OPERATING INSTRUCTIONS

for the heat press

CF-Dual-Air-2N

Congratulations on purchasing a CobraFlex heat press!
Please read these operating instructions carefully so you can start production with your press without problems. Reproduction of these operating instructions in any form requires the written approval of CobraFlex. We reserve all rights to change technical data and product features. CobraFlex does not assume any liability for direct or indirect damage resulting from use of this product.

Version 1.2 (09.06.2022)

Brief overview

CobraFlex pneumatic double station heat press

The design of the CobraFlex double station presses combines a heavy-duty solid industrial grade pressing framework with high quality electric components. This provides the operator with the best possible features and equipment needed for today's various heat transfer applications.
Using the CobraFlex double station heat press, all common hot transfer processes (flock, flex, sublimation, transfer, Inkjet-flex etc.) can be conducted professionally and with highest productivity. The desired settings can be set easily with the temperature controller. The pneumatic pressure can be regulated smoothly with the air reducing valve. With the restriction valve on the solenoid valve, the press and lift speed could be adjusted.

Short overview CobraFlex heat press

Pneumatic double station transfer press for medium and large batches.
Pressure balancing system on heat plate and bottom plate.
Operates in semi-automatic or manual modes.
Adjustable air pressure by air reducing valve with water separator.
Two-hand operation for safety use.
CE certificated and RoHS certificated.
Lifetime factory on-line service.

Safety Precautions

Please read these instructions and safety precautions carefully before using your press for the first time!

Never reach into the heat press with your hands when it is connected to the power supply, particularly when it is switched on and heated up – danger of severe burns!
Do not open the cover or attempt to modify the machine yourself without instruction.
In case you are requested by the CobraFlex customer support to open the heating plate cover, please make sure you are wearing respiratory protection and only touch the contained insulation wool with gloves. Any disposal of the wool must be contained in a closed bag.
Ensure that liquids and metal objects do not get into the inside of the heat press.
Ensure that the power socket used is grounded. Note that it is only permissible to operate a heat press from a power socket protected by a ground fault protection switch.
Disconnect machine from power outlet when not in use!
Never operate the heat press within the reach of children and never leave the machine unsupervised when switched on.
Ensure that the machine is used only in dry rooms.
Pay attention that the used compressor is attuned to the air consumption and the pressure

If you cannot observe one or more of the safety precautions above, or if you are not sure whether all points are satisfied, please contact our Technical Support Department.

Machine description

a. Air reducing valve
b. Two hand control press buttons (works on manual mode)
c. Fuse
d. Temperature controller
e. Power switch
f. Emergency stop button
g. Handle
h. Manual/semi-automatic switch button (not shown)
i. Heat plate
j. Bottom platen
k. Bottom pressure balancing system
l. Stand
m. Height adjustable foot

Controller

With the temperature controller, temperature (°C and °F) and pressing time can be adjusted. The Set Value are showing the setting value, the Temperature digits are showing the actual value. Counter (reset after power off) function that counts the number of transfers that have already been made during the current session could be enabled, contact CobraFlex for counter function enable instruction.

Press and hold SET button to enter parameter setting interface, press and hold SET button to exit parameter setting interface.

Press down key to decrease the corresponding parameter value.

Press up key to increase the corresponding parameter value.
Press and hold up key to start self-tuning (or on the panel blinks.) Once the machine begins self-tuning, do not unplug or press any key until the self-tuning is done (or stop blinking). Before apply self-tuning, set temperature to normal working temperature and let the heat plate cool down to room temperature. Apply self-tuning when the machine could not control temperature properly. Self-tuning will change PID parameter automatically.

Do not change parameters except Pb and SL2 without our instruction.

Parameter code		Function
Pb	Pb	Temperature calibration: If measured temperature 1 or 1 lower than the showing temperature, decrease the value 1.
SL2	SL2	0: Celsius ( ) 1: Fahrenheit ( )

Operation

Pneumatic connection

Requires air compressor with minimum 800w (1 hp) and 30L (8 gallon) hold tank.
Connect 5mm inner diameter (usually 8mm outer diameter) air hose to the machine.
Charge the compressor to 0.6-0.7 Mpa, up to 0.8 Mpa (150 psi) if possible.
Set the desired pneumatic pressure on the air reducing valve of the heat press by pulling up the cap at the top end and then turning it. After the pressure is set, push the cap back down. The set pressure should be lower than on the manometer of the compressor. Commonly used pressures are between 0.4 to 0.6 Mpa (60 to 90 psi).

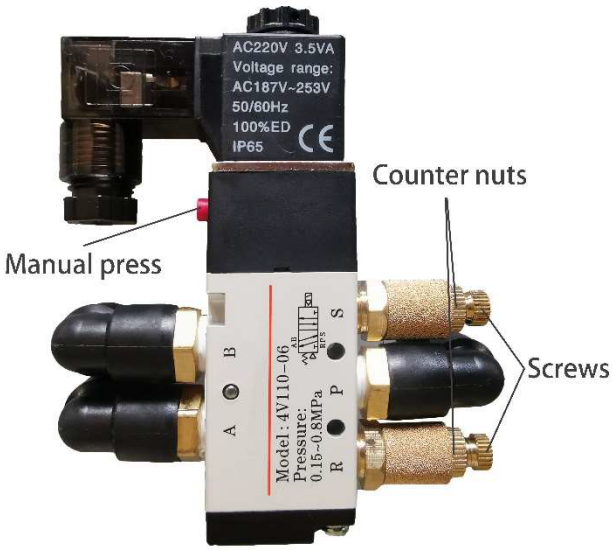
Power supply

Connect the heat press to a power socket using the connection cable supplied.
Switch on the press with the red power switch.

Operating transfers

Set the desired pneumatic pressure on the air reducing valve of the heat press by pulling up the cap at the top end and then turning it. After the pressure is set, push the cap back down.
Bring the press head into an end position right or left.
Manual mode: Shuttle the upper platen over the garment and design. Press both Press Buttons located on the side of the head to press.
Semi-auto mode: The heat plate will press automatically when the head reaches either end. After the timer count to zero, the heat plate lifts automatically.
By pressing the red emergency stop button, transfer process can be stopped at any time.

Operation of solenoid valve



On the side of the solenoid valve there are two silver/golden screws which restricting the air flow speed of the cylinder.
If the screws are screwed out, it accelerates up/down process of the cylinder.
When the screws are screwed in, it slows down up/down process of the cylinder
Fix the respective setting with the corresponding counter nuts by tightening them by hand.

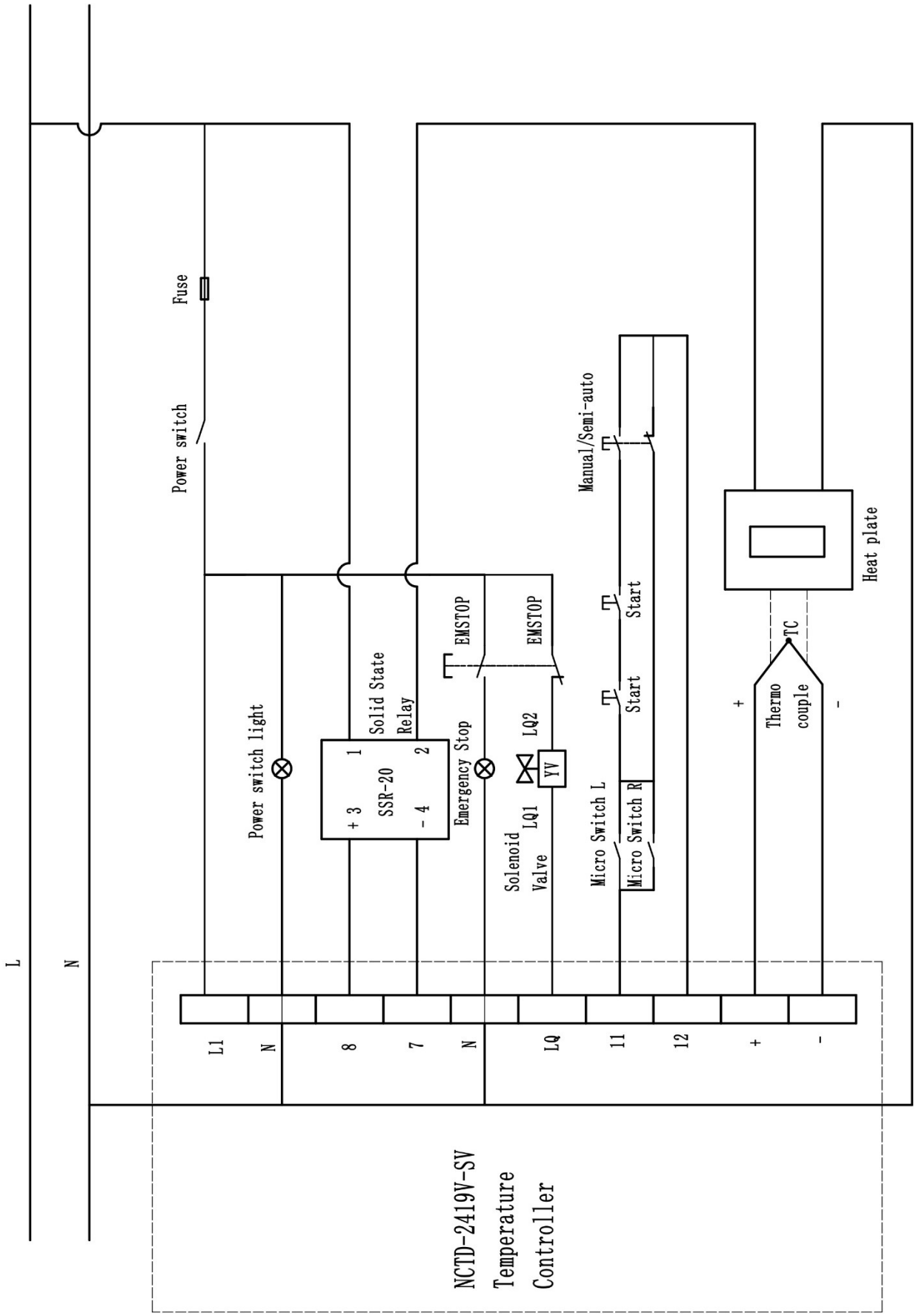
Maintenance and cleaning

Maintenance work should always be accomplished with the press switched off and cooled down. The plug must first be disconnected from the power socket. Consult Technical Support before carrying out any maintenance work.
Clean the press regularly with a soft cloth and mild household cleaner to remove adhesive residues etc.

Technical data

Model	TQ-4050
Voltage and power	220V (2700W) or 110V (1800W) Check voltage at back side of the head
Time Range	0-999sec.
Max. Temp.	260°C / 500°F
Heat plate size	40x50cm (16"x20")
Dimensions(L*W*H)	1080*730*590mm (42"x28"x23")
Shipping Dimensions(L*W*H)	1230*770*650mm (49"x31"x25")
Shipping Weight	145kg (320lbs)
Max. press thickness	40mm

Circuit diagram



Statement of Conformity

CE certification

We herewith declare that the product meets the provisions of the following EC Directives and Harmonized Standards:
Certificate Number: M.2020.206.C9752

2006/42/EC Machinery Directive
2014/35/EU Low Voltage Directive
Related Standards: EN ISO 12100:2010, EN 60204-1:2018

RoHS test

We herewith declare that the product conforms to RoHS Directive 2011/65/EU AnnexⅡ amending Annex (EU)2015/863 and amending Annex (EU)2017/2102.
Report No.: B-R2203A0560

Control Panel Instruction

Press and hold the SET button to enter the parameter setting interface and press and hold the SET button to exit the parameter setting interface.

Press this key to decrease the corresponding parameter value after the machine enters the setting interface。

Press this key to increase the corresponding parameter value after the machine enters the setting interface
Press and hold this key to start self-tuning (℃ or ℉on the panel blinks.) Once the machine begins self-tuning, do not unplug, or press any key until the self-tuning is done (℃ or ℉ stop blinking). Before applying self-tuning, set the temperature to normal working temperature, and let the heat plate cool down to room temperature. Apply soft tuning when the machine does not control temperature properly. Self-tuning will change the PID parameter automatically.

Parameter code		Note	Pneumatic models except TQ-1515	Parameter Value for TA-4050; TY-4050; THX-4050; T-13*9; T-1515 or other manual machines	Parameter Value for TQ-1515
ATI	ATI	Temperature alarm value All models set to 50	50	50	50
P	P	P value for PID control. Change automatically after auto-tunning is finished.	Do not change	Do not change	Do not change
I	I	I value PID control. Change automatically after auto-tuning is finished.	Do not change	Do not change	Do not change
d	D	D value for PID control. Change automatically after auto-tunning is finished.	Do not change	Do not change	Do not change
Ar	Ar	Temperature surges control All models set to 100	100	100	100
T	T	Control period for temperature All models set to 3	3	3	3
Pb	Pb	**Temperature Calibration** If the measured temperature is 1°C or 1°F lower than the showing temperature, decrease parameter 1. For instance, the measured temperature is 350°F, the screen shows 355°F, the Pb parameter is -15, lower the Pb value is 5 degrees to -20.	Adjustable	Adjustable	Adjustable
SL2	SL2	**0: Celsius (°C)** **1: Fahrenheit (°F)**	Adjustable	Adjustable	Adjustable
SL4	SL4	Temperature alarm mode All models set to 1	1	1	1
SLH	SALE	Temperature setting upper limit value	260°C(500°F)	260°C(500°F)	260°C(500°F)
SLL	ALL	Temperature setting lower limit value	0°C(32°F)	0°C(32°F)	0°C(32°F)
AH1	AHI	Alarm return difference All models set to 4	4	4	4
dF	DF	Measurement filters factor All models set to 200	200	200	200
run	RUN	Timer Control Mode	6	0	1
LCt	LCT	0: Only timer 1 is adjustable 1: Only timer 2 is adjustable 2: Timers 1 and 2 are both adjustable Other: Timers 1 and 2 are not adjustable	2	2	2
LCK	LCK	**0: All the parameters are adjustable** 1: Only SP is adjustable 2: Lock the panel, all the parameters are not adjustable except LCK	0	0	0

Other functions

Counter: Count press action, will be reset to 0 after power off.

Instruction for activating counter function(video instruction available):

1. Press the up and down buttons together.

2. Press the up button to 88 and then press the set button

3. Press the set button 2 more times, change the C-E parameter to 0, then press the set button 1 time.

4. Press and hold the set button to return to working mode.

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