



A Donaldson Company

A WORLD LEADER IN FUME
EXTRACTION TECHNOLOGY

T1

USER MANUAL

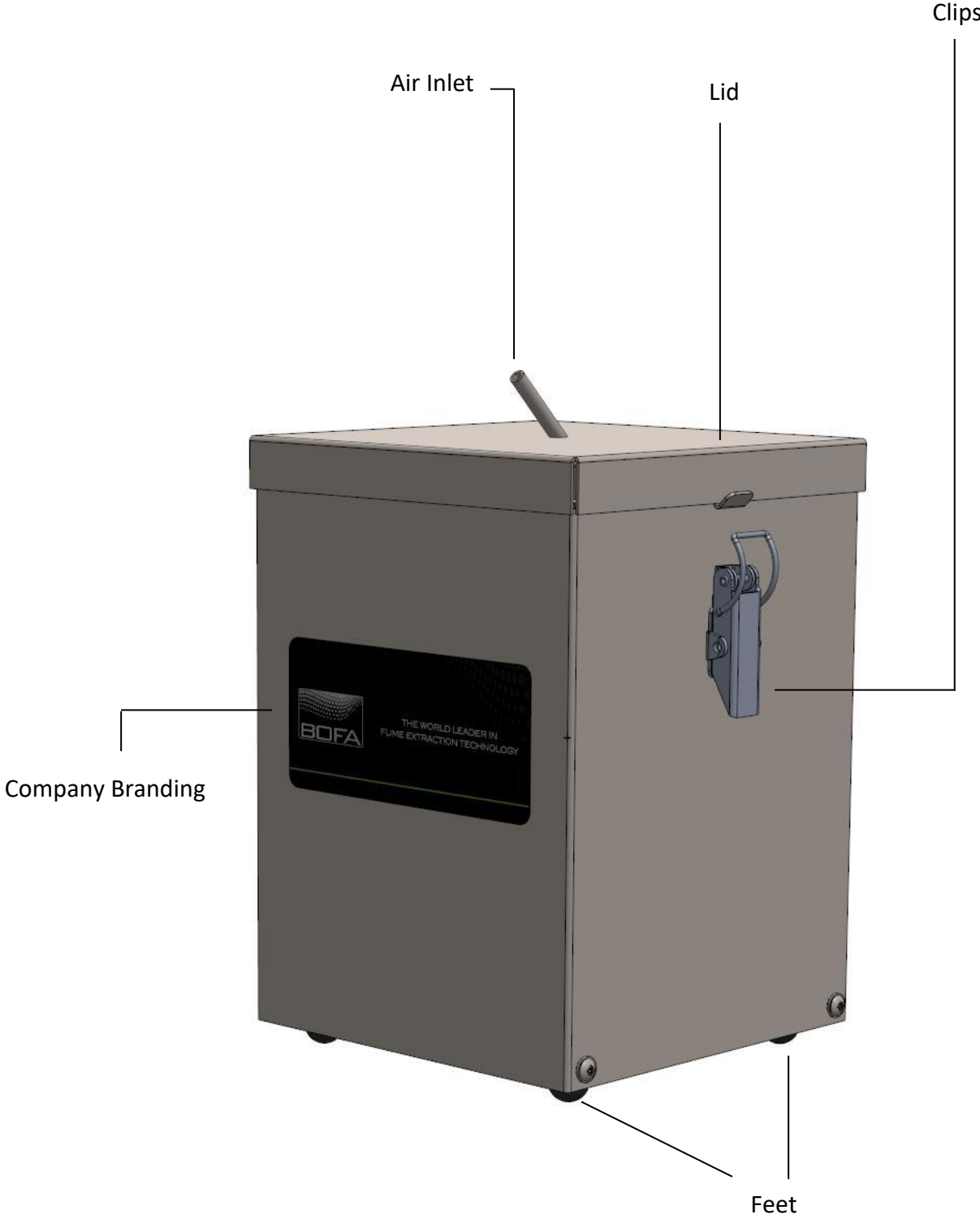


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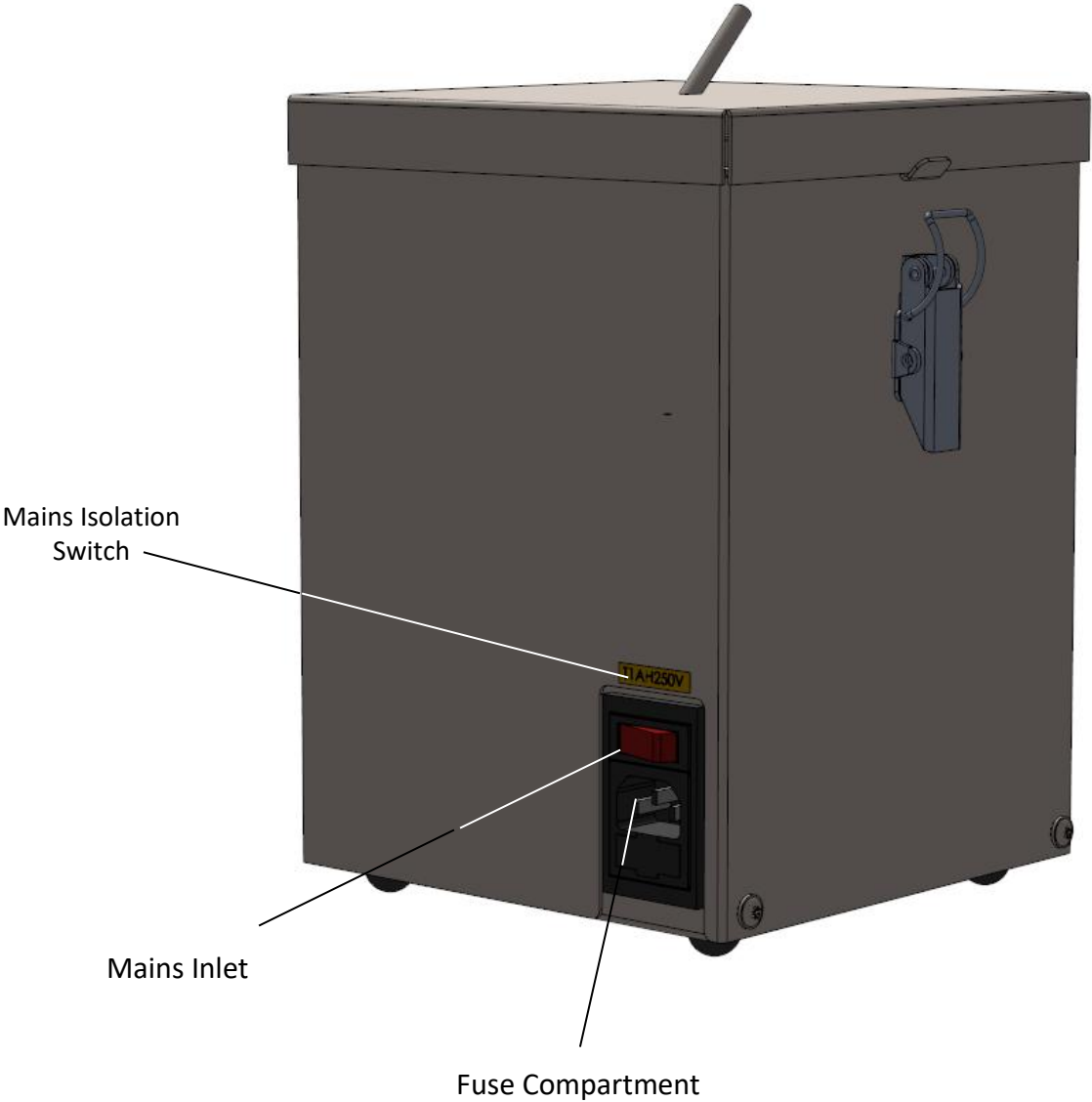
Overview

1 01



Overview

1 02



Safety Instructions



Important safety notes

Concerning symbols used on the extraction unit and referred to within this manual.



Danger

Refers to an immediately impending danger. If the danger is not avoided, it could result in death or severe (crippling) injury. Please consult the manual when this symbol is displayed.



Warning

Refers to a possibly dangerous situation. If not avoided it could result in death or severe injury. Please consult the manual when this symbol is displayed.



Caution

Refers to a possibly harmful situation. If not avoided, damage could be caused to the product or something in its environment.



Important (Refer to manual)

Refers to handling tip and other particularly useful information. This does not signify a dangerous or harmful situation. Refer to manual when this symbol is displayed.

Important

To reduce the risk of fire, electric shock or injury:

1. Always isolate the system from the mains power supply before removing the pump/motor access panel.
2. Use only as described in this manual.
3. Connect the system to a properly grounded outlet.

Dangers to eyes, breathing and skin

Once used, the filter within the T1 system may contain a mixture of particulates, some of which may be sub-micron size. When the used filters are moved it may agitate some of this particulate, which could get into the breathing zone and eyes of the operative. Additionally, depending on the materials being used, the particulate may be an irritant to the skin.

This unit should not be used on processes with sparks of flammable materials or with explosive dusts and gases, without implementation of additional precautions.

Caution: When changing used filters always wear a mask, safety shoes, goggles and gloves.

Carbon selection

Please note that the media within the filter fitted in the T1 is capable of adsorbing a wide range of organic compounds. However, it is the responsibility of the user to ensure it is suitable for the particular application it is being used on.

BOFA Technical Service

If problems arises with your T1 unit please contact us:

- Visit our website at www.bofa.co.uk for on-line help.
- Or contact the helpline on **+44 (0) 1202 699 444**, Mon-Fri, 9am-5pm.
Email: Technical@bofa.co.uk

Serial Number

For future reference, fill in your system details in the space provided. The serial number is on the rating label located on the side/rear of the unit.

Serial Number:

□	□	/	T	1	-	□	□	□	-	□	□	□
---	---	---	---	---	---	---	---	---	---	---	---	---

Safety Instructions



Warning and Information labels

The following listing details labels used on your extraction unit.

Goggles, Gloves & Mask Label



Location: Front face of filter.

Meaning: Goggles, Gloves and Masks should be worn while handling used filters.

Warning Label



Location: Next to release clips.

Meaning: Power should be isolated before the panel with this label attached is opened/ removed.

Serial Number Label



Location: Next to mains inlet.

Meaning: This label contains a variety of information about the extraction unit, including.

- Company name, Address & Contact number
- Extractor model
- Unit serial number
- Operating voltage range
- Maximum current load
- Operating frequency
- Year of Manufacture
- Relevant approval markings/ logos

PLEASE NOTE: If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment maybe compromised.

Fire Risk Warning

In the very rare event that a burning ember or spark is drawn into the fume extraction unit, it may be possible that the filters will ignite.

Whilst any resultant fire would typically be retained within the fume extraction unit, the damage to the extractor could be significant. It is therefore essential to minimise the possibility of this occurring by undertaking an appropriate Risk assessment to determine:-

- a). Whether additional fire protection equipment should be installed.
- b). Appropriate maintenance procedures to prevent the risk of build-up of debris which could potentially combust.

This unit should not be used on processes where sparks could occur, with explosive dusts and gases, or with particulates which can be pyrophoric (can spontaneously ignite), without implementation of additional precautions

It is essential that nozzles or other extraction/ fume capture devices and hoses/pipework are cleaned regularly to prevent the build-up of potentially ignitable debris

Before installation

3 01

Packaging Removal & Unit Placement

Before installation, check the extraction unit for damage. All packaging must be removed before the unit is connected to the power supply.

Please read all instructions in this manual before using this extractor.

1. Move the unit to the location where it is going to be installed and remove the outer packaging. **This unit should be installed in a well-ventilated area.**

Ensure that 500 mm space is available around any vented panels on the extractor to ensure adequate airflow.

2. Check the filter is located in its correct position before replacing the lid and securing the clips



Do not block or cover the airflow and motor cooling ports on the unit, as this severely restricts airflow and may cause damage to the unit.



Under no circumstances should the exhaust outlet/s be covered as this will restrict the airflow and cause overheating.



Installation

4⁰¹

TECHNICAL DATA		
	230V	115V
Dimensions (HxWxD)	260 x 171 x 171 mm	9.8 x 6.7 x 6.7"
Cabinet Construction	Powder coated mild steel	Powder coated mild steel
Flow Rate with filters fitted (per tip)	20-24 L/M	20-24 L/M
Electrical Data	230v 1ph 50/60Hz Full load current: 0.25amps / 40w	115v 60/50Hz Full load current: 0.46amps / 32w
Noise Level	< 48dBA*	< 48dBA*
Weight	5kg	11lbs
Pre Filter Efficiency	F7 (85% @ 0.8 microns)	
HEPA Filter Efficiency	(99.997% @ 0.3 microns)	
Gas Filter	Treated Activated Carbon	

UNIT SPECIFICATIONS		
	230V	115V
Maximum number of Soldering Irons	1	1



Operation

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The T1 high vacuum unit is designed to extract and filter fumes and debris through small bore hoses and attachments.

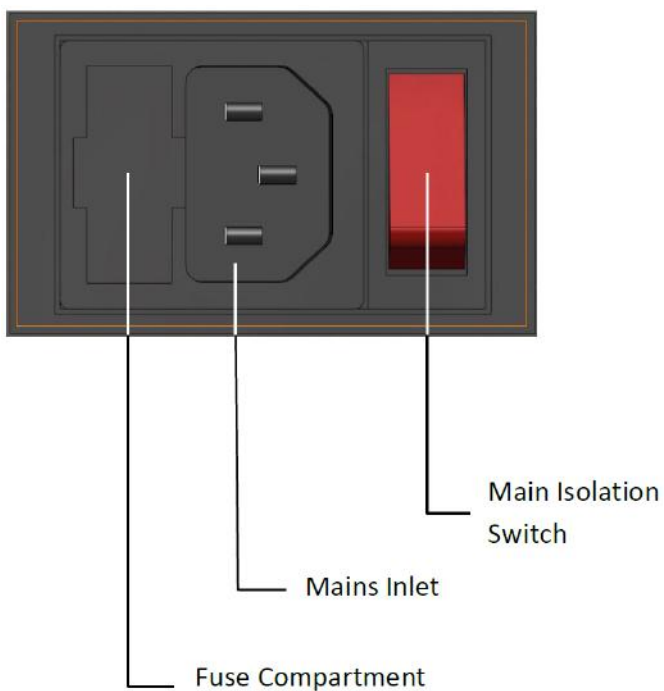
Ideally suited for soldering iron tip extraction, vac pens and any application requiring close proximity, micro extraction.

TYPICAL APPLICATIONS:

- Soldering
- Tip soldering
- Rework
- Lead free

Turning extraction unit On

The T1 features a fused IEC inlet for the mains cable as well as a main isolation switch. The unit can be powered on and off by pressing the red rocker switch to the right hand side.



Maintenance



Maintenance UK

It is a legal requirement, under regulation 9 of the COSHH regulations that all local exhaust ventilation systems are thoroughly examined and tested at least once every 14 months (typically carried out annually). The approved code of practice recommends that a visual check should be carried out at least once a week.

COSHH requires the annual inspection and testing to be carried out by a competent person and specifies that documentation results are recorded in a log.

Contact the seller for more information about inspection and certification.

Maintenance General

User maintenance is limited to cleaning the unit and filter replacement, only the manufacturers trained maintenance technicians are authorised to carry out component testing and replacement. Unauthorised work or the use of unauthorised replacement filters may result in a potentially dangerous situation and/or damage to the extractor unit and will invalidate the manufacturer's warranty.

Cleaning the unit

The powder coat finish can be cleaned with a damp cloth and non-aggressive detergent, do not use an abrasive cleaning product as this will damage the finish.

The cooling inlets and outlets should be cleaned once a year to prevent build-up of dust and overheating of the unit.

Cleaning tip extraction pipe

To ensure that each operator's extraction tube is pulling the recommended amount of air from the iron tip, the operator must clean the extraction tube at least once during a day's use with the brass brush supplied. Replacement brushes are available. It may also be necessary to clean the silicone

tube. This can be achieved by rolling the tube between finger and thumb. (Refer to individual iron conversion kit maintenance sheet for further details.)

Filter Information

A log of filter changes should be maintained by the user. The filters require attention when the display shows the configuration shown on the next page or when the extractor no longer removes fume efficiently.

All filters are tested to BS3928. A certificate of conformity for each filter is available on request.

It is recommended that a spare set of filters are kept on site to avoid prolonged unit unavailability. Part numbers for replacement filters can be found on the filters fitted in your system.

To prevent overheating, units should not be run with a blocked filter condition, or with dust obstruction of Inlets / Outlets.

Fire Risk Warning

In the very rare event that a burning ember or spark is drawn into the fume extraction unit, it may be possible that the filters will ignite.

Whilst any resultant fire would typically be retained within the fume extraction unit, the damage to the extractor could be significant.

It is therefore essential to minimise the possibility of this occurring by undertaking an appropriate Risk assessment to determine:-

- a). Whether additional fire protection equipment should be installed.
- b). Appropriate maintenance procedures to prevent the risk of build-up of debris which could potentially combust.

This unit should not be used on processes where sparks could occur, with explosive dusts and gases, or with particulates which can be pyrophoric (can spontaneously ignite), without implementation of additional precautions.

It is essential that nozzles or other extraction/ fume capture devices and hoses/pipework are cleaned regularly to prevent the build-up of potentially ignitable debris.

Maintenance



Filter Replacement

Caution:

When changing used filters always wear respirator mask, safety glasses and gloves.

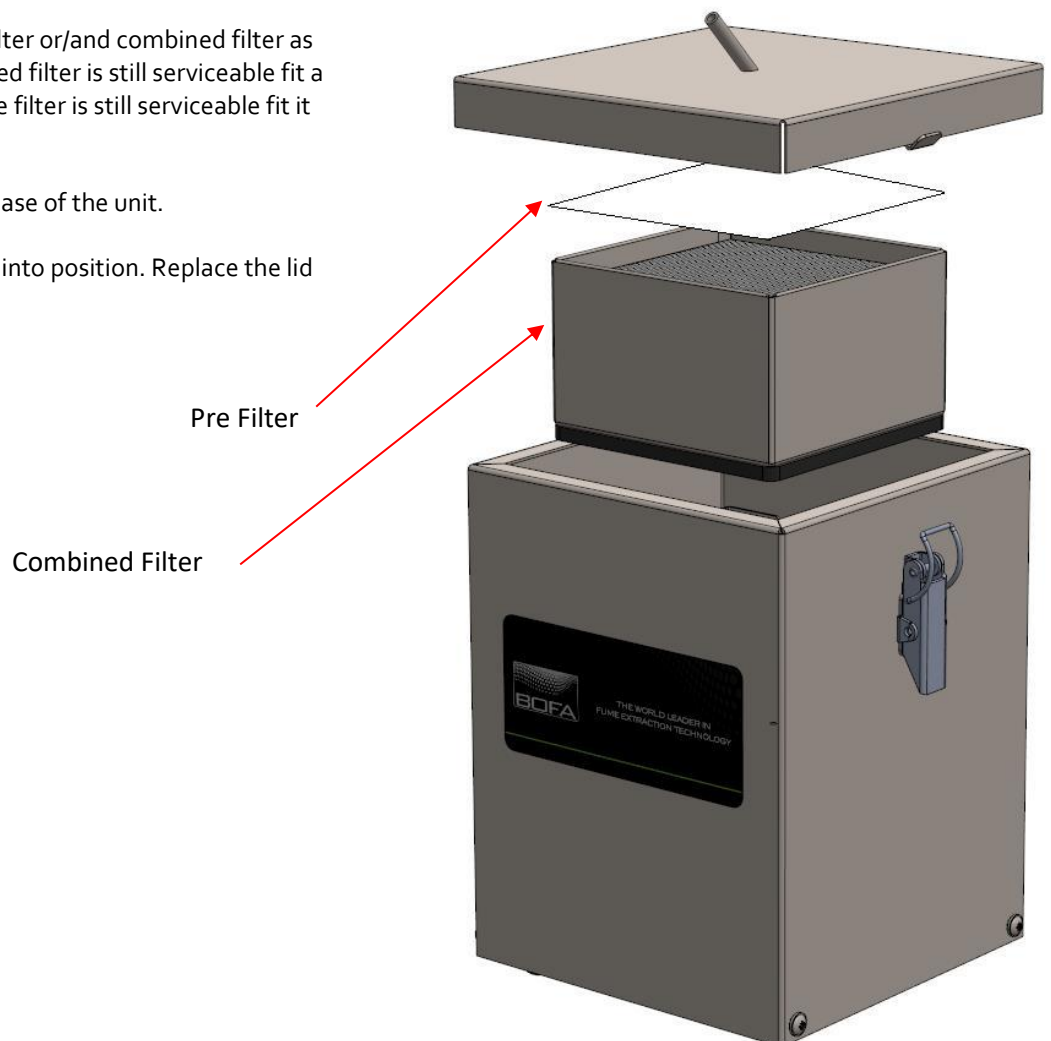
There are two separate filters fitted in the T1; a pre filter pad and a combined Gas/HEPA filter. The filter package needs attention when fume is not being pulled away. The first few filter changes should only apply to the pre-filter, which sits inside the main combined filter package. If, after replacing the pre-filter the fume removal is still not satisfactory, then the combined filter will require replacing.

Undo the clips on either side of the unit and lift the filter lid clear of the filter package. Place the lid on a safe surface. Lift out the combined filter and then take out the pre-filter, which is recessed into the combined filter enclosure.

Replace the exhausted pre-filter or/and combined filter as necessary. E.g. If the combined filter is still serviceable fit a new pre filter into it. If the pre filter is still serviceable fit it into a new combined filter.

Vacuum out any dust in the base of the unit.

Place the filter package back into position. Replace the lid and fasten the clips.



Replacement Parts



Consumable Spares

The T1 contains a pre filter and combined filter, (see section 6 for replacing the filters)

To maintain performance it is important that the filters are replaced with identical BOFA filters. To re-order please refer to the Filter number printed on the filter installed in your extraction unit.

Maintenance Protocol

Users can record changes in filter change intervals on the table below.

Unit Serial Number:			
Pre Filter		Combined Filter	
Date	Engineer	Date	Engineer

Filter disposal

The filters are manufactured from non-toxic materials. Filters are not re-usable, cleaning used filters is not recommended. The method of disposal of the used filters depends on the material deposited on them.

For your guidance

Deposit	EWC Listing*	Comment
Non Hazardous	15 02 03	Can be disposed of as non-hazardous waste.
Hazardous	15 02 02M	The type of hazard needs to be identified and the associated risks defined. The thresholds for these risks can then be compared with the amount of material in the filters to see if they fall into the hazardous category, if so, the filters will need to be disposed of in line with the local/national regulations.

*European Waste Catalogue

System Specifications



Unit: T1

Flow rate with filters fitted (per tip): 22-30 L/M

Weight: 5kg (11lbs)

Electrical supply: 115-230V

Power: 0.25A/ 40W (0.46A/32W)

Hertz: 50/60Hz

Noise Level: Below 48dBA

(at typical operating speed)

Size:

	Metric (mm)	Imperial (inches)
Height	250	9.8
Depth	171	5.9
Width	171	6.7

Filters:

Filter Type	Construction	Efficiency
Combined Filter	Maxi pleat construction with webbing spacers	99.997% @ 0.3microns
Pre Filter	Pad	F7 (96% @ 2 Microns

Environmental operating range:

Temperature: +5°C to + 40°C

Humidity: Max 80% RH up to 31°C

Max 50% RH at 40°C

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