

## Envirowise EnergySaver Datamatic - Data Logging Kitchen Fan DMES150

### Technical Data Sheet

Energysaver Datamatic, fully automatic data logging 150mm (6") axial kitchen fan with integral microprocessor controlled contamination proof humidity sensor, together with 240V to 12V Switching Power Supply situated within the fan – no transformer required.

The microprocessor records the following data in Real Time: Relative Humidity (RH), temperature, RH set point, vapour pressure, dew point, power interrupts and every occasion when the fan has run (plus cumulative run time total). Data is held for a rolling period of 420 days.

The energy efficient, ball bearing 12V DC motor only requires 8.4 watts of power when running, resulting in a long and trouble free operational life whilst reducing energy costs to the resident.

FAN DIMENSIONS					
Casing (mm)	A	B	C	D	E
	230	200	52	63	148
Hole Diameters (mm)	Walls	158			
	Ceilings	158			
	Windows	188			
FAN TECHNICAL DATA					
Insulation	Double				
Voltage	240v (integral switching power supply)				
Fan motor	12v DC 8.4 watts				
Extract capacity	230m <sup>3</sup> /h (68ltrs/sec) – integral adjustment facility allows increase to max. 350m <sup>3</sup> /h				
Pressure	mm H <sub>2</sub> O 5.1 (max)				
dB (A)	45				
HUMIDITY SENSOR TECHNICAL DATA					
Set point (at manufacture)	70% RH at 20°C (in conjunction with anticipatory control)				
Night time setback	75% RH at 20°C – 85% at 10°C				



### Special Features

#### Motor

- Energy Efficient – only 8.4 watt motor
- 12V DC ball bearing motor – proven long life performance
- No transformer required
- Impedence protected – motor cannot be burnt out if impellor is fouled
- Speed can be adjusted to increase duty rate to 350m<sup>3</sup> per hour

#### Humidity Sensor

- Sensor head guaranteed for life
- Contamination proof
- Microprocessor controlled ■ Anticipatory control for set point
- Night time setback

#### General

- Extract rate 230m<sup>3</sup>/h (64 ltrs/sec)
- Automatic silent operating integral back draught shutter mechanism
- Diagnostic two colour LED function display
- Manually operated pull cord overrun on facility
- Recorded data easily downloaded for use on PC or lap top
- Integral battery back up
- A remote version of the humidity sensor is available

#### Benefits

- Records (in Real Time) important environmental data: Relative Humidity (RH), temperature, RH set point, vapour pressure, dew point, power interrupts and every occasion when fan has run. Data held for rolling period of 420 days
- 5 year guarantee
- Lower energy cost for tenant in keeping with Government Directive regarding energy efficient electrical appliances in Social Housing

## Envirowise Energysaver Datamatic - Data Logging Kitchen Fan DMES150

### Construction

Formed from a high quality impact resistant white, thermoplastic material. The silent operation shutters open automatically when the fan switches on, and again, close automatically when fan switches off to prevent back draught through the fan when not operating.

### Motor

A 12V DC brushless, electrically commutated sealed for life lubricated ball bearing motor. The motor incorporates an overload protection device and conforms to EEC Directive 78-889 for radio interference. The motor will operate in temperatures up to 40°C. The fan conforms to BS3456, BS800 and BS5490.

The incoming AC 240V supply is converted to 12V DC by an integral switching power supply. The 12V DC motor, which consumes only 8.4 watts, requires no separate transformer.

### Installation

For best effect, the extract fan should be fitted at a minimum of 2 metres from floor level (where possible), but not closer than one metre to a major moisture producing source. The fan should not be fitted immediately above a cooker – a remote sensor should be used in this application, order code DMES150/REM/W150.

Care must be taken if the fan is fitted in a room containing a fuel burning device without a balanced flue. There must be sufficient air replacement to prevent 'spillage'.

In many instances, a passive air vent or an air brick, may need to be fitted to other cooler rooms within the property in order to promote a good airflow

### Fitting Kits available:

**WALL:** Comprises wall sleeve and external grille (available in brown, terracotta, buff or white)

**WINDOW:** Mounting unit suitable for S/G or D/G windows. (for greater efficiency we would recommend that a fan and remote sensor configuration of this model be used for this application, order code DMES150/REM/W150)

**CEILING:** Ceiling ring available for fitting into plasterboard. 150mm dia. ducting will be required. We only recommend that this axial fan be ducted a maximum 1.5 metres. For greater distances, a centrifugal or mixed flow type unit would be more appropriate. (see Centramatic and remote sensors data sheets)

#### Order Codes

<b>DMES150</b>	Fan with integral data logging humidity sensor
<b>DMES150/REM</b>	Kit comprising fan and separate data logging humidity sensor
<b>W150</b>	Wall fixing kit
<b>G150</b>	Window fixing kit
<b>C150</b>	Ceiling fixing kit

