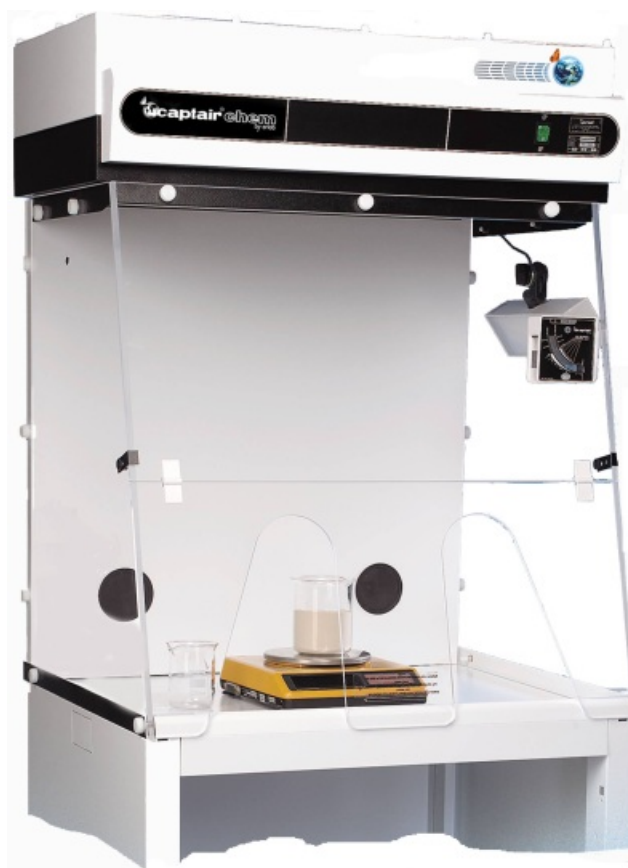




PowderMidcap™ 811 - 821 Powdercap™ 811 - 821



User's Manual

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Introduction

What must be absolutely known before using your Powdercap™?
Or how to manipulate in total safety?

Congratulations for your excellent choice, your new equipment is manufactured according to a very high standard of quality which will guarantee its safe use over the years to come.

The Powdercap™ combines operator protection and protection of the environment by using a unique air recirculation system directly into the laboratory. This is being made possible by the use of highly specialized filters which trap toxic molecules. This process named chemical adsorption allows to obtain purified air at the filter exhaust that is free from chemical pollutants. The efficiency and filter lifetime directly depend on the nature of the manipulation that will be carried out in the enclosure.

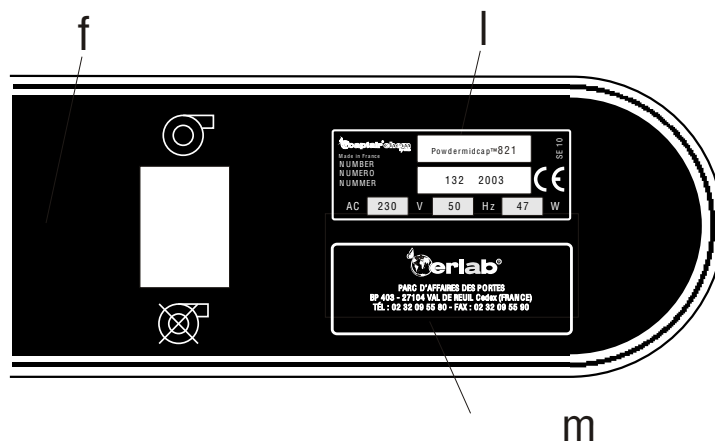
Important notice for your safety

The Powdercap™ is designed to protect the user while weighing powders or powders diluted into water. In any case, the Powdercap™ cannot be used for weighing powders in a boiling liquid or heated in the enclosure. The filtration system can be seriously damaged if used in inappropriate conditions and may not provide full protection to the user.

A careful reading of this user's manual will insure you a worry free experience while working in total safety.

Front control panel description

Powdermidcap™ 811 - 821



Right hand side of the front panel control .

- f - Ventilator/fan on-off switch
- l - Type label.
- m - Name of the manufacturer or its distributor



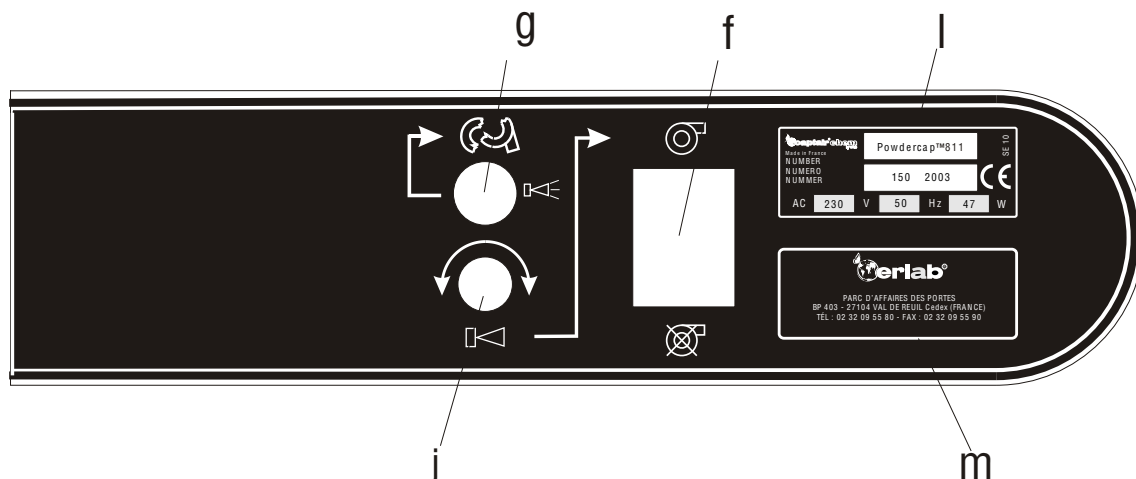
Middle part of the front control panel.



Left side of the front control panel l.

Front control panel description

Powdercap™ 811 - 821



Right hand side of the front panel control.

- | | | | |
|---|--|---|-------------------------------------|
| f | - Ventilator/fan on-off switch | g | - (Red) warning light "Fan Failure" |
| l | - Type label. | j | - External potentiometer |
| m | - Name of the manufacturer
Or its distributor | . | for the "Fan Failure" setting |



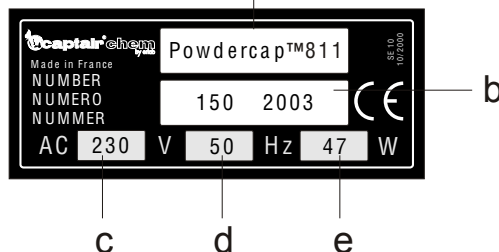
Middle part of the front control panel.



Left side of the front control panel l.

1 - Identification tag (right side of the front panel)

Make sure that your power supply complies with the actual supply voltage of your Powdercap™.



- a) Powdercap™ model
- b) Serial number
- c) Actual supply voltage
- d) Hertz frequency
- e) Total power in Watt

2 - Name of the manufacturer or its distributor (right side of the front panel)


Label with the manufacturer or distributor contact detail label.



3 - Switching on the equipment

Your Powdercap™ is equipped with 1 on-off switch

- An on-off switch with a green light for the control of the fan.

Before using your Powdercap™, the fan switch must be turned on "I  ". The red "Fan Failure" light will illuminate but should go out after a few seconds.

If the light and the warning alarm do not stop, go to section 3.

Calibration of the “FAN FAILURE” indicator

Powdercap™ 811 - 821

The “Fan Failure” alarm warns the user of any fan malfunction. Prior to use, it is necessary to calibrate this alarm according to the following procedure:

External calibration procedure

To be done when using your Powdercap™ for the first time

This calibration has to be done when the fans are running, with the filters installed and only if the “fan failure” red warning light g (located on the right side of front control panel I) and alarm are active.

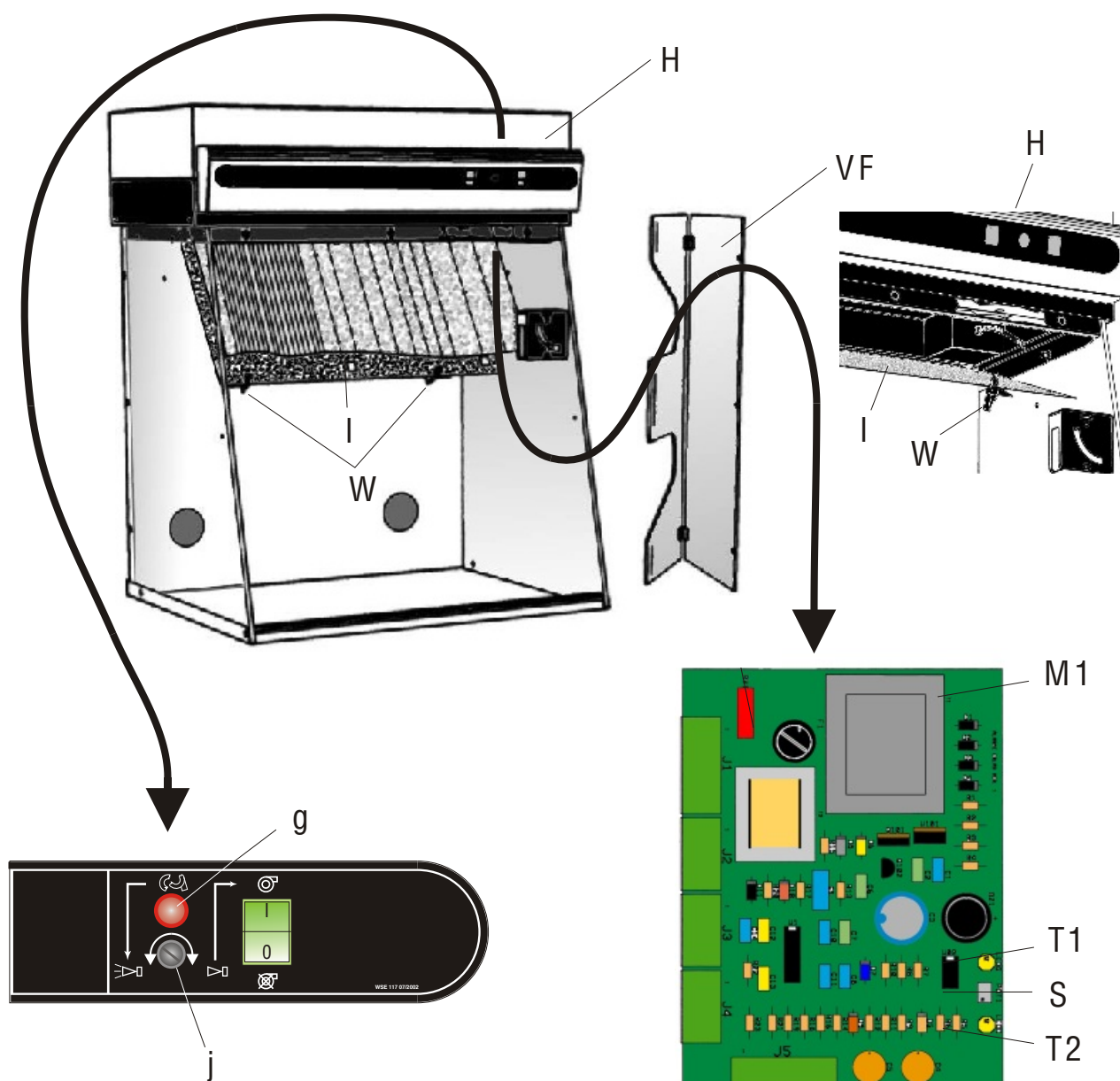
* Gently turn with a screwdriver the potentiometer screw J located under the red warning light g towards the left or the right until the visual and audible alarm stops. If you cannot calibrate the visual and audible alarm with the potentiometer J, then follow the instructions hereunder.

Internal calibration procedure

(To be done by qualified maintenance technicians)

- 1 Remove the entire acrylic front panel VF (Lower door + Visor). Unlock the fasteners W which maintain the panel I. Lower the panel I.
- 2 With the screwdriver (provided with the unit in the technical casing), gently turn the grey potentiometer S clockwise or counter clockwise until neither of the yellow light T1 or yellow light T2 remain on. Within this range, the audible alarm stops.
- 3 Fan failure detection: Put on a thick glove and decrease the fan rotor rotation speed by pushing on it with the palm of your hand. One of the 2 warning lights T1 or T2 should go on. Remove your hand. Once the fan rotor is back to normal speed, the visual and audible alarm will stop.
- 4 Raise the panel I and lock the fasteners W. Replace the acrylic front panel VF.

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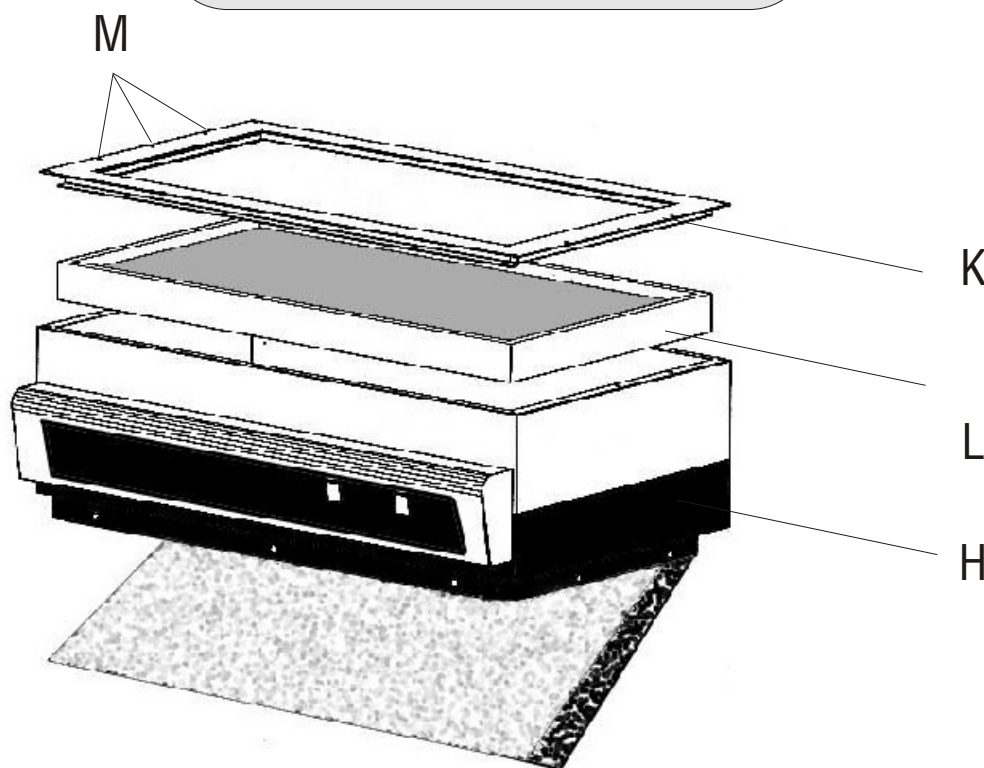
M1 : Circuit board installed in filter housing **H**.

S : Grey multi turn potentiometer for the calibration of the "Fan Failure" indicator.

T1 -T2: Yellow warning lights located on electronic board **M1**, determines the external calibration area.

U : Circuit board **M1** protection fuse

Remplacement du filtre

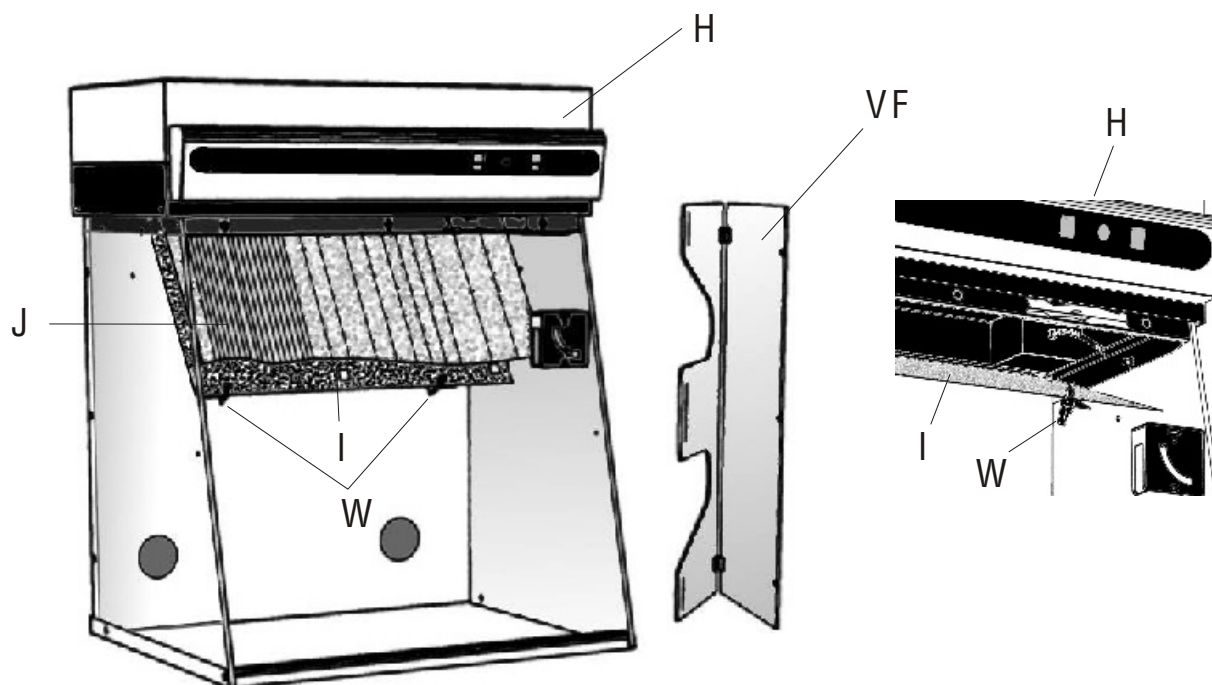


To replace a filter, you may stop your Powdercap™, Powdermidcap™.

- 1 Remove all 16 white plastic caps M covers located on top the filter housing H.
- 2 Unscrew all screws with the box spanner provided with your Powdercap™ and remove the top panel K.
- 3 With the help of two metal "L" shaped bars provided and remove the particulate filter L.
- 4 Take the new filter and place it in the filter housing H but make sure to position in the direction of the filtration flow (see directions on the information sticker found on the filter shell).
- 5 Place the top panel back K to its original position on the Powdercap™ filter housing H and tighten it in place with the 16 screws which were previously removed.
- 6 You can cover all screws with the white plastics caps M.

Your Powdercap™ is now ready for use.

Remplacer le préfiltre



To replace the prefilter

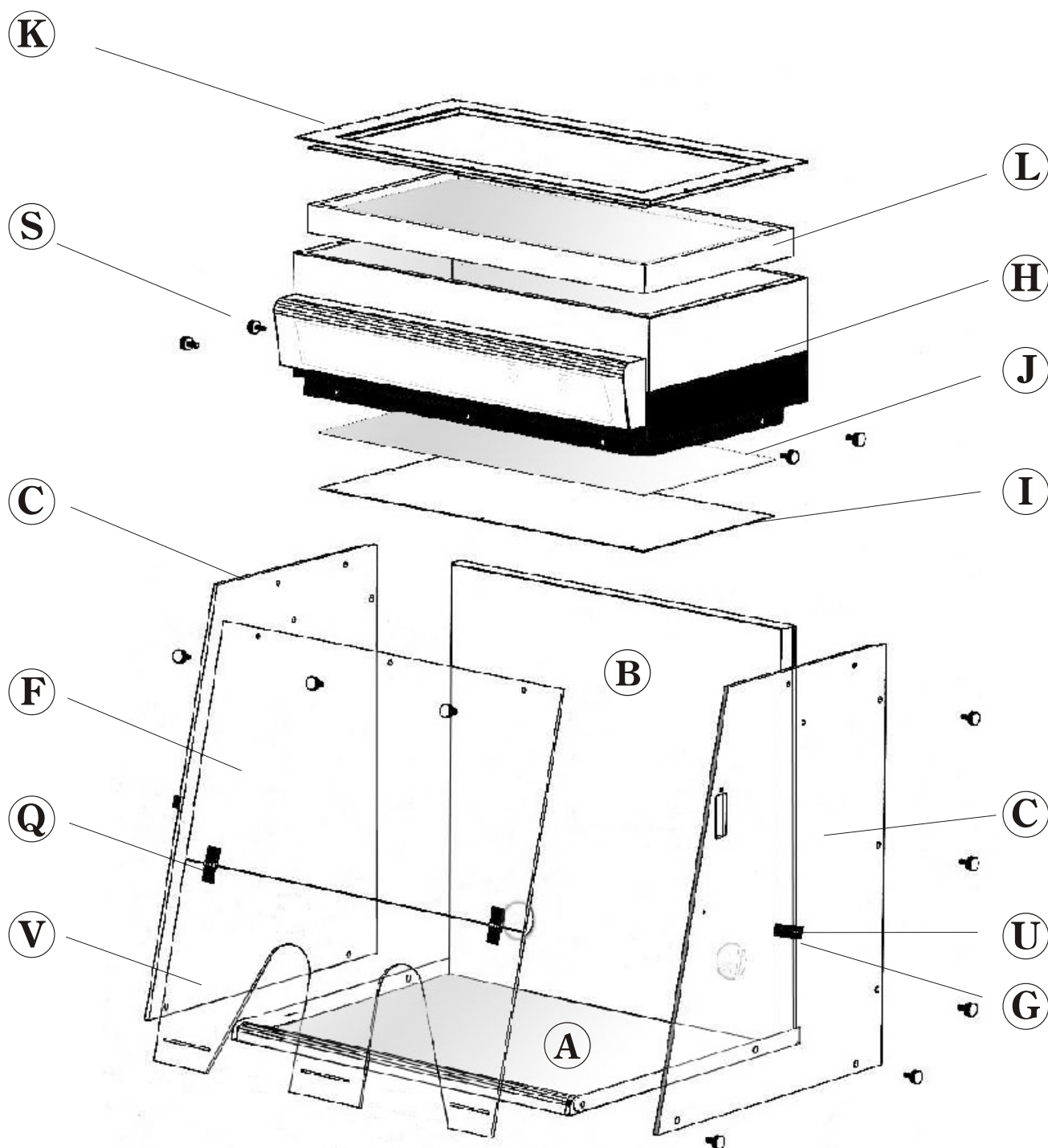
- 1 Turn off your product.
- 2 Use gloves to protect your hands.
- 3 Remove the entire acrylic front panel VF (Lower door + Visor).
- 4 Unlock the fasteners W which maintain the panel I. Lower the panel I.
- 5 Remove the saturated prefilter J and replace it with a new prefilter. Once your prefilter is properly in place, raise the panel I and lock the fasteners W.
- 6 Replace the acrylic front panel.

Your Powdercap™ or Powdermidcap™ is ready.

Exploded view

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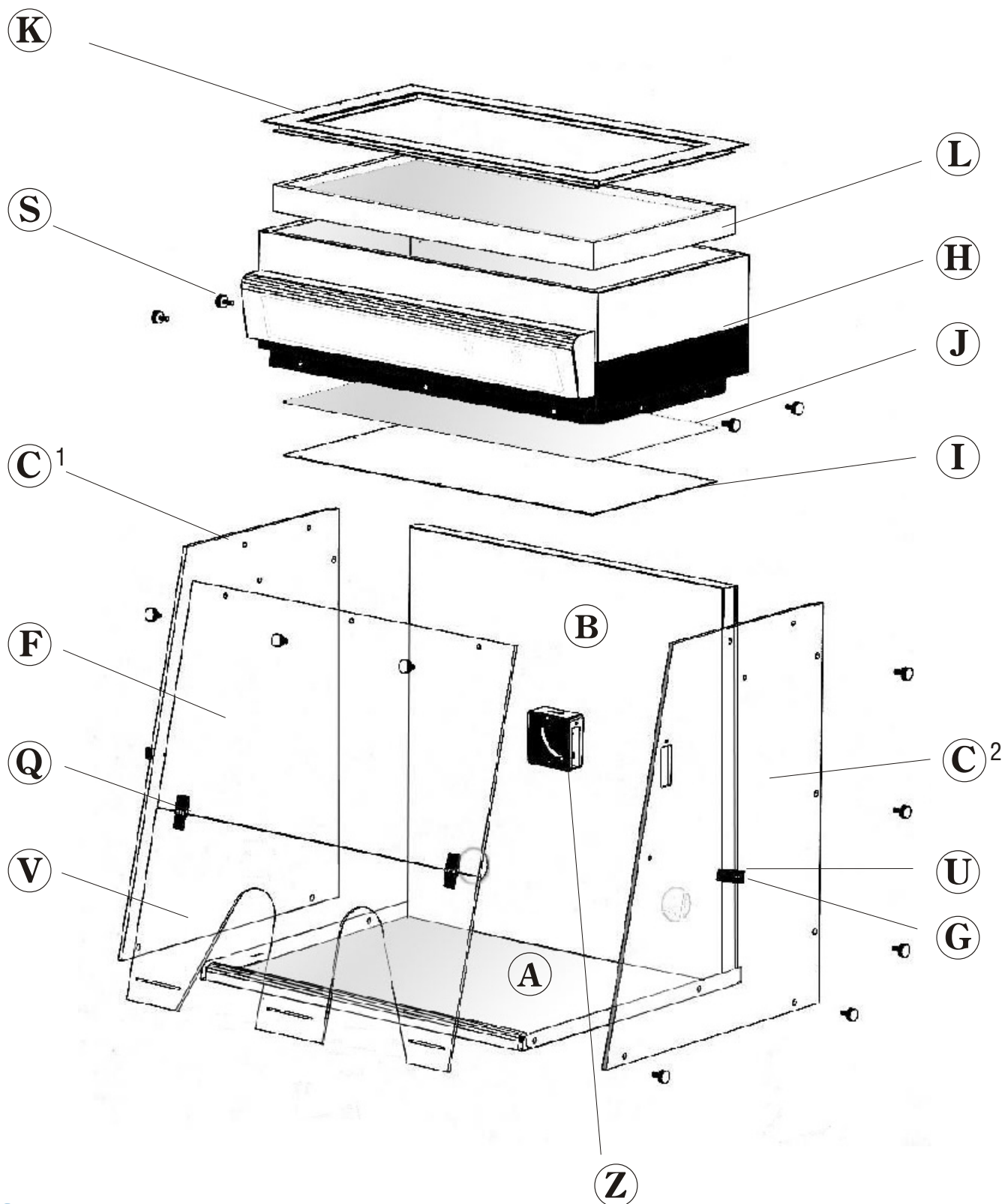
Powdermidcap™ 811 - 821



Exploded view

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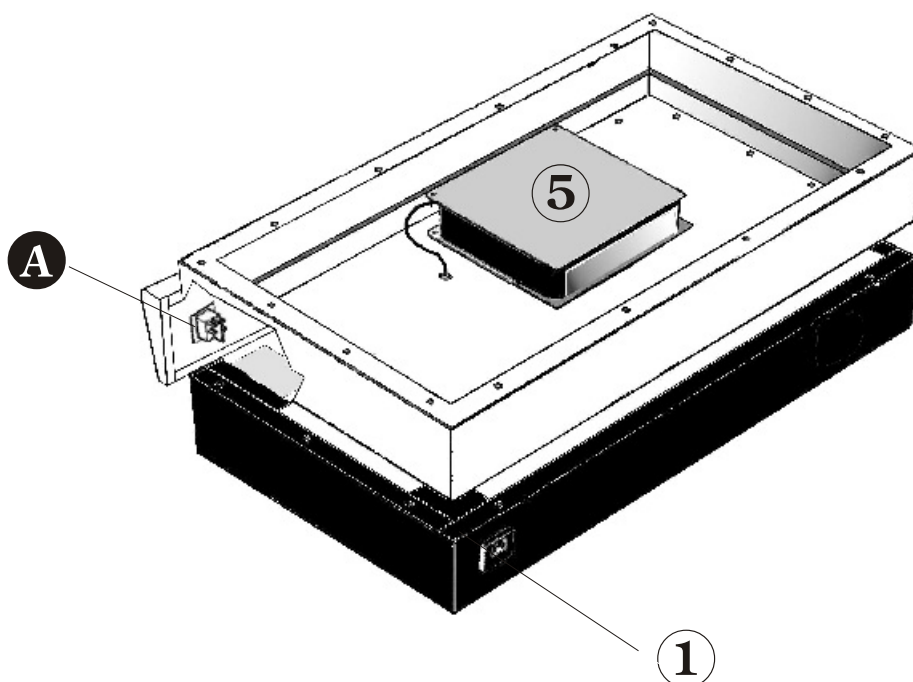
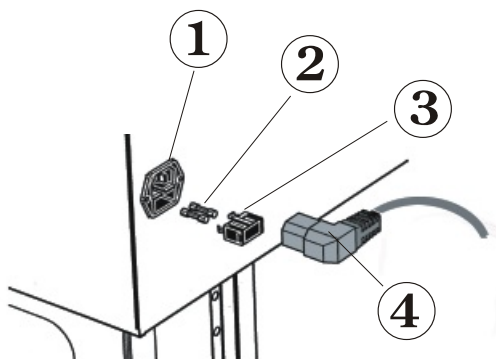
Powdercap™ 811 - 821



SPARE PARTS	
REFERENCE	DESIGNATION
Z	Air velocity meter
A :	Spill tray
B	Back panel
C1:	Side panel B
C2:	Side panel P
F :	Visor
V :	Lower door for Powdercap™ or Powdermidcap™
Q :	Two plastic hingers
G :	Side clamp
b : OPTN 5SF OPTN 5SGB OPTN 5SUS	Lighting option Europe 230V Lighting option UK 230V Lighting option USA 127V
R	Electrical cordset (Europe) Electrical cordset (USA - Japon) Electrical cordset (UK) Electrical cordset (Suisse)
S : PIDB0086 U : PIDMSU824 PIDMS032	Six vis nylon screwsM8x25 Two screws PP M6x16 Six nuts PP black M6
L :	Filter HEPA H14 753 X 403 X 62 mm
H	Filter housing
K	Top panel
J	Prefilter for Powdercap™ ou Powdermidcap™
I	Panel

Electrical (Technical) parts

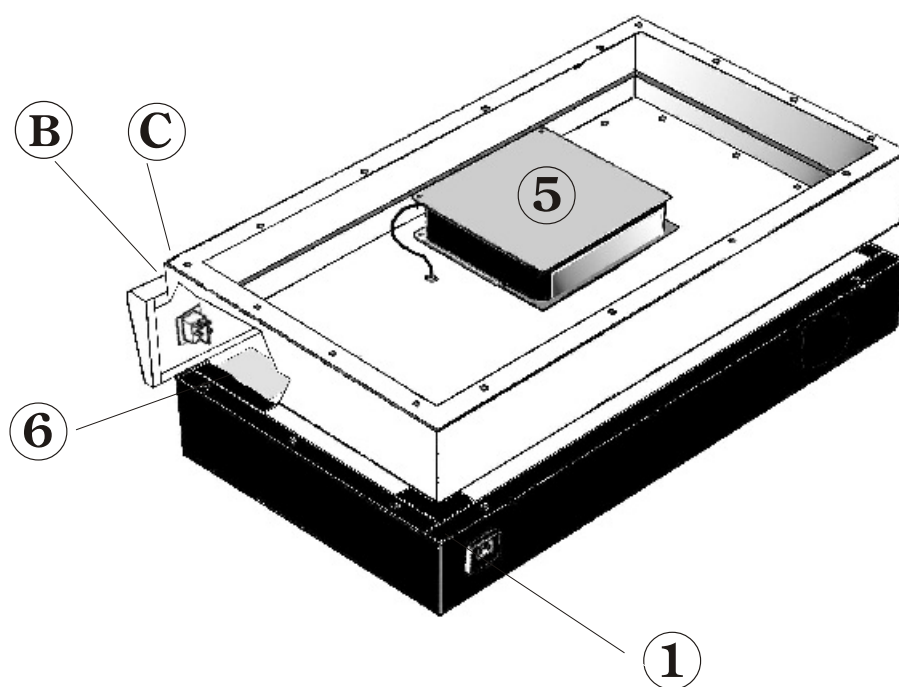
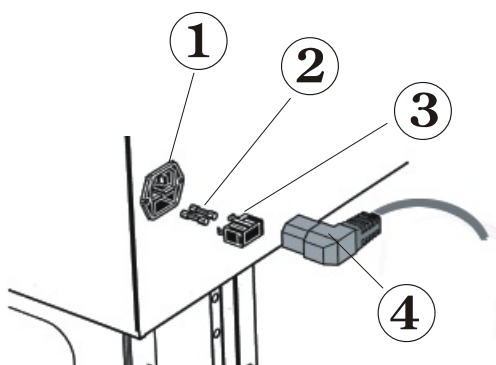
Powdermidcap™ 811 - 821



- 1 Electrical socket
- 2 Fuses 5 X 20 4A
- 3 Fuse holder
- 4 Electrical plug
- 5 Ventilator
- A General switch

Electrical (Technical) parts

Powdercap™ 811 - 821



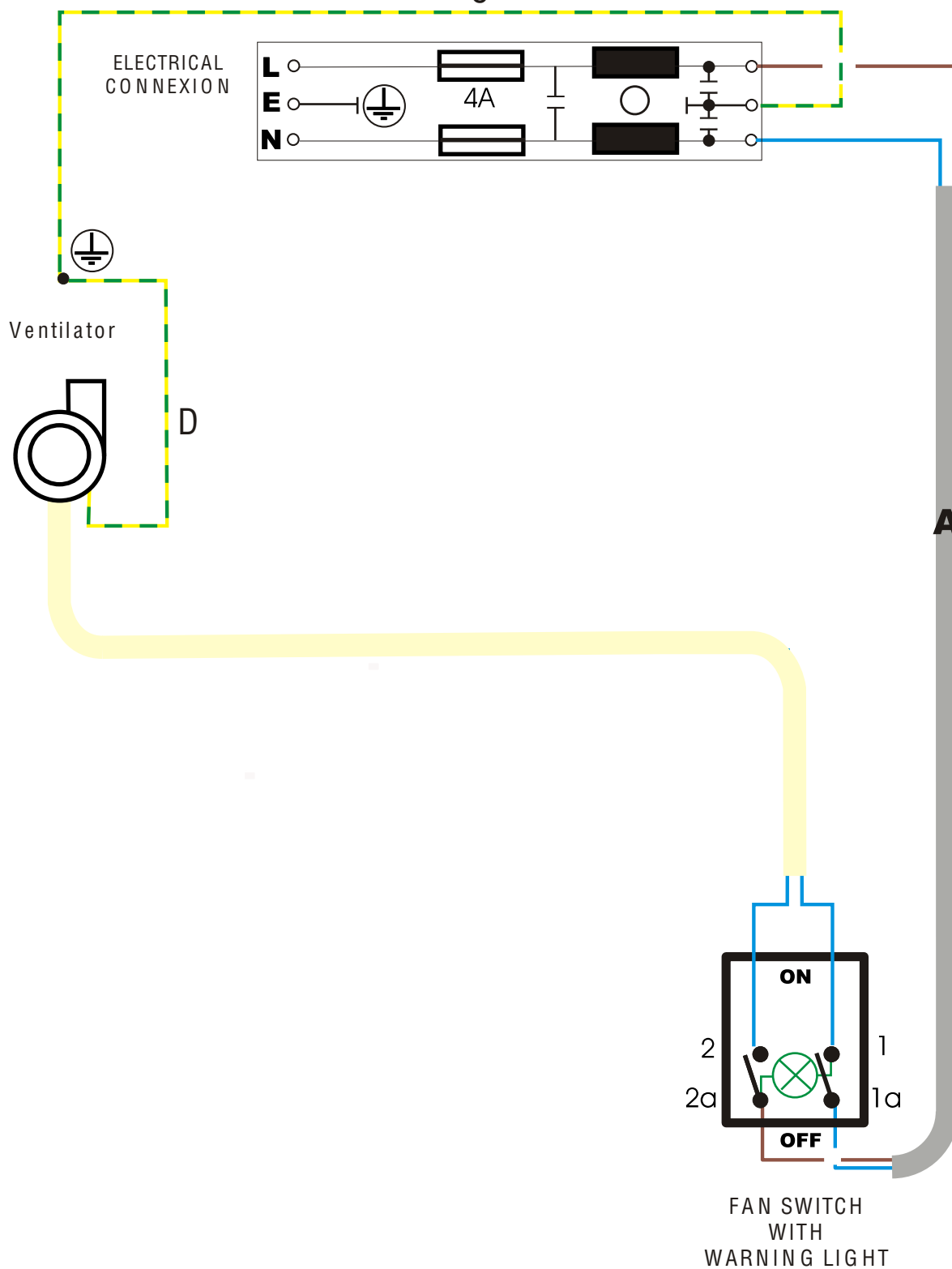
- 1 Electrical socket
- 2 Fuses 5 X 20 4A
- 3 Fuse holder
- 4 Electrical plug
- 5 Ventilator

- 6 "Fan Failure" circuit board
- A General switch
- B "Fan Failure" warning light
- C "Fan Failure" potentiometer

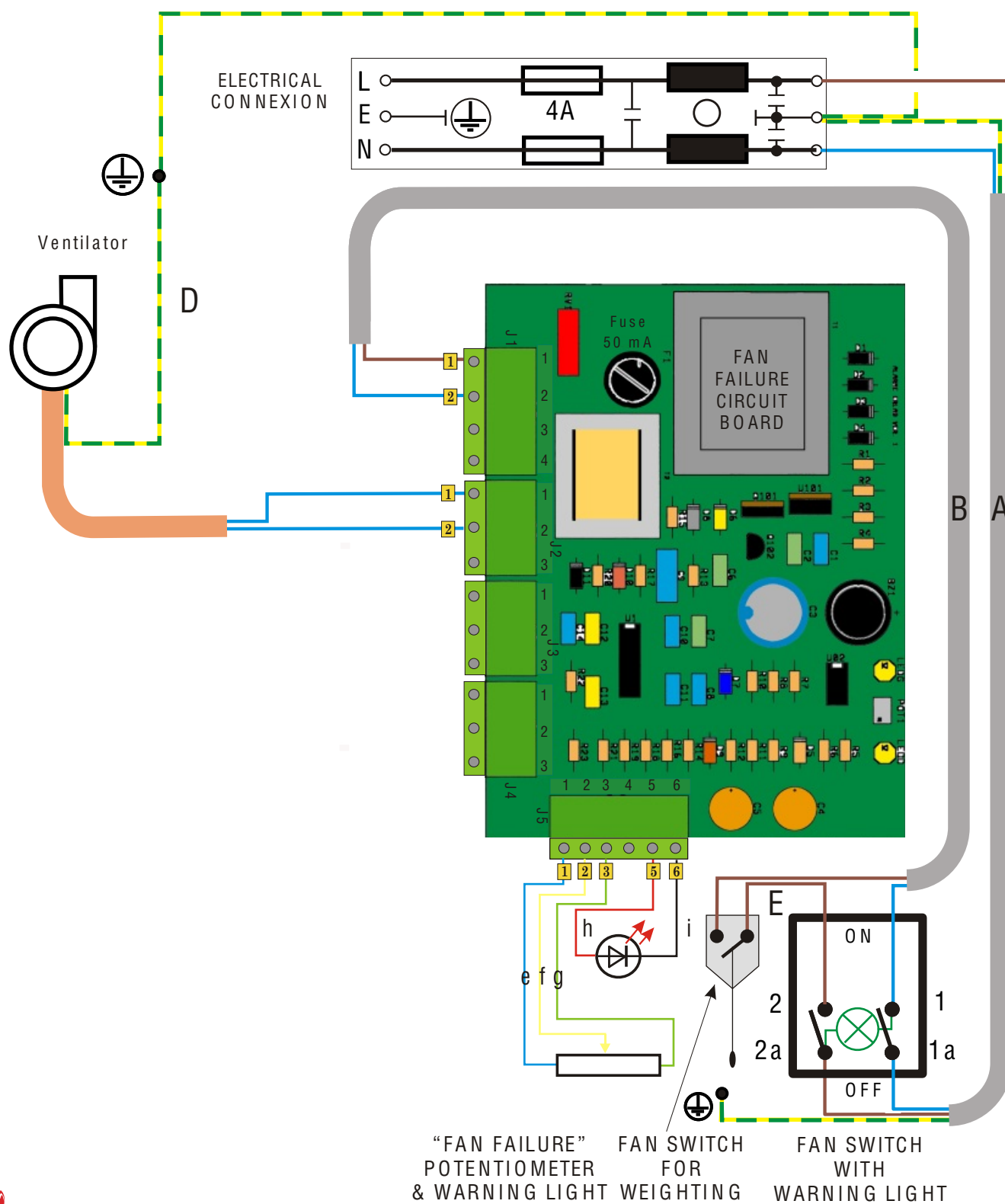
Electrical wiring diagram

Powdermidcap™ 811 - 821

C



Electrical wiring diagram

Powdercap™ 811 - 821
C

Specifications

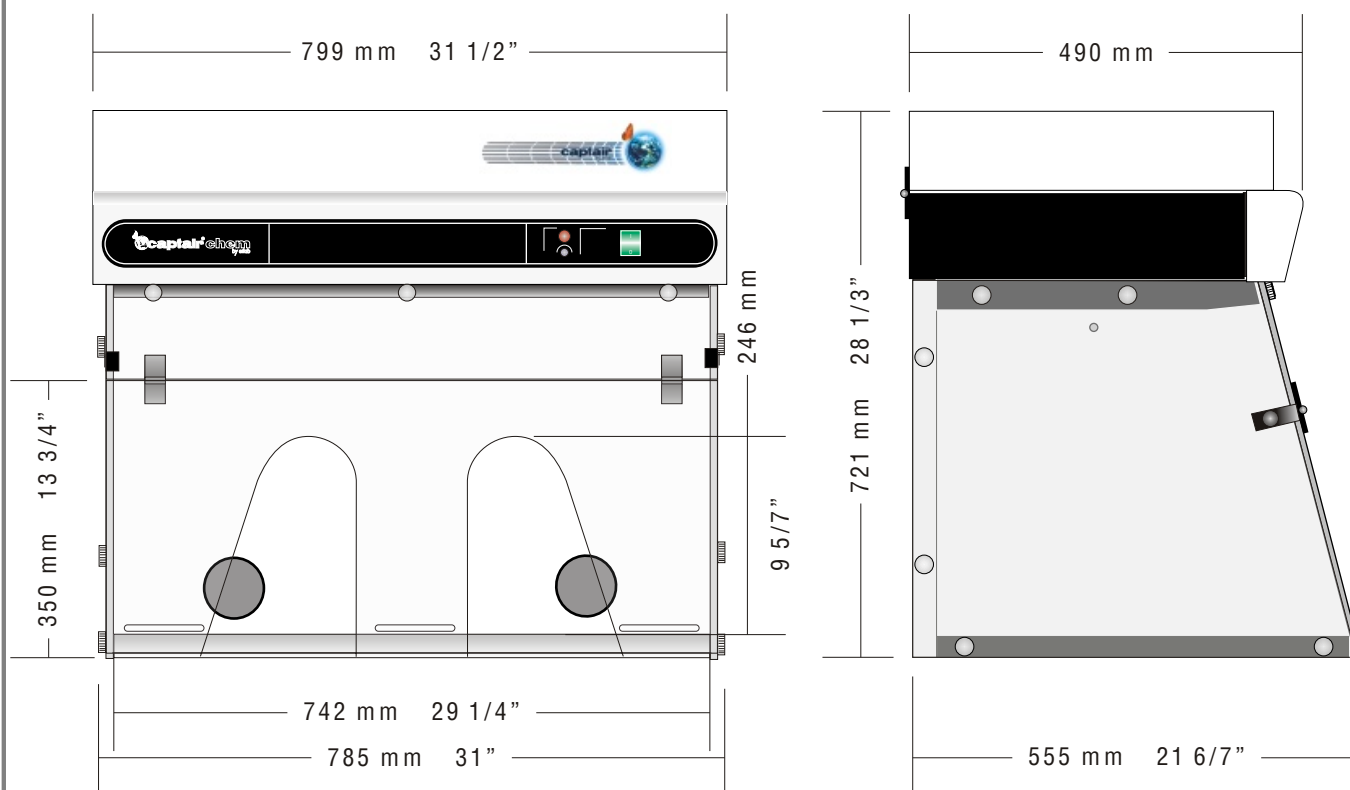
Model		Powdermidcap™ 811	Powdermidcap™ 821	Powdercap™ 811	Powdercap™ 811
External dimensions m m	Length	799	799	799	799
	Height	721	969	721	969
	Depth	555	622	555	622
Internal dimensions m m	Length	742	742	742	742
	Height	496	749	496	749
	Depth	480	580	480	580
Quantity of fans		1	1	1	1
Quantity of HEPA filters (H14) 753X403X62 mm		1	1	1	1
"Fan failure" alarm		-	-	Serial	Serial
Switch for weighting		-	-	Serial	Serial
Lighting	1x11 W	Option 5S	Option 5S	Option 5S	Option 5S
Volume of air treated	m ³ /h	170	170	170	170
Face velocity	m/s	0,55	0,55	0,55	0,55
Internal volume of enclosure	m ³	0,15	0,32	0,32	0,32
Air exchange per hour	Time/hour	18,9	9,9	18,9	9,9
Sound level	dBA	54	54	54	54
Power consumption	Watt	47	47	47	47
Electrical voltage	Volt	230	230	230	230
Frequency	Hz	50	50	50	50
Amperage absorbed	A	0,31	0,31	0,31	0,31

Specifications

Model		Powdermidcap™ 811	Powdermidcap™ 821	Powdercap™ 811	Powdercap™ 811
External dimensions inches	Length	31 1/2	31 1/2	31 1/2	31 1/2
	Height	28 1/3	38 1/5	28 1/3	38 1/5
	Depth	21 6/7	24 1/2	21 6/7	24 1/2
Internal dimensions inches	Length	29 1/4	29 1/4	29 1/4	29 1/4
	Height	19 1/2	29 1/2	19 1/2	29 1/2
	Depth	18 7/8	22 4/5	18 7/8	22 4/5
Quantity of fans		1	1	1	1
Quantity of HEPA filters (H14) 753X403X62 mm		1	1	1	1
"Fan failure" alarm		-	-	Serial	Serial
Switch for weighting		-	-	Serial	Serial
Lighting	1x13W	Option 5S	Option 5S	Option 5S	Option 5S
Volume of air treated	cfm	105	105	105	105
Face velocity	fpm	118	118	118	118
Internal volume of enclosure	cf	5,3	11,3	5,3	11,3
Air exchange per minute	Time/mn	20	10,4	20	10,4
Sound level	dBA	56	56	56	56
Power consumption	Watt	50	50	50	50
Electrical voltage	Volt	115	115	115	115
Frequency	Hz	60	60	60	60
Amperage absorbed	A	0,62	0,62	0,62	0,62

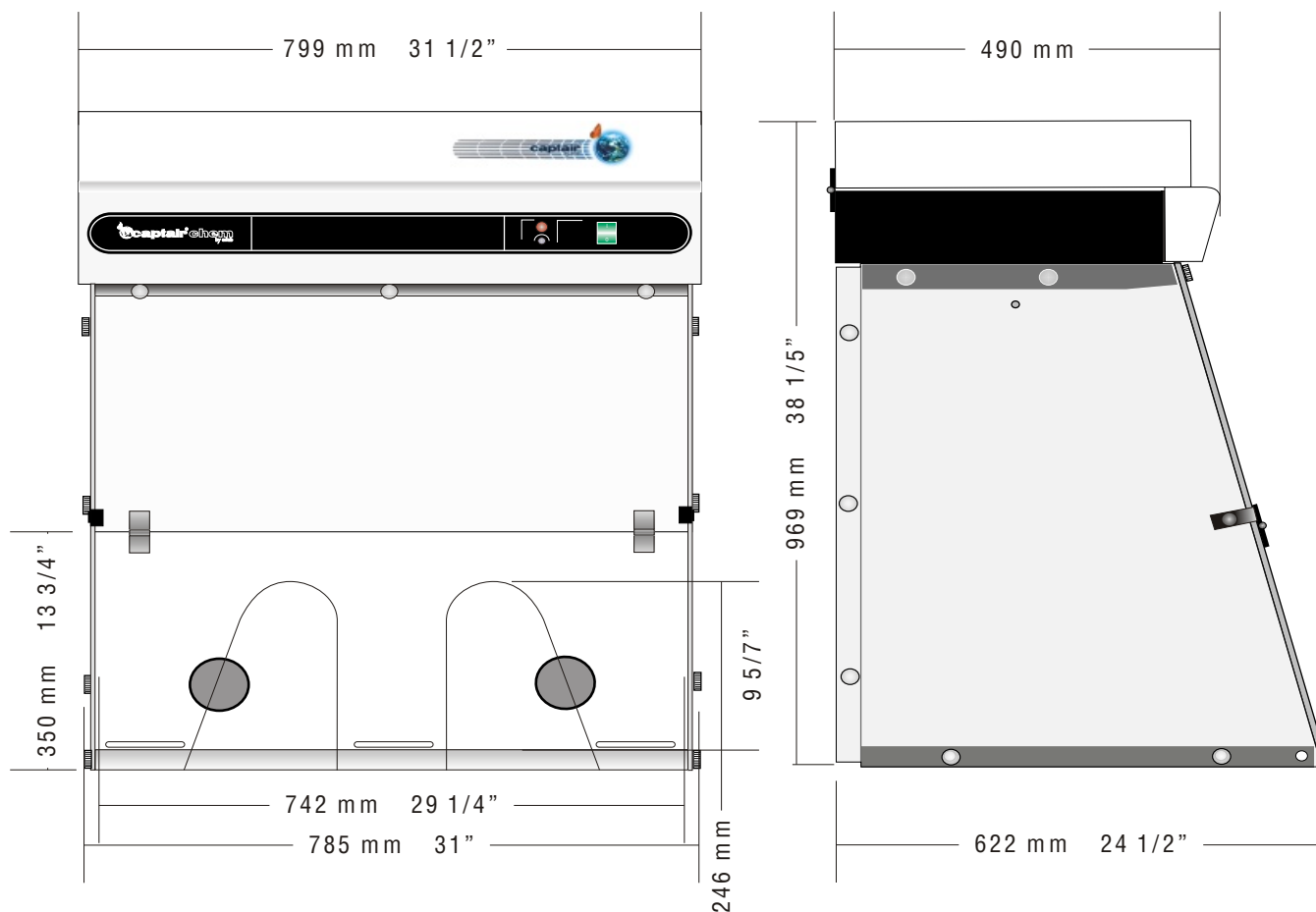
PowderMidcap™ 811 & Powdercap™ 811

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PowderMidcap™ 821 & Powdercap™ 821

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