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**TRION<sup>®</sup>**  
Indoor Air Quality



Grease, Odour &  
Smoke Control Units



### **T-UV-C**

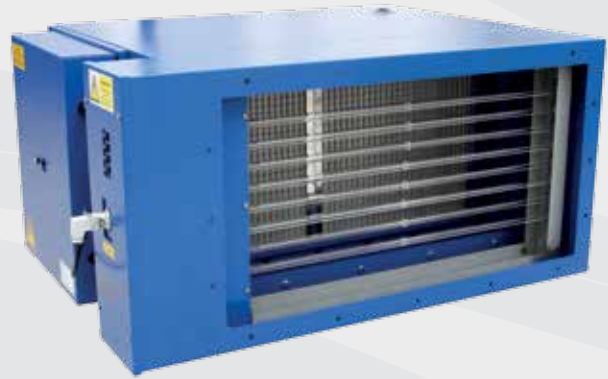
Combined Electrostatic  
Precipitator with UV-C

## Combined Electrostatic Precipitator with UV-C

**Combining electrostatic precipitator technology with UV-C light in a single small footprint unit helps to combat grease, smoke and odour.**

Trion offers a range of integrated process technologies for the control of grease, smoke and odour for kitchen ventilation applications.

Combining electrostatic precipitation with UV-C light technology results in the highly efficient removal of grease, smoke and odour in a single unit. The result is a cost effective, small footprint solution which is ideal for a wide range of food service ventilation applications.



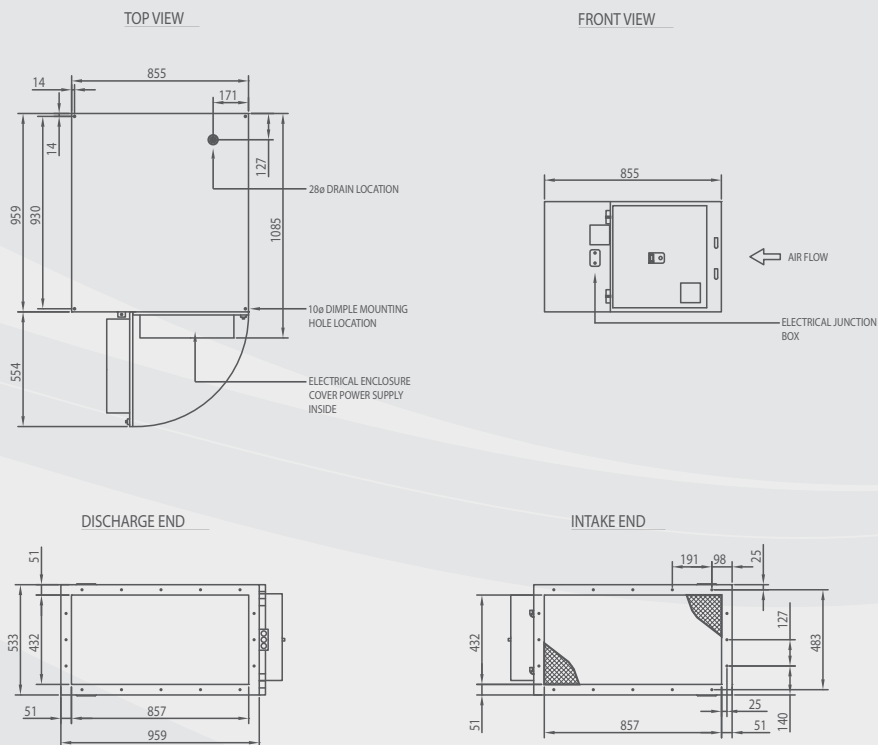
### Key advantages of the combined ESP/UV-C system

- Integrated grease, smoke and odour removal
- Keeps extract ductwork virtually grease free
- Reduced fire risk
- Low cost and limited maintenance requirements
- Ability of heat recovery due to grease-free air
- Small footprint

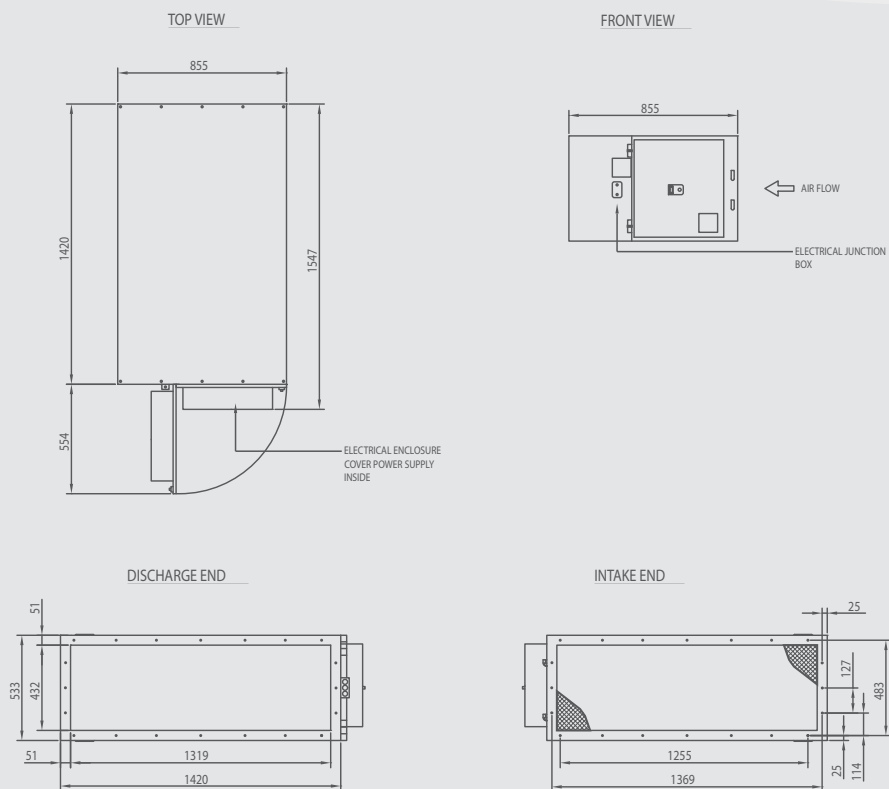
### Product Specification - Combined ESP/UV-C

Model	T2002-UV-C	T3003-UV-C
Overall Size	H 533 x W 1085 x L 855mm	H 533 x W 1547 x L 855mm
Capacity Max (95% efficient)	4420 m <sup>3</sup> /hr	6630 m <sup>3</sup> /hr
Supply	1 phase/230Vac/5A/50Hz	1 phase/230Vac/5A/50Hz
Power Consumption	Up to 750W	Up to 800W
Weight	92 Kg	130 Kg
Pressure Drop	140 Pa (dirty filters)	140 Pa (dirty filters)

## Technical Drawing T2002-UV-C



## Technical Drawing T3003-UV-C



## Technical Data T2002-UV-C

Combined Electrostatic Precipitator T2002-UV-C	
<b>Model</b>	T2002-UV-C 'in-duct' combined electrostatic precipitator with integrated UV-C complete and ready for operation
<b>Purpose</b>	Combined ESP/UV-C is designed for the high efficiency removal of grease, smoke and odour in commercial kitchen exhaust applications. It should be placed as close to the kitchen canopy as possible to reduce grease build up in the downstream ductwork. Direction of air flow is to be specified on ordering
<b>Construction</b>	Purpose built unit with access doors on one side for the withdrawal of the filter components. Multiple units can be joined together for increased volume or efficiency
<b>Dimensions</b>	533H x 1090W x 855D mm
<b>Features &amp; Benefits</b>	<ul style="list-style-type: none"> <li>• Integrated grease, smoke and odour removal keeps extract ductwork virtually grease free</li> <li>• Stainless steel spiked ioniser blades offer significantly longer life than wire ionisers</li> <li>• Extra depth collector cells provide greater collection efficiency</li> <li>• Long life UV-C lamps</li> <li>• Low pressure drop - 140Pa (dirty)</li> <li>• 95% single pass particle removal efficiency (ESP section)</li> <li>• Ability of heat recovery due to grease free air</li> <li>• Two year parts only warranty, subject to maintenance</li> </ul>
<b>Filtration</b>	Each unit incorporates a 4 stage filtration system consisting of: <ul style="list-style-type: none"> <li>• Aluminium pre filter</li> <li>• Combined electronic Ioniser/Electrostatic collector cells</li> <li>• Aluminium post filter</li> <li>• UV-C lamp frame containing 6 or 8 high output UV-C lamps</li> </ul>
<b>Control Lights</b>	On/Off switch with indicator lamp
<b>Technical Data</b>	<ul style="list-style-type: none"> <li>• Capacity max - 1.23m³/s</li> <li>• Supply - 1phase/230Vac/5A/50Hz</li> <li>• Power - &lt;750W</li> <li>• Weight - 92kg</li> <li>• Pressure drop - 140Pa (dirty filters)</li> </ul>
<b>Power Supply</b>	High frequency solid state design
<b>Accessories</b>	Nil
<b>Finish</b>	Blue Epoxy Powder Coat

## Maintenance

Trion would recommend:

- Servicing is normally confined to the regular cleaning of the electrostatic filter components (steam or degreasing fluid) and UV-C lamps (detergent followed by isopropyl alcohol)
- The aluminium pre-filters require washing when dirty
- For maximum efficiency establish a regular cleaning cycle based on routine checks of the ionisers, collector cells and UV-Clamps during the first few months of use

## Technical Data T3003-UV-C

Combined Electrostatic Precipitator T3003-UV-C	
<b>Model</b>	T3003-UV-C 'in-duct' combined electrostatic precipitator with integrated UV-C complete and ready for operation
<b>Purpose</b>	Combined ESP/UV-C is designed for the high efficiency removal of grease, smoke and odour in commercial kitchen exhaust applications. It should be placed as close to the kitchen canopy as possible to reduce grease build up in the downstream ductwork. Direction of air flow is to be specified on ordering
<b>Construction</b>	Purpose built unit with access doors on one side for the withdrawal of the filter components. Multiple units can be joined together for increased volume or efficiency
<b>Dimensions</b>	533H x 1547W x 855D mm
<b>Features &amp; Benefits</b>	<ul style="list-style-type: none"> <li>• Integrated grease, smoke and odour removal keeps extract ductwork virtually grease free</li> <li>• Stainless steel spiked ioniser blades offer significantly longer life than wire ionisers</li> <li>• Extra depth collector cells provide greater collection efficiency</li> <li>• Long life UV-C lamps</li> <li>• Low pressure drop - 140Pa (dirty)</li> <li>• 95% single pass particle removal efficiency (ESP section)</li> <li>• Ability of heat recovery due to grease free air</li> <li>• Two year parts only warranty, subject to maintenance</li> </ul>
<b>Filtration</b>	Each unit incorporates a 4 stage filtration system consisting of: <ul style="list-style-type: none"> <li>• Aluminium pre filter</li> <li>• Combined electronic Ioniser/Electrostatic collector cells</li> <li>• Aluminium post filter</li> <li>• UV-C lamp frame containing 6 or 8 high output UV-C lamps</li> </ul>
<b>Control Lights</b>	On/Off switch with indicator lamp
<b>Technical Data</b>	<ul style="list-style-type: none"> <li>• Capacity max - 1.84m³/s</li> <li>• Supply - 1phase/230Vac/5A/50Hz</li> <li>• Power - &gt;800W</li> <li>• Weight - 130kg</li> <li>• Pressure drop - 140Pa (dirty filters)</li> </ul>
<b>Power Supply</b>	High frequency solid state design
<b>Accessories</b>	Nil
<b>Finish</b>	Blue Epoxy Powder Coat

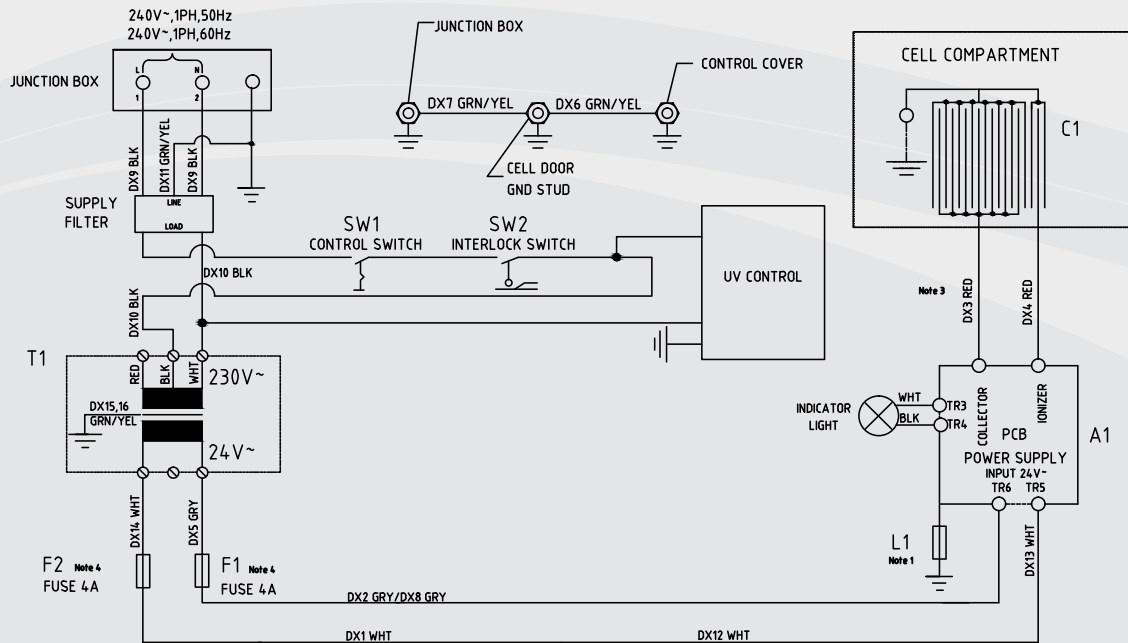
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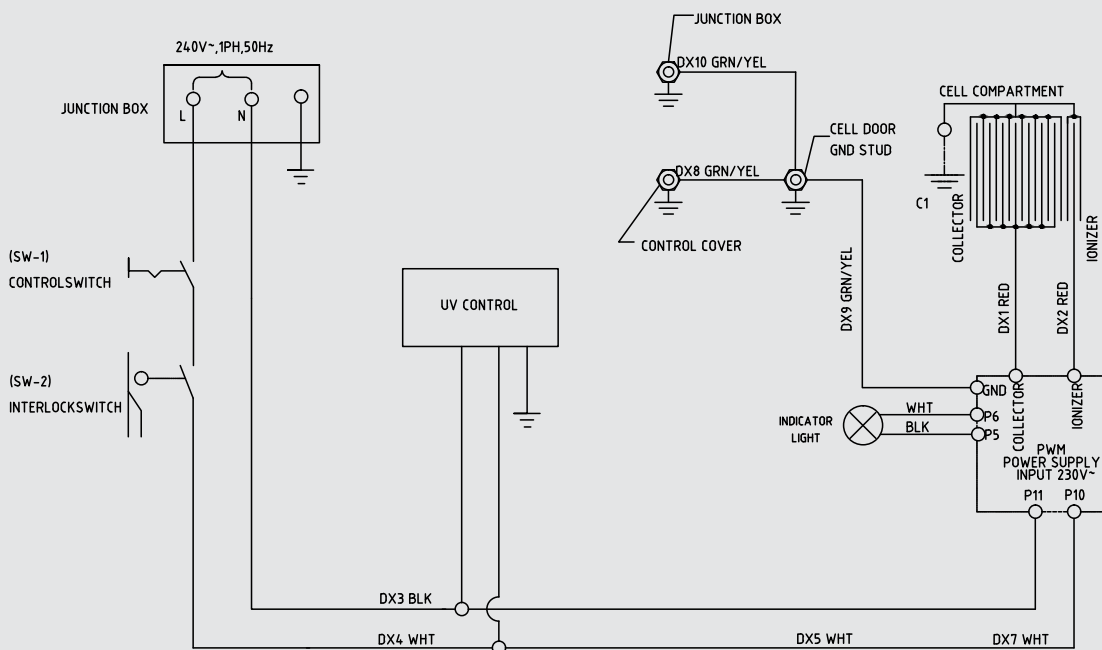
# Combined Electrostatic Precipitator with UV-C

## Wiring Detail - T2002-UV-C



- Note 1: Connect L1 between solder side of PCB & cabinet earth  
 Note 2: Chassis of transformer must be connected to cabinet Earth  
 Note 3: Cell voltages must be value +/- 500v when connected to the cells  
 Note 4: All fuses should be time delay / anti surge type

## Wiring Detail - T3003-UV-C



## Notes

**Our Electronic Air Cleaners come with a two-year parts only warranty.**



**Air Boss® Model 75**

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Trion industrial products  
by contacting your local  
Trion representative or by  
visiting us on the web at

**[www.trionuk.co.uk](http://www.trionuk.co.uk)**



**Air Boss® T-Series Plus**

**TRION®**

**Air Purification Systems**

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