

# AUTOSTAT

## Smart Humidity Controller

### ABOUT VAPOURFLOW AUTOSTAT

The Autostat IV is an intelligent, microprocessor driven humidity controller, which unlike conventional humidistats is based on a determination of absolute humidity, not relative humidity.

The important difference between the two is that absolute humidity is not affected by the temperature of the surrounding environment, making the Autostat perfectly suited to environments with widely fluctuating air moisture content such as kitchens, laundry rooms, shower & bathrooms whilst not being affected by the ambient background humidity.

By way of example, cooking and tumble dryers produce copious amounts of water vapour, however a local RH% controller would register only a slight increase in RH% due to a simultaneous increase in temperature causing the air to hold more moisture. Increased ventilation would therefore not be triggered. The Autostat would however identify a change in the moisture content of the air and react accordingly.

### AUTOSTAT FEATURES AND BENEFITS

Autostat IV is pre-programmed at our factory and should require no adjustment through its lifetime. The units operate on 240V AC and 12V AC/DC and provide output control through relay load output position 1.

- Integral override on/standby pull switch
- Remote override feature
- Light switch trigger with overrun proportional timer
- Relay operated voltage free output control
- Autostat IV programming software
- Link settings for 12/240v ac or voltage free relay (items factory set)
- Incorporates a data-logger that captures humidity, temperature and fan operation providing details on the dwelling air quality for improved condensation control management
- Macro enabled excel programme for data output and intuitive presentation format
- Tri-coloured LED Status indicator



### GENERAL NOTES

The Autostat samples the surrounding environment at regular intervals, stores and averages the results over the previous two hours and uses this as a reference base of humidity for the next two hours. When the measured humidity exceeds this reference base by a predetermined amount the controller triggers action.

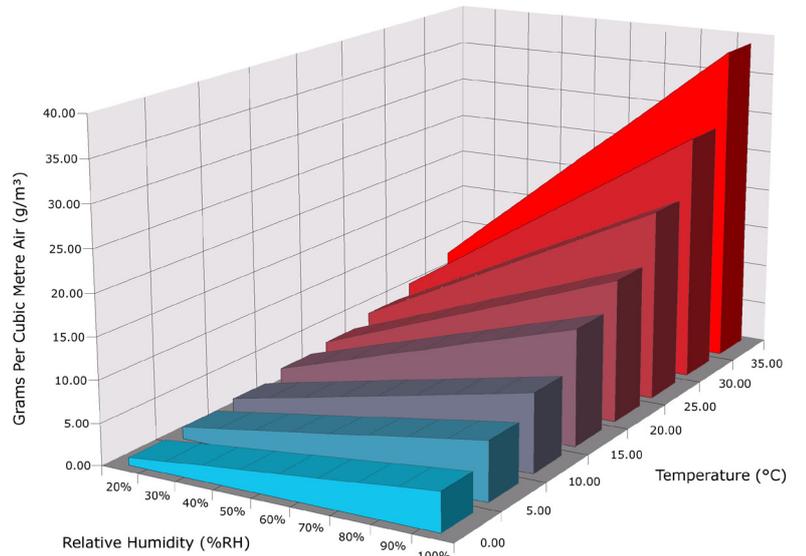
Another sample is taken after a few minutes, the difference between this and the initial trigger reading is used to calculate a total running time for the ventilation equipment to operate. This mechanism results in the ventilation not being influenced by ambient humidity, resulting in much more consistent operation.

The AUTOSTAT is designed to work with ventilation equipment to ensure a comfortable environment - by monitoring a wide variety of air conditions and operating the ventilation equipment in the appropriate manner, the atmosphere in a room can be kept in a desirable condition. Depending on the settings and trigger values that have been stored within its memory, the desired atmospheric conditions can be fully customised.

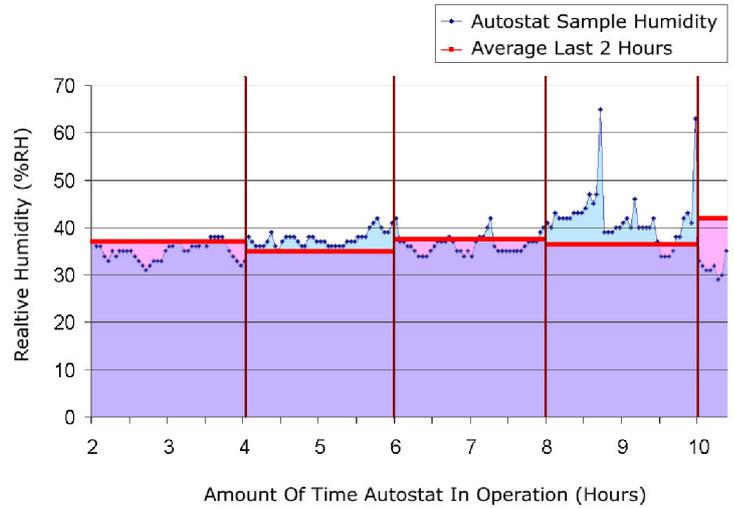
## AUTOSTAT OPTIONS

AUTOSTAT is preprogrammed at the factory and will not require adjustment throughout its lifetime. The units operate on 240V AC and 12V AC/DC and provide output control through relay load output position 1.

- Integral override on pull switch;
- Remote override on;
- Light switch trigger with proportional on time hold;
- Voltage free output control with switch over relay;
- On board program header, with Autostat IV programming software available from website;
- Link settings for 12/240v ac or voltage free relay (items factory set);
- Autostat IV spreadsheet to generate custom graphs on downloaded log data;
- Tri-coloured LED Status indicator;
- Extensive User Manual, covering all Autostat IV software and Autostat operations available for download on request.



Temperature and Moisture Content of Air Register on the Relative Humidity Scale



The AUTOSTAT humidity controller ensures low fan power consumption by constantly monitoring the humidity and temperature levels, and triggering the extractor fan only when necessary.

<b>Operation Modes</b>	Standard	auto humidity control
	Manual	override on
	Internal bathroom	1-15 minutes, proportional on time
<b>Control Settings</b>	Controlling humidity range	Auto set 300 pa at 20 °C, auto changing with temp
	Auto humidity temperature control range	0 >9, 10>19, 20>29, 30>39 40>50 °C
<b>Electrical Range</b>	Relay	S.P.C.O.
	Load Resistive (max.)	10 Amps
	Load Inductive (max.)	3.5 Amps
	Supply voltages	240V 50Hz & 12V AC SELV
<b>Data</b>	Data storage (max/min/av)	Relative Humidity RH Temperature °C Vapour Pressure Pa
	Data	1 per hour > 10 days 1 per 6 hours > 1 year
	Operating data	Fan run time, date/time Number of times user turns system on, + date from download time to last switch off

Vapour Flow Limited reserves the right to alter specifications and withdraw products from sale without notice.



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