



## HTS

Case Mounted  
Circulating Axial Fan

# HTS

## Product Overview

- 3 standard sizes from 450mm to 630mm
- Air volume flow rates up to 2,344 m<sup>3</sup>/s
- Suitable for operating temperatures up to +50°C
- Available in **AC**



**The HTS range of circulating fans provide a constant airflow for year-round ventilation, removing condensation and providing evenness of temperature and humidity throughout the building.**

### Energy Efficient

These highly efficient fans are designed to circulate air using minimal power consumption, offering a fast payback period.

### Reliability

HTS fans boast an efficient and robust motor suitable for speed control, with proven reliability for long life and trouble free operation. Cool running motors constructed with a finned aluminium casing to give excellent heat dissipation and increased lifecycle.

### Easy Installation

Recirculation fans are supplied with an integral IP55 terminal box attached, which allows the fan to be positioned conveniently to incoming electrical inputs.

### Material Strength

The all metal fan casing and guard provides a long lasting and robust construction. The units have been constructed from Aluzinc or stainless steel to ensure full corrosion protection and the guard is powder coated polyester epoxy paint finish in black (RAL 9005).

### Warranty

Each HTS has a 12 month warranty.

### Motors

Motors are efficient, lightweight induction motors, weatherproofed to IP55 and suitable for speed control. Fans are suitable for operating temperatures between -20°C and +50°C when used with a speed controller. Electrical connection to the motor is pre-wired with a 3 metre cable with a 3 pin plug, connected to a IP55 terminal box which is fitted onto the outer side of the fan casing.

### Impeller

Impellers are non-corrosive, long service life, adjustable pitch impellers with aerofoil blades made from high quality GRP. Impellers are factory set at an angle to provide maximum performance. The hubs are manufactured from die cast aluminium alloy (LM24). Assembled impellers are to be dynamically balanced to ISO 14694 Grade G6.3.

### Electrical

All units are suitable for Single Phase 220V to 240V / 50Hz operation.

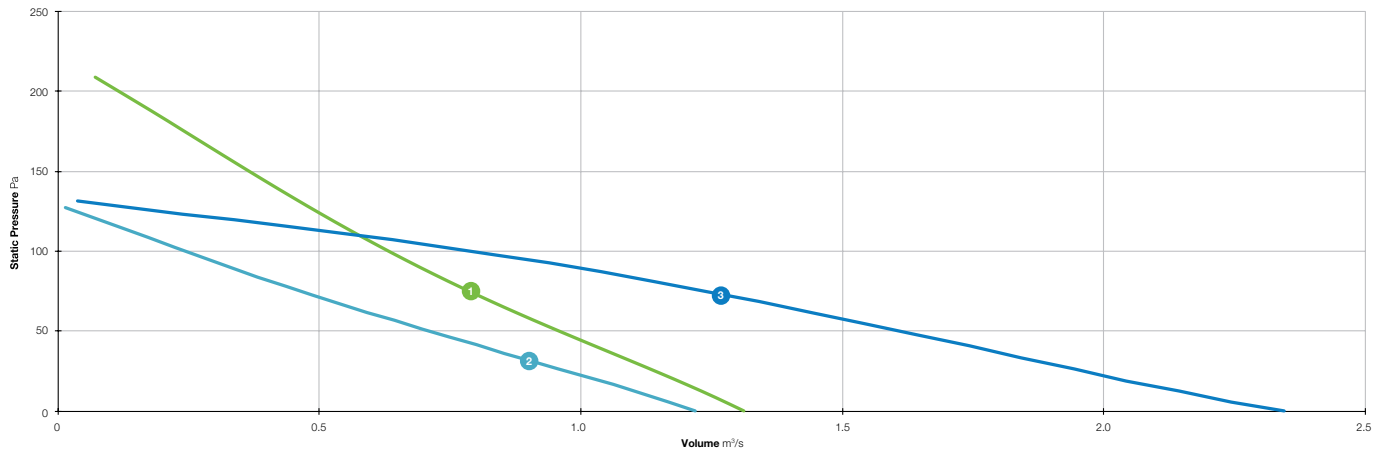
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### Product Coding

Code	Reference
HTS	Product Range
450	Diameter (450/500/560...)
4	Number of Poles (2/4/6)
1	Voltage Supply (Single Phase / Three Phase)
e.g.	<b>HTS450/4-1</b>

## Performance Range Curves



- 1 HTS450 / 4-1
- 2 HTS500 / 6-1
- 3 HTS630 / 6-1

## Performance, SFP & Electrical Data

Single Phase 220V to 240V / 50Hz

Product Code	Speed r/min	Airflow SFP	Airflow m <sup>3</sup> /s @ Static Pressure Pa							At Best Efficiency Point		Electrical Data	dBA @ 3m (Breakout)
			0	25	50	75	100	150	200	Overall Eff %	Input kW	Peak Amps	
HTS450/4-1	1347	m <sup>3</sup> /s	<b>1.312</b>	<b>1.141</b>	<b>0.958</b>	<b>0.785</b>	<b>0.631</b>	<b>0.365</b>	<b>0.116</b>	32.1	0.407	2.31	64
		W/(L/s)	0.30	0.34	0.40	0.51	0.66	1.27	4.56				
HTS500/6-1	954	m <sup>3</sup> /s	<b>1.219</b>	<b>0.973</b>	<b>0.708</b>	<b>0.464</b>	<b>0.242</b>	-	-	35.0	0.206	1.33	57
		W/(L/s)	0.18	0.22	0.30	0.49	1.02	-	-				
HTS630/6-1	924	m <sup>3</sup> /s	<b>2.344</b>	<b>1.959</b>	<b>1.611</b>	<b>1.241</b>	<b>0.789</b>	-	-	37.0	0.653	3.15	64
		W/(L/s)	0.25	0.31	0.38	0.50	0.82	-	-				

Data provided is at standard air density of 1.2 kg/m<sup>3</sup>.

Overall static efficiency, r/min and FMEG values are per ISO 12759. Installation Category A.

Peak Amps @ 230V / 1PH / 50Hz.

The overall A-weighted sound pressure level is at a distance of 3m with spherical free-field propagation. It is expressed in dB re-20μPa and is presented for comparative purposes only.

### Single Phase 220V to 240V / 50Hz

Product Code		Sound Power Level dBW @ Octave Band Hz								Total dB
		63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	
HTS450/4-1	Breakout	75	82	84	83	79	75	70	64	89
HTS500/6-1	Breakout	70	75	76	75	72	69	64	58	81
HTS630/6-1	Breakout	76	82	84	82	79	76	72	67	89

Data provided at standard air density of 1.2 kg/m<sup>3</sup>.

Tests and preparation of the sound data have been carried out in accordance with BS 848 Part 2:1985 at 50% peak pressure.

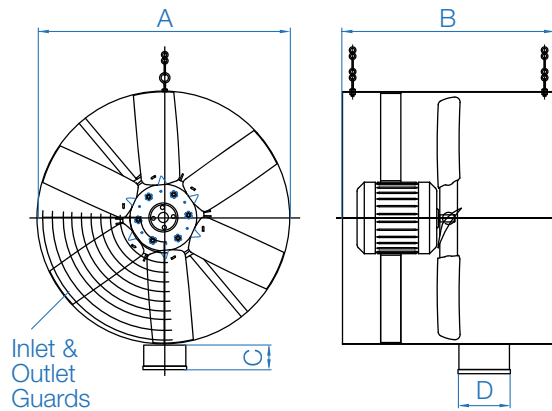
The Sound Power Level Spectra are in dB re-1pW.

The overall A-weighted sound pressure level is at a distance of 3m with spherical free-field propagation. It is expressed in dB re-20μPa and is presented for comparative purposes only.

## Dimensional Data

### Single Phase

Product Code	A	B	C	D	Weight kg
<a href="#">HTS450</a>	460	440	75	115	20
<a href="#">HTS500</a>	510	440	70	115	19
<a href="#">HTS630</a>	660	630	70	115	30



Dimensions are in mm.

### Single Phase

Product Code	Room Humidistat
HTS450	149-DCV-H1
HTS500	149-DCV-H1
HTS630	149-DCV-H1

# ROOM HUMIDISTAT

## Accessories

- 1 Step
- High reliability and accuracy
- Protection class IP30
- Setpoint settings can be locked
- Changeover contact 250V AC, 5A



### Overview

149-DCV-H1 is an electro-mechanical room humidistat for controlling humidification and/or dehumidification in HVAC systems.

### Function

The humidistat uses a synthetic element as sensor medium. The synthetic element stretches as the humidity increases and shrinks as the humidity decreases. These changes are transmitted to a microswitch. The setpoint knob affects the position of the microswitch in relation to the synthetic element. The setpoint can be set at between 35...95% RH.

### Synthetic Element

We have developed a new synthetic element that gives a high accuracy at a low cost. In order to eliminate the risk of tampering, the setpoint knob can be locked. In order to eliminate the risk of tampering, the setpoint knob can be locked by means of a locking screw under the cover.

### Typical applications

Can be used to control a humidifier or a dehumidifier or for on/off controlling of a fan. Can also be used to alarm when the humidity exceeds or falls below a pre-set level.

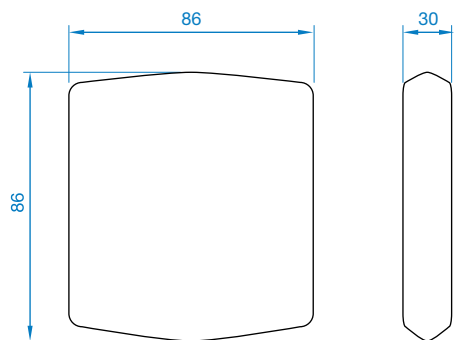
### Technical Data

Product Code	Material Casing	Ambient Temperature °C	Mounting	Protection Class	Outputs Changeover Contact	Setpoint %	Hysteresis %
149-DCV-H1	Polycarbonate	0 - 40°C	Wall	IP30	250V AC, 5A	35 - 95 RH	+/- 4 RH



# ROOM HUMIDISTAT

## Dimensional Data & Wiring



### Wiring

Humidification Closing contact between terminals 1 and 2

Dehumidification Closing contact between terminals 1 and 3

Dimensions are in mm.

This Product conforms with the requirements of European LVD standards EN 60730-1:2000+A11+A12, EN 60730-2-13:1998+A1 and carries the CE-mark

Etta Fans Limited has a policy of continuous product development and improvement and therefore reserves the right to supply products which may differ from those illustrated and described in this publication. Confirmation of dimensions and data will be supplied on request.





## Building Services

Tel **+44 (0) 1384 275800**  
Fax **+44 (0) 1384 275810**  
Email **info@eltafans.co.uk**

46 Third Avenue, Pensnett Trading Estate, Kingswinford,  
West Midlands, DY6 7US United Kingdom

## Applied Technology & Building Services Export

Tel **+44 (0) 1489 566500**  
Fax **+44 (0) 1489 566555**  
Email **at@eltafans.co.uk / export@eltafans.co.uk**

17 Barnes Wallis Road, Segensworth East Industrial Estate,  
Fareham, Hampshire, PO15 5ST United Kingdom

**eltafans.com**

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