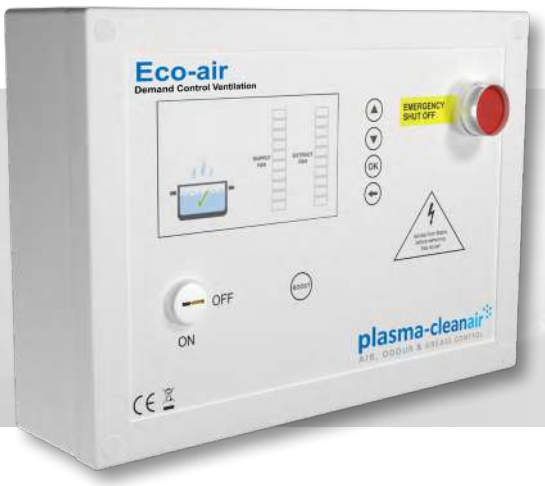
Eco-air (DCV)
Demand Control Ventilation

plasma-cleanair
AIR, ODOUR & GREASE CONTROL

Suitable for all commercial kitchens, average installed ROI in less than 2 years



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3 Year Warranty Care Plan

Commercial kitchens are running exhaust fans continuously at high speed throughout operating hours and conditioned air is exhausted out of the building. This results in high energy use to run the fans and energy waste as heated or cooled air is forced out of the building.

The Eco-air (DCV) energy saving system has been designed for new and retrofit commercial kitchens. It provides automated control over the ventilation system by adjusting kitchen exhaust and supply air in response to cooking activity.

It does this by monitoring CO2 in the kitchen and temperature in the kitchen canopy to optimise energy efficiency and reduce energy waste. Eco-air also improves kitchen comfort through Indoor Air Quality (IAQ) and ventilation noise levels during periods of low cooking activity.

Eco-air is qualified for the Energy Technology List (ETL) and has an average Return On Investment of less than 2 years.

Benefits

- Energy cost savings of up to 60% per annum
- Average installed ROI less than 2 years
- Retrofit solution
- Works with gas and electric appliances
- In built gas interlock

Ancillary Products

Temperature probe
CO2 sensor

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Eco-air is an energy saving system designed specifically for commercial kitchens. The system acts as an interlock between the kitchen ventilation and the gas solenoid valve whilst also varying the speed of the ventilation via a 0-10VDC output.

Eco-air has 2 built-in 0-10VDC outputs. This is designed to vary the speed of the ventilation system(s) based on Carbon Dioxide (CO_2) levels in the kitchen and temperature in the canopy. It can also operate with smoke/steam detection in the canopy using optical sensors and CO detection for solid fuel protection.

As the commercial kitchen CO_2 or duct temperature increases, Eco-air will increase the speed of the ventilation system to provide the perfect cooking environment. Conversely, when duct temperature decreases and the kitchen CO_2 levels are low, Eco-air will reduce the speed of the ventilation systems, saving energy and money.

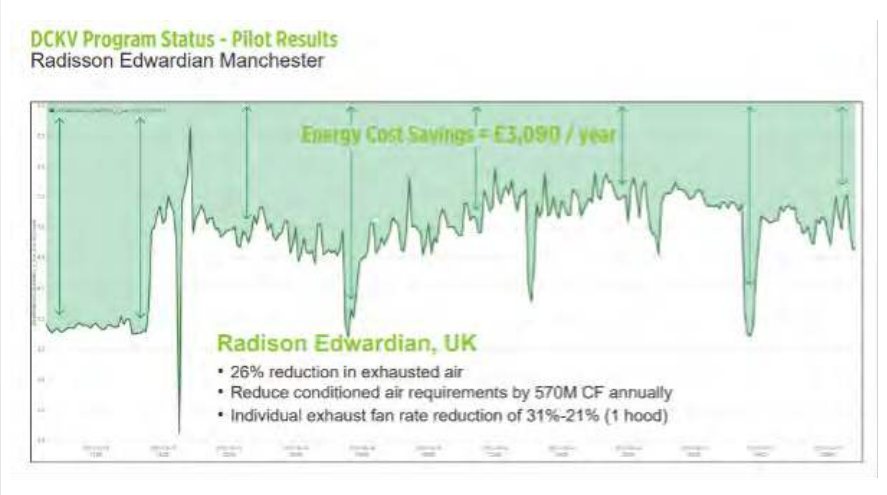
When used, the optical sensor will increase the ventilation should it detect excess smoke or steam in the canopy along with the duct mounted heat sensor to monitor excess heat in the duct.

Eco-air also carries out its duty as a traditional ventilation interlock and gas pressure proving system alongside the ventilation on demand capabilities. This allows for one single small control panel in the kitchen, freeing up valuable real estate on the kitchen walls.

Features

- Full compliance with BS6173, IGEM/UP19, DW172 & CIBSE TM50
- Qualified for Energy Technology List (ETL)
- Controls ventilation automatically based on real-time duct temperature and CO_2 levels in the kitchen
- Can also use optical sensors and CO sensors to maintain optimum ventilation rate as per DW172
- Reduces ventilation rates when duct temperature and kitchen CO_2 is low to reduce energy consumption
- Minimises heat loss via extraction by reducing the fan speeds when duct temperature and CO_2 are minimal
- Pulsed output gas meter can be linked with other building systems to monitor the kitchen
- Reduces ventilation noise levels at times of low kitchen activity
- Takes responsibility for sufficient ventilation control away from kitchen staff
- Maintains the air balance between supply and extract ventilation creating a negative pressure in the kitchen to control cooking odours
- Interlock with ventilation using with either Fan Current Sensors or Air PD Switches
- Optional Gas Proving function
- Clear full colour TFT display for user info and easy calibration
- Will accept Methane, LPG and CO detectors
- Can be linked to remote knock-off buttons, fire alarm and BMS
- Covered by a 3 year warranty

Proven costs savings



Technical Specifications

Dimensions (HWD)	178 x 254 x 62mm

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