



HIGH VOLUME LOW SPEED FANS

APPLICATION

The MHS range of High Volume Low Speed fans are designed to be installed in high ceilings to redistribute air towards floor level.

They generate a gentle and slowly moving airstream which covers a large area and create a cooling effect in summer while they de-stratify the air in winter pushing the warm air down at floor level.

They are suitable for commercial, industrial and agricultural applications such as warehouses, manufacturing facilities, industry, shopping malls, airports, sports centres, greenhouses, dairy farms.

CONSTRUCTION

- Upper frame made of painted steel structure to protect the motor.
- Safety cables and 800mm length downrod provided as standard.
- Specially designed airfoil made from aluminium EN AW 6063 T6. The surface is anodized to avoid corrosion.
- Hub provided with safety ring.
- Stylish hub cover.
- High efficiency three-phase EC brushless motor, which are specifically designed for HVLS application, 380-440Vac/3ph/50/60Hz, IP55, with integrated electronic system and EMC filters. Suitable for S1 continuous service. Speed controllable.

FEATURES & BENEFITS

- "Wide cone" air distribution under the fan.
- Top silent operation thanks to the gearless motor and the special airfoil design.
- Ideal to integrate the HVAC system, for energy saving and CO2 emission reduction.
- In winter months they are suitable to de-stratify the air pushing the warm air towards the floor level, so to even the temperature and to prevent the HVAC system to run as hard.
- In summer time the constant and gentle breeze eliminates hot and cool spots in the building by improving the internal environment and creating a natural cooling effect.
- No ordinary maintenance.
- Robust steel structure for long life.
- Key safety features (main security wire, additional stabilising cables, hub safety ring).
- Hub cover to protect the motor from dust and for a better aesthetics.
- Simplified electrical connection.
- Integrated EMC filters to prevent electromagnetic interference from other devices.
- Fan are suitable for operating temperatures from 0°C to +50°C.
- Unit performances are tested to the latest AMCA standard meaning accurate information that can be relied upon.

- Designed and manufactured in accordance with Machinery Directive (MD), Low Voltage Directive (LVD), Electromagnetic Compatibility Directive (EMC).

ACCESSORIES

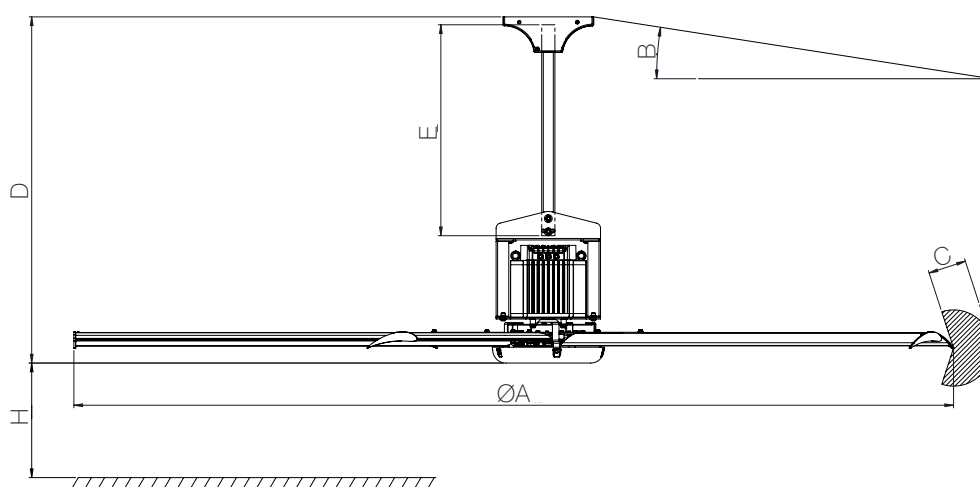
- Different length downrod
- Remote controllers
- I-Beam fixing kit
- Glulam fixing kit

Performance @ 400Vac 50Hz

Description	Nr. Blades	Max Rotation Speed	Max absorbed power	Max Thrust	Max Air Flow AMCA 230-15			Max Air Flow AMCA 230-99		
		r/min	kW	N	cfm	m³/h	SPI ⁽¹⁾ W/(m³/s)	cfm	m³/h	SPI ⁽¹⁾ W/(m³/s)
MHS12-360	5	110	0,57	121	67883	115333	17,8	96001	163105	12,6
MHS18-540	5	65	0,66	162	117818	200174	11,9	166620	283089	8,4
MHS24-730	5	43	0,75	213	182631	310291	8,7	258279	438818	6,2

(1) Max absorbed power / max airflow

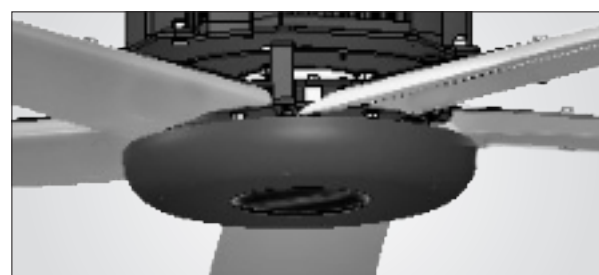
Dimensions



Description	ØA	B max ceiling slope	C min safety distance from side obstruction	D fan height with standard downrod	E standard downrod length	H min fan installation height	Weight
	mm	°	mm	mm	mm	mm	kg
MHS12-360	3610	20	550	1315	800	2700	97
MHS18-540	5410		650				123
MHS24-730	7220		750				142







Straight blade profile



Aesthetic hub cover

Accessories

Description		Control panel		Potentiometer		Control panel		Anemometer		Temperature probe
	Description	Code	Description	Code	Description	Code	Description	Code	Description	Code
MHS12-360	CTRL-HS	004154	CTRL-A	002049	CTRL-XWS	005324	AN-SY	002741	SV-10K	005327
MHS18-540										
MHS24-730										
Description		Control panel	Humidity probe			Downrod	I-Beam		Glulam	
	Description	Code	Description	Code	Description	Code	Description	Code	Description	Code
MHS12-360	CTRL-XTHI	005325	YGRO-100	005326	TUB300	002220	KT-I-BEAM	003357	KT-GLULAM	004009
MHS18-540					TUB1500	000817				
MHS24-730					TUB3000	003757				

CTRL-HS



- 3,5" TFT full touch-screen colour graphic display control panel
- Provides a single point of control for up to 4 units
- To control:
 - ✓ Speed
 - ✓ Airflow direction
 - ✓ Alarm warning
- RS-485 ModBus connection
- 24 VaC 50/60Hz (max 4 VA) or 12 ÷ 30VDC (max 2W)
- IP30

CTRL-A



- Potentiometer with front knob to adjust the motor speed
- Provided with two-pole switch (ON/OFF)
- Front yellow led to indicate that the load is active
- Controls one fan only
- 230V~ 50/60Hz
- Supplied with IP55 wall surface box

CTRL-XWS



AN-SY

SV-10K

- To control the ventilation units according to temperature and wind speed
- Can control up to 10 units
- Three operating modes:
 - Mode A: control of ventilation according to wind speed by means of an anemometer (accessory on request) and blocking of the fan according to temperature
 - Mode B: control of ventilation according to room temperature using 1 temperature probe (supplied as standard) and blocking of the fan according to wind speed
 - Mode C: control of ventilation according to room temperature by means of 2 temperature probes (additional temperature probe on request) to manage winter destratification and summer comfort ventilation
- Regulation 0-10V
- 230Vac - 50/60Hz
- IP65 wall-mounted casing
- 1 temperature probe included
- Wind speed probe (anemometer) available on request
- Additional temperature probe for Mode C available on request

CTRL-XTHI



- To control the ventilation units according to temperature and THI level
- Can control up to 10 units
- Shower control and auxiliary ventilation activation
- Regulation 0-10V
- 230Vac - 50/60Hz
- IP65 wall-mounted casing
- Temperature probe included
- Humidity probe available on request

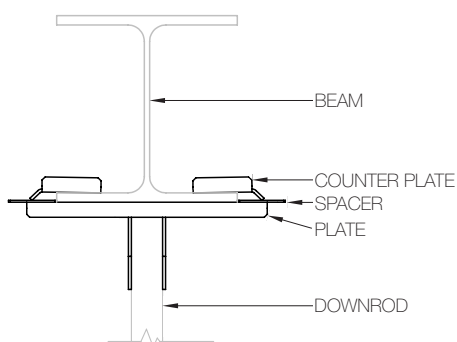
Downrod



- Downrod made from painted steel
- Different length downrod on request

Description	Weight (kg)	Dimensions (mm)
TUB300	1,3	50x50x3 - L=300
TUB1500	6,6	50x50x3 - L=1500
TUB3000	13,2	50x50x4 - L=3000

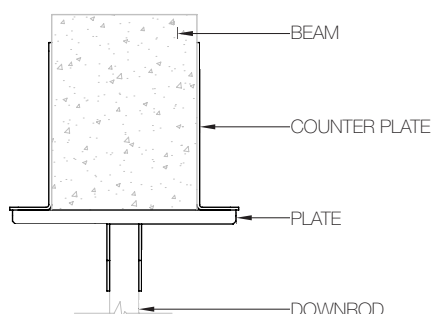
I-Beam



- I-Beam fixing kit suitable for standard IPE, HEA and HEB profiles
- Fixing screws supplied

Model	Range
IPE	from IPE180 to IPE600
HEA	from HEA100 to HEA400
HEB	from HEB100 to HEB300

Glulam



- Fixing kit suitable for rectangular beams with base between 100mm and 260mm
- Fixing screws supplied