









# AF HIGH VOLUME LOW SPEED FANS

#### **APPLICATION**

The AF range of High Volume Low Speed fans are designed to be installed in high ceilings to redistribute air towards floor level, to create a cooling effect in summer while they de-stratify the air in winter pushing the warm air down at floor level, in order to generate thermal comfort for the animals welfare.

#### CONSTRUCTION

- Upper frame made of painted steel welded structure to protect the motor.
- Safety cables and 800mm length downrod provided as standard.
- Specially designed airfoil made from aluminium EN AW 6063 T6.
- Aerodynamically shaped blade tips made in plastic.
- Hub provided with safety ring.
- · Aesthetic hub cover made in plastic.
- 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**

- "Narrow 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. The air movement also helps keeping the insects away.
- No ordinary maintenance.
- Robust steel structure for long life.
- Key safety features (main security wire, additional stabilising cables, hub safety ring).
- Blade tips to optimise performances and acoustic comfort.
- Hub cover to protect the motor from dust.
- 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

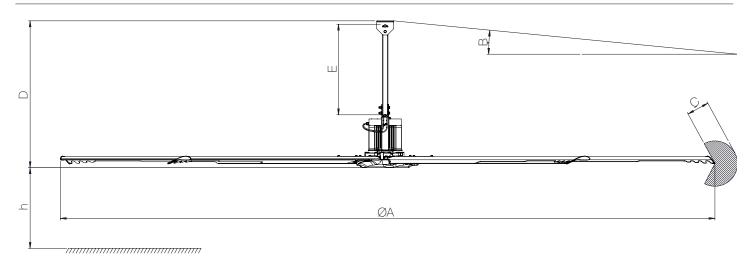


# Performance @ 400Vac 50Hz

Description	No. 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 W/(m³/s)	cfm	m³/h	SPI W/(m³/s)
AF400	5	120	0,8	272	113086	192133	15,0	159927	271717	10,6
AF500	5	105	1,1	366	152319	258791	16,0	215412	365986	11,3
AF600	5	84	1,4	302	178738	303677	16,6	252774	429464	11,7

<sup>(1)</sup> Max absorbed power / max airflow

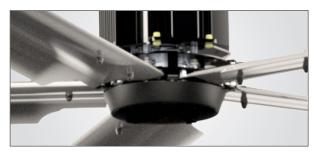
# **Dimensions**



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	0	mm	mm	mm	mm	kg
AF400	4000		450				105
AF500	5000	20	550	1300	800	2700	127
AF600	6000		650				143



Aerodynamic optimized blade profile







## **Accessories**

Description		CTRL-A		CTRL-XWS		AN-SY		SV-10K Temperature probe		CTRL-XTHI		YGRO-100 Humidity probe
	Description	Code	Description	Code	Description	Code	Description	Code	Description	Code	Description	Code
AF400					411.017							
AF500	CTRL-A	002049	CTRL-XWS	005324	AN-SY Anemometer	002741	SV-10K	005327	CTRL-XTHI	005325	YGRO-100	005326
AF600					7 themometer							

Description	/	Downrod	I-B€	eam	Glu	lam
	Description	Code	Description	Code	Description	Code
AF400	TUB300	002220				
AF500	TUB1500	000817	KT-I-BEAM	003357	KT-GLULAM	004009
AF600	TUB3000	003757				

#### 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





- To control the ventilation units according to temperature and wind speed.
- 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
- Can control up to 10 units
- IP65 wall-mounted casing
- Dimensions: 160x110x81 mm
- 1 temperature probe included
- Wind speed probe (anemometer) available on request
- Additional temperature probe for operating Mode C available on request





# **CTRL-XTHI**



- To control the ventilation units according to temperature and THI level.
- Shower control and auxiliary ventilation activation.
- Regulation 0-10V
- 230Vac 50/60Hz
- Can control up to 10 units
- IP65 wall-mounted casing
- Dimensions: 160x110x81 mm
- Temperature probe included
- Humidity probe available on request

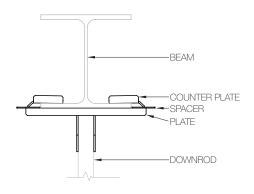
# **Downrod**



- 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

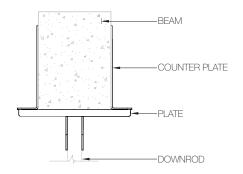
# I-Beam



- I-Beam fixing kit suitable for standard IPE, HEA and HEB100 profiles
- Fixing screws supplied

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

# Glulam



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

