

# UV-C Odour Control Technology



**UVC 3000**  
**UVC 4500**

**TECHNICAL & OPERATION MANUAL**

**CK Direct**



**This product contains lamps that produce UV light. Immediate or prolonged exposure to UV light can result in painful eye injury, skin burn, premature skin aging, or skin cancer**

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**TAKE YOUR TIME TO CAREFULLY READ AND UNDERSTAND THE MANUAL BEFORE USING THE PRODUCT.  
ALWAYS KEEP THE MANUAL WITH THE PRODUCT**

# 1 PREFACE

## Using this manual

This manual is intended to be used as a work of reference for professional, well trained and authorised users to be able to safely install, use, maintain and repair the product mentioned on the cover of this document. **Please note that it is strongly recommended that training is given by CK Direct Ltd prior to operatives attempting to carry out maintenance or repair work on this product.**

## Service and technical support

For information about specific adjustments, maintenance or repair jobs which are not dealt with in this manual, please contact the supplier of the product.

# 2 SAFETY INSTRUCTIONS AND WARNINGS

## General

The manufacturer does not accept any liability for the damage to the product or personal injury caused by non-observance of the safety instructions in this manual, or by negligence during installation, use, maintenance and repair of the product mentioned on the cover of this document or corresponding accessories.

Specific working conditions or used accessories may require additional safety instructions.

Immediately contact your supplier if you detect a potential danger when using the product.

The user of the product is always fully responsible for observing the local safety instructions and regulations. Observe all applicable safety instructions and regulations.

## User manual

- Everyone working on or with the product must be familiar with the contents of this manual and must strictly observe the instructions therein. The management should instruct the personnel in accordance with the manual and observe all instructions and directions given.
- Never change the order of the steps to perform
- Always keep the manual with the product.

## Pictograms and instructions on the product

- The pictograms, warning and instructions attached to the product are part of the safety feature. They must not be covered or removed and must be present and legible during the entire life of the product.
- Immediately replace or repair damaged or illegible pictograms, warnings and instructions.

## Users

- The use of this product is exclusively reserved to authorised, trained and qualified users. Temporary personnel and trainees can only use the product under supervision and responsibility of skilled engineers.

## Intended use

The product has been designed exclusively for the treating odours which are released during the most common cooking processes in commercial kitchens. Using the product for other purposes is considered contrary to its intended use. **The manufacturer accepts no liability for any damage or injury resulting from such use.**

## Safety features

All safety features must be correctly mounted and can only be removed for maintenance and repair jobs by skilled and authorised service engineers

The product must not be used if the safety features are only partly present or defective.

The safety features should be regularly checked for their proper functioning, and if required, be immediately repaired.





## Modifications

A modification of the product is not allowed.

## General Use



**WARNING: To guard against injury, basic safety precautions should be observed, including the following:**

1. Inspect the product and check it for damage. Verify the function of the safety features
2. Read and save all notices, warnings and safety instructions received with equipment.
3.  **WARNING: Avoid exposure to direct or strongly reflected germicidal ultraviolet rays. Germicidal ultraviolet rays are harmful to the eyes and skin.**
4.  **WARNING: Always disconnect power, to the equipment and unplug, before performing any service or maintenance.**
5.  **WARNING: Ozone is produced by the product. Ozone can be poisonous at certain concentrations. UNIT MUST NOT BE OPERATED WITHOUT KITCHEN EXTRACT FAN RUNNING**
6.  **CAUTION: Do not operate without proper electrical ground.**
7. Do not alter the construction or design. Do not remove safety labels or devices
8. Do not use this equipment for other than its intended purpose, as described in the equipment manual.
9. Do not operate the unit if the power cord and/or plug are damaged, or if any other damage to the unit is visible or suspected.
10. Utility power must match power requirements listed on the unit label.
11. *\*Hg - LAMP CONTAINS MERCURY, manage in accord with disposal laws*
12. Make sure the room is always sufficiently ventilated, particularly in smaller confined areas

## Use of UV-C 3000 / UV-C 4500

The product is suitable for the filtration of extracted fumes from commercial kitchens.

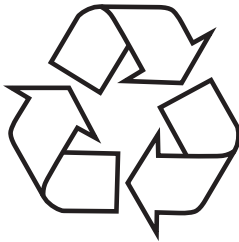
The product should always be used in combination with prefilters that are suitable for kitchen extract.

## Service, maintenance and repairs

**The maintenance of the UVC 3000/4500 unit is a very specialist task and should not be carried out by anyone who has not received specialist training by CK Direct Ltd**

Observe the maintenance intervals given in this manual. Overdue maintenance can lead to high costs for repairs and revisions and can render the guarantee null and void. Always use tools, parts and service techniques that have been approved by the manufacturer. Do not carry out any service, maintenance or repairs on the product before it has been protected against unintended starting. Clean and replace the lamps in time. **Appropriate PPE equipment should be worn at anytime when there is a possibility that the light emitted from the UV lamps can be viewed or come into contact with skin.**

## 3 USED PRODUCTS AND THE ENVIRONMENT



### Packaging Material

The purpose of the packaging is to protect the product during transport. It consists of the following substances that can be reused:

- (corrugated) cardboard
- untreated wood

Do not dispose of the packaging material in the industrial waste

### Product

Products which you would like to dispose of may still contain valuable substances and materials. Do not dispose of the product in the industrial waste.

## 4 TECHNICAL SPECIFICATIONS

### UVC 3000

|                          | <b>6 Lamp</b>          | <b>12 Lamp</b>         | <b>18 Lamp</b>         |
|--------------------------|------------------------|------------------------|------------------------|
| <b>Power consumption</b> | 500 W                  | 1000 W                 | 1500 W                 |
| <b>Max capacity</b>      | 5000m <sup>3</sup> /hr | 5000m <sup>3</sup> /hr | 5000m <sup>3</sup> /hr |
| <b>Weight</b>            | 121 kg                 | 137kg                  | 153 kg                 |
| <b>Power supply</b>      | 220-240 V 50 Hz        |                        |                        |
| <b>Housing</b>           | Epoxy-coated steel     |                        |                        |

Number of lamps depends on pollution - for medium to high cooking pollution work on 0.75 to 0.5m<sup>3</sup>/sec per rack.

## UVC 4500

|                          | <b>6 Lamp</b>         | <b>12 Lamp</b>        | <b>18 Lamp</b>        |
|--------------------------|-----------------------|-----------------------|-----------------------|
| <b>Power consumption</b> | 500 W                 | 1000 W                | 1500 W                |
| <b>Max capacity</b>      | 7500m <sup>3</sup> /h | 7500m <sup>3</sup> /h | 7500m <sup>3</sup> /h |
| <b>Weight</b>            | 151 kg                | 167kg                 | 183 kg                |
| <b>Power supply</b>      | 220-240 v 50 Hz       |                       |                       |
| <b>Housing</b>           | Epoxy-coated steel    |                       |                       |

Number of lamps depends on pollution - for medium to high cooking pollution work on 1.0 to 0.75m<sup>3</sup>/sec per rack.

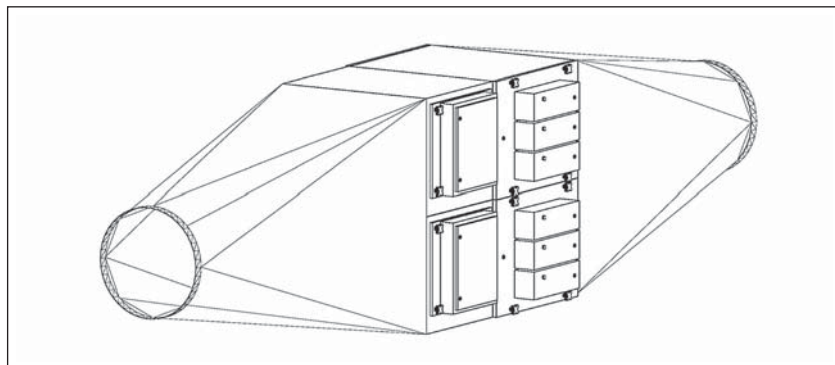
## 5 GENERAL DESCRIPTION

This UVC filter can remove, at high efficiency, odorous compounds. The UVC3000/4500 is designed to be installed in the extraction ducting of a commercial kitchen down stream of the extraction hood.

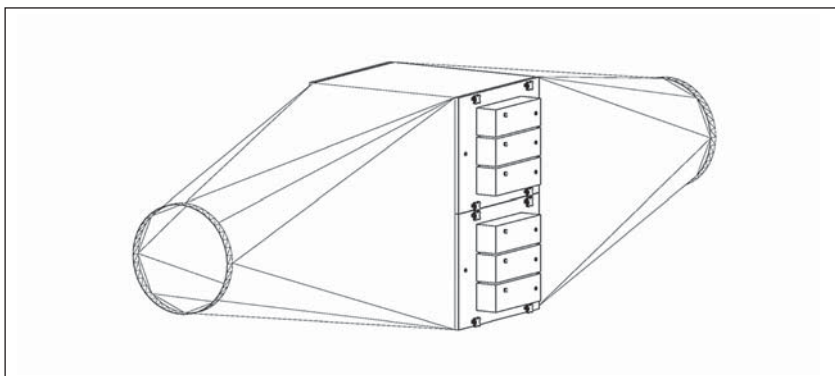
## 6 INSTALLATION

Check that the suspension construction is adequate prior to installing the product. Mount the UVC 3000/4500 in the ducting system. It can be supported by a suspension bracket or placed on the floor. Please consult the electrical diagram when connecting to the mains.

UVC 3000/4500  
unit installed in  
conjunction with  
Purified ESP unit

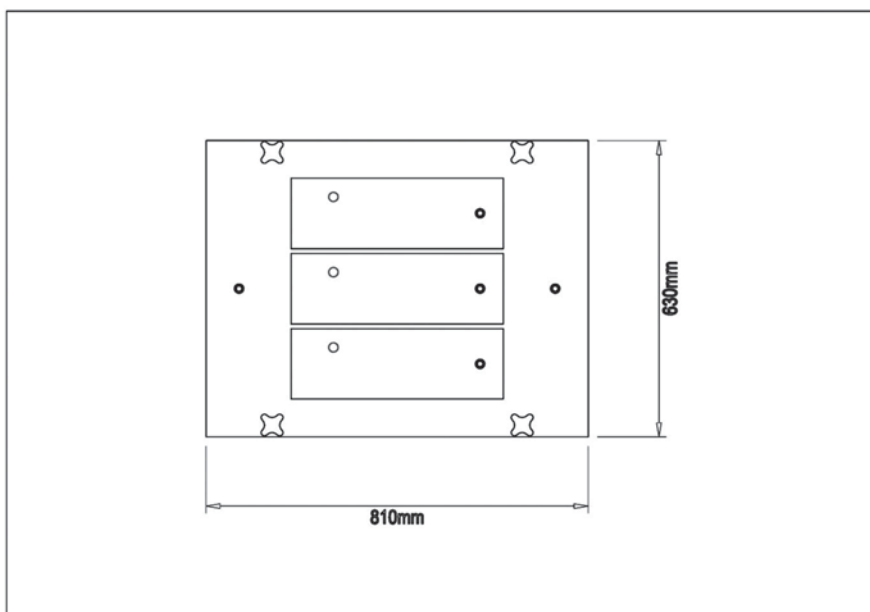
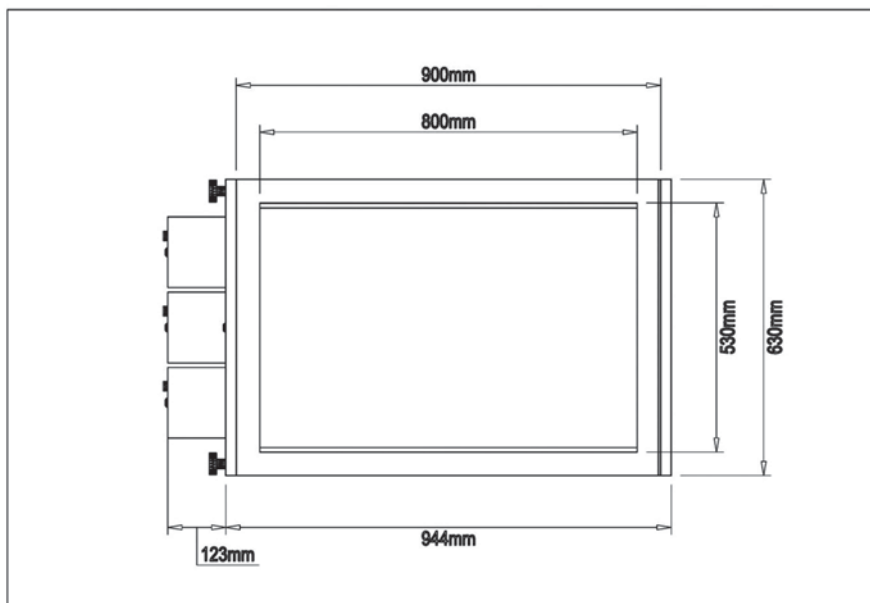


2 No. UV-C 3000  
unit installed

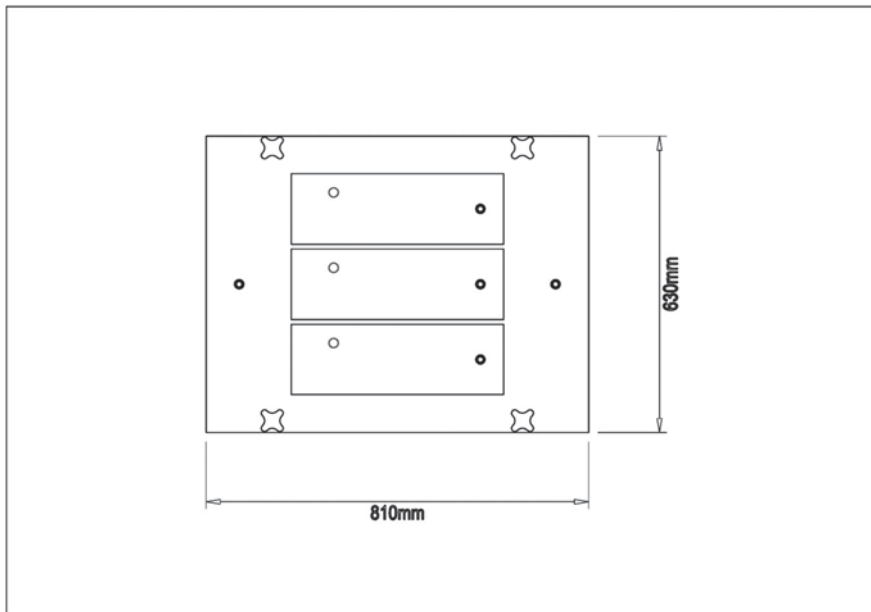
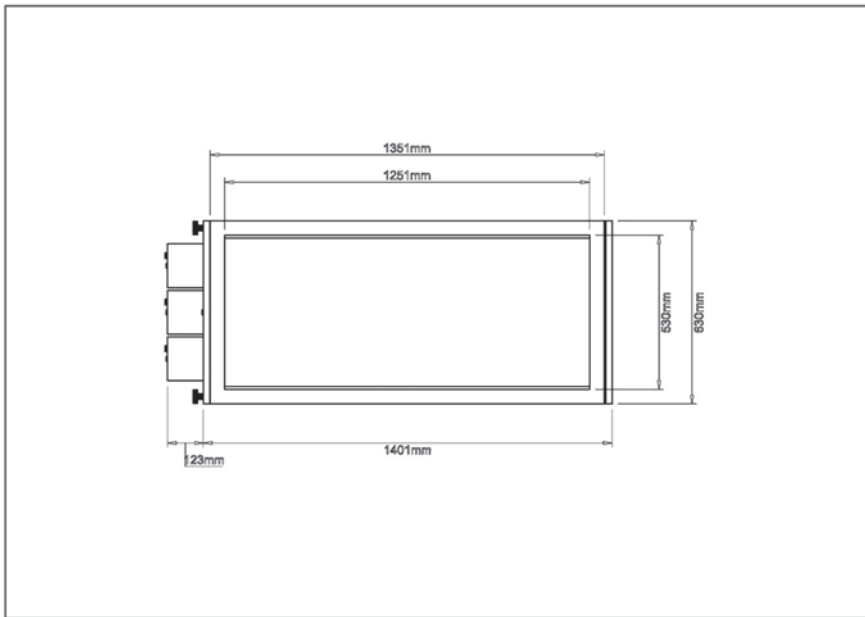


# 7 DIMENSIONS

UVC 3000

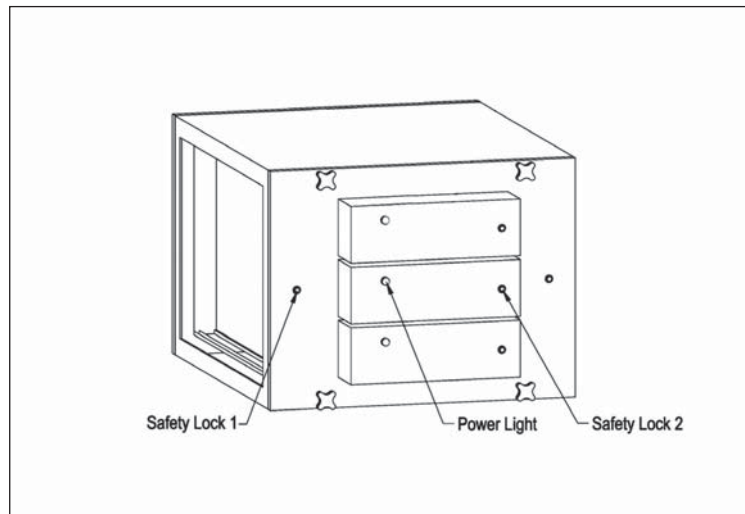
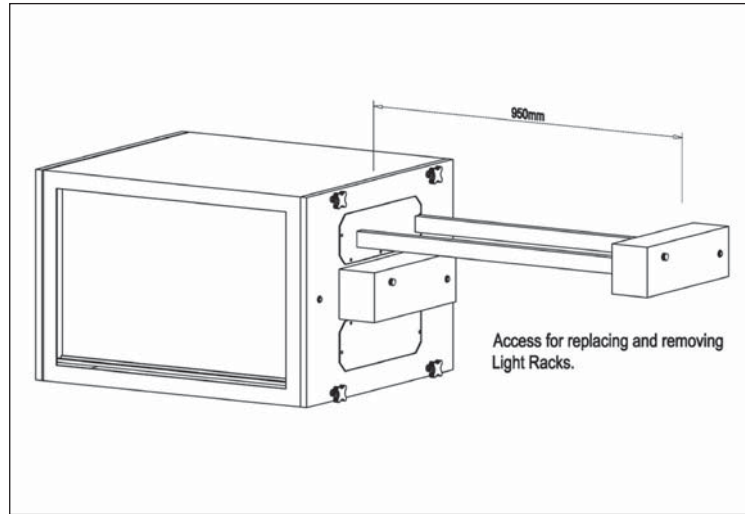


# UVC 4500





# UVC 3000/4500



## 8 MAINTENANCE

**The maintenance of the UVC 3000/4500 unit is a very specialist task and should not be carried out by anyone who has not received specialist training by CK Direct Ltd**

If you carry out the simple maintenance and cleaning described below at the regular intervals, then any problems will mostly be detected and corrected before they result in a total breakdown of the product.

| Action   | Every week to 2 months (depending on degree of pollution) | Every 3 months | Every 12 months |
|--|---|----------------|-----------------|
| Clean UV lamps   | X   |                |                 |
| Replace UV lamps                                       |   |                | X               |
| Clean the inside of the product and remove dust/grease |   | X              |                 |

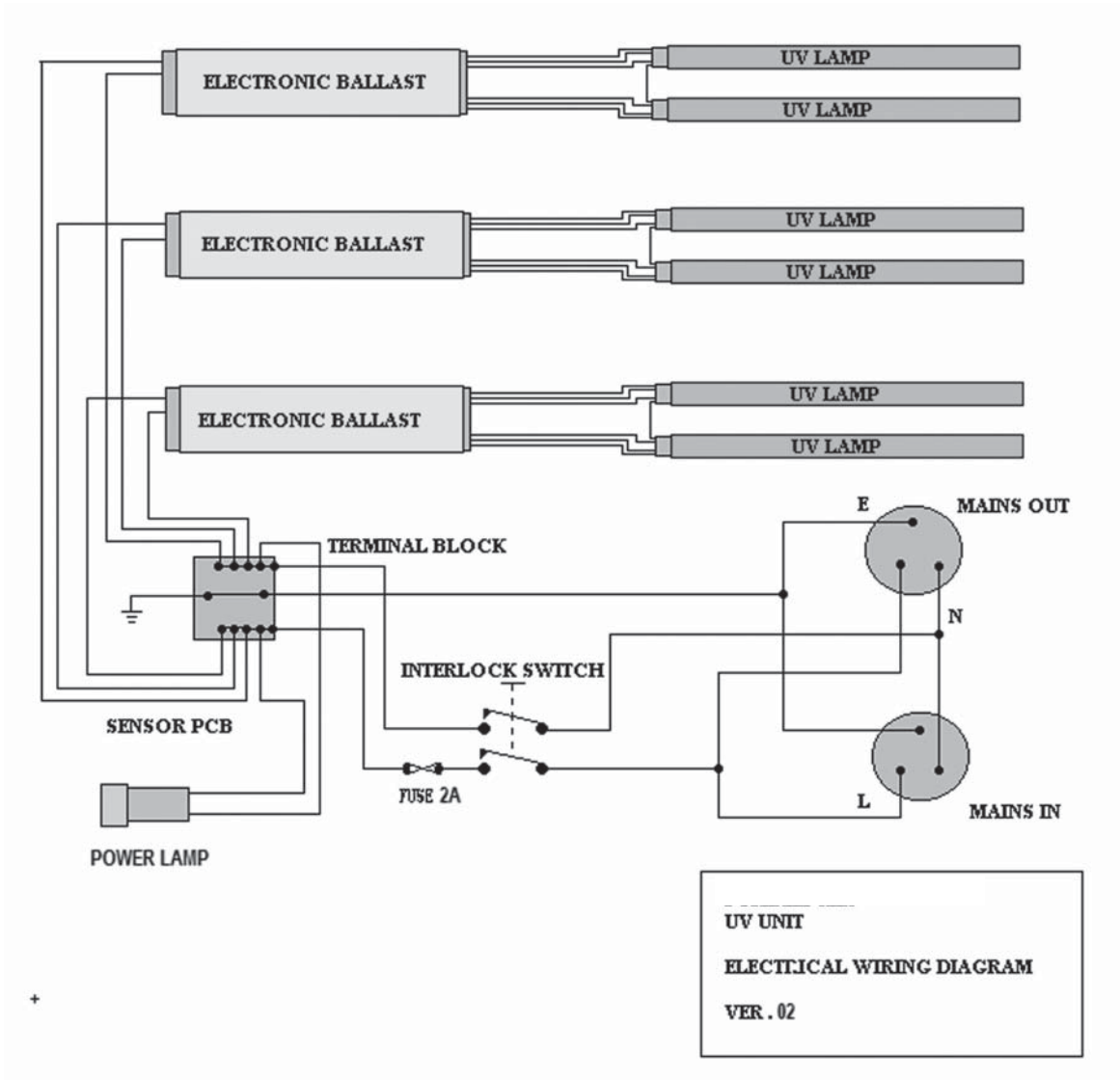
### **Cleaning the UV lamps**

UV lamps should be cleaned using alcohol wipes and a lint free cloth. Care should be taken not to handle the lamps with bare hands as this will damage the glass of the lamp.

It is a matter of experience to determine when the product needs to be cleaned, since the nature and the degree of pollution depend strongly on the particular situation, humidity, intensity of use, etc. Nevertheless the UV lamps should be cleaned regularly.

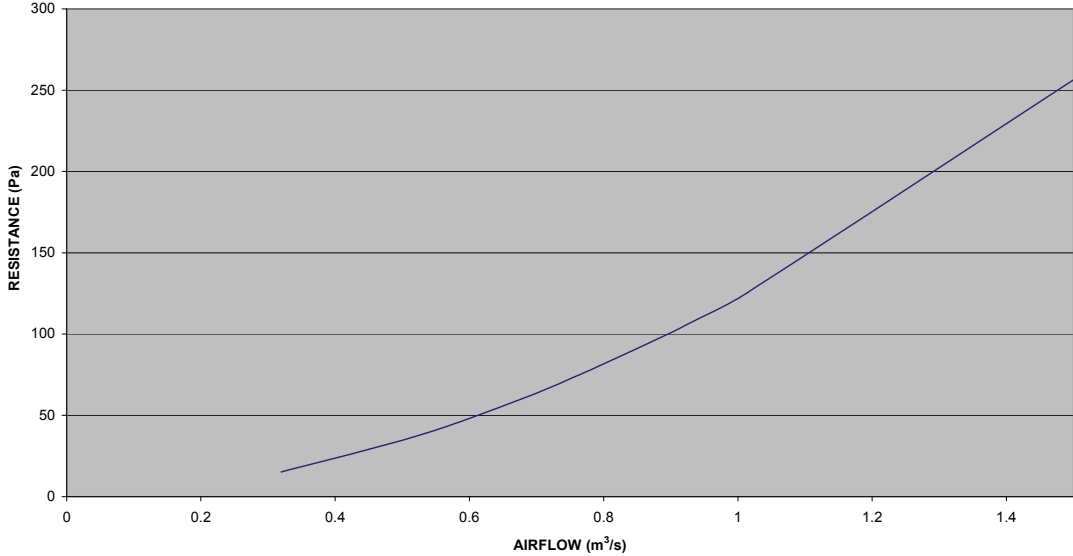
**Appropriate PPE equipment should be worn at anytime when there is a possibility that the light emitted from the UV lamps can be viewed or come into contact with skin.**

# 9 WIRING DIAGRAM

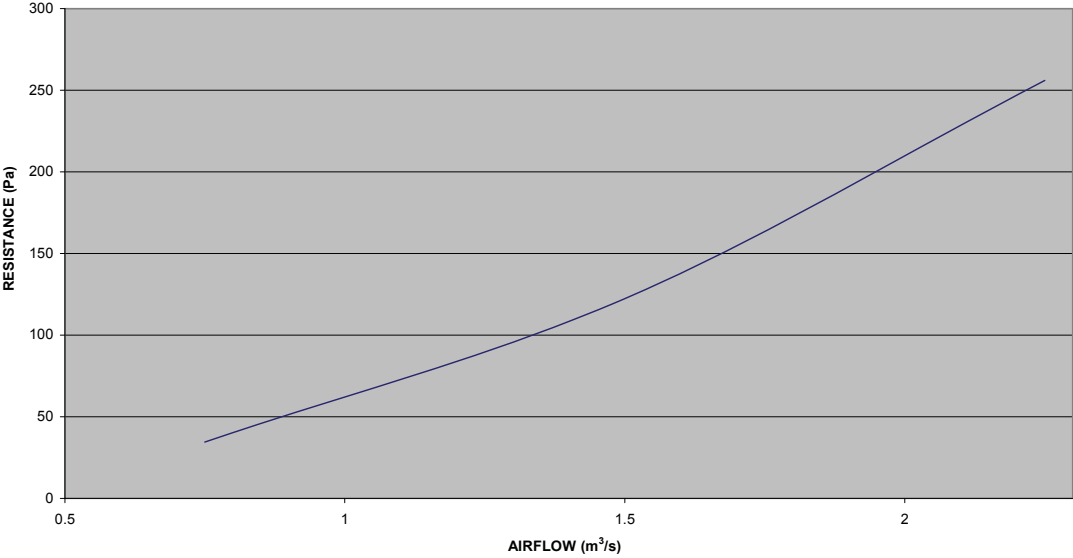


# 10 PRESSURE LOSS GRAPHS

RESTANCE AGAINST AIRFLOW UVC3000



RESISTANCE AGAINST AIR FLOW UVC 4500



## NOTES

## NOTES

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