Weller®

WHP 3000





Operating Instructions



- 1. Remote LED (external control via RS232)
- 2. High Power LED (large 1200 W / small 600 W heating zone)
- 3. Indication, external sensor regulation
- 4. Display (3-digit 7-segment display)
- 5. "UP" button
- 6. Mains switch
- 7. "DOWN" button
- 8. Optical indication of the state of regulation
- 9. "HIGH POWER" button (switchover large 1200 W small 600 W heating zone)





WHP 3000



Quick Reference WHP 3000



We thank for the confidence you have shown by purchasing the Weller Heating Plate WHP 3000. During manufacture the strictest guality requirements are applied; these assure the correct function of the device and make it possible to obtain optimal soldering results.

1. Attention!

Prior to placing the device in operation, please carefully read these operating instructions and the safety instructions enclosed. If the safety instructions are not observed, there is a risk of injury.

The manufacturer accepts no liability for usage other than that described in the operating instructions or for unauthorised modifications

The WELLER heating plate WHP 3000 complies with the EU declaration of conformity as per the essential safety requirements in the directives 2004/108/EU. 2006/95/EU and 2011/65/EU (RoHS).

2. Description

The WHP 3000 heating plate is equipped with 3 infrared high temperature lamps and enables electronic assemblies to be pre-heated in numerous ways. The high temperature lamps emit radiation primarily in the wavelength range 2 - 10 µm and heat modern materials rapidly and efficiently. Digital regulation electronics ensure precise temperature behaviour and support various special functions such as "AUTO OFF" or standby temperature. Setpoints and actual values are indicated digitally. Two different size heating zones are available. Using an optional external sensor, the temperature can be regulated at defined measuring points. An integrated BS232 interface enables the device to be controlled externally from the Weller WHA 3000P / WHA 3000V hot air station. Here the WHP 3000 heating plate is used as a bottom heater in a 3-step temperature-time profile.

Technical data

Dimensions: $(W \times L \times H)$ Mains voltage: Power: T0053338699 T0053364699 Temperature range: Protection class:

254 x 395 x 70 mm 10 x 15,55 x 2,75 inch 230 V (120 V); 50 Hz (60 Hz)

small heating zone 600 W large heating zone 1200 W 50°C - 400°C (150°F - 750°F) 1

3. Placing in operation

Remove all temperature sensitive and flammable objects from the vicinity of the heating plate. Ensure that the heating plate is switched off. Ensure that the mains voltage is correct. Connect the device to the mains (12). Switch on the device at the mains switch (6). When the device is switched on, a self-test is performed during which all display elements (4) are operated. The temperature set (setpoint) and the temperature scale (°C / °F) are then displayed briefly. The display then switches automatically to the indication of the actual value. The red dot on the display illuminates (8). This dot is a visual indication of the state of the regulation. Continuous illumination indicates the system is warming up. Flashing indicates that the operating temperature has been reached.

3.1. Adjusting temperature

The digital display (4) normally indicates the actual temperature. The digital display (4) switches to the current setpoint when the "UP" or "DOWN" button (5)(7) is pressed. The setpoint (flashing indication) can now be changed as required by pressing or pressing and holding the "UP" or "DOWN" button (5)(7). If the button is pressed and held down, the setpoint changes quickly. Approx. 2 sec. after the button is released, the digital display (4) automatically switches back to the actual value.

3.2. Switching over between large / small heating zone

Two different power settings and sizes of the active heating surface are available. Switch over is performed by pressing the HIGH POWER button (9).

Small heating zone:



200 W 120 x 60 mm (4.72 x 2.36 inch)

Large heating zone:



600 W 183 x 120 mm (7.20 x 4.72 inch)

Note:

The heating zone should be selected prior to use (when the device is cold). Switch over from the small to the large heating zone when the device has reached a



600 W 120 x 190 mm (4.72 x 7.48 inch) HIGH POWER LED (2) illuminates



1200 W 183 x 250 mm

HIGH POWER LED (2) illuminates



(7.20 x 9.84 inch)

steady-state temperature will result in long warm up times for the additional lamps.

3.3. Manual heating shut down (OFF)

The device heating is shut down by simultaneously pressing the "UP" and "DOWN" buttons. "Off" appears on the display (4). If the standby function is also active, the temperature is reduced to $100^{\circ}C$ (212°F). "Stb" appears on the display (4).

3.4. Automatic heating shut down (AUTO OFF function)

The auto off time for the heating shut down is displayed flashing by pressing and holding (approx. 3 sec.) the HIGH POWER button (2). The shut-down time can be adjusted in 5 minute steps in the range 5 - 600 min by pressing the "UP" or "DOWN" button (5)(7). A setting of less than 5 min switches off the automatic heating shut-down and "OFF" appears on the display (4).

If the standby function is also active, the temperature is reduced to $100^{\circ}C$ (212°F). "Stb" appears on the display (4).

3.5. Operation using RS232 serial interface

When operated together with the WHA 3000P / WHA 3000V hot air station, the WHP 3000 heating plate is controlled via the RS232 serial interface (11). Here the heating plate is used as a bottom heater for electronic assemblies and is integrated into a 3-step temperature-time profile. When used in automatic mode (Remote LED (1) illuminated) it is not possible to make any entries directly at the heating plate. Only the switch over between the heating zones (9) remains active. The temperature setting is made via the WHA 3000V / WHA 3000V hot air station. When the program is not active, the heating plate is switched off. "OFF" appears on the display(4). If the standby function is also active, the temperature is reduced to 100°C (212°F). "Stb" appears on the display (4).

3.6. STANDBY function

In standby mode the temperature is reduced to $100^{\circ}C$ (212°F) if a heating shut-down occurs (using OFF, AUTO OFF, RS232). The standby mode is activated via a "Power-On Routine". For this purpose the device is first switched off at the mains switch (6). Press the HIGH POWER button (9) and switch on the device. Keep button pressed until the **- 1** - appears on the display (4). When the "HIGH POWER" button is released the setting is saved. The standby function is switched on. Use the same procedure for switching off. **- 0** - appears on the display (4) (factory setting).

4. Operation with external Sensor

It is also possible to measure the control variable for the temperature regulation using an external sensor. If an external sensor is connected, the current temperature from the external sensor is displayed and controlled instead of the temperature of the heating lamps. The external sensor, an insulated thermocouple type K, is connected to socket (10). LED (3) on the display (4) illuminates.

Note:

The sensor must be adequately in contact with the assembly or component for correct operation. When working with the external sensor, the temperature setting (setpoint) must be adjusted to suit the measuring point.

5. Error indications on the display (4)

--- No temperature sensor detectedE10 Maximum housing temperature exceeded

6. Other power-on routines

°C / °F change over

For this purpose the device is first switched off at the mains switch (6). Press DOWN button (7) and switch on the device. Keep button pressed until the "°F" appears on the display (4). When the "DOWN" button is released the setting is saved. Use the same procedure for the change over to "°C".

Resetting to the factory setting (FSE)

For this purpose the device is first switched off at the mains switch (6). Press "UP" (5) + "DOWN" (7) + "HIGH POWER" (9) button simultaneously and switch on the device. Keep buttons (5, 7, 9) pressed until "FSE" appears on the display (4). When the buttons (5, 7, 9) are released the setting is saved.

7. Accessories

T005 31 190 99	External sensor type K (0.5mm)
T005 31 191 99	Interface cable
T005 33 162 99	WBH 3000 Circuit board holder
T005 33 163 99	WBH 3000S Circuit board holder
	with stand WHA 3000
T005 33 346 99	WHA 3000P Hot air station
T005 33 366 99	WHA 3000V Hot air station

8. Items supplied

WHP 3000 heating plate Mains cable Operating instructions Safety information

Subject to technical change without notice!



- 10. External sensor
- 11. RS232 interface (external control)
- 12. Mains connection



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