

Energysaver™ Datamatic

Data logging bathroom fan SELV DMESQ50

WALL FITTING



Energysaver™ Datamatic, fully automatic 100mm (4") safe extra low voltage axial extract fan, for wall, ceiling or window fit applications, in bathroom or shower areas. Energy efficient ball bearing 12V DC motor requires only 2.9 watts of power when operating. Supplied as a complete kit, comprising tube fan, remote humidity sensor/transformer and external wall grille with integral back draught shutter.

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

The Dynamic Humidity sensor is designed to operate when any rapid increase in the humidity is sensed. When the water vapour has been extracted and the room returns to the previous humidity level, the Dynamic Controller will switch off the fan.

Special Features

Motor

- Energy efficient – only consumes 2.9 watts of power when running
- 12V DC ball bearing motor, provides long life performance
- Quiet operation
- Conforms to IEE 16th Edition SELV circuits

Humidity Sensor

- Dynamic sensor head guaranteed for life
- Transformer and humidity sensor housed in single remote unit
- Manually operated pull-cord override on for continuous running
- Diagnostic two colour LED function display
- Timer overrun option also available if required
- Night time set back

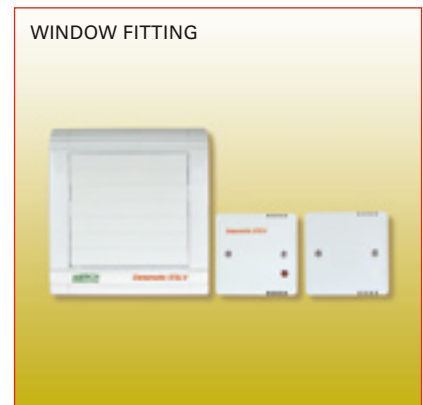
General

- Extract rate 90m³ per hour (25 ltrs/ sec)
- SELV fan unit can be positioned in Zone 1 or 2
- Transformer/Humidity sensor unit must be positioned in Zone 3. Transformer can be supplied separately from the humidity sensor if required
- Can also be supplied with separate transformer and humidity sensor units, if required
- Recorded data easily downloaded for use on PC or lap top
- Flush fitting white internal grille

Benefits

- Records 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
- No maintenance required

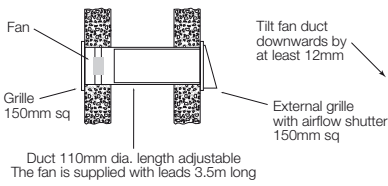
WINDOW FITTING



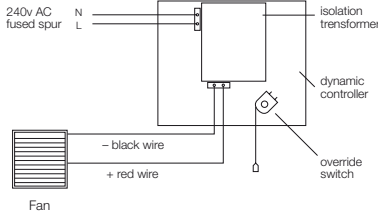
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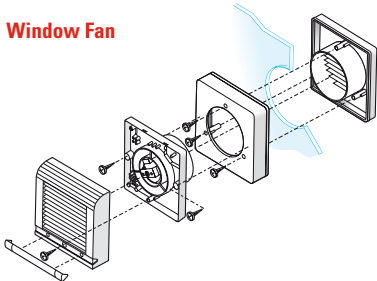
Wall Fan



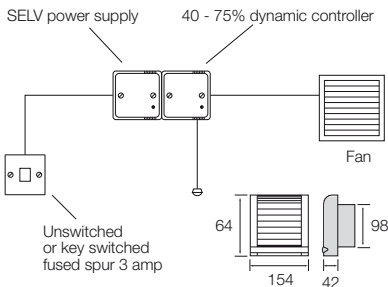
Wire Diagram



Window Fan



Wire Diagram



Construction

Wall fan – unit is housed within a standard 100mm diameter white plastic wall tube, which allows recessed fitting. Isolation transformer forms integral part of the dynamic humidity sensor controller and is contained within a single gang box. Supplied as a complete kit comprising tube fan, transformer/sensor and external grille with integral back draught shutter. This safe extra low voltage fan can be positioned in any location, even where water and earth contact is a possibility.

Window Fan – unit is housed within a casing with a 100mm spigot and integral silent mechanical backdraught shutters. Transformer and dynamic humidity sensor are contained in two separate single gang boxes. Supplied as a complete kit comprising of fan, transformer, sensor and window kit. This safe extra low voltage fan can be positioned in any location, even where water and earth contact is a possibility.

Motor

A 12V DC brushless, electrically commutated with sealed for life lubricated ball bearing motor. Energy efficient – only consumes 2.9 watts of power when running. Conforms to IEE 16th Edition SELV circuits. Isolated power supply conforms to BS3535.

Installation

The SELV fan unit may be fitted in either Zone 1 or 2 of a bath/shower room. The humidity sensor/transformer must be fitted in Zone 3 only (alternative models available with separate transformer and SELV sensor with or without Timer overrun if required). For maximum efficiency the fan should be sited at high level, as close as possible to the source of moisture. The sensor/transformer should be positioned to detect humidity as it is produced, ideally on an internal wall 100-150mm down from the ceiling and between the moisture source and the door of the room.

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 throughout the dwelling.

Fitting Kits available:

WALL: All inclusive

CEILING: As wall but will require 100mm dia. ducting. We only recommend that this axial fan be ducted a maximum 1.5m. For greater distances, a centrifugal or in-line fan would be more appropriate. (see Centramatic and remote sensors data sheets)

WINDOW: All inclusive

FAN DIMENSIONS

Hole diameters (mm)	Walls	107
	Ceilings	107
	Windows	130

FAN TECHNICAL DATA

Fan motor	12v DC 2.9 watts
Extract capacity	90m ³ /h (25 ltrs/sec)

HUMIDITY SENSOR TECHNICAL DATA

Humidity range	40-75% RH
Response sensitivity	5% RH @ 40% RH within 10 seconds
Night time setback	75% RH at 20°C – 85% RH at 10°C
Supply voltage	220/240v AC
Max. DC ripple voltage	20mV RMS
load (maximum switching)	50watt @ 12 volt DC inductive

TIMER

Time range	1 to 30 minutes*
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*At manufacture, the timer is set for a 15 minute overrun period. At installation, or subsequently, the scaled adjustment dial permits the timed period to be changed in the range 1 to 30 minutes.

SPECIFICATION KEY FACTS

- Data logging in Real Time for a rolling 420 day period
- All data viewable on a single A4 page or computer screen
- Shows fan run times
- Energysaver fan
- Impedence protected 12 volt 2.9 watt DC ball bearing motor
- Silent integral back-draught shutter
- Dynamic control in range 40%-75% RH
- Contamination proof sensor head with lifetime guarantee
- 5 year guarantee as standard
- Red/Green diagnostic LED

ORDER CODES

DMESQ50W Complete wall fan kit comprising tube fan, sensor/ transformer combined and external grille with integral backdraught shutter

DMESQ50WR Complete kit comprising tube fan, separate sensor, transformer and external grille with integral back draught shutter

DMESQ50WT As DMESQ50W plus integral timer

DMESQ50G Complete window fan kit comprising fan, sensor, transformer and window fixing kit



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