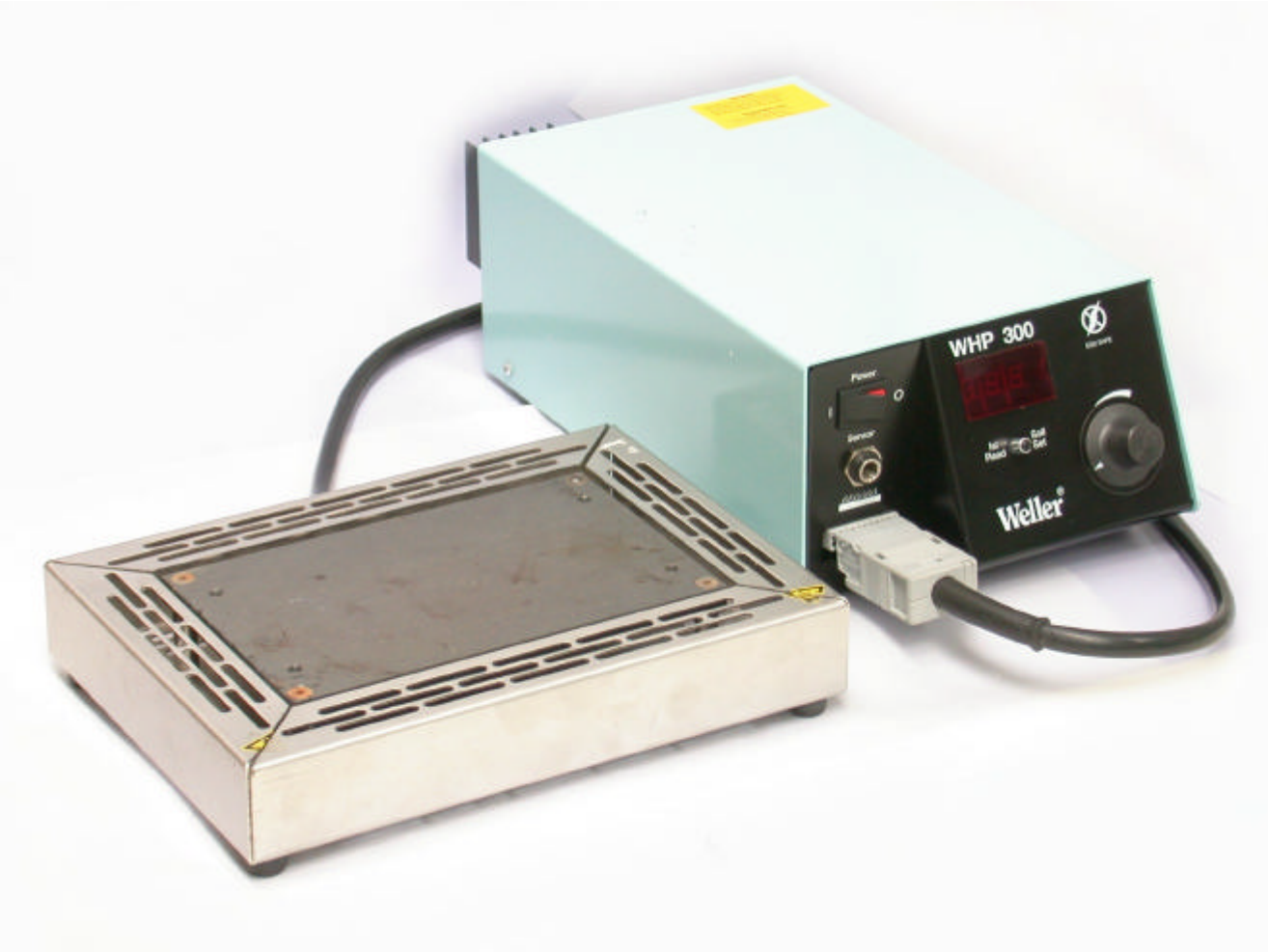
Operating Instructions

Weller Model WHP-300 Hot-Plate Solderer De-Solderer



Description

The Preheating and Reflow System WHP 300 is eminently suitable for soldering and unsoldering tasks in hybrid technology. This device brings the carrier material to the working temperature for perfect soldering operations without causing any thermal damage to the base material. The Heating Plate HP 300 is electrically isolated from the power supply mains and operates with safe low voltage of 27 V AC. The heated area of 100 x 160 mm (European format) is heated uniformly. Temperature regulation is performed by analogue means. The desired temperature can be set continuously with a rotary potentiometer control over the range from 50°C to 300°C. The set point temperature and the actual temperature are displayed in digital form. The digital temperature indicator can be switched to the desired display mode (set point or actual value) with a sliding switch. The digital display also contains a luminous spot for visually checking the action of the temperature controller. As option, a facility is available for controlling the temperature with an external sensor directly on the heated component. Switchover to the external sensor takes place automatically when plugging-in the 6.35 mm jack plug on the front of the unit. The case is coated with a permanent electrically conducting lacquer. A ground potential equalisation connection can be made if required via the 3.5 mm switching jack-plug socket on the rear of the unit. The mains primary circuit of the unit is equipped with a resetable current overload cut-out device. This current overload cut-out device can be reset by pressing the red button after clearing the cause of the current overload fault.

Technical Data

Dimensions: Controller Unit WHP 300 W x D x H: 145 x 270 x 102
Heating Plate HP 300 L x W x H: 220 x 160 x 45
Mains voltage: 230 V AC
Heater voltage: 27 V
Power consumption: 300 W
Protection: 1.5 A current overload cut-out device
Accuracy: Temperature control tolerance
+1-2% of scale end value

1. Commissioning

Connect the heating plate via the 5-pole flat plug connector to the controller unit.

Warning: Make sure that there are no combustible objects in the vicinity of the heating plate.

Check that the mains voltage corresponds to the nominal value stated on the type specification label. When you are sure that the mains voltage is correct, connect the controller unit to the mains voltage. The changeover switch for set point I actual temperature display should be set to "SET POINT". Switch-on the control unit at its mains switch and set the desired
temperature on the rotary potentiometer control. The red spot to the right of the display digits lights up. This red spot indicates the temperature controller action. Continuous illumination means that the actual temperature is below the set point temperature, that is the system is heating-up. Flashing of the red spot means that the actual temperature agrees with the set point temperature, that is the system is now operating in the controlled temperature mode. When the red spot is not lit, this means that the actual temperature lies above the set point temperature. Move the changeover switch to the setting "ACTUAL". The digital display now reads the actual temperature of the heating plate.

Equi-potential bonding

The various circuit elements of the 3.5 mm jack bush make 4 variations possible:

Hard-grounded: No plug (delivery form)

Equipotential bonding: With plug, equalizer at center contact (impedance 0 Ohms)

Potential free: With plug

Soft-grounded: With plug and soldered resistance. Grounding with set resistance value.

Notes on Use

The good thermal insulation of the Heating Plate HP 300 with respect to the exterior makes it suitable for recessed table mounting.

Warning: Danger of skin burns! Use a suitable covering device as a safeguard against burns. Ensure adequate circulation of air from below when operating the heating plate in recessed table installation.

When preheating ceramic carrier material it is advisable to use a thin Teflon or Capton intermediate layer on the heating plate to prevent return of soldering heat to the heating plate.

Safety Instructions

The manufacturer cannot take over any responsibility or liability for damage or injury caused by unauthorised tampering or by usage deviating from the proper usage as described in the operating instructions.

These operating instructions and the warnings contained therein must be read attentively and placed clearly visible in the vicinity of the soldering device. Failure to observe the warnings can lead to accidents and injuries or damage to health.

The WELLER Controller Unit WHP 300 with heating plate complies with the EC Conformity Declaration according to the basic safety stipulations of the directives 89/336/EEC, 73/23/ EEC.

Accessories

533 161 99 Hand support 490 x 340 mm
587 017 23 External Sensor

Scope of supply

HP 300 Heating Plate L x W x H: 220 x 160 x 45
Controller Unit WHP 300
Mains Cable
Operating Instructions

Warnings *(The Controller Unit WHP 300 with heating plate is referred to as the soldering tool in the following warning texts).*

1. Keep your work area in proper order.

Always return the soldering tool to its original holder when not in use. Do not bring combustible materials near the hot soldering tools.

2. Take care for the surroundings.
Don't use the soldering tool in a moist or wet environment.

3. Protect yourself against electrical shocks.
Avoid touching grounded parts with your body, e.g. pipes, heating radiators, stoves, refrigerators.

4. Keep children at a distance.
Don't allow other persons to touch or disturb the soldering tool or cord. Keep other persons away from your work area.

5. Store your soldering tool in an appropriate place
Unused soldering tools should be stored in a dry location which is out of the reach of children (some place high or in a locked cabinet). Switch off all unused soldering tools.

6. Do not overload your soldering tool.
Use the soldering tool only with the specified voltage or specified pressure and pressure range.

7. Use the appropriate soldering tool.
Don't use a soldering tool whose performance is not adequate for your work. Never use the soldering tool for purposes for which is was not designed.

8. Wear suitable work cloths.
There is a danger of burning yourself with liquid solder. Wear the corresponding protective clothing in order to protect yourself against burns.

9. Protect your eyes.

Wear protective eyewear. When working with bonding agents, it is particularly important to observe the warning notices of the bonding agent manufacturer. Protect yourself against spattering solder. There is a danger of burning yourself with liquid solder.

10. Use a soldering vapour suction device
If devices for solder vapour suction are available, ensure that these are connected and correctly used.

11. Do not use the cord for purposes for which it is not designed.
Never carry the soldering tool by the cord. Don't use the cord to pull the power plug from the socket. Protect the cord from heat, oil, and sharp edges.

NOTE – This manual was compiled from an OCR of the original Weller Manual 005-56-912-04/6.00 BB 0,3 Copyright by Cooper Tools GmbH, Germany with images produced by CASA

The document is also saved as a PDF file (with the makers original data sheet attached) to conserve file size.