are stuck together.

Apply a thin layer of glue evenly over the platen and then stick the pad immediately into place, making sure there are no air bubbles trapped between the platen and the pad (e.g. a notched tile adhesive comb).

Leave to set overnight at room temperature with a slight pressure applied and the platen cold.

- For other parts, contact your stockist to determine whether they need to be renewed or repaired.

b. Maintenance

SEFA heat presses are practically maintenance-free. Follow the preventive maintenance instructions below to ensure trouble-free operation:

Do not heat items that could perish or score the silicone pad or damage the heat platen's teflon coating.

Clean the machine at regular intervals, with the platen cold, using a clean cloth and soapy water and wearing suitable personal protective equipment.

Keep the heat platen in the raised position when it is hot but not in use.

DAILY CARE:

Clean the foam pad and the heat platen's coating (when cold) with a dry cloth or a cloth with grease remover.

Inspect the air inlet filter on the left side of the swing arm; drain the filter if it is heavily condensated.

MONTHLY CARE:

Check that the hinged joints are lubricated.

According to use:

Replace the foam pad every 6 months.

TROUBLESHOOTING TIPS

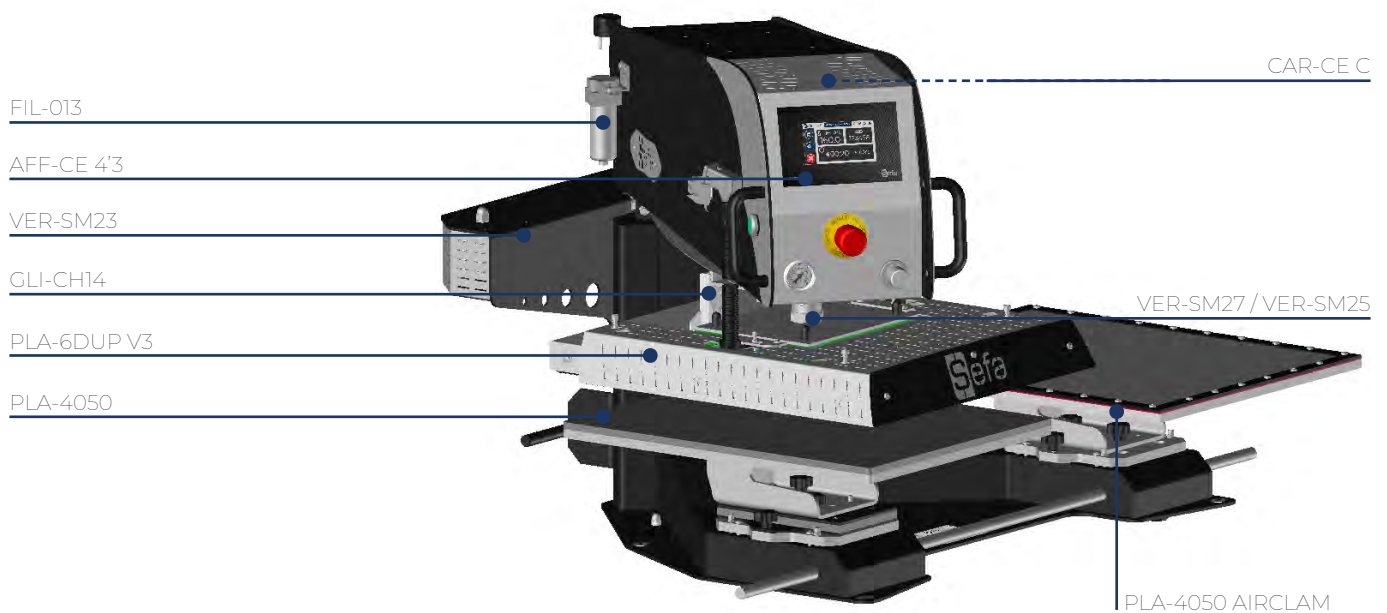


The machine must be switched off and locked and tagged prior to any service repair work (electric and pneumatic power switched off).
The heat platen can cause burns. Check that the platen temperature reading on the display panel is below 25° C before handling.

Problem	Possible causes	Solution
The machine does not switch on	The plug is not connected The switch has not been pressed The emergency stop is activated Faulty display panel	Check the mains electricity and that the machine is plugged in. Press the main On/Off switch to 1. Turn the red button to release the emergency stop Check whether the cables are damaged (potential short circuit)
The platen does not heat up	Faulty heating element Problem with the automated system Temperature setting too low	Check the connections and the condition of the wires. Contact your retailer to have the heat platen removed. Check the on-screen messages and contact your stockist See section 5 to change this setting
The platen overheats	Problem with the probe or the temperature control	Check the on-screen messages and contact your stockist
The timer is not counting down	Disabled or faulty cylinder-mounted sensor Problem with the automated system	Check its position. Check the connections. Replace if necessary. Check the on-screen messages and refer to the manual or contact your stockist.
The platen does not lower	Leaking cylinder The solenoid control valve or the proportional controller are faulty Compressed air pressure too low	Check the seals and all the connections. Cut the ends of the pipes. Contact your retailer. Check the valve couplings. Contact your retailer about a possible replacement. Check that the supply pressure is working.
The platen does not lift up	Faulty solenoid control valve Leaking cylinder	Check the valve couplings. Contact your retailer about a possible replacement. Check the seals and all the connections. Contact your retailer.
The platen stays down after pressing	Lack of compressed air	Check the compressed air system

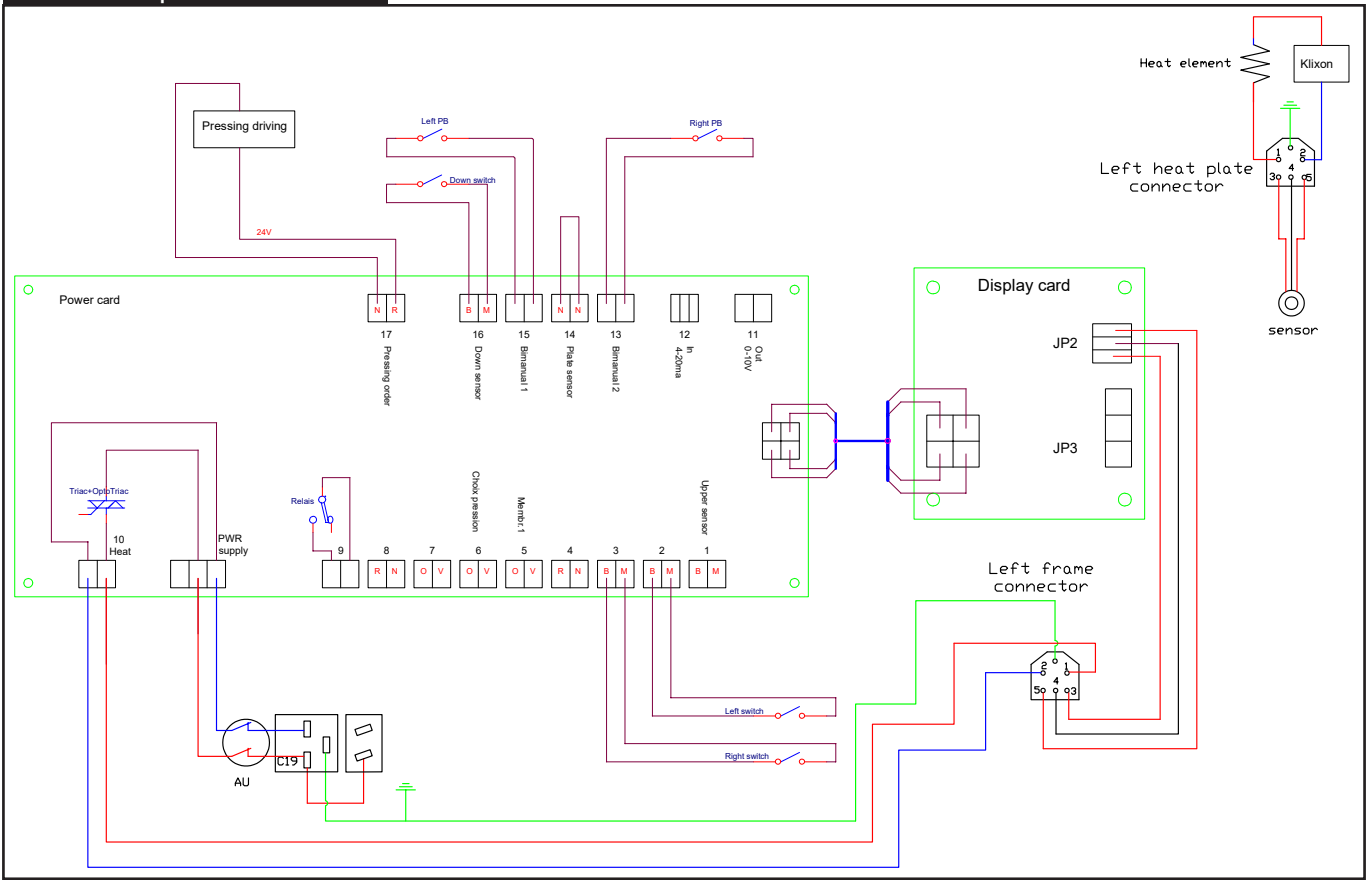
SPARE PARTS

Reference	Description	Quantity
ELECTRICAL PARTS		
CAR-CE C	COMPLETE CONTROL POWER BOARD	1
AFF-CE 4'3	DISPLAY CARD WITH 4'3 COLOUR TOUCH SCREEN	1
CAB-CE1	LINK CABLE FOR DISPLAY CARD AND CONTROL BOARD	1
PLA-6DUP V3	HEAT PLATEN WITH THERMO SENSOR 3200W	1
PLA-6DUP V3 110V	HEAT PLATEN WITH THERMO SENSOR 1750W	1
RES-500X400-3200W	MICA HEATING ELEMENT 400x500mm 3200W	1
RES-500X400-1750W	MICA HEATING ELEMENT 400x500mm 1750W	1
PNEUMATIC PARTS		
VER-SM27	PRESSING CYLINDER Ø125 C80 (AIR PRO)	1
VER-SM25	PRESSING CYLINDER Ø125 C100 (LITE & PRO)	1
VER-SM23	SWING CYLINDER Ø40 C200 (PRO & AIR PRO)	1
FIL-013	FILTER	1
ELE-SM8	PRESSING SOLENOID CONTROL VALVE 24V	1
ELE-SM21	SWING SOLENOID CONTROL VALVE 24V (PRO & AIR PRO)	1
PRESS COVERINGS		
MOU-455	FOAM 9.53 mm 400 x 500mm	2
TOI-4050	TEFLON SHEET 400 X 500mm	1
HOU-4555	NOMEX COVER FOR MEMBRANE PLATES	2
HOU-50	NOMEX COVER FOR STANDARD LOWER PLATES	2
PLA-MEM4050	PRE-PERFORATED SILICONE MEMBRANE	2
MOU-405	FOAM 3.2 mm MEMBRANE	2
PLA-4050	ALUMINIUM LOWER PLATEN 400x500 mm	2
PLA-4050 AIRCLAM	ALUMINIUM LOWER PLATEN 400x500 mm FOR MEMBRANE	2
GLI-CH14	ANTI-ROTATION TELESCOPIC SLIDER	1

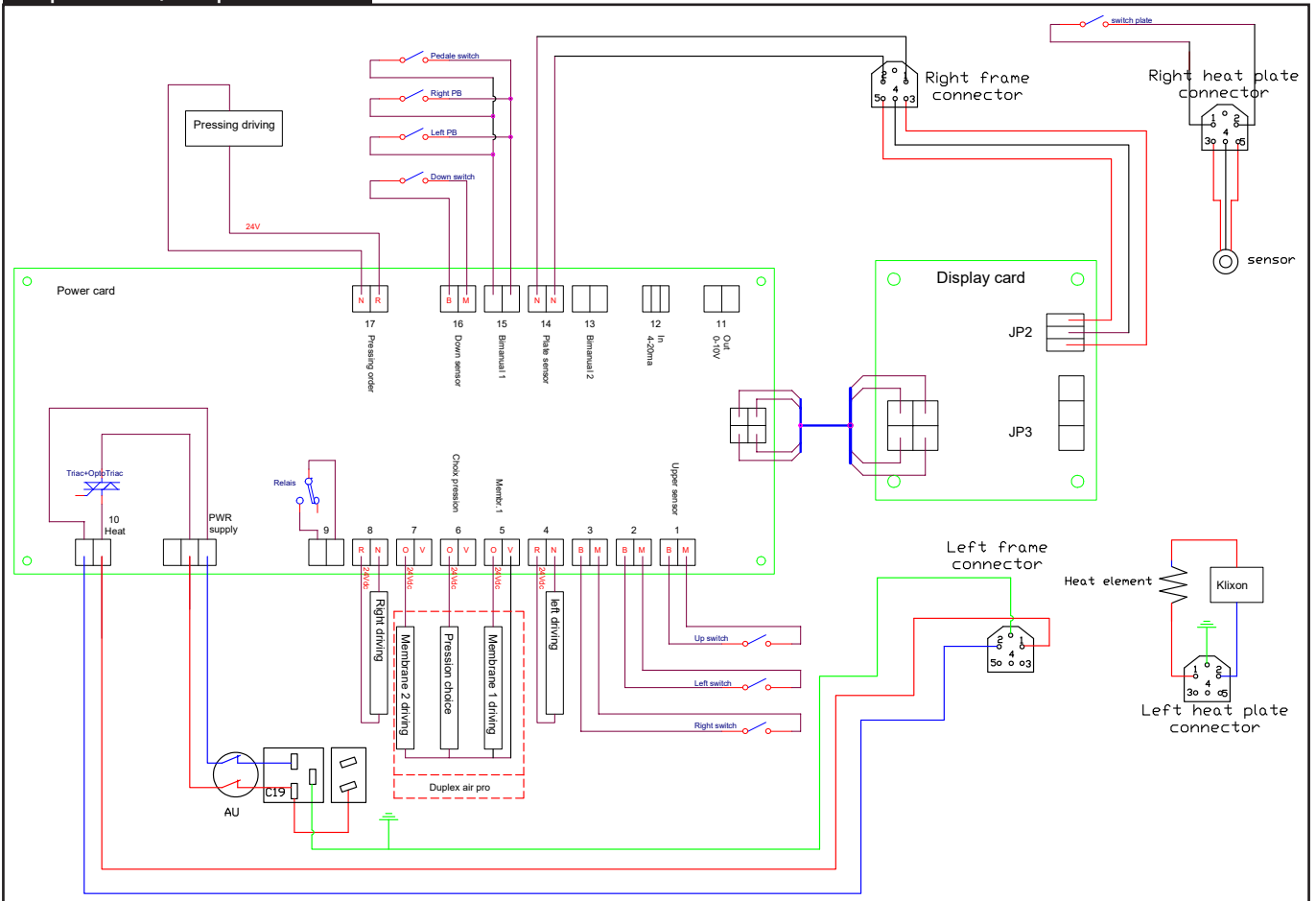


WIRING DIAGRAM

Duplex Lite



Duplex Pro / Duplex Air Pro



MAINTENANCE LOG

Date	Number of hours	Pressure check	Air filter check	Cylinder check	Condition of foam pad	Heating element check	Replaced parts	Observations

Tip - use the following abbreviations to help complete the log more quickly:
C: Checked W: Washed/Cleaned R: Replaced