DIRECT DRIVE MOTOR

CAAB

Extremely robust high pressure 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.
- Backward curved impeller made of very robust sheet steel, specially designed for clean and dusty air.
- Directly coupled motor.
- With inspection and cleaning hatch from size 560 and up.
- All casings continuously welded.

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

Finishing:
- Anti-corrosive finish in polyester resin, polymerised at 190 ºC, after degreasing with phosphate-free nanotechnology treatment.

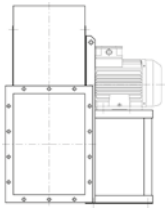
On request:
- Special windings for different voltages.
- Fan prepared to transport air up to +150 ºC.
- Special executions for temperatures + 300 ºC.
- Stainless steel fan.
- ATEX certified Category 2.
- System 8 elastic coupling.

Order code

CAAB	—	450	—	2T	—	10
CAAB: Extremely robust high pressure single inlet centrifugal fans with sheet steel casing and impeller.		Impeller size		Number of motor poles 2=2900 r/min 50 Hz 4=1400 r/min 50 Hz 6=900 r/min 50 Hz	T=Three-phase	Motor power (HP)

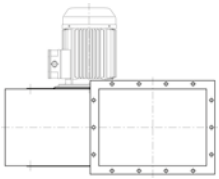
Direct drive motor construction method

SYSTEM 4



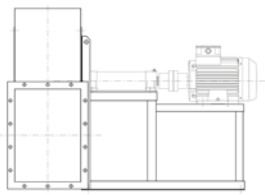
Direct drive, impeller mounted on the motor shaft, mounted on the pedestal.

SYSTEM 5



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

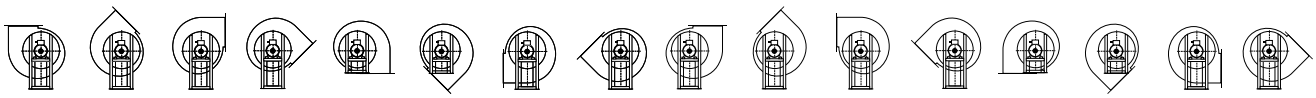
SYSTEM 8



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



LG270 standard supply, other positions on request. Models 350 to 710 are adjustable. Special sizes in positions 180 and 225. Models 800 to 900 are adjustable. Special sizes except position 315. Models 1000 to 1400 are not adjustable. Special sizes except position 315.

Technical characteristics

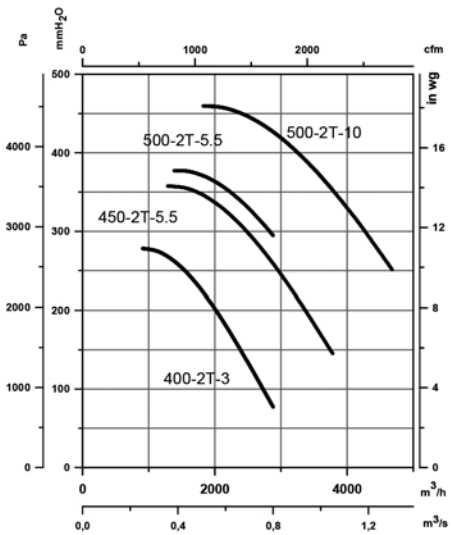
Model	Frame	Speed	Maximum admissible current (A)			Installed power	Maximum flow rate	Sound pressure level	Approx. weight	According ErP
		(r/min)	230 V	400 V	690 V	(kW)	(m^3/h)	dB(A)	(Kg)	
CAAB-400-2T-3 IE3	90 L	2910	7.32	4.21		2.2	2880	84	55	2015
CAAB-450-2T-5.5 IE3	112 M	2900	13	7.5		4	3780	87	85	2015
CAAB-500-2T-5.5 IE3	112 M	2900	13	7.5		4	2880	87	100	2015
CAAB-500-2T-10 IE3	132 SB	2930		14.1	8.17	7.5	4680	90	120	2015
CAAB-560-2T-10 IE3	132 SB	2930		14.1	8.17	7.5	4680	90	140	2015
CAAB-560-2T-15 IE3	160 MA	2945		20	11.6	11	7560	93	175	2015
CAAB-630-2T-25 IE3	160 L	2945		33.9	19.7	18.5	10800	100	240	2015
CAAB-710-2T-30 IE3	180 M	2950		39.7	23	22	8280	100	280	2015
CAAB-710-2T-50 IE3	200 LB	2960		67.8	39.3	37	15480	100	410	2015
CAAB-800-2T-60 IE3	225 M	2960		77.5	44.9	45	15480	103	490	2015
CAAB-800-2T-100 IE3	280 S	2975		130	75.4	75	23400	102	670	2015
CAAB-900-2T-100 IE3	280 S	2975		130	75.4	75	19080	102	880	2015
CAAB-900-2T-150 IE3	315 S	2980		189	110	110	30600	104	1080	2015
CAAB-1000-2T-175 IE3	315 MA	2980		224	130	132	37800	108	1150	2015
CAAB-1000-2T-270 IE3	315 MC	2975		334	194	200	43200	108	1280	2015

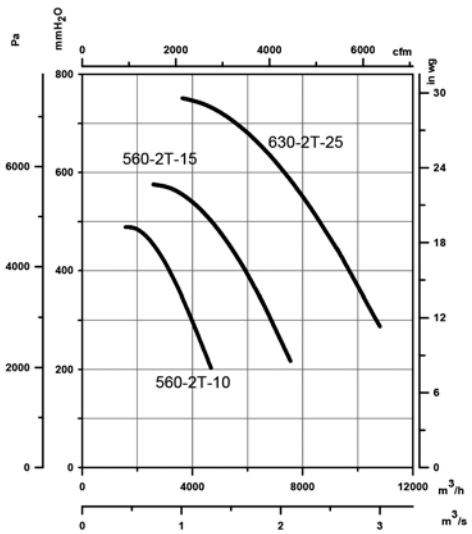
Erp. (Energy Related Products)

Information on Directive 2009/125/EC can be downloaded from the SODECA website or the QuickFan selector programme.

Characteristic curves

Q= Flow rate in m^3/h, m^3/s and cfm Pe= Static pressure in mm H_2O, Pa and inwg

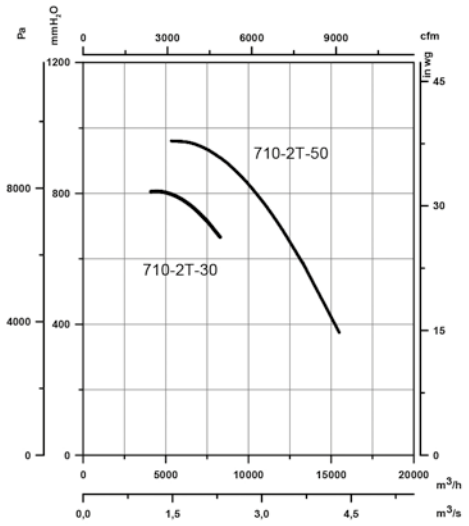


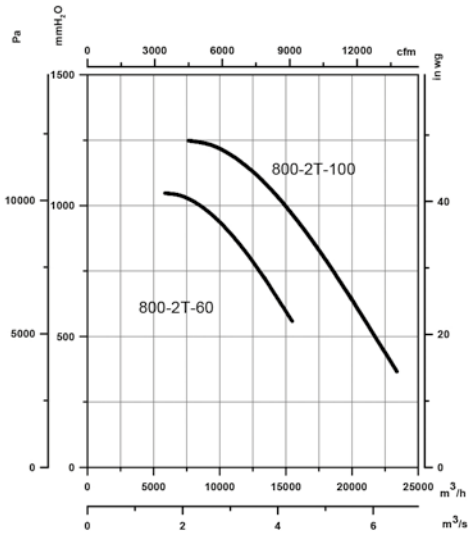


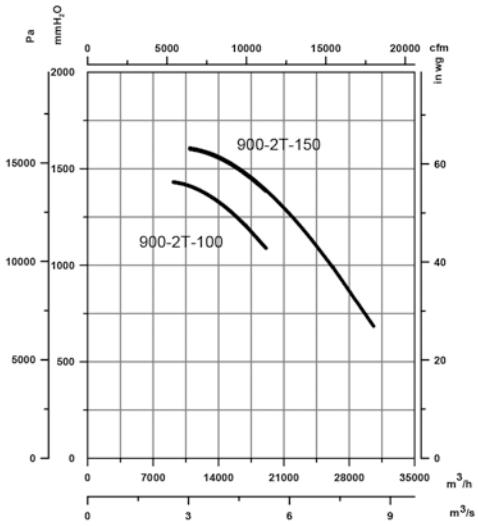
LARGE SERIES

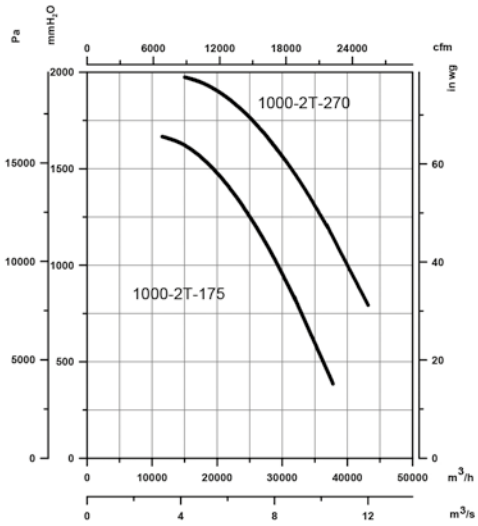
Characteristic curves

Q= Flow rate in m^3/h, m^3/s and cfm Pe= Static pressure in mm H_2O, Pa and inwg









Accessories


INT


C2V


RM


VSD3/A-RFT
VSD1/A-RFM


AET


RPA


B


BD


BIC


ACE


S


REG


Drall-Regler


Válvula lamas contrapuestas

BELT-DRIVEN MOTOR

CAAB-X

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

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

Fan:
- Sheet steel casing.
- Backward curved impeller made of very robust sheet steel, specially designed for clean and dusty air.
- Engine mounted on general bench.
- With inspection and cleaning hatch from size 560 and up.
- All casings continuously welded.

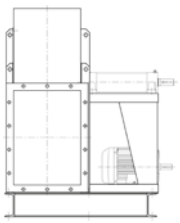
Motor:
- IE3 efficiency motors.
- Class F motors with ball bearings, IP55 protection.
- Three-phase 230/400 V 50 Hz (up to 4 kW) and 400/690 V 50 Hz (powers greater than 4 kW).
- Maximum temperature of air to be carried: -25 ºC +90 ºC.

Finishing:
- Anti-corrosive finish in polyester resin, polymerised at 190 ºC, after degreasing with phosphate-free nanotechnology treatment.

On request:
- Special windings for different voltages.
- Fan prepared to transport air up to +300 ºC.
- Stainless steel fan.
- ATEX certified Category 2.
- System 8 elastic coupling.

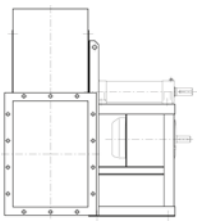
Belt-driven motor construction method

SYSTEM 12



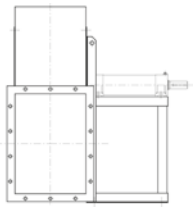
Transmission drive, identical to SYSTEM 1, with the motor and fan mounted on the common bench. Motor positions “W” or “Z” and exceptionally “X” or “Y”.

SYSTEM 9



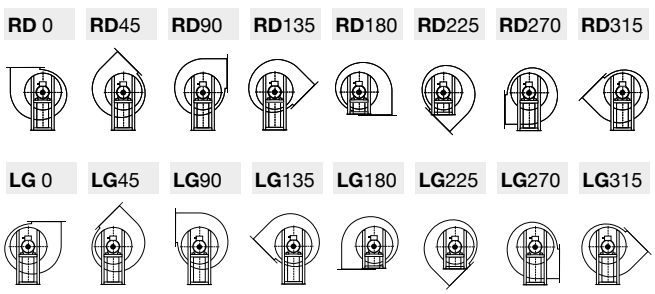
Transmission drive, identical to SYSTEM 1, with the motor mounted on the side of the pedestal, in position “W” or “Z”.

SYSTEM 1



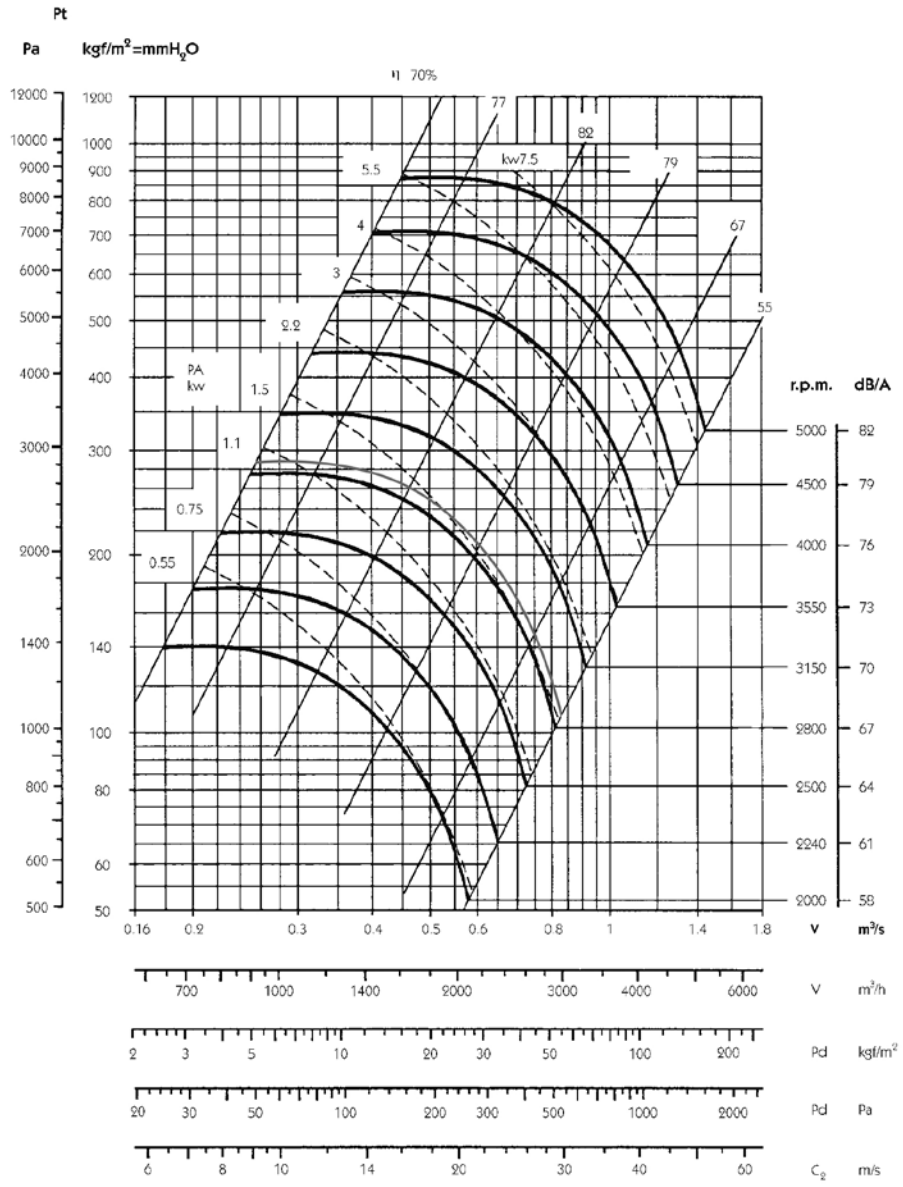
Transmission drive, impeller mounted on the support shaft. Support mounted on the pedestal.

Orientations



Characteristic curves

CAAB-X 400



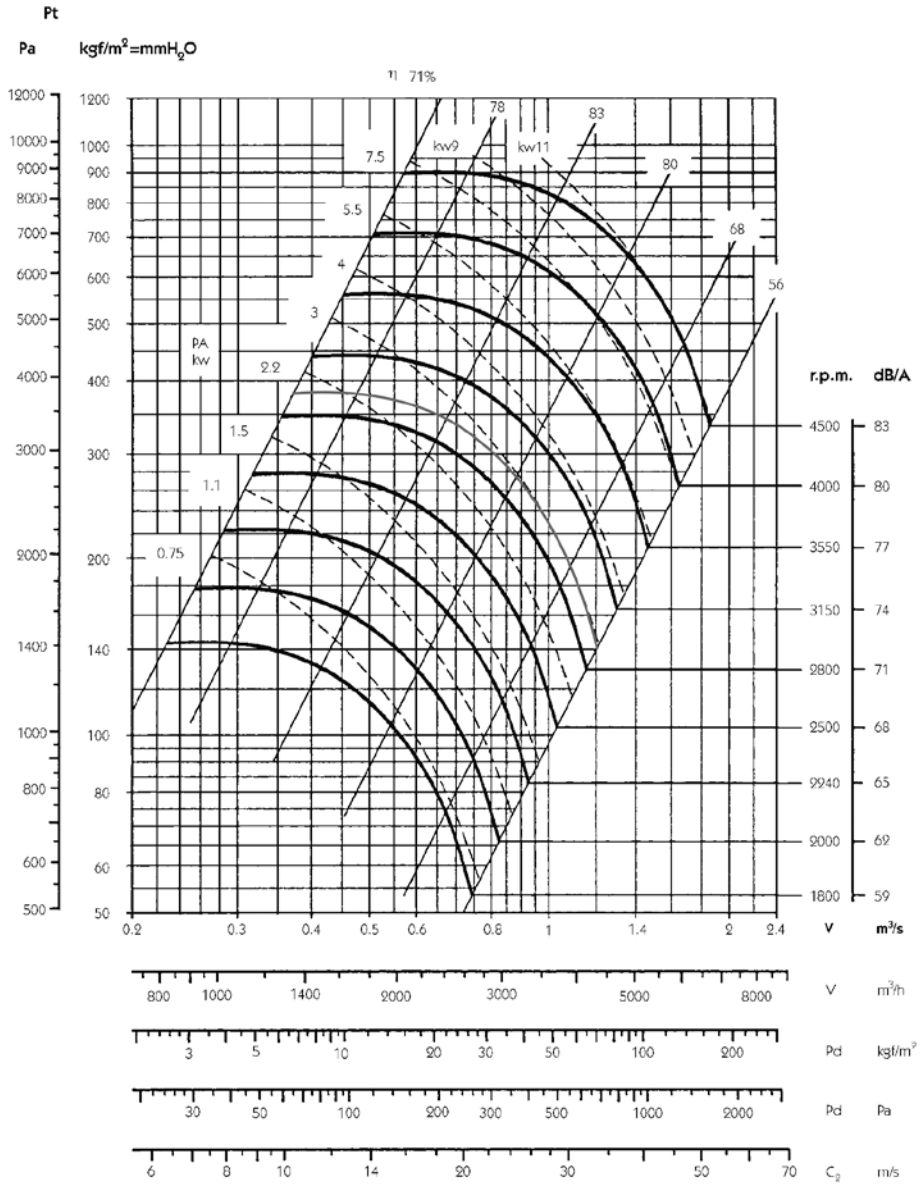
Flow margin ±5%
Noise level margin + 3... 5 dB
Margin of kW absorbed ±3%

Outlet characteristics.

Maximum admissible Rpm

	Class 1
≤ 100 °C	4500
101 ... 200 °C	4000
201 ... 300 °C	3550

CAAB-X 450



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

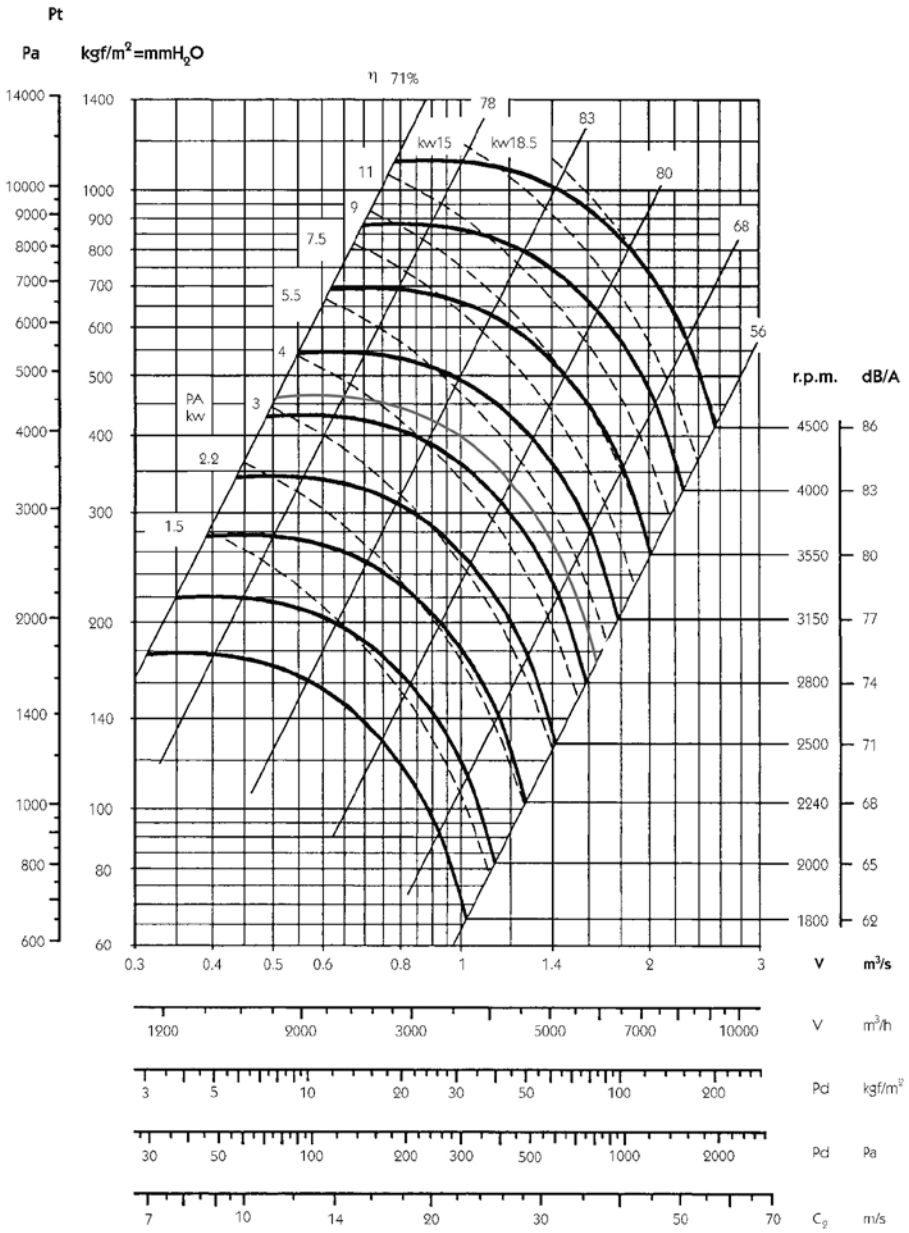
Outlet characteristics.

Maximum admissible Rpm

	Class 1
≤ 100 °C	4250
101 ... 200 °C	3750
201 ... 300 °C	3350

Characteristic curves

CAAB-X 500



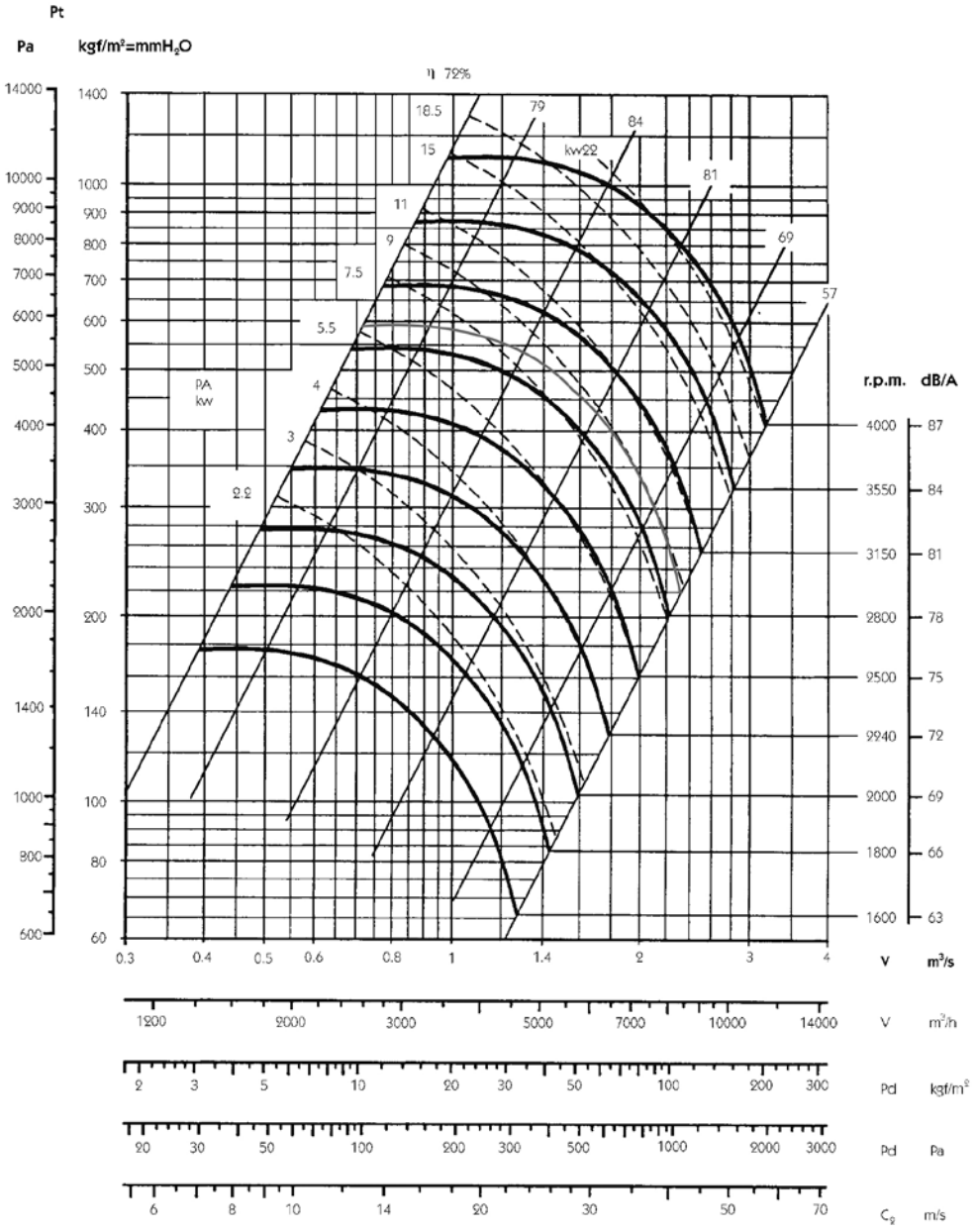
Flow margin ±5%
Noise level margin + 3... 5 dB
Margin of kW absorbed ±3%

Outlet characteristics.

Maximum admissible Rpm

	Class 1
≤ 100 °C	4000
101 ... 200 °C	3550
201 ... 300 °C	3150

CAAB-X 560



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

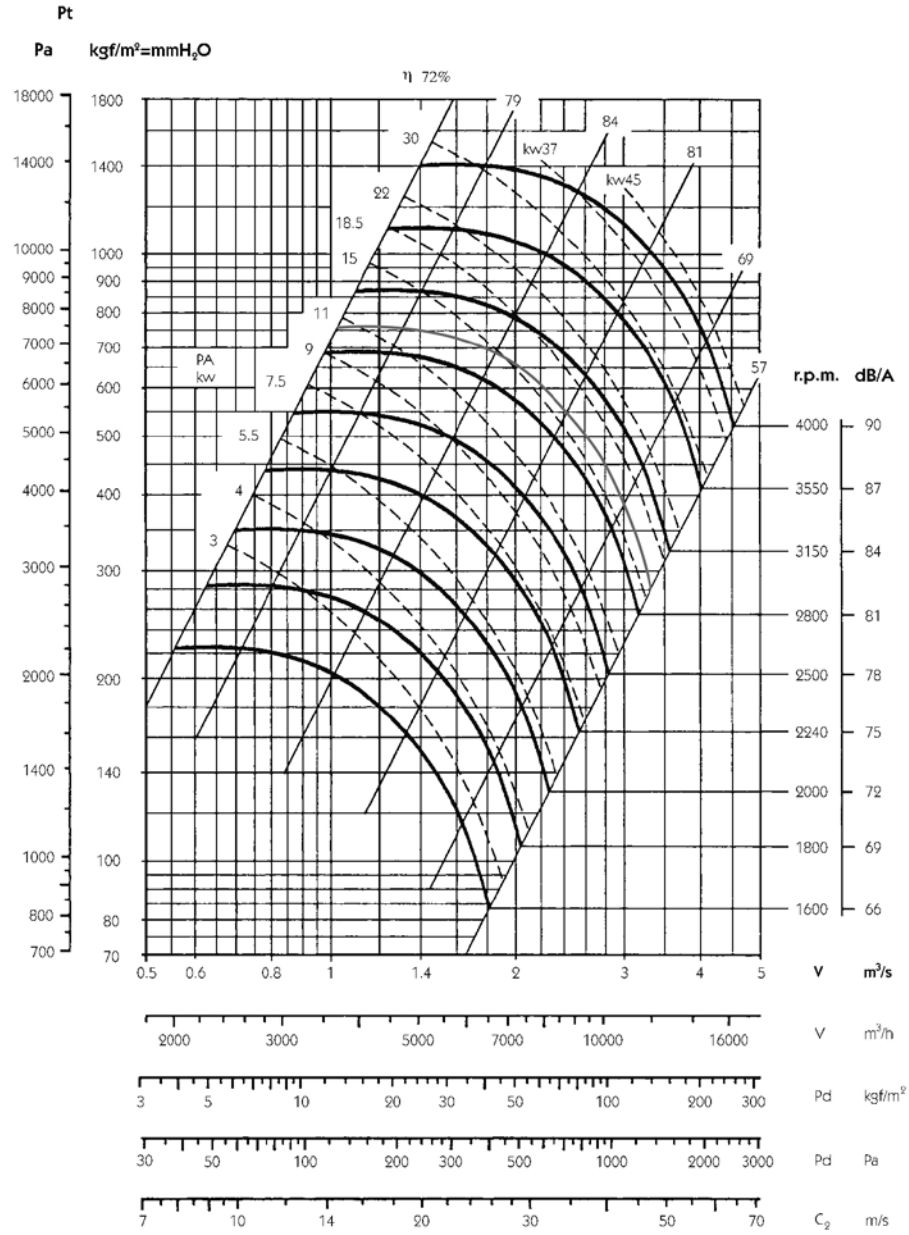
Outlet characteristics.

Maximum admissible Rpm

	Class 1
≤ 100 °C	3750
101 ... 200 °C	3350
201 ... 300 °C	3000

Characteristic curves

CAAB-X 630



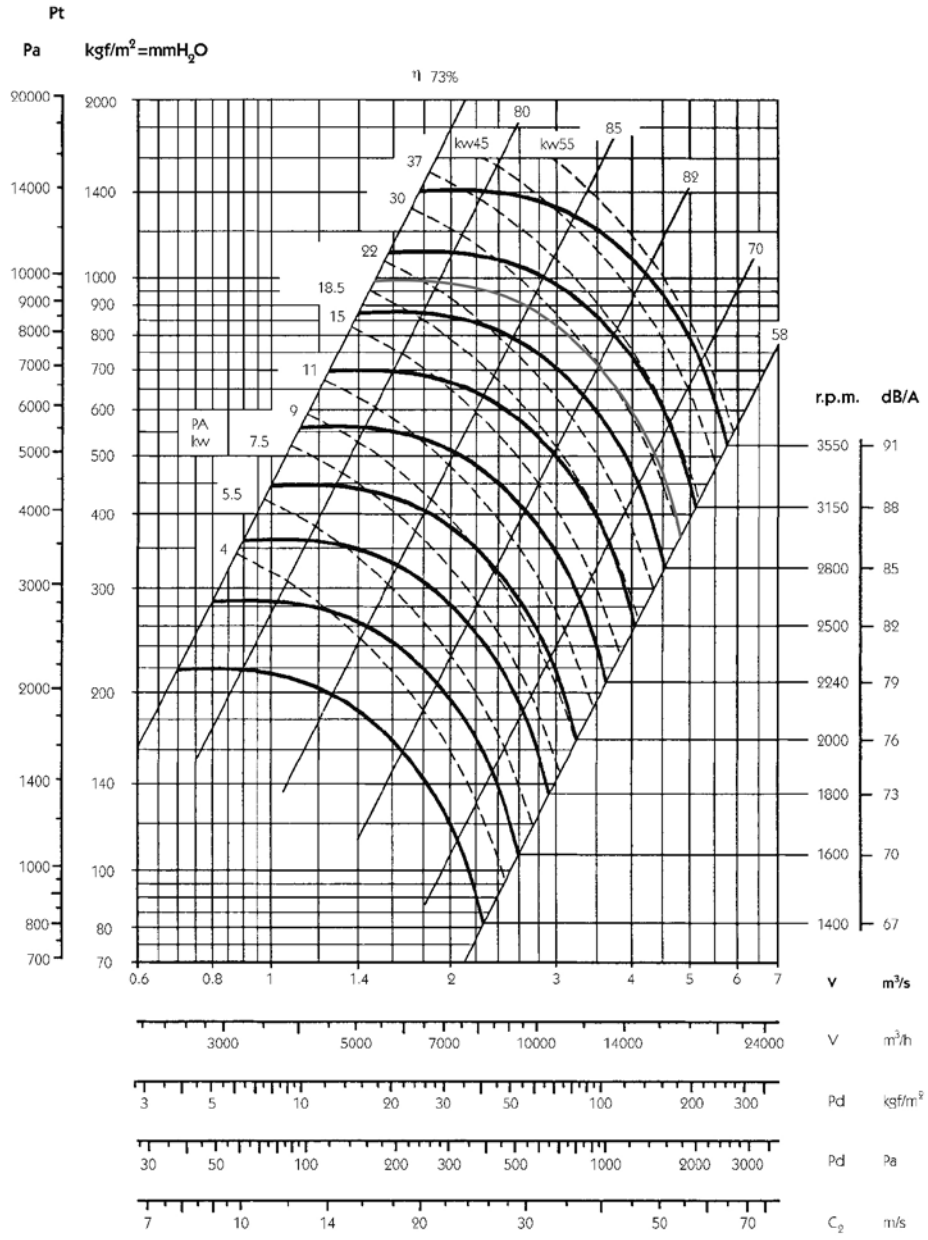
Flow margin ±5%
Noise level margin + 3... 5 dB
Margin of kW absorbed ±3%

Outlet characteristics.

Maximum admissible Rpm

	Class 1
≤ 100 °C	3550
101 ... 200 °C	3150
201 ... 300 °C	2800

CAAB-X 710



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

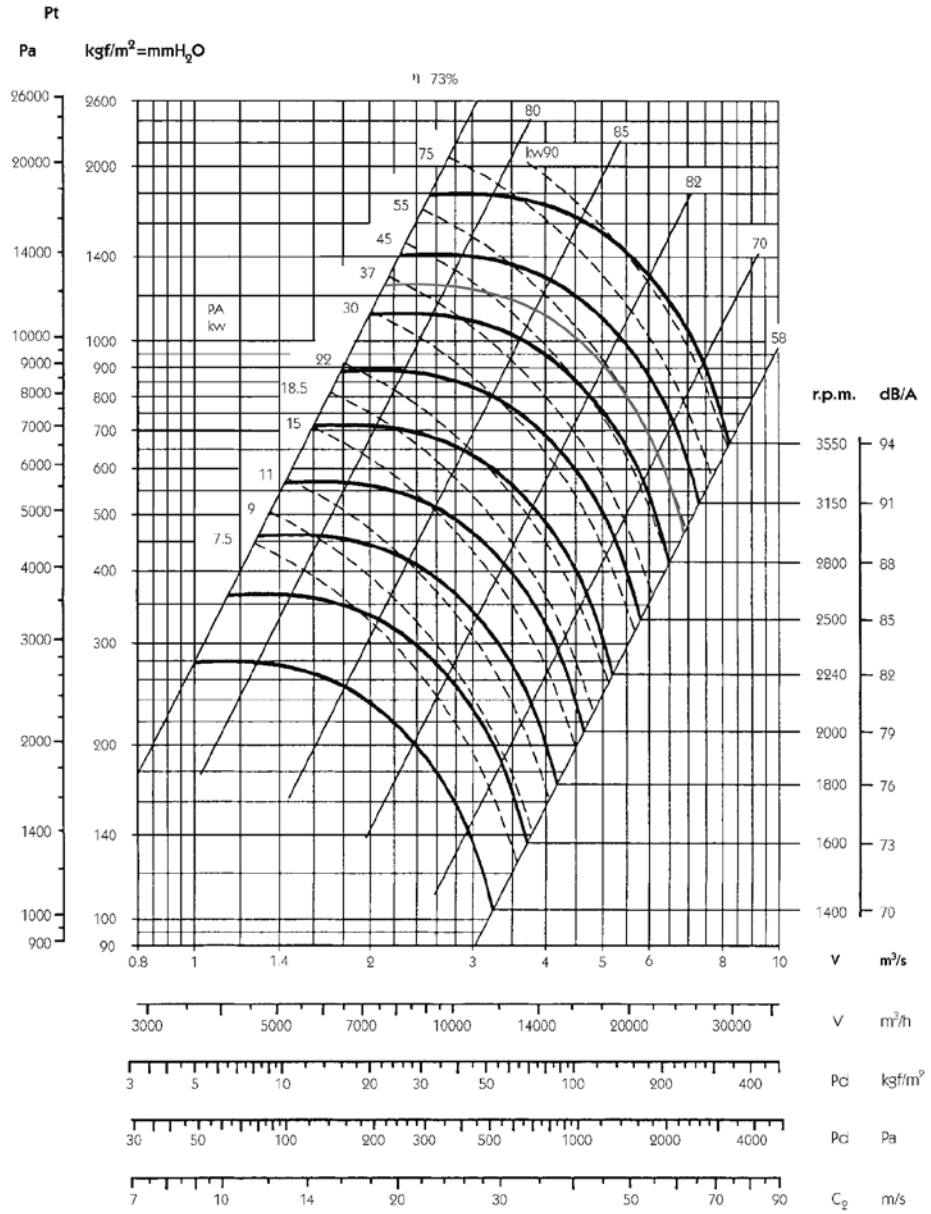
Outlet characteristics.

Maximum admissible Rpm

	Class 1
≤ 100 °C	3350
101 ... 200 °C	3000
201 ... 300 °C	2650

Characteristic curves

CAAB-X 800



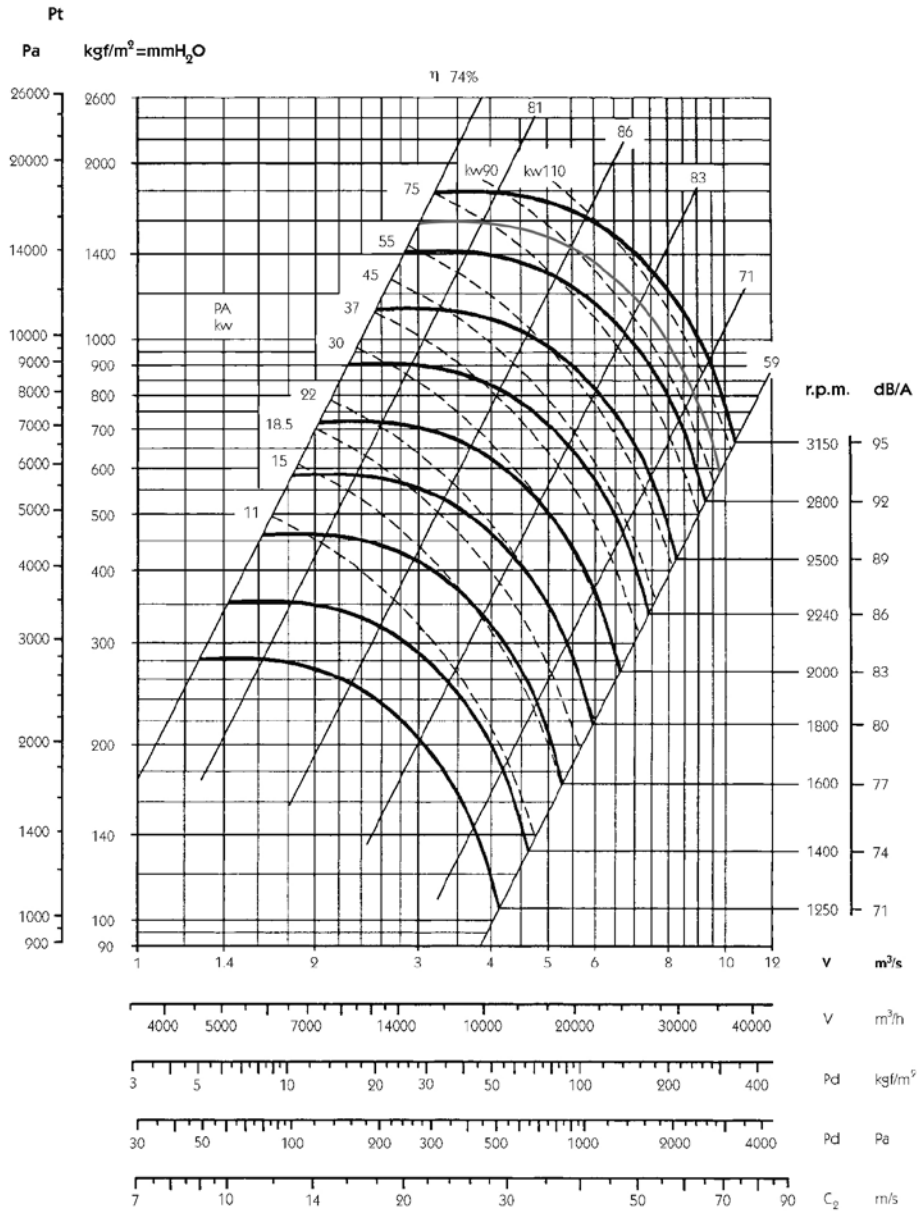
Flow margin ±5%
Noise level margin + 3... 5 dB
Margin of kW absorbed ±3%

Outlet characteristics.

Maximum admissible Rpm

	Class 1
≤ 100 °C	3150
101 ... 200 °C	2800
201 ... 300 °C	2500

CAAB-X 900



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

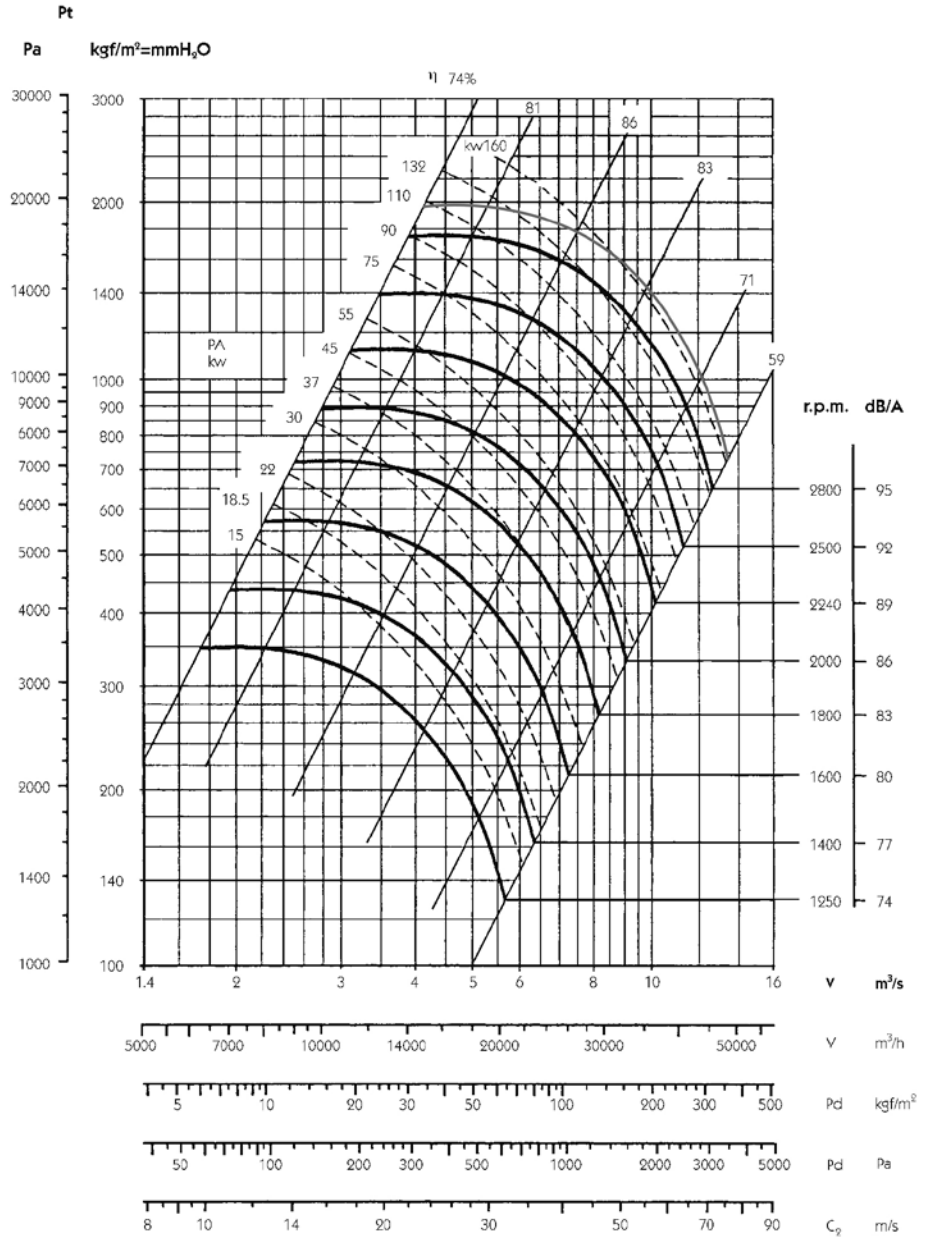
Outlet characteristics.

Maximum admissible Rpm

	Class 1
≤ 100 °C	3000
101 ... 200 °C	2650
201 ... 300 °C	2360

Characteristic curves

CAAB-X 1000



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

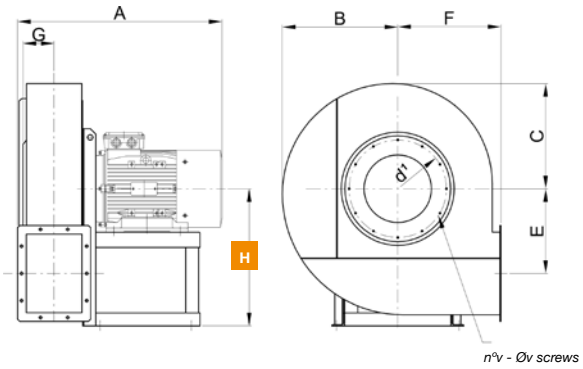
Outlet characteristics.

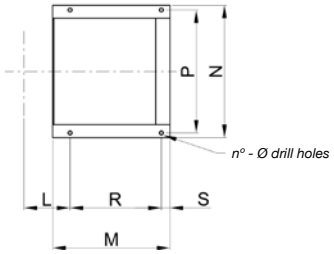
Maximum admissible Rpm

	Class 1
≤ 100 °C	2800
101 ... 200 °C	2500
201 ... 300 °C	2240

Dimensions mm

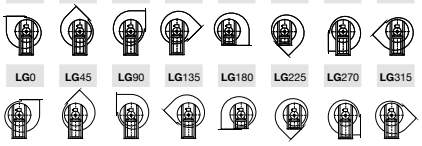
CAAB 400...1000





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

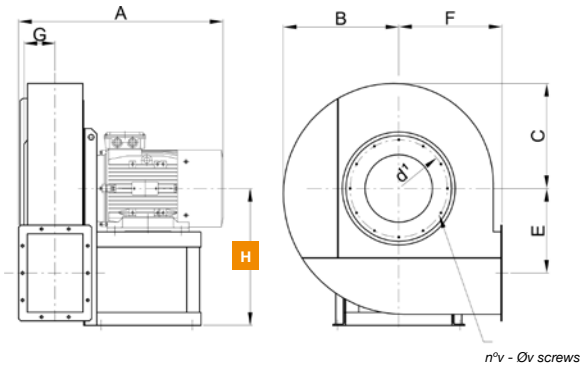
MOD.	FRAME	A	B	C	E	F	G	HO-1-2-3	H4-5	H6-7	L	M	N	P	R	S	n°	Φ	d¹	n°v	Φv
CAAB-400	90 L/2	480	305	285	217	280	88	375	280	375	126	215	269	245	140	25	4	10	241	8	M6
CAAB-450	112 M/2	525	335	310	242	300	97	400	300	400	135	260	312	280	185	25	4	12	292	8	M8
CAAB-500	112 M/2	545	375	345	272	335	106	450	335	450	145	260	312	280	185	25	4	12	332	8	M8
CAAB-500	132 SB/2	635	375	345	272	335	106	450	335	450	145	320	342	310	245	25	4	12	332	8	M8
CAAB-560	132 SB/2	660	425	385	308	375	117	500	375	500	156	320	342	310	245	25	4	12	366	8	M8
CAAB-560	160 MA/2	730	425	385	308	375	117	500	375	500	156	425	440	400	345	30	4	14	366	8	M8
CAAB-630	160 L/2	835	475	430	348	425	129	560	425	560	168	425	440	400	345	30	4	14	405	8	M8
CAAB-710	180 M/2	900	525	485	389	475	143	630	475	630	201	470	550	510	370	30	4	17	448	12	M8
CAAB-710	200 LB/2	960	525	485	389	475	143	630	475	630	211	540	608	565	420	40	4	19	448	12	M8
CAAB-800	225 M/2	1045	595	545	440	530	159	710	530	710	228	550	668	625	430	40	4	19	497	12	M8
CAAB-800	280 S/2	1245	595	545	440	530	159	710	530	710	228	740	784	725	610	50	4	21	497	12	M8
CAAB-900	280 S/2	1280	665	620	496	600	176	800	600	800	245	740	784	725	610	50	4	21	551	12	M8
CAAB-900	315 S/2	1280	665	620	496	600	176	800	600	800	245	800	890	810	670	50	4	21	551	12	M8
CAAB-1000	315 MA/2	1435	745	695	556	670	195	900	670	900	265	800	890	810	670	50	4	21	629	12	M8
CAAB-1000	315 MC/2	1435	745	695	556	670	195	900	670	900	265	800	890	810	670	50	4	21	629	12	M8

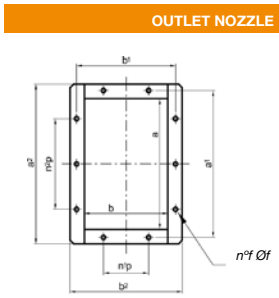
*For "HIGH TEMP." constructions, elevations "A-M-R" + 50 mm.
(kg) Weight of fan with motor.
WD^2 = Moment of inertia of the impeller, expressed in Kg x m^2

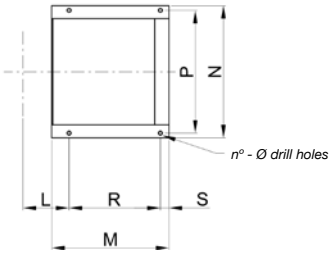
SYSTEM 4

Dimensions mm

CAAB 400...1000







	OUTLET NOZZLE											
MOD.	**a**	**b**	**a¹**	**b¹**	**a²**	**b²**	**n¹p**	**n²p**	**n°f**	**Φf**	**kg**	**WD²**
CAAB-400	205	146	241	182	275	216	1-112	1-112	8	12	55	0.6
CAAB-450	229	164	265	200	299	234	1-112	1-112	8	12	85	1
CAAB-500	256	183	292	219	326	253	1-112	2-112	10	12	100	1.5
CAAB-500	256	183	292	219	326	253	1-112	2-112	10	12	120	1.7
CAAB-560	288	205	332	249	368	285	1-125	2-125	10	12	140	2.3
CAAB-560	288	205	332	249	368	285	1-125	2-125	10	12	175	2.7
CAAB-630	322	229	366	273	402	309	1-125	2-125	10	12	240	4.5
CAAB-710	361	256	405	300	441	336	1-125	2-125	10	12	280	7
CAAB-710	361	256	405	300	441	336	1-125	2-125	10	12	410	8.6
CAAB-800	404	288	448	332	484	368	2-125	3-125	14	12	490	12
CAAB-800	404	288	448	332	484	368	2-125	3-125	14	12	670	15.5
CAAB-900	453	322	497	366	533	402	2-125	3-125	14	12	880	18
CAAB-900	453	322	497	366	533	402	2-125	3-125	14	12	1080	20.5
CAAB-1000	507	361	551	405	587	441	2.125	3.125	14	12	1150	35
CAAB-1000	507	361	551	405	587	441	2.125	3.125	14	12	1280	50

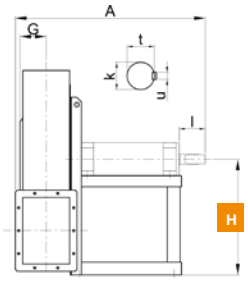
*For "HIGH TEMP." constructions, elevations "A-M-R" + 50 mm.
(kg) Weight of fan with motor.
WD^2 = Moment of inertia of the impeller, expressed in Kg x m^2

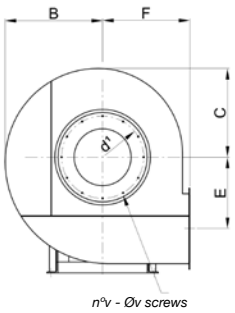
LARGE SERIES

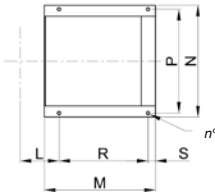
Dimensions mm

CAAB-X 400...1000

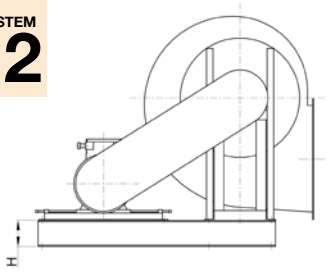
SYSTEM 1

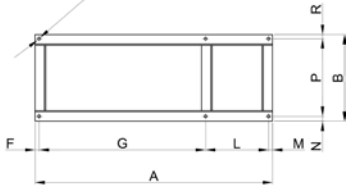






SYSTEM 12





MOD.	A*	B	C	E	F	G	H0-1-2-3	H4-5	H6-7	L
CAAB 400	745	305	285	217	280	88	375	280	375	126
CAAB 450	865	335	310	242	300	97	400	300	400	135
CAAB 500	885	375	345	272	335	106	450	335	450	145
CAAB 560	920	425	385	308	375	117	500	375	500	156
CAAB 630	945	475	430	348	425	129	560	425	560	168
CAAB 710	1060	535	485	389	475	143	530	475	630	181
CAAB 800	1145	595	545	440	530	159	600	530	710	198
CAAB 900	1260	665	620	496	600	176	670	600	800	215
CAAB 1000	1565	745	695	556	670	195	750	670	900	285

MOD.	A	B*	H	F	G	L	M	N	P*
CAAB 400	900	450	120	20	550	310	20	25	400
CAAB 450	1055	530	120	25	680	330	20	25	480
CAAB 500	1055	530	120	25	680	330	20	25	480
CAAB 560	1265	485	160	25	830	385	25	30	430
CAAB 630	1445	550	160	25	1010	385	25	30	495
CAAB 710	1505	575	180	30	1050	395	30	30	515
CAAB 800	1775	700	180	30	1280	435	30	30	640
CAAB 900	1880	750	180	30	1320	500	30	35	680
CAAB 1000	2100	850	180	35	1230	800	35	35	780

MOD.	M*	N	P	R*	S	n°	Φ	k	l	t	u
CAAB 400	480	350	310	400	30	4	14	28 K6	60	31	8
CAAB 450	560	370	330	480	30	4	14	38 K6	80	41	10
CAAB 500	560	370	330	480	30	4	14	38 K6	80	41	10
CAAB 560	520	438	385	430	40	4	17	42 K6	110	45	12
CAAB 630	520	438	385	430	40	4	17	48 K6	110	51.5	14
CAAB 710	605	456	395	515	40	4	19	48 K6	110	51.5	14
CAAB 800	655	496	435	565	40	4	19	55 m6	110	59	16
CAAB 900	705	564	500	605	50	4	19	65 m6	140	69	18
CAAB 1000	940	880	820	780	60	4	24	80 m6	170	85	22

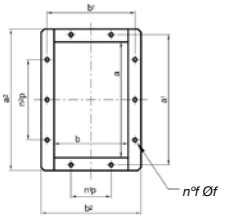
MOD.	R	n°	Φ	kg
CAAB 400	25	6	14	40
CAAB 450	25	6	14	45
CAAB 500	25	6	14	45
CAAB 560	25	6	17	70
CAAB 630	25	6	17	90
CAAB 710	30	6	19	100
CAAB 800	30	6	19	130
CAAB 900	35	6	19	185
CAAB 1000	35	6	24	190

(*) For "HIGH TEMP." constructions in models 400 to 800, elevations "B-P" + 50 mm.
Kg = Weight of the support base

MOD.	d¹	n°v	Φv	kg	WD²
CAAB 400	241	8	M6	60	0.6
CAAB 450	292	8	M8	75	1
CAAB 500	332	8	M8	90	1.7
CAAB 560	366	8	M8	125	2.7
CAAB 630	405	8	M8	170	4.5
CAAB 710	448	12	M8	220	8.6
CAAB 800	497	12	M8	300	15.5
CAAB 900	551	12	M8	500	20.5
CAAB 1000	629	12	M8	850	50

(*) For "HIGH TEMP." constructions in models 400 to 800, elevations "A-M-R" + 50 mm.
kg = Weight of fan without motor.
WD² = Moment of inertia of the impeller, expressed in Kg x m²

OUTLET NOZZLE



OUTLET NOZZLE

MOD.	a	b	a¹	b¹	a²	b²	n¹p	n²p	n°f	Φf
CAAB 400	205	146	241	182	275	216	1-112	1-112	8	12
CAAB 450	229	164	265	200	299	234	1-112	1-112	8	12
CAAB 500	256	183	292	219	326	253	1-112	2-112	10	12
CAAB 560	288	205	332	249	368	285	1-125	2-125	10	12
CAAB 630	322	229	366	273	402	309	1-125	2-125	10	12
CAAB 710	361	256	405	300	441	336	1-125	2-125	10	12
CAAB 800	404	288	448	332	484	368	2-125	3-125	14	12
CAAB 900	453	322	497	366	533	402	2-125	3-125	14	12
CAAB 1000	507	361	551	405	587	441	2-125	3-125	14	12

ORIENTATIONS

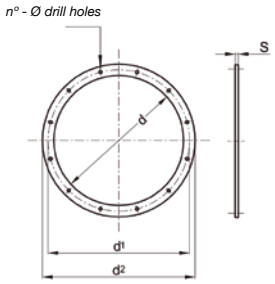
H0	H1	H2	H3	H4	H5	H6	H7
RD0	RD45	RD90	RD135	RD180	RD225	RD270	RD315
LG0	LG45	LG90	LG135	LG180	LG225	LG270	LG315

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

LARGE SERIES

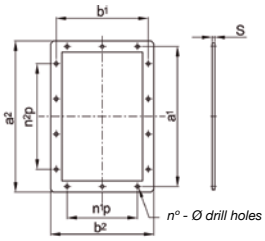
Accessories

Inlet counter flange



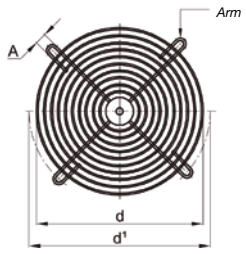
MOD.	d	d¹	d²	n°	Φ	s	kg
CAAB 400	229	265	299	8	9	4	0.8
CAAB 450	255	292	325	8	11	4	1
CAAB 500	286	332	366	8	11	5	1.6
CAAB 560	321	366	401	8	11	5	1.8
CAAB 630	361	405	441	8	11	5	2
CAAB 710	406	448	486	12	11	5	2.2
CAAB 800	456	497	536	12	11	5	2.5
CAAB 900	506	551	586	12	11	5	2.7
CAAB 1000	568	629	668	12	11	6	4.6

Impulsion counter-flange



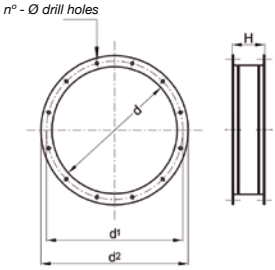
MOD.	a	b	a¹	b¹	a²	b²	n¹p	n²p	n°	Φ	s	kg
CAAB 400	205	146	241	182	275	216	1-112	1-112	8	12	4	0.9
CAAB 450	229	164	265	200	299	234	1-112	1-112	8	12	4	1
CAAB 500	256	183	292	219	326	253	1-112	2-112	10	12	4	1.1
CAAB 560	288	205	332	249	368	285	1-125	2-125	10	12	5	1.8
CAAB 630	322	229	366	273	402	309	1-125	2-125	10	12	5	2
CAAB 710	361	256	405	300	441	336	1-125	2-125	10	12	5	2.2
CAAB 800	404	288	448	332	484	368	2-125	3-125	14	12	5	2.4
CAAB 900	453	322	497	366	533	402	2-125	3-125	14	12	5	2.7
CAAB 1000	507	361	551	405	587	441	2-125	3-125	14	12	5	3

Inlet protection mesh



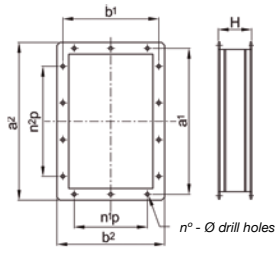
MOD.	d	d¹	A	n°	kg
CAAB 400	229	265	9	4	0.25
CAAB 450	255	292	11	4	0.3
CAAB 500	286	332	11	4	0.35
CAAB 560	321	366	11	4	0.4
CAAB 630	361	405	11	8	0.7
CAAB 710	406	448	11	8	0.8
CAAB 800	456	497	11	8	0.9
CAAB 900	506	551	11	8	1
CAAB 1000	568	629	11	8	1.2

Inlet anti-vibration seal



MOD.	d	d¹	d²	n°	Φ	H	kg
CAAB 400	229	265	299	8	9	200	2
CAAB 450	255	292	325	8	11	200	2.2
CAAB 500	286	332	366	8	11	200	3.4
CAAB 560	321	366	401	8	11	200	3.8
CAAB 630	361	405	441	8	11	200	4.2
CAAB 710	406	448	486	12	11	200	4.6
CAAB 800	456	497	536	12	11	200	5.1
CAAB 900	506	551	586	12	11	200	5.6
CAAB 1000	568	629	668	12	11	200	9.4

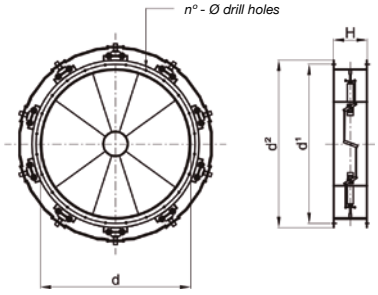
Impulsion anti-vibration seal



MOD.	a	b	a¹	b¹	a²	b²	n¹p	n²p	n°	Φ	H	kg
CAAB 400	205	146	241	182	275	216	1-112	1-112	8	12	200	2
CAAB 450	229	164	265	200	299	234	1-112	1-112	8	12	200	2.2
CAAB 500	256	183	292	219	326	253	1-112	2-112	10	12	200	2.4
CAAB 560	288	205	332	249	368	285	1-125	2-125	10	12	200	3.8
CAAB 630	322	229	366	273	402	309	1-125	2-125	10	12	200	4.2
CAAB 710	361	256	405	300	441	336	1-125	2-125	10	12	200	4.6
CAAB 800	404	288	448	332	484	368	2-125	3-125	14	12	200	5
CAAB 900	453	322	497	366	533	402	2-125	3-125	14	12	200	5.6
CAAB 1000	507	361	551	405	587	441	2-125	3-125	14	12	200	6.2

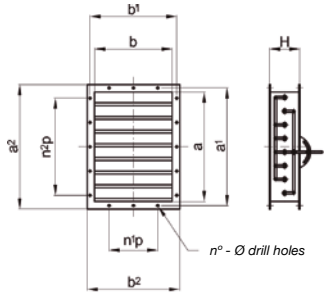
Accessories

Flow regulator at the inlet



MOD.	d	d¹	d²	n°	Φ	H	kg
CAAB 560	321	366	401	8	11	200	24
CAAB 630	361	405	441	8	11	250	26
CAAB 710	406	448	486	12	11	250	30
CAAB 800	456	497	536	12	11	250	32
CAAB 900	506	551	586	12	11	250	45
CAAB 1000	568	629	668	12	11	250	50

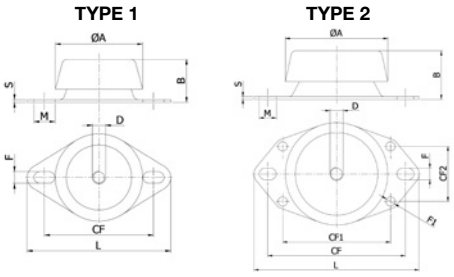
Opposing blades damper



MOD.	a	b	a¹	b¹	a²	b²	n¹p	n²p	n⁰	Φ	H (1)	H (2)	kg (1)	kg (2)
CAAB 630	322	229	366	273	402	309	1-125	2-125	10	12	220	250	11	12
CAAB 710	361	256	405	300	441	336	1-125	2-125	10	12	220	250	14	15
CAAB 800	404	288	448	332	484	368	2-125	3-125	14	12	220	250	18	19
CAAB 900	453	322	497	366	533	402	2-125	3-125	14	12	220	250	21	22
CAAB 1000	507	361	551	405	587	441	2-125	3-125	14	12	220	250	24	25

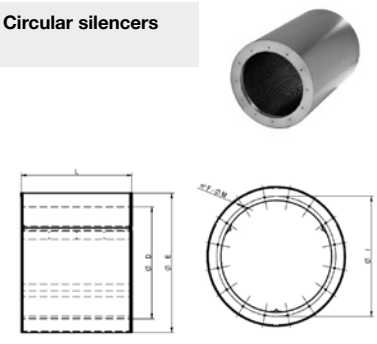
(1) Up to 300 mm H_2O
(2) Above 300 mm H_2O

Shock absorbers



MOD.	SHOCK-ABSORBERS MODEL	TYPE	øA	B	D	CF	CF1	CF2	F	øF1	L	M	S
CAAB 400	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
CAAB 450	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
CAAB 500	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
CAAB 560	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
CAAB 630	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
CAAB 710	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
CAAB 800	CF 924512	2	92	44…45	12	120	98	50	10.5	8.5	130	15.5	2.5
CAAB 900	CF 924512	2	92	44…45	12	120	98	50	10.5	8.5	130	15.5	2.5
CAAB 1000	CF 924512	2	92	44…45	12	120	98	50	10.5	8.5	130	15.5	2.5

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	øl	F	øM
315	515	ØD,1.5ØD, 2ØD	355	8	M8
355	555	ØD,1.5ØD, 2ØD	395	8	M8
400	600	ØD,1.5ØD, 2ØD	450	8	M8
450	650	ØD,1.5ØD, 2ØD	500	8	M8
500	700	ØD,1.5ØD, 2ØD	560	12	M8
560	760	ØD,1.5ØD, 2ØD	620	12	M8
630	830	ØD,1.5ØD, 2ØD	690	12	M8
710	910	ØD,1.5ØD, 2ØD	770	16	M8
800	1000	ØD,1.5ØD, 2ØD	860	16	M8

øD	øE	L	øl	F	øM
900	1100	ØD,1.5ØD, 2ØD	970	16	M10
1000	1200	ØD,1.5ØD, 2ØD	1070	16	M10
1120	1320	ØD,1.5ØD, 2ØD	1190	20	M10
1250	1450	ØD,1.5ØD, 2ØD	1320	20	M10
1400	1600	ØD,1.5ØD, 2ØD	1470	20	M10
1500	1700	ØD,1.5ØD, 2ØD	1570	20	M10
1600	1800	ØD,1.5ØD, 2ØD	1680	24	M14
1700	1900	ØD,1.5ØD, 2ØD	1780	24	M14
1800	2000	ØD,1.5ØD, 2ØD	1880	24	M14