

## DIRECT DRIVE MOTOR

# AE

**Extremely robust, high pressure and single inlet centrifugal fans with sheet steel casing and impeller**  
*Designed for clean or dusty air*



\*The images are provided only for illustrative purposes, the product may vary depending on its size, specifications and position.



- Fan:**
- Sheet steel casing.
  - Impeller with reaction blades in extremely robust sheet steel, specially designed for clean or dusty air.
  - Motor coupled directly.
  - All casings continuously welded.

**Motor:**

- IE3 efficiency motors for powers equal to or higher than 0.75 kW except single-phase, 2-speed and 8-poles.
- Class F motors with ball bearings and IP55 protection.
- Three-phase 230/400 V-50 Hz (up to 4 kW) and 400/690 V-50 Hz (powers higher than 4 kW).
- Maximum temperature of air to be carried: -25°C +90°C.

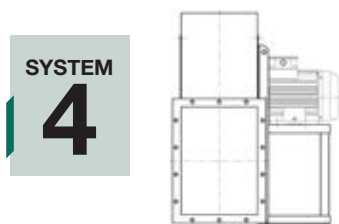
**Finish:**

- Anti-corrosive finish of polyester resin polymerised at 190°C, previously degreased with phosphate-free nanotechnological treatment.

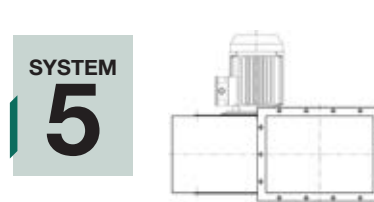
**On request:**

- Special windings for different voltages.
- Fan prepared for air transmission of up to +150°C.
- Special executions for temperatures of +300°C.
- Stainless steel fan.
- Category 2 ATEX certification.
- System 8 elastic coupling.

### Direct drive motor construction method



Direct drive, impeller mounted on the motor shaft, mounted on the pedestal.



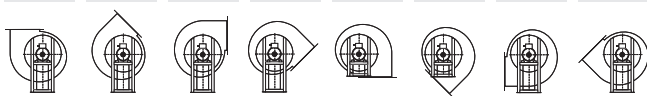
Direct drive, impeller mounted on the motor shaft, flange motor mounted on the fan casing.



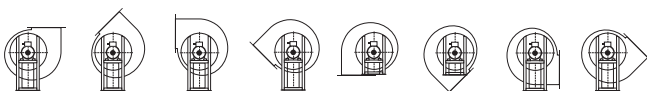
Elastic coupling drive, impeller mounted on the support shaft, mounted on the motor via an elastic coupling. Everything mounted together on a fan pedestal.

### Orientations

RD 0 RD45 RD90 RD135 RD180 RD225 RD270 RD315



LG 0 LG45 LG90 LG135 LG180 LG225 LG270 LG315





**BELT-DRIVEN MOTOR**

# AE/R

**Belt-driven high pressure fans fitted with electric motors and a standardised set of pulleys, belts and protectors in accordance with standard ISO 13857**  
*Designed for clean or dusty air*



**Motor:**

- IE3 efficiency motors.
- Class F motors with ball bearings and IP55 protection.
- Three-phase 230/400 V-50 Hz (up to 4 kW) and 400/690 V-50 Hz (powers higher than 4 kW).
- Maximum temperature of air to be carried: -25°C +90°C.

**Finish:**

- Anti-corrosive finish of polyester resin polymerised at 190°C, previously degreased with phosphate-free nanotechnological treatment.

**On request:**

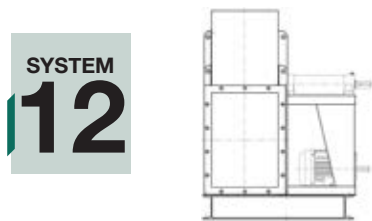
- Special windings for different voltages.
- Fan prepared for air transmission of up to +300°C.
- Stainless steel fan.
- Category 2 ATEX certification.
- System 8 elastic coupling.

**Fan:**

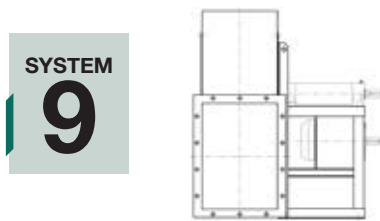
- Sheet steel casing.
- Impeller with reaction blades in extremely robust sheet steel, specially designed for clean or dusty air.
- Motor assembled on the general bench.
- All casings continuously welded.

\*The images are provided only for illustrative purposes, the product may vary depending on its size, specifications and position.

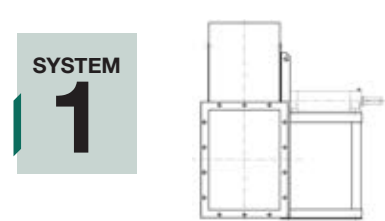
**Belt-driven motor construction method**



Transmission drive, identical to SYSTEM 1, with the motor and fan mounted on the common bench. Motor positions "W" or "Z" and exceptionally "X" or "Y".



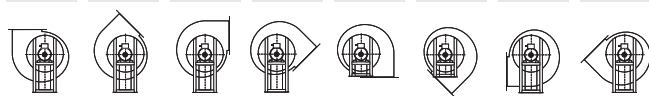
Transmission drive, identical to SYSTEM 1, with the motor mounted on the side of the pedestal, in position "W" or "Z".



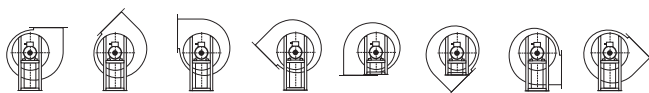
Transmission drive, impeller mounted on the support shaft. Support mounted on the pedestal.

**Orientations**

RD 0 RD45 RD90 RD135 RD180 RD225 RD270 RD315



LG 0 LG45 LG90 LG135 LG180 LG225 LG270 LG315

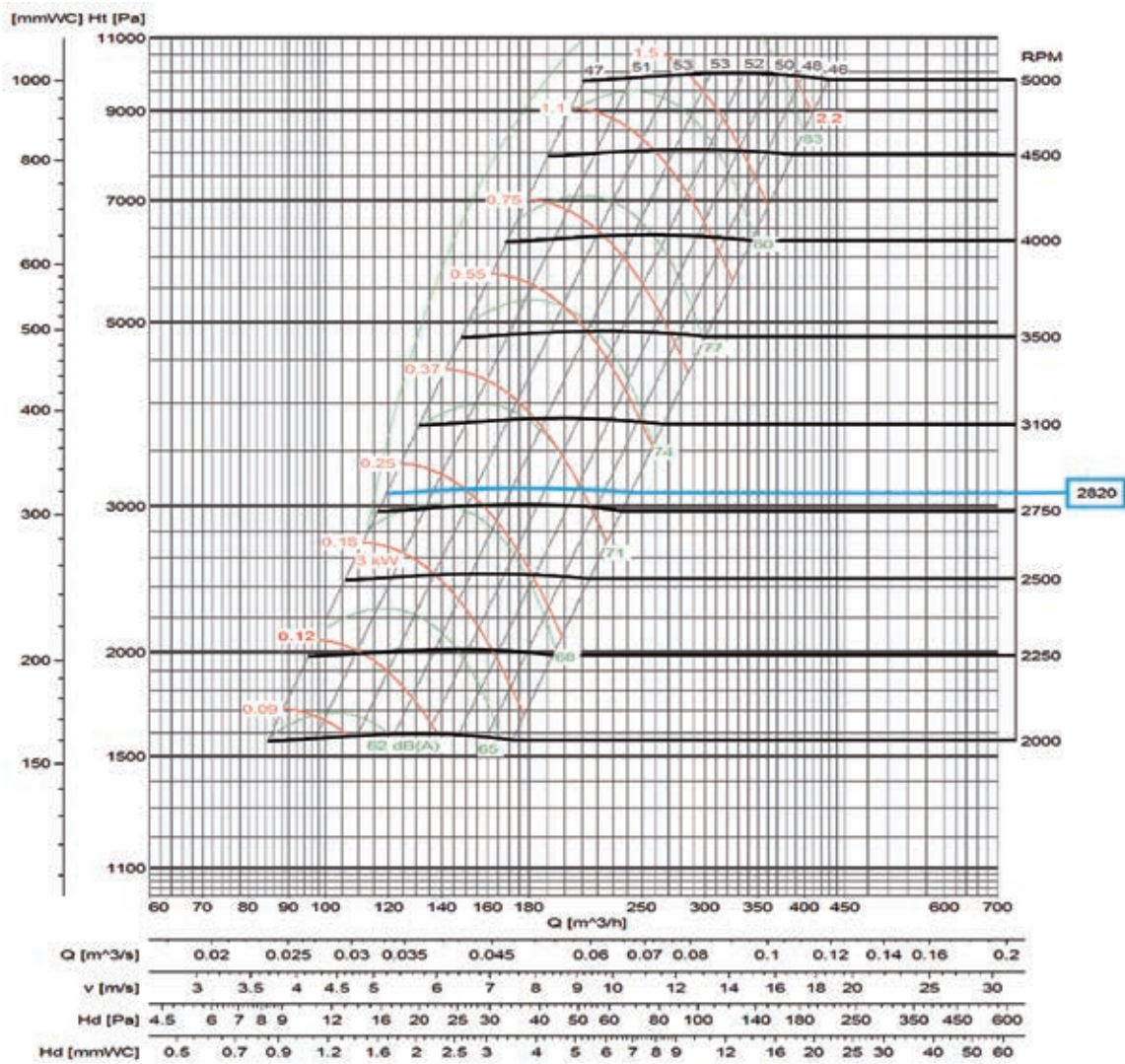






## Characteristic curves

### AE 400



Flow margin  $\pm 5\%$   
 Noise level margin  $+3...5$  dB  
 Margin of kW absorbed  $\pm 3\%$   
 Impulsion characteristics

RPM

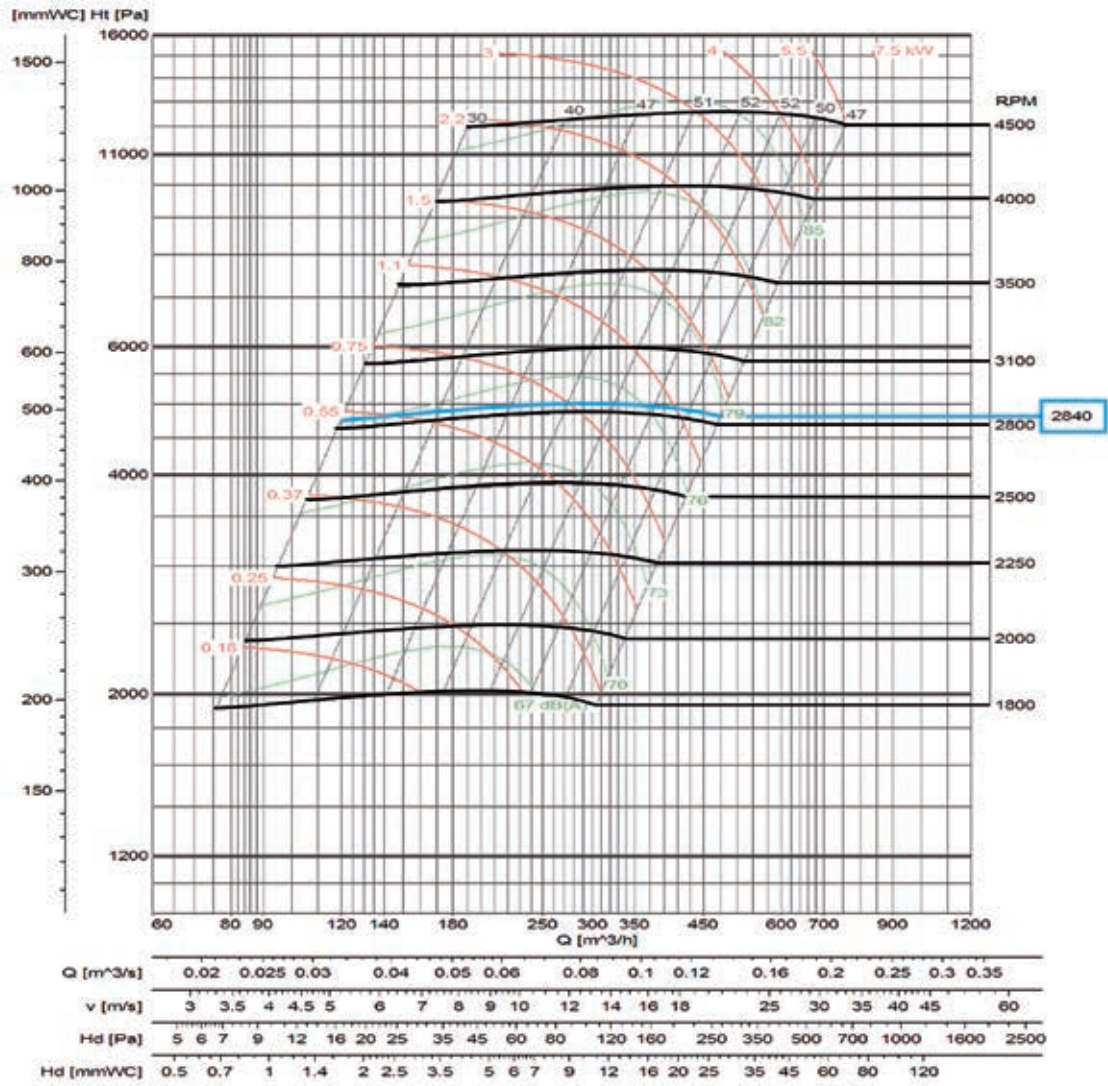
Characteristics for:  
 system 4 and 5 in direct  
 drive motor with 2/4/6/8  
 poles depending on the  
 model.





Characteristic curves

AE 500



Flow margin ±5%  
 Noise level margin +3...5 dB  
 Margin of kW absorbed ±3%

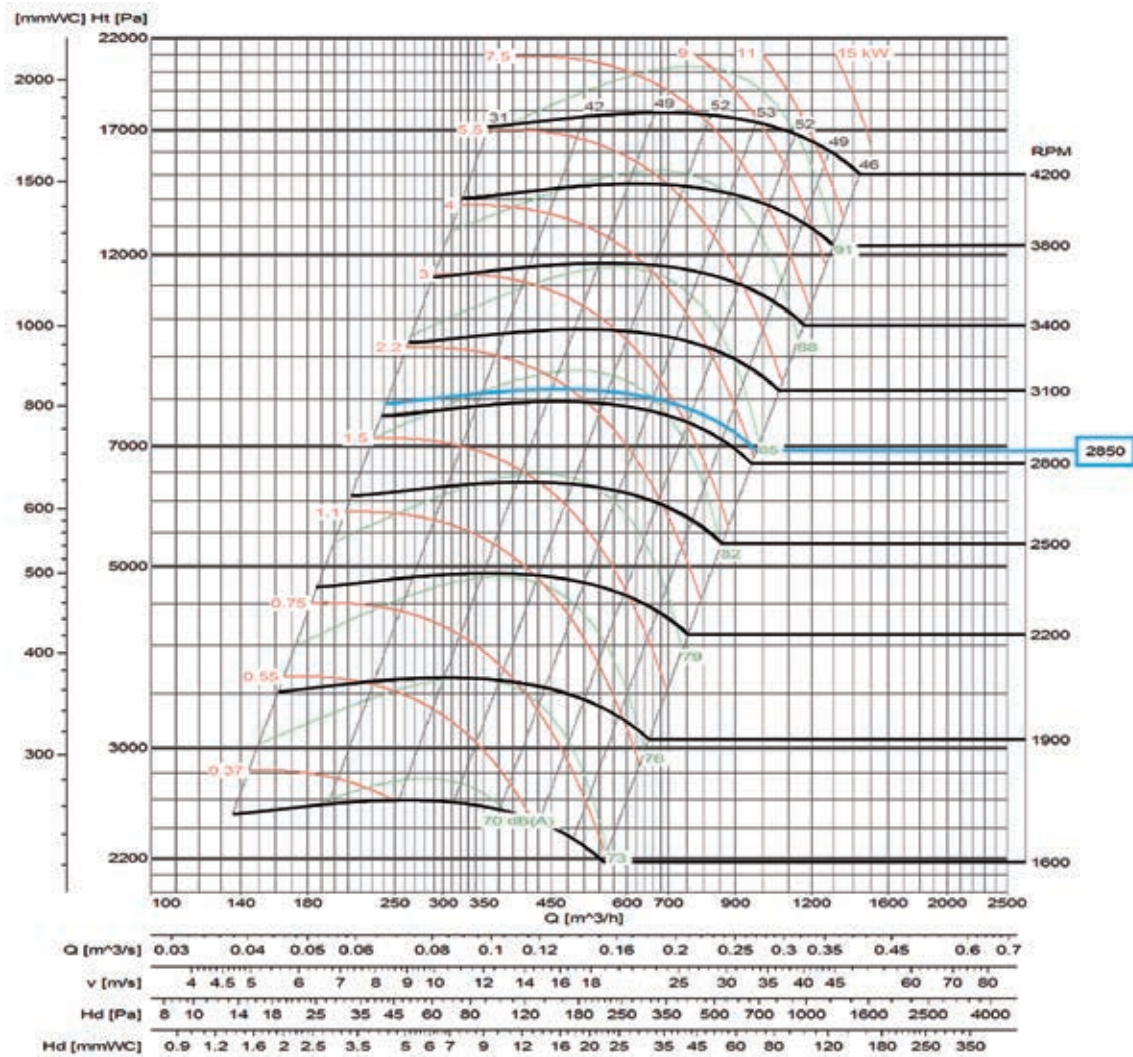
Impulsion characteristics

RPM

Characteristics for:  
 system 4 and 5 in direct  
 drive motor with 2/4/6/8  
 poles depending on the  
 model.

## Characteristic curves

### AE 630



Flow margin  $\pm 5\%$   
 Noise level margin +3...5 dB  
 Margin of kW absorbed  $\pm 3\%$

Impulsion characteristics

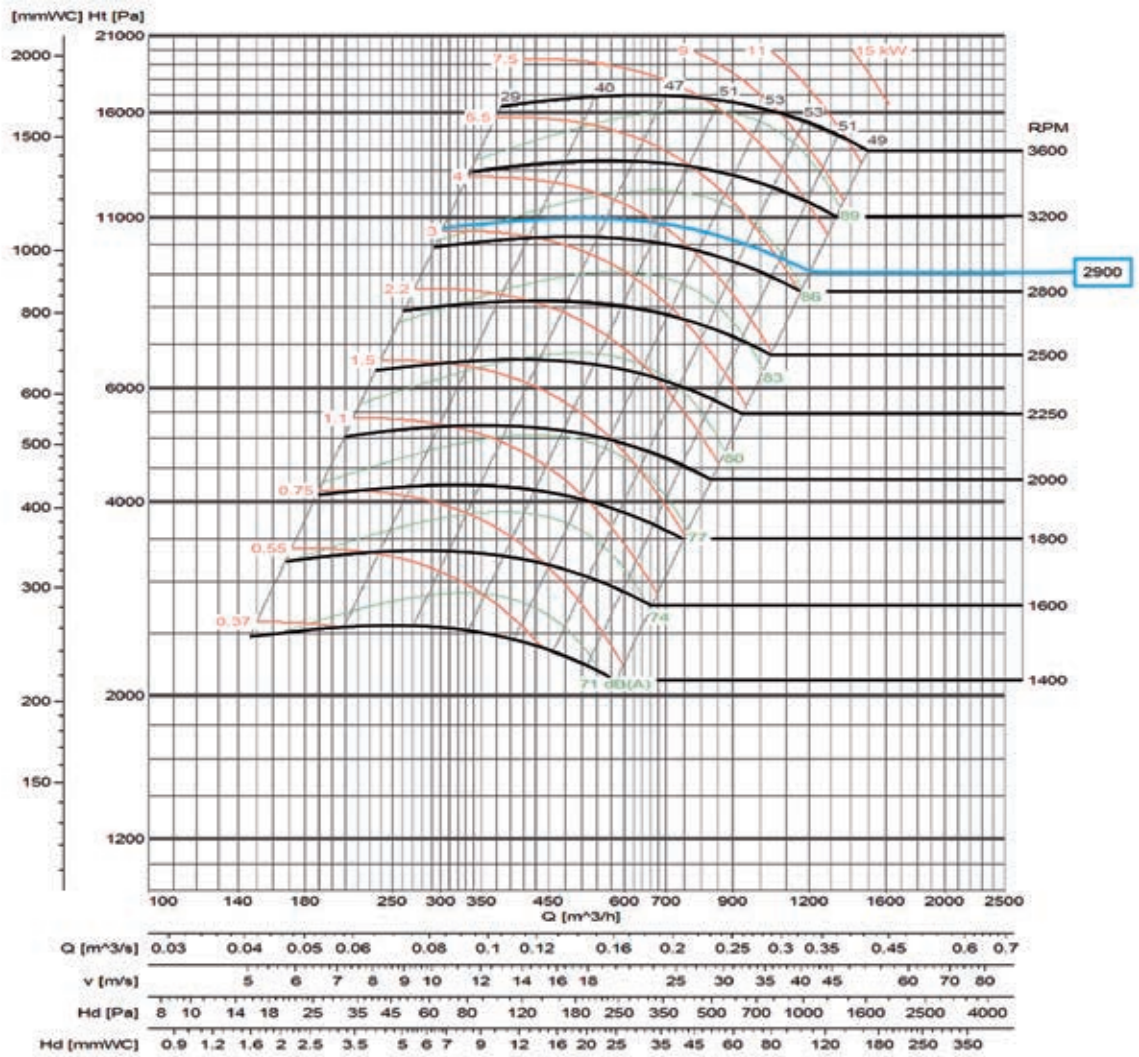
**RPM**

Characteristics for:  
 system 4 and 5 in direct  
 drive motor with 2/4/6/8  
 poles depending on the  
 model.



Characteristic curves

AE 710



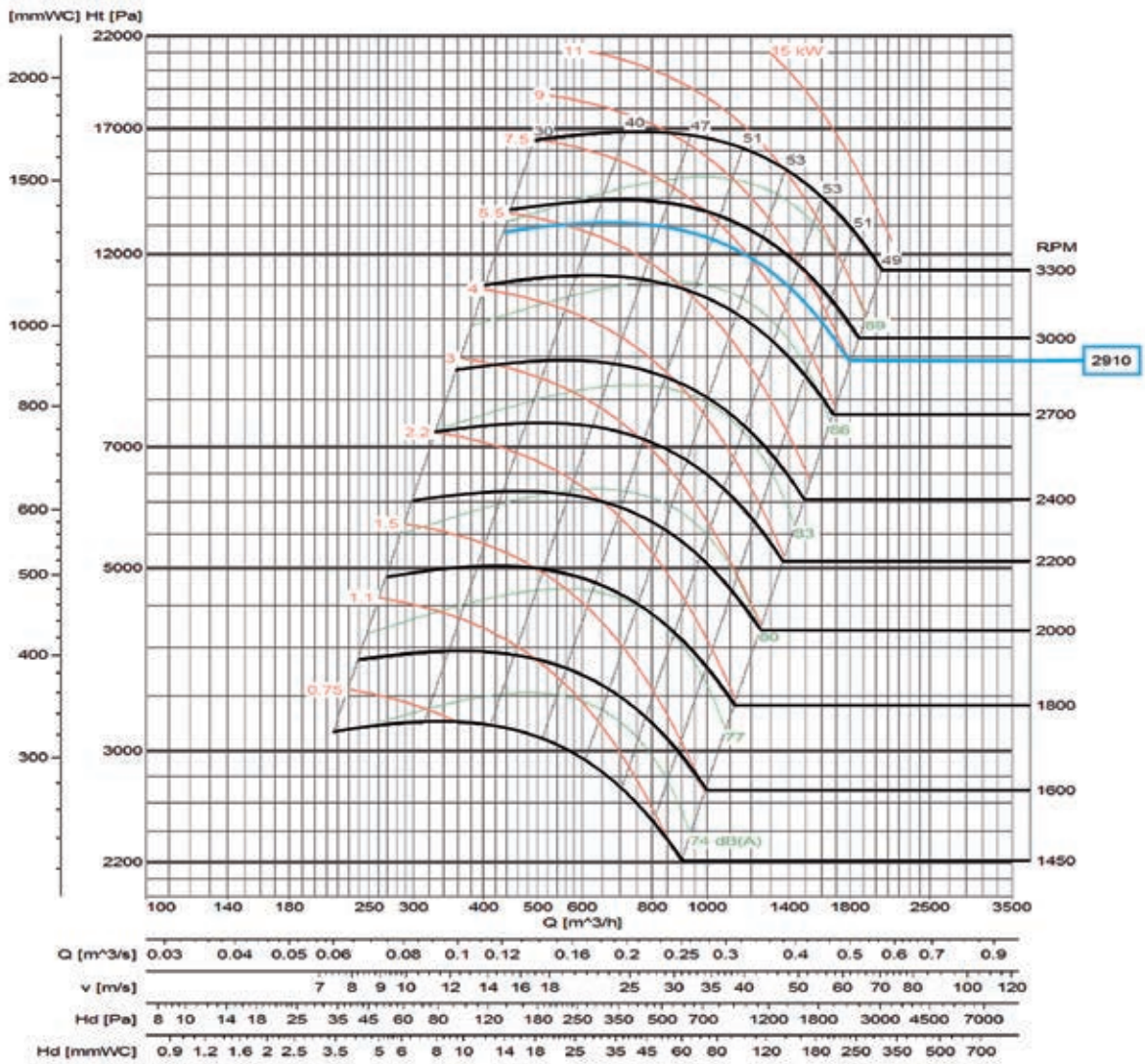
Flow margin ±5%  
 Noise level margin +3...5 dB  
 Margin of kW absorbed ±3%  
 Impulsion characteristics

**RPM** Characteristics for:  
 system 4 and 5 in direct  
 drive motor with 2/4/6/8  
 poles depending on the  
 model.



## Characteristic curves

### AE 800



Flow margin  $\pm 5\%$   
 Noise level margin  $+3...5$  dB  
 Margin of kW absorbed  $\pm 3\%$

Impulsion characteristics

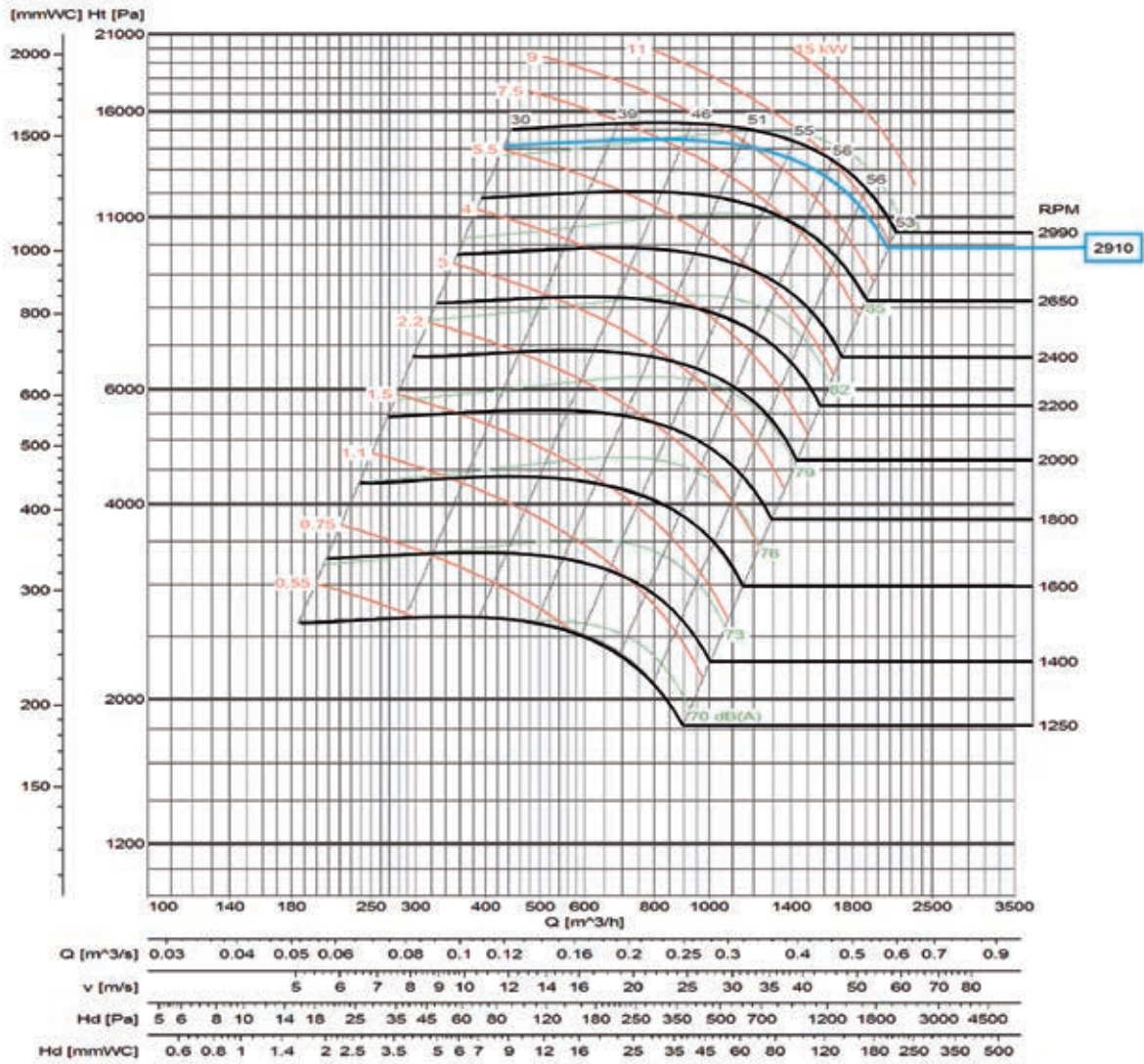
RPM

Characteristics for:  
 system 4 and 5 in direct  
 drive motor with 2/4/6/8  
 poles depending on the  
 model.



Characteristic curves

AE 900



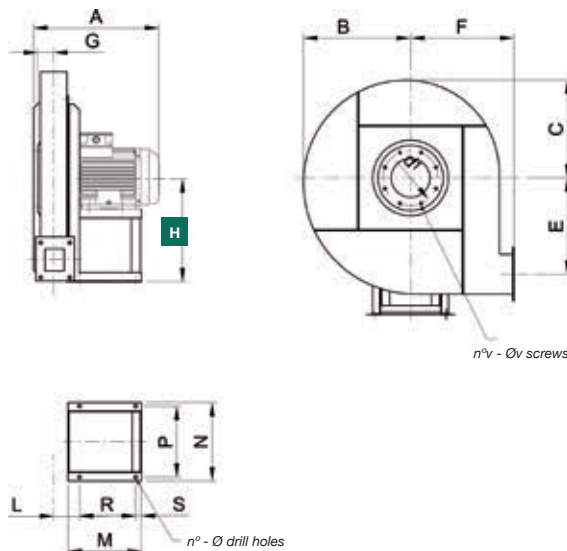
Flow margin ±5%  
 Noise level margin +3...5 dB  
 Margin of kW absorbed ±3%  
 Impulsion characteristics

RPM

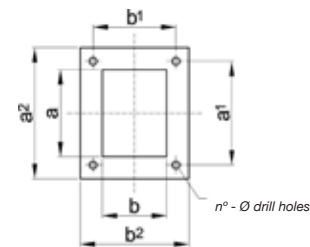
Characteristics for:  
 system 4 and 5 in direct  
 drive motor with 2/4/6/8  
 poles depending on the  
 model.

Dimensions mm

**AE 400...900**



**OUTLET NOZZLE**



**ORIENTATIONS**

H0	H1	H2	H3	H4	H5	H6	H7
RD0	RD45	RD90	RD135	RD180	RD225	RD270	RD315
LG0	LG45	LG90	LG135	LG180	LG225	LG270	LG315

**H** \*The measurement of height H (distance between the ground and the axis) varies depending on the orientations

MOD.	FRAME	A*	B	C	E	F	G	HO-1-2-3	H4-5	H6-7	L	M*	N	P	R*
AE 400/B	71 A/2	320	260	250	220	250	42	300	250	300	87	190	244	220	115
AE 400/B	71 B/2	320	260	250	220	250	42	300	250	300	87	190	244	220	115
AE 400/A	71 B/2	320	260	250	220	250	42	300	250	300	87	190	244	220	115
AE 400/A	80 A/2	345	260	250	220	250	42	300	250	300	87	190	244	220	115
AE 500/B	80 A/2	345	320	310	280	300	42	355	300	355	87	190	244	220	115
AE 500/B	80 B/2	345	320	310	280	300	42	355	300	355	87	190	244	220	115
AE 500/A	80 B/2	345	320	310	280	300	42	355	300	355	87	190	244	220	115
AE 500/A	90 S/2	360	320	310	280	300	42	355	300	355	87	215	269	245	140
AE 630/B	90 S/2	370	375	365	330	355	50	425	355	425	92	215	269	245	140
AE 630/B	90 L/2	395	375	365	330	355	50	425	355	425	92	215	269	245	140
AE 630/A	90 L/2	395	375	365	330	355	50	425	355	425	92	215	269	245	140
AE 630/A	100 LA/2	425	375	365	330	355	50	425	355	425	92	260	312	280	185
AE 710/B	100 LA/2	425	425	410	380	400	50	475	400	475	92	260	312	280	185
AE 710/B	112 M/2	425	425	410	380	400	50	475	400	475	92	260	312	280	185
AE 710/A	112 M/2	425	425	410	380	400	50	475	400	475	92	260	312	280	185
AE 710/A	132 SA/2	515	425	410	380	400	50	475	400	475	92	320	342	310	245
AE 800/A	132 SA/2	515	475	460	430	450	50	530	450	530	92	320	342	310	245
AE 800/A	132 SB/2	515	475	460	430	450	50	530	450	530	92	320	342	310	245
AE 800/A	132 MB/2	540	475	460	430	450	50	530	450	530	92	320	342	310	245
AE 900/A	160 MA/2	550	570	545	530	525	55	630	525	630	98	320	342	310	245
AE 900/A	160 MA/2	595	570	545	530	525	55	630	525	630	98	425	440	400	345

**OUTLET NOZZLE**

MOD.	S	n°	Φ	d <sup>1</sup>	n°v	Φv	a	b	a <sup>1</sup>	b <sup>1</sup>	a <sup>2</sup>	b <sup>2</sup>	n <sup>1</sup>	Φf	kg	WD <sup>2</sup>
AE 400/B	25	4	10	182	8	M6	94	68	112	90	150	128	4	10	28	0.3
AE 400/B	25	4	10	182	8	M6	94	68	112	90	150	128	4	10	30	0.3
AE 400/A	25	4	10	182	8	M6	94	68	112	90	150	128	4	10	31	0.4
AE 400/A	25	4	10	182	8	M6	94	68	112	90	150	128	4	10	35	0.4
AE 500/B	25	4	10	182	8	M6	94	68	112	90	150	128	4	10	40	0.8
AE 500/B	25	4	10	182	8	M6	94	68	112	90	150	128	4	10	41	0.8
AE 500/A	25	4	10	182	8	M6	94	68	112	90	150	128	4	10	42	1.2
AE 500/A	25	4	10	182	8	M6	94	68	112	90	150	128	4	10	50	1.2
AE 630/B	25	4	10	200	8	M6	105	77	125	100	165	137	4	10	60	2
AE 630/B	25	4	10	200	8	M6	105	77	125	100	165	137	4	10	62	2
AE 630/A	25	4	10	200	8	M6	105	77	125	100	165	137	4	10	65	3.2
AE 630/A	25	4	12	200	8	M6	105	77	125	100	165	137	4	10	80	3.2
AE 710/B	25	4	12	200	8	M6	105	77	125	100	165	137	4	10	95	4.7
AE 710/B	25	4	12	200	8	M6	105	77	125	100	165	137	4	10	100	4.7
AE 710/A	25	4	12	200	8	M6	105	77	125	100	165	137	4	10	105	6
AE 710/A	25	4	12	200	8	M6	105	77	125	100	165	137	4	10	125	6
AE 800/A	25	4	12	200	8	M6	105	77	125	100	165	137	4	10	145	9.5
AE 800/A	25	4	12	200	8	M6	105	77	125	100	165	137	4	10	150	9.5
AE 800/A	25	4	12	200	8	M6	105	77	125	100	165	137	4	10	160	9.5
AE 900/A	25	4	12	219	8	M6	117	87	140	112	177	147	4	10	190	15
AE 900/A	30	4	14	219	8	M6	117	87	140	112	177	147	4	10	220	15

(\*) For "HIGH TEMP" constructions, elevations "A-M-R" + 50 mm.  
(kg) = Weight of fan with motor.  
WD<sup>2</sup> = Moment of inertia of the impeller, expressed in kg x m<sup>2</sup>

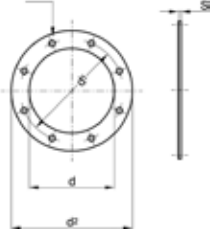
To obtain the dimensions of systems 1, 9 and 12 consult with our technical team.



Accessories

Inlet counter-flange

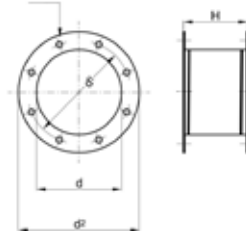
n° - Ø drill holes



MOD.	d	d¹	d²	n°	Φ	s	kg
AE 400	145	182	215	8	9	4	0.6
AE 500	145	182	215	8	9	4	0.6
AE 630	165	200	235	8	9	4	0.65
AE 710	165	200	235	8	9	4	0.65
AE 800	165	200	235	8	9	4	0.65
AE 900	185	219	255	8	9	4	0.75

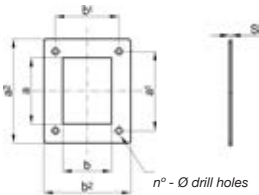
Inlet anti-vibration seal

n° - Ø drill holes



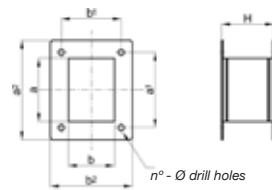
MOD.	d	d¹	d²	n°	Φ	H	kg
AE 400	145	182	215	8	9	200	1.5
AE 500	145	182	215	8	9	200	1.5
AE 630	165	200	235	8	9	200	1.6
AE 710	165	200	235	8	9	200	1.6
AE 800	165	200	235	8	9	200	1.6
AE 900	185	219	255	8	9	200	1.7

Impulsion counter-flange



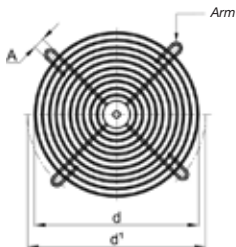
MOD.	a	b	a¹	b¹	a²	b²	n°	Φ	s	kg
AE 400	94	68	112	90	150	128	4	10	4	0.4
AE 500	94	68	112	90	150	128	4	10	4	0.4
AE 630	105	77	125	100	165	137	4	10	4	0.45
AE 710	105	77	125	100	165	137	4	10	4	0.45
AE 800	105	77	125	100	165	137	4	10	4	0.45
AE 900	117	87	140	112	177	147	4	10	4	0.5

Impulsion anti-vibration seal



MOD.	a	b	a¹	b¹	a²	b²	n°	Φ	H	kg
AE 400	94	68	112	90	150	128	4	10	200	1
AE 500	94	68	112	90	150	128	4	10	200	1
AE 630	105	77	125	100	165	137	4	10	200	1.1
AE 710	105	77	125	100	165	137	4	10	200	1.1
AE 800	105	77	125	100	165	137	4	10	200	1.1
AE 900	117	87	140	112	177	147	4	10	200	1.2

Inlet protection net

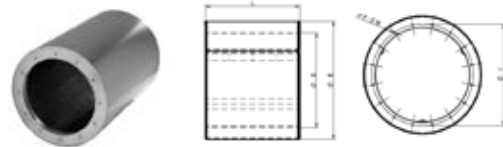


MOD.	d	d¹	A	n°	kg
AE 400	145	182	9	4	0.13
AE 500	145	182	9	4	0.13
AE 630	165	200	9	4	0.15
AE 710	165	200	9	4	0.15
AE 800	165	200	9	4	0.15
AE 900	185	219	9	4	0.18

Circular silencers

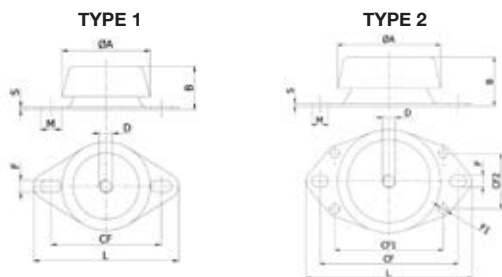
Silencers are used to lower the noise level at air conditioning or ventilation installation manufactured using galvanised steel

- Upon request: other constructions using different materials.



øD	øE	L	øI	F	øM	øD	øE	L	øI	F	øM
315	515	ØD,1.5ØD, 2ØD	355	8	M8	900	1100	ØD,1.5ØD, 2ØD	970	16	M10
355	555	ØD,1.5ØD, 2ØD	395	8	M8	1000	1200	ØD,1.5ØD, 2ØD	1070	16	M10
400	600	ØD,1.5ØD, 2ØD	450	8	M8	1120	1320	ØD,1.5ØD, 2ØD	1190	20	M10
450	650	ØD,1.5ØD, 2ØD	500	8	M8	1250	1450	ØD,1.5ØD, 2ØD	1320	20	M10
500	700	ØD,1.5ØD, 2ØD	560	12	M8	1400	1600	ØD,1.5ØD, 2ØD	1470	20	M10
560	760	ØD,1.5ØD, 2ØD	620	12	M8	1500	1700	ØD,1.5ØD, 2ØD	1570	20	M10
630	830	ØD,1.5ØD, 2ØD	690	12	M8	1600	1800	ØD,1.5ØD, 2ØD	1680	24	M14
710	910	ØD,1.5ØD, 2ØD	770	16	M8	1700	1900	ØD,1.5ØD, 2ØD	1780	24	M14
800	1000	ØD,1.5ØD, 2ØD	860	16	M8	1800	2000	ØD,1.5ØD, 2ØD	1880	24	M14

Shock-absorbers



MOD.	SHOCK-ABSORB-ERS MODEL	TYPE	øA	B	D	CF	CF1	CF2	F	øF1	L	M	S
AE 400	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
AE 500	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
AE 630	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
AE 710	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
AE 800	CF 924512	2	92	44...45	12	120	98	50	10.5	8.5	130	15.5	2.5
AE 900	CF 924512	2	92	44...45	12	120	98	50	10.5	8.5	130	15.5	2.5