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TECHNOLOGY GROUP

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with experienced engineers and technicians on staff.

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so your equipment works exactly as you specify.

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Find the *Cooper Hand Tools / Weller WHA 3000P* at our website: *Click HERE*

Technical data WHA 3000P:

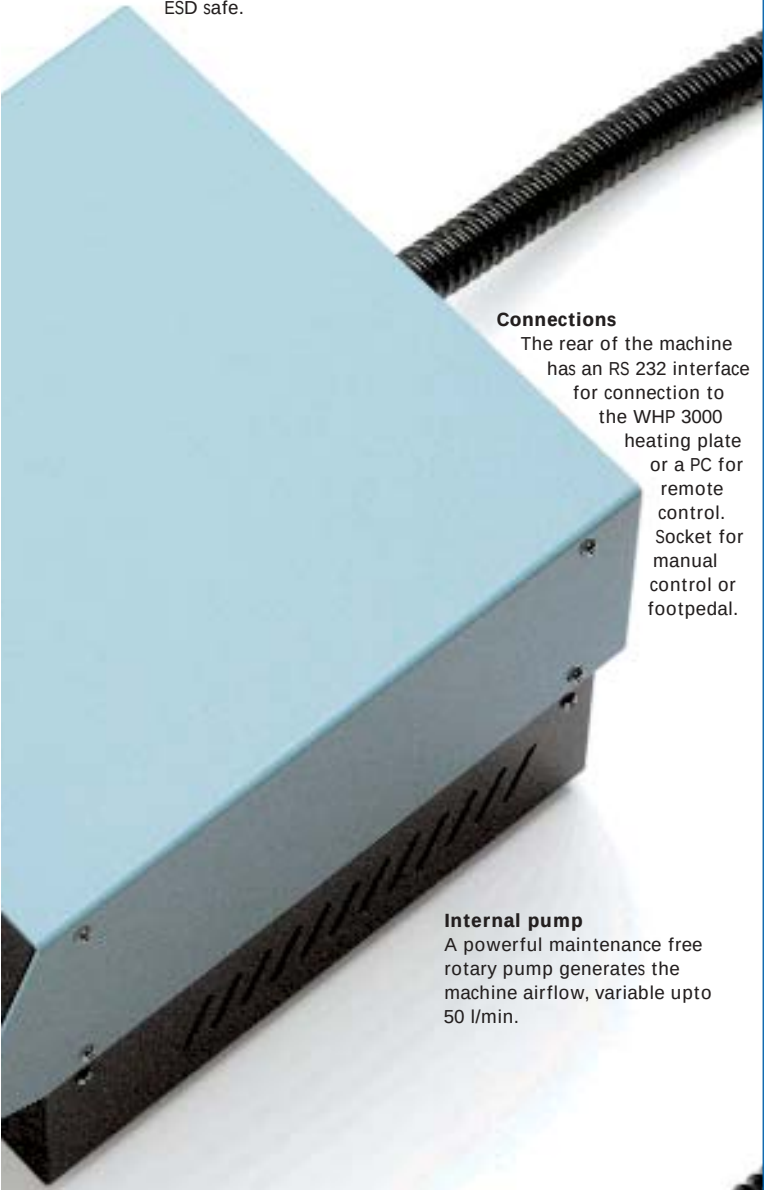
Dimensions:	240 x 270 x 170 (W x L x H mm)
Mains voltage:	230 V
Max. heat power:	700 W
Temperature range:	50 °C – 550 °C
Control accuracy:	± 25 °C
Air volume:	5 – 50 l/min.
Vacuum:	- 0.6 bar

Protection class 1 (control unit and hot air iron hard grounded)

Order No. 005 33 346 99
(UK: 005 33 343 99)

"ESD" Safe

ESD safe
Both the housing and pencil are ESD safe.



Connections
The rear of the machine has an RS 232 interface for connection to the WHP 3000 heating plate or a PC for remote control. Socket for manual control or footpedal.

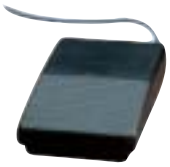
Internal pump
A powerful maintenance free rotary pump generates the machine airflow, variable upto 50 l/min.

External sensor
A machine-mounted socket is fitted to receive a type K thermocouple; this would be used to record the temperature of a specific position on the circuit board and allow precise process monitoring.

Accessories for WHA 3000P and WHA 3000V



Manual control panel
The hot air and vacuum can be activated via the manual control panel if, for example, the machine cannot be reached conveniently. For connection to WHA 3000P / WHA 3000V.
Order No. 005 87 367 80



Foot switch
Hot air and vacuum can be activated via the foot switch. The foot switch has two stages: stage 1 hot air, stage 2 vacuum. For connection to WHA 3000P / WHA 3000V.
Order No. 005 87 577 70



Nozzle change tool
This tool is required to change the nozzles when they are hot. It is part of the equipment supplied with the hot air stations WHA 3000P / WHA 3000V and WHA 300.
Order No. 005 15 049 99



External sensor
Type K. For precise "on-the-spot" temperature measurement. For connection to the hot air stations WHA 3000P or WHA 3000V or to the pre-heating plate WHP 3000.
Order No. ∅ 0.25 mm: 005 87 549 51
Order No. ∅ 0.50 mm: 005 31 190 99







Stand for hot air nozzles



The rest has space for up to six hot air nozzles and facilitates nozzle change even when parts are hot. The nozzle is secured in the holder by means of a clamping device. When the clamping screw is loosened, nozzle and iron can be separated easily. The nozzle remains in the holder. The hot air iron can now be pushed onto another nozzle in the holder; simply tighten the clamping screw and the nozzle change is complete. The risk of burning hands or material is minimised.
Order No. 005 15 048 99

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Hot Air Technology

Equipment overview

The control technology used in Weller hot air equipment guarantees precise and repeatable processes when soldering/desoldering SMD components. This process control is further enhanced by the application of Weller patented nozzle technology.

700-W Hot Air Stations

These stations use temperature and volume controlled hot air with Weller patented technology nozzles and the HAP 3000 hot air pencil to solder and desolder the larger dual in line and quad pack components.
There are three stations in the range giving users the option of digital control with an integral air supply, digital control with an external air or inert gas supply or analogue control with an integral air supply.
A wide range of hot air nozzles type ND and NQ with integral hot plates to heat the component body and types NR and DR without hot plates complete the range.



WHA 3000P
Digitally controlled hot air station with an integral air supply and vacuum pick up at the nozzle. To cater for demanding repair operations.



WHA 3000V
Digitally controlled hot air station for use with a compressed air or inert gas supply and vacuum pick up at the nozzle.



WHA 300
Analogue controlled hot air station with an integral air supply without vacuum pick up. This station is suited to less complex repair operations and other heating processes such as heat shrinking.

100-W Hot Air Stations

This range of four stations is suited to reworking smaller SMD components. Like the 700 W stations the type D and type Q nozzles do have an integral hot plate but other types do not. These stations do not have a nozzle vacuum pick up therefore; it is necessary to use either manual or vacuum tweezers to remove the component.
As well as the HAP 1 hot air pencil, all other tools in the Weller Temtronic range can be connected to these stations and dependant upon the station upto three tools could be controlled independently.
Of the four stations in the range two have internal electrically driven pumps and two are operated from either a compressed air or inert gas supply.



WMD 3K
Three channel digitally controlled repair station with an integral pump to provide variable volume airflow and fixed value vacuum. The station is supplied with an 80 watt miniature soldering iron, 80 watt through hole desoldering tool and 100 watt hot air pencil.



WMD 1A
A single channel digitally controlled repair station with an integral pump to provide variable volume air flow and fixed value vacuum. The station is supplied with a 100 watt hot air pencil but all other Temtronic tools of compatible rating could be driven.



WAD 101
A single channel digitally controlled hot air station for use with compressed air or inert gas. The station is supplied with a 100 watt hot air pencil but all other Temtonic tools apart from the through hole desoldering pencil can be driven.



WMA 3V
A single channel, analogue controlled repair station for use with compressed air or inert gas. The station is supplied with a 100 watt hot air pencil, vacuum pick up and solder paste/adhesive dispenser all able to be operated simultaneously.

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WHA 3000 Set

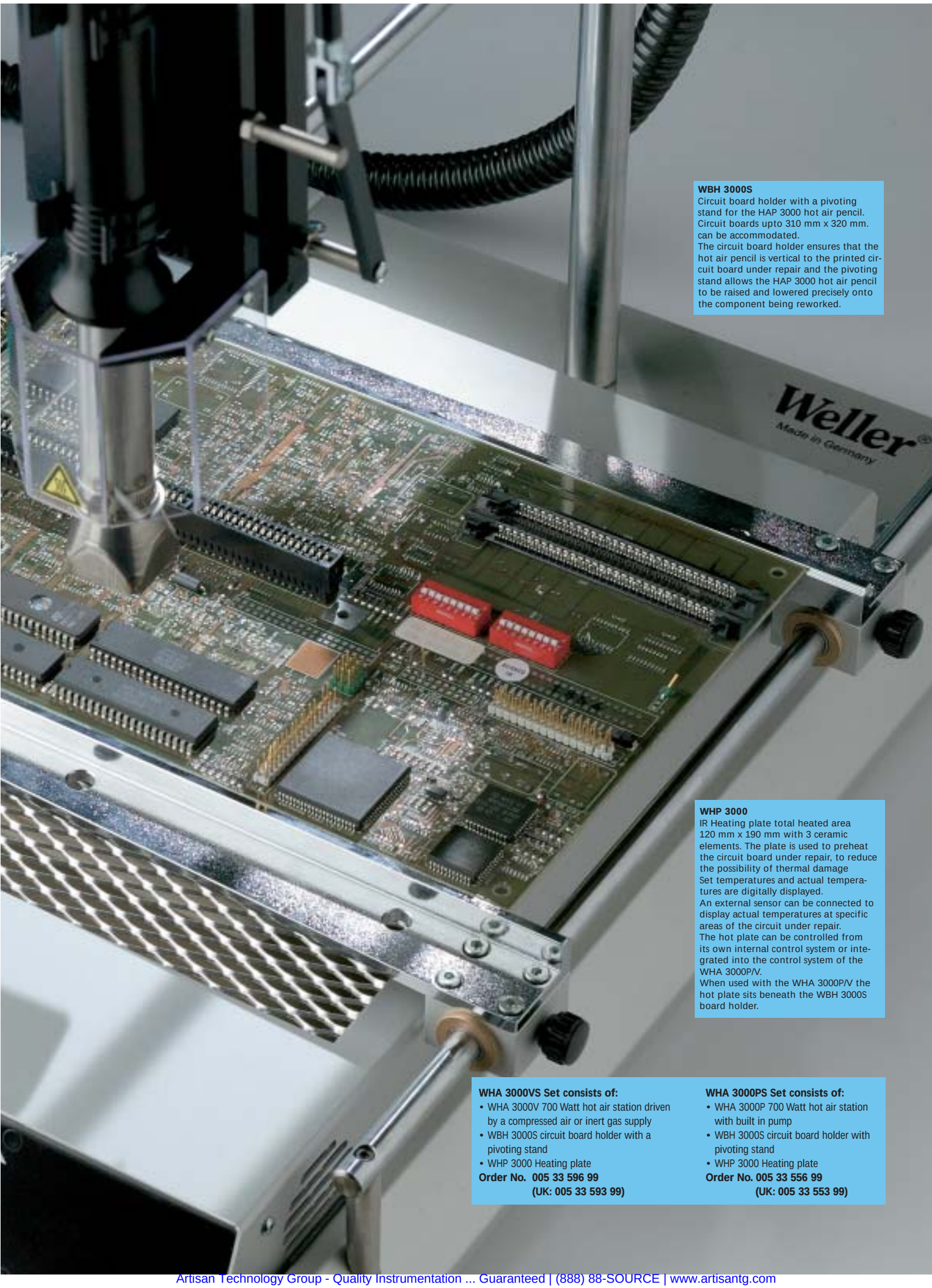
The versatile system for demanding work

WHA 3000P
700 watt hot air station with patented Weller nozzle technology for maximum process control and user friendly operation. The powerful variable speed controlled turbine generates an air volume of upto 50 litres/min.
An ion trap so that charge free hot air is directed at the component.
Memory space to store upto 10 thermal profiles to ensure process repeatability

Alternatively:
WHA 3000V
700 watt hot air station similar in all respects to the WHA 3000P but operating from an external compressed air or inert gas supply.

Hot air nozzle stand (option)
Provides storage for upto 6 hot air nozzles and allows quick and easy nozzle changes even when hot.

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WBH 3000S
Circuit board holder with a pivoting stand for the HAP 3000 hot air pencil. Circuit boards upto 310 mm x 320 mm. can be accommodated.
The circuit board holder ensures that the hot air pencil is vertical to the printed circuit board under repair and the pivoting stand allows the HAP 3000 hot air pencil to be raised and lowered precisely onto the component being reworked.

WHP 3000
IR Heating plate total heated area 120 mm x 190 mm with 3 ceramic elements. The plate is used to preheat the circuit board under repair, to reduce the possibility of thermal damage
Set temperatures and actual temperatures are digitally displayed.
An external sensor can be connected to display actual temperatures at specific areas of the circuit under repair.
The hot plate can be controlled from its own internal control system or integrated into the control system of the WHA 3000P/V.
When used with the WHA 3000P/V the hot plate sits beneath the WBH 3000S board holder.

WHA 3000VS Set consists of:
- WHA 3000V 700 Watt hot air station driven by a compressed air or inert gas supply
- WBH 3000S circuit board holder with a pivoting stand
- WHP 3000 Heating plate

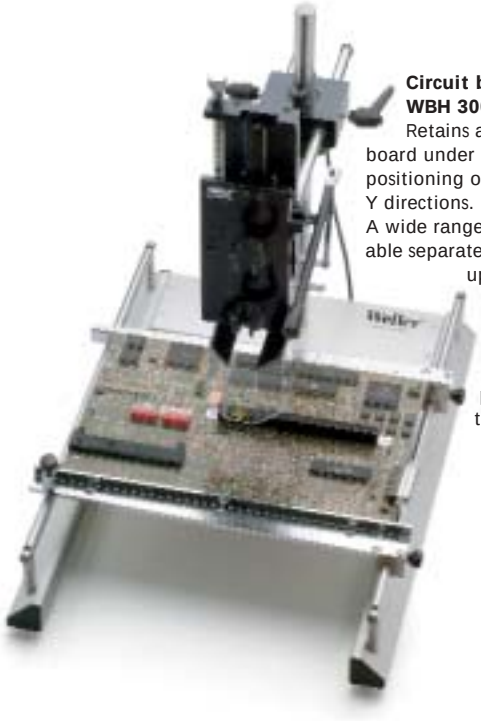
Order No. 005 33 596 99
(UK: 005 33 593 99)

WHA 3000PS Set consists of:
- WHA 3000P 700 Watt hot air station with built in pump
- WBH 3000S circuit board holder with pivoting stand
- WHP 3000 Heating plate

Order No. 005 33 556 99
(UK: 005 33 553 99)

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The components of the **WHA 3000P Set**



Circuit board holder WBH 3000S

Retains and secures the circuit board under repair and allows positioning of the board in X and Y directions.
A wide range of accessories available separately permits boards upto a max size of 310 mm x 320 mm both single and double sided to be accommodated in a perfectly flat condition.

The WBH 3000S incorporates a pivoting stand to mount the HAP 3000 hot air pencil. This stand allows the HAP 3000 to be raised and lowered onto the component under repair. An added safety feature is the Stop + Go function, which will automatically switch the hot air pencil into a standby mode if the stand is pivoted to the side of the board holder without first switching off the hot air.

The pre-heating plate WHP 3000 (supplied separately) can be fitted under the board holder to provide background heating.

Technical data WBH 3000S:
Dimensions: 440 x 320 x 446 (H x W x L mm)
Order No. 005 33 163 99



Circuit board holder WBH 3000

As the WBH 3000S but without pivoting stand.
Technical data WBH 3000.
Dimensions:
100 x 320 x 446
(H x W x L mm)
Order No. 005 33 162 99

Accessories for circuit board holder WBH 3000 / WBH 3000S:



Adjustable circuit board stop.
Order No. 005 87 548 73



Support for large-dimensioned circuit boards.
Order No. 005 87 557 45



Downholder for circuit boards.
Order No. 005 87 557 41



Clamping set for irregular shaped circuit boards (mobile phones, video/digital camera boards etc.).
Order No. 005 87 549 24

Heating plate WHP 3000



The WHP 3000 increases the flexibility of the WHA systems. It provides underside heating to the board under repair, reducing the heat requirement from the hot air pencil and therefore minimising the risk of thermal damage to the board as well as speeding up the repair process. The heated surface comprises 3 high temperature ceramic elements that ensure fast and efficient heating.

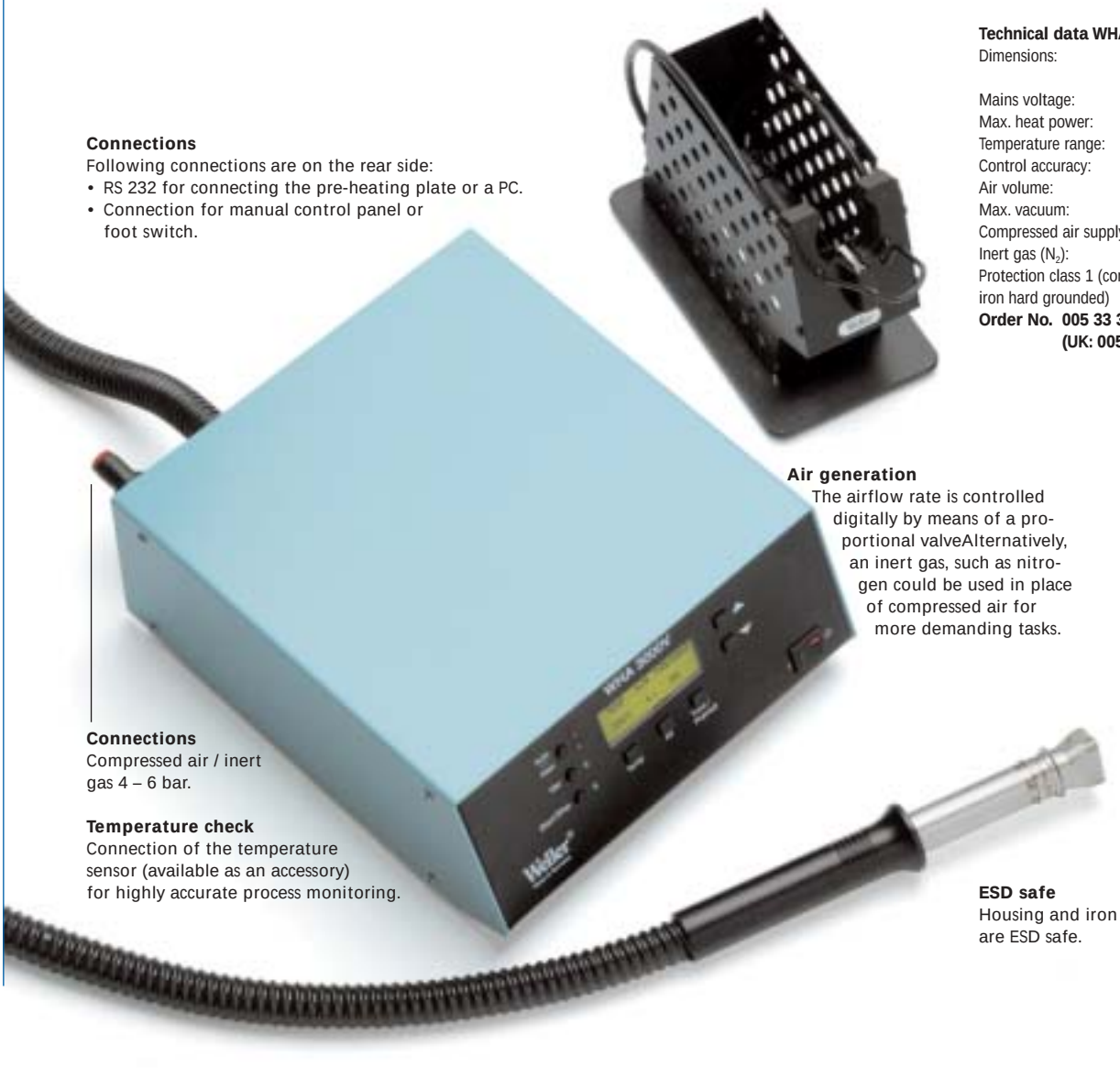
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700W

WHA 3000V

Digital 700 W hot air station for operation with compressed air or inert gas

Function and equipment corresponds to WHA 3000P



Connections
Following connections are on the rear side:
- RS 232 for connecting the pre-heating plate or a PC.
- Connection for manual control panel or foot switch.

Technical data WHA 3000V:

Dimensions:	240 x 270 x 100 (W x L x H mm)
Mains voltage:	230 V
Max. heat power:	700 W
Temperature range:	50 °C – 550 °C
Control accuracy:	± 25 °C
Air volume:	5 – 50 l/min.
Max. vacuum:	-0.6 bar
Compressed air supply / Inert gas (N_2):	4 – 6 bar

Protection class 1 (control unit and hot air iron hard grounded)
Order No. 005 33 366 99
(UK: 005 33 363 99)

Air generation
The airflow rate is controlled digitally by means of a proportional valveAlternatively, an inert gas, such as nitrogen could be used in place of compressed air for more demanding tasks.

Connections
Compressed air / inert gas 4 – 6 bar.

Temperature check
Connection of the temperature sensor (available as an accessory) for highly accurate process monitoring.

ESD safe
Housing and iron are ESD safe.

A digital electronic control system guarantees precise temperature control and provides other functions, such as Auto off and stand by temperature. Set and actual temperatures are displayed digitally.
Two heated zones can be selected The temperature of a specific point on the board under repair can be monitored and controlled by means of an optional external sensor. If used the temperature display will show the actual value of the temperature of the board at the point of contact, not the temperature of the hot plate elements.

An RS 232 interface connection from either of the WHA stations can be used to enable the hot plate to be used as an underside heater in a multilevel process sequence. If this option is required then we recommend that the WBH 3000 board holder is used. The pre-heating plate is designed to sit between the side supports of the board holder.

Technical data WHP 3000:

Dimensions:	254 x 395 x 70 (B x L x H)
Heatable surface:	120 x 190 mm
Mains voltage:	230 V
Power:	small heating zone 200 W large heating zone 600 W
Temperature range:	50°C – 400°C
Protection class:	1

Order No. 005 33 386 99
(UK: 005 33 383 99)

Heating plate WHP 3000
As the WHP 3000 but with a heatable surface of 190 x 245 mm.

Technical data:

Dimensions:	254 x 395 x 70 (B x L x H)
Heatable surface:	190 x 245 mm
Mains voltage:	230 V
Power:	1200 W
Temperature range:	50°C – 400°C
Protection class:	1

Order No. 005 33 646 99
(UK: 005 33 643 99)

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700W

WHA 3000P

Digital 700 W hot air station with built in turbine

The WHA 3000P will perform demanding repair tasks on circuit boards with complex fine pitch surface mounted components.
The advanced control technology coupled with user-friendly operation, guarantees precision of repair processes. While the sophisticated automatic operation mode guarantees repeatability of the process and increases productivity and quality.
Extensive range accessories compliment the machine to promote flexibility.

Stop and Go
The tool holder AKT 30 is a stable support for the hot air pencil. When the pencil is replaced in the support after soldering or desoldering the airflow rate is automatically switched to the standby mode, at a minimal flow rate, sufficient to maintain the nozzle at its operating temperature. Removal of the pencil will switch the airflow back to its selected flow rate.
Order No. 005 15 043 99







LCD Display
High contrast LCD characters clearly display the operating parameters.

Manual operation
Operating parameters are selected by the operator to cope with repair tasks.

Automatic mode
A three-stage temperature/time profile controlling air temperature, air volume and process time can be stored in the machine memory to carry out repeatable repair operations. The WHP 3000 hot plate can also be controlled in this mode. Upto 10 individual programmes can be stored in the machines memory.



PC Software
To provide control from a PC.



Setting
Up down push buttons set the operating parameters of the air temperature, air volume and process time.
LED indicators highlight the operating mode, start/ stop and vacuum functions.

Hot air pencil
The ergonomic and powerful hot air pencil (700 W) together with the extensive range of patented technology nozzles (see pages 11-13) make this tool very versatile. Hot air nozzles are secured to the tool by a clamping screw. A vacuum plate will lift the component from the board after reflow.
A nozzle removal tool supplied with the machine enables rapid removal and replacement of nozzles, even when hot.



ESD safe
The hot air is delivered through an ion trap to remove any charge and the tool handle and tubing are manufactured from static dissipative materials.

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