



## HIGH VOLUME AXIAL FANS

### APPLICATION

High volume axial fans suitable for wall installation with the motorised shutter (accessory on request) to extract air or for suspended ceiling/beam installation with anti-vibration or safety net (accessories on request) to create a uniform indoor climate and recirculate air in commercial and industrial buildings, dairy, barns and greenhouses.

### CONSTRUCTION

- A version:  
Casing made from stainless steel. High efficiency three-phase EC brushless motor, 200-480Vac/50-60Hz, IP65, with integrated electronic system and EMC filters. Suitable for S1 continuous service. Speed controllable.
- B version:  
Casing made from galvanised steel. High efficiency one-phase EC brushless motors, 220-277Vac/50-60Hz, IP55, with integrated electronic system and EMC filters. Suitable for S1 continuous service. Speed controllable.
- Adjustable pitch aerofoil impellers are provided with blades made from high quality glass reinforced polypropylene.
- Hubs made of die-cast aluminium.
- Dynamically balanced impellers in accordance with ISO 14694 Grade G6.3.
- Conveyor made from technopolymer for ease of cleaning and not susceptible to corrosion.

### FEATURES & BENEFITS

- Effective in preventing thermal stress: it helps to increase the heat loss by removing the warm air layer surrounding the occupants body and to increase evaporation, with benefits for latent heat loss.
- Ideal for in-line installation on the feed lane and on the rest/waiting area in dairy applications ("wind channel" ventilation).
- No ordinary maintenance.
- Robust galvanised steel motor support structure for long life.
- Impellers are factory set at an angle to provide maximum performance.
- Eyebolt hooks to simplify hanging and inclined installation.
- A version:  
Integrated EMC filters to prevent electromagnetic interference from other devices. Gearless and aerodynamic design for absolute silence. Fans are suitable for operating temperatures from 0°C to +50°C. Simplified electrical connections, pre-wired cable with screw connectors guaranteeing safety, reliability and impermeability. Modbus interface.
- B version:  
Integrated EMC filters to prevent electromagnetic interference from other devices. Gearless and aerodynamic design for absolute silence. Fans are suitable for operating temperatures from -20°C to +50°C.
- Units are tested to the latest standards to ensure the highest reliability of electrical safety, performance and sound levels.
- Designed and manufactured in accordance with Machinery Directive (MD), Low Voltage Directive (LVD), Electromagnetic Compatibility Directive (EMC) and Regulation 327/2011 (ErP Directive).

### ACCESSORIES

- Motorised shutter for wall installation.
- Motor or impeller side guards.
- Remote controllers.

## Performance

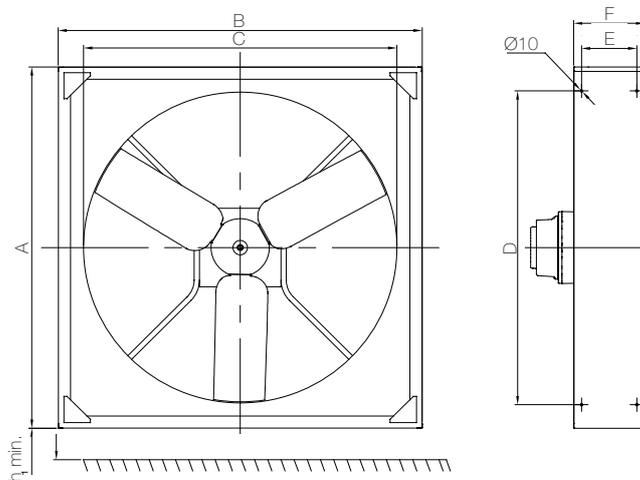
Description	Fan diameter	Max Rotation Speed	Max Electric power	Max Thrust	Max Air Flow AMCA 230-15			Max Air Flow AMCA 230-99		
					cfm	m <sup>3</sup> /h	SPI <sup>(3)</sup> W/(m <sup>3</sup> /s)	cfm	m <sup>3</sup> /h	SPI <sup>(3)</sup> W/(m <sup>3</sup> /s)
AD1400A <sup>(2)</sup>	1170	475	1,04	98	19855	33733	111,0	28079	47706	78,5
AD1400B <sup>(1)</sup>	1170	500	1,40	105	20551	34917	144,3	29064	49380	102,1
AD900B <sup>(1)</sup>	800	1200	0,99	56	10300	17500	203,7	14567	24749	144,0

(1) Data @230Vac, 50 Hz

(2) Data @400Vac, 50 Hz

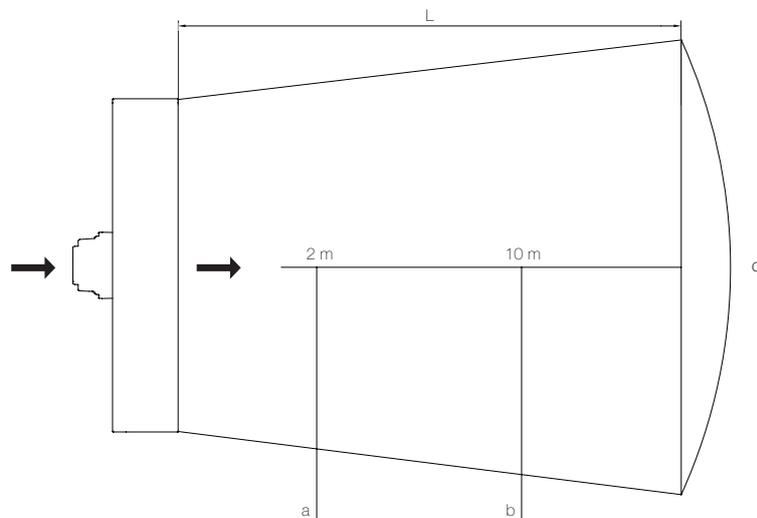
(3) Maximum power input / maximum flow rate

## Dimensions (mm) and Weight (kg)



Description	A	B	C	D	E	F	h min.	Weight
AD1400A	1382	1382	1190	1200	210	270	2700	50
AD1400B	1382	1382	1190	1200	210	270	2700	52
AD900B	951	951	819	780	210	270	2700	40

## Velocity pattern



Description	Q [m <sup>3</sup> /h]	α	L @ air velocity = 0,2 m/s [m]	Air velocity @ 2m [m/s]	Air velocity (10m) [m/s]
AD1400A	33733	50°	27	5,6	2,4
AD1400B	34517	50°	28	5,8	2,5
AD900B	17500	67°	39	5,2	2,6

## Accessories

Description		 Potentiometer	 Potentiometer	 Control panel touch	 Control panel	 Anemometro	Temperature probe					
Description	Code	Description	Code	Description	Code	Description	Code	Description	Code			
AD1400A	CTRL-A	002049	CTRL-A2	005666	CTRL-HS	004154	CTRL-XWS	005324	AN-SY	002741	SV-10K	005327
AD1400B					-	-						
AD900B					-	-						

Description		 Control panel	Humidity probe		 Motorised shutter	Impeller side bird guard (galvanised steel)		Motor side bird guard (galvanised steel)		
Description	Code	Description	Code	Description	Code	Description	Code	Description	Code	
AD1400A	CTRL-XTHI	005325	YGRO-100	005326	ES1400	005743	GRD-BV-AD1400 ZINC	006844	GRD-BM-AD1400A ZINC	006814
AD1400B					ES900	006558			GRD-BV-AD900 ZINC	006815
AD900B					GRD-BM-AD900B ZINC	006569				

Description		 Impeller side safety guard (galvanised steel)		 Motor side safety guard (galvanised steel)		 Stainless steel safety guard INOX	
Description	Code	Description	Code	Description	Code	Description	Code
AD1400A	GRD-SV-AD1400 ZINC	006916	-	-	GRD-SV-AD1400 INOX	005439	
AD1400B			GRD-SM-AD1400B ZINC	006906	-	-	
AD900B			GRD-SM-AD900B ZINC	006907	-	-	

## 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-A2



- Potentiometer with front knob to adjust the motor speed
- Provided with 2-pole switches (ON/OFF): one for the fan and one for the shutter activation
- Front yellow led to indicate that the load is active
- Controls one fan only
- 230V~ 50/60Hz
- Supplied with IP55 wall surface box

## CTRL-HS

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- Control panel with full colour touch-screen graphic display, size 3.5", suitable for controlling the AD1400A unit
- Multi-function, speed regulation, display of actual speed value, alarms and Modbus connection
- IP30, 12-30Vdc or 24Vac 50/60Hz
- The CTRL-HS can control up to 4 units via Modbus

## CTRL-XWS

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- 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



AN-SY

SV-10K

## CTRL-XTHI

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- 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

**ES**

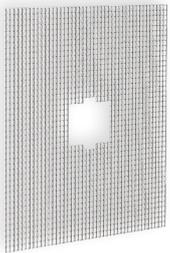
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- Motorised shutter to be mounted on the fan when wall-mounted
- Casing and blades made of galvanised steel
- Opening and closing of blades controllable via CTRL-A2 (accessory on request)

**GRD-BM**

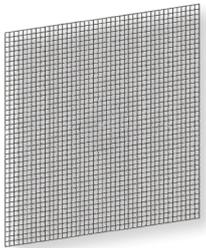
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- Motor side bird guards made from galvanised steel

**GRD-SV**

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- Impeller side safety guards made from galvanised steel
- Stainless steel on request for AD1400