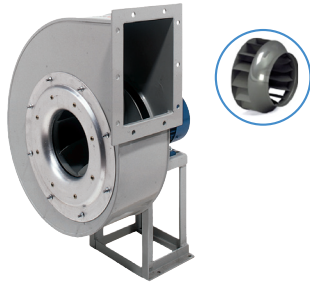


VCRP

Single inlet centrifugal fan,
backward curved blades with direct drive, clean air



Product

VCRP

Construction

Scroll housing: carbon steel painted RAL 7032 and/or RAL 5015.

Impeller: painted steel

Versions

Bearing cooling fan (VE): TMAX= 100 °C.

ATEX version

FAN

Single-inlet centrifugal fan, backward curved blades, with direct drive, suitable for extraction of clean or slightly dusty air, for a wide variety of industrial system and civil and industrial air conditioning applications. Operating range at high flow rates, medium/low pressures.

Backward curved blade impeller in welded galvanized steel sheet. Statically and dynamically balanced according to ISO standards, keeps to minimum levels noise and vibrations.

Orientations: VCRP series fans allow 16 orientation positions (8 clockwise RD and 8 counterclockwise LG) defined looking at the fan from the motor side.

FEATURES

Scroll housing in carbon steel painted RAL 7032 and/or RAL 5015, impeller in painted steel with static and dynamic balancing.

Robust construction entirely in thick welded steel sheet, then painted with epoxy powders in grey RAL 7032 and/or blue RAL 5015.

Intake air conditions T=15 °C, p=760 mm Hg.

Mounting intended on support base. Possibility to request an additional pedestal fixed to the suction inlet to increase the machine's rigidity.

MOTOR

Three-phase asynchronous with squirrel cage rotor, class IE3, in 230/400 V execution (for power ratings up to 4 kW), 400/690 V (for power ratings above 4 kW), B3 frame, IP55 protection, according to UNELMEC standards. Installed with 2, 4 or 6 poles depending on the required pressure, or with dual polarity for two-speed versions. The power ratings shown in the performance tables have been sized taking into account the machine efficiency and an additional safety margin to compensate for any system anomalies.

Minimum fluid temperature: -25 °C.

Maximum fluid temperature: +60 °C in standard version.

APPLICATIONS



HOSPITALS



CANTEENS



INDUSTRIES



PUBLIC SERVICES



RESTAURANTS



ATEX

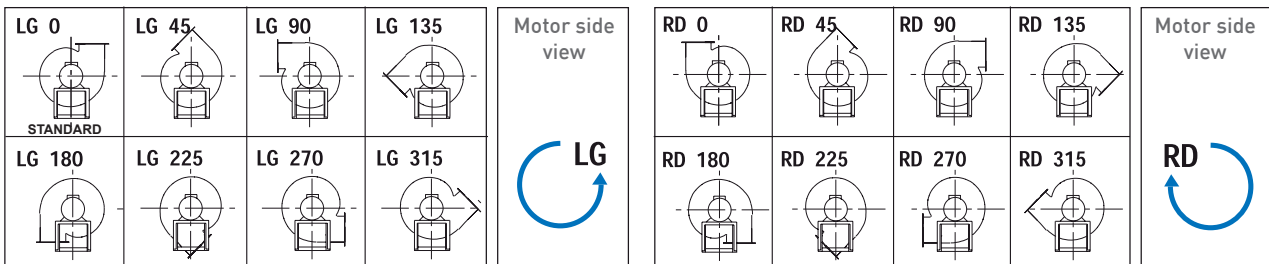


TECHNICAL FEATURES - OPERATING RANGE

Operating range	Flow rate (m ³ /h)	From 930 to 24,200
	Pressure (Pa)	From 380 to 3,700
Min. impeller diameter	mm	250
Max. impeller diameter	mm	630
Motor	Volt (±10%)	230-400 T / 400-690 T
	Poles	2-4-6
	IP	55
Fluid temp min. limit	°C	-25
Fluid max. temp limit	°C	+60

ORIENTATIONS

STANDARD orientation LG 0



Dimensions

H = LG 0 - LG 45 - LG 90 - LG 135

H1 = LG 180 - LG 225

H2 = LG 270 - LG 315

Dimensions

H = RD 0 - RD 45 - RD 90 - RD 135

H1 = RD 180 - RD 225

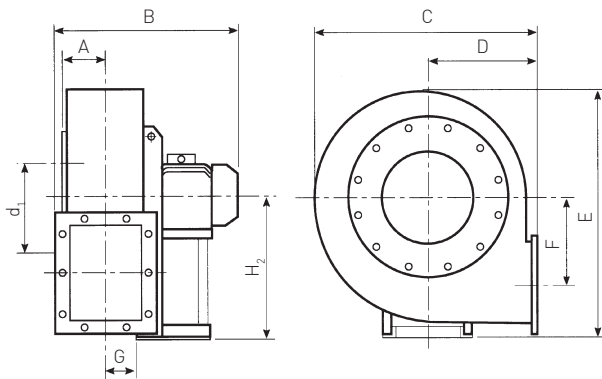
H2 = RD 270 - RD 315

VCRP

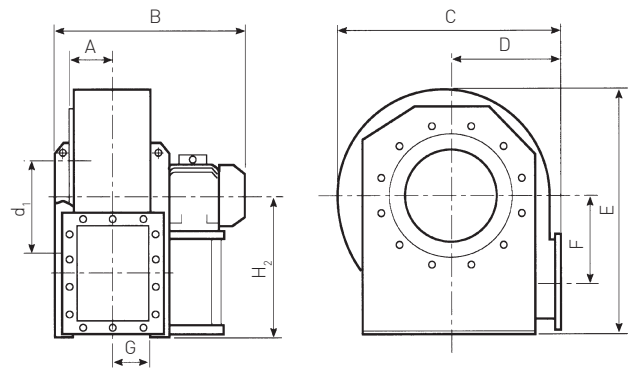
Single inlet centrifugal fan,
backward curved blades with direct drive, clean air

DIMENSIONS

Model	Motor	KG F	PD ² KG F m ²	Motor-driven fan								Suction flange						
				A	B	C	D	E	F	G	H	H ₁	H ₂	d	d ₁	d ₂	N.	Ø
250/2	71B-2	33	0,145	94	435	441	195	526	149	96	315	195	315	255	292	325	8	10
280/2	80B-2	43	0,195	105	450	477	200	610	172	105	375	200	375	285	332	365	8	10
310/2	90L-2	52	0,32	117	539	527	225	658	196	117	400	225	400	320	366	400	8	10
310/4	63B-4	42	0,32	117	454	527	225	658	196	117	400	225	400	320	366	400	8	10
350/2	100L-2	80	0,52	130	636	600	255	740	216	131	450	255	450	360	405	440	8	10
350/4	71B-4	65	0,52	130	506	600	255	740	216	131	450	255	450	360	405	440	8	10
400/2	112M-2	95	1,1	147	668	655	285	815	245	147	500	285	500	405	448	485	8	10
400/2	132S-2	108	1,1	147	730	655	285	815	245	147	500	285	500	405	448	485	8	10
400/4	80A-4	75	1,1	147	558	655	285	815	245	147	500	285	500	405	448	485	8	10
450/2	132S-2	124	1,9	163	764	735	320	915	275	165	560	320	560	455	497	535	8	10
450/2	160M-2	160	1,9	163	900	735	320	915	275	165	560	320	560	455	497	535	8	10
450/4	80B-4	89	1,9	163	592	735	320	915	275	165	560	320	560	455	497	535	8	10
450/4	90S-4	94	1,9	163	632	735	320	915	275	165	560	320	560	455	497	535	8	10
500/2	160M-2	187	3,1	183	939	832	360	1000	303	185	600	360	600	505	551	585	8	10
500/2	160L-2	196	3,1	183	939	832	360	1000	303	185	600	360	600	505	551	585	8	10
500/4	90L-4	123	3,1	183	671	832	360	1000	303	185	600	360	600	505	551	585	8	10
500/4	100L-4	129	3,1	183	741	832	360	1000	303	185	600	360	600	505	551	585	8	10
500/6	80A-6	115	3,1	183	631	832	360	1000	303	185	600	360	600	505	551	585	8	10
500/6	80B-6	116	3,1	183	631	832	360	1000	303	185	600	360	600	505	551	585	8	10
560/4	100L-4	141	5,5	205	797	940	400	1126	332	206	670	400	670	565	629	665	16	10
560/4	112M-4	146	5,5	205	797	940	400	1126	332	206	670	400	670	565	629	665	16	10
560/6	90S-6	131	5,5	205	727	940	400	1126	332	206	670	400	670	565	629	665	16	10
560/6	90L-6	133	5,5	205	727	940	400	1126	332	206	670	400	670	565	629	665	16	10
630/4	132S-4	190	8,7	250	908	1052	450	1260	373	231	755	450	750	635	698	735	16	12
630/4	132M-4	204	8,7	250	908	1052	450	1260	373	231	755	450	750	635	698	735	16	12
630/6	100L-6	173	8,7	250	846	1052	450	1260	373	231	755	450	750	635	698	735	16	12
630/6	112M-6	179	8,7	250	846	1052	450	1260	373	231	755	450	750	635	698	735	16	12



Version from size 250 to size 500
with electric motor in **B3**.



Version from size 560 to size 630
with electric motor in **B3**.



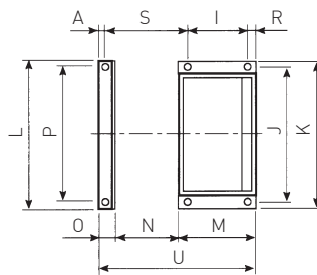
Ventilation

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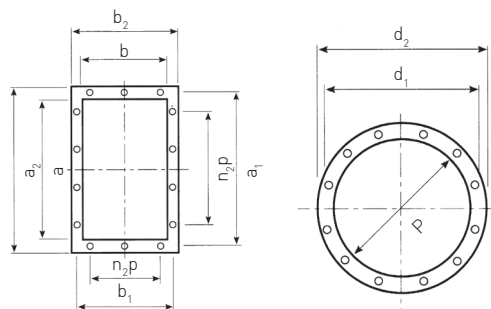
Discharge flange

Electric Motor Base

Discharge flange										Electric Motor Base													
a	b	a ₁	b ₁	a ₂	b ₂	n ₁ xp	n ₂ xp	No.	Ø	I	J	K	L	M	N	O	P	Q	R	S	T	U	Ø
258	185	292	219	328	255	1x112	2x112	10	12	121	203	225	-	180	-	-	-	45	14	-	-	-	10
288	205	332	249	368	285	1x125	2x125	10	12	121	203	225	-	180	-	-	-	45	14	-	-	-	10
322	229	366	273	402	309	1x125	2x125	10	12	133	234	260	-	205	-	-	-	55	17	-	-	-	10
322	229	366	273	402	309	1x125	2x125	10	12	86	184	206	-	145	-	-	-	45	14	-	-	-	10
361	256	405	300	441	336	2x125	3x125	10	12	197	289	324	-	250	-	-	-	30	23	-	-	-	12
361	256	405	300	441	336	2x125	3x125	10	12	121	203	225	-	180	-	-	-	45	14	-	-	-	10
404	288	448	332	484	368	2x125	3x125	14	12	197	289	324	-	250	-	-	-	30	23	-	-	-	12
404	288	448	332	484	368	2x125	3x125	14	12	237	337	372	-	300	-	-	-	40	23	-	-	-	12
404	288	448	332	484	368	2x125	3x125	14	12	121	203	225	-	180	-	-	-	45	14	-	-	-	10
453	322	497	366	533	402	2x125	3x125	14	12	237	337	372	-	300	-	-	-	40	23	-	-	-	12
453	322	497	366	533	402	2x160	3x160	14	12	337	395	440	-	415	-	-	-	50	28	-	-	-	14
453	322	497	366	533	402	2x160	3x160	14	12	121	203	225	-	180	-	-	-	45	14	-	-	-	10
453	322	497	366	533	402	2x160	3x160	14	12	133	234	260	-	205	-	-	-	55	17	-	-	-	10
507	361	551	405	587	441	2x160	3x160	14	12	337	395	440	-	415	-	-	-	50	28	-	-	-	14
507	361	551	405	587	441	1x125	2x125	14	12	337	395	440	-	415	-	-	-	50	28	-	-	-	14
507	361	551	405	587	441	1x125	2x125	14	12	133	234	260	-	205	-	-	-	55	17	-	-	-	10
507	361	551	405	587	441	2x125	3x125	14	12	197	289	324	-	250	-	-	-	30	23	-	-	-	12
507	361	551	405	587	441	2x125	3x125	14	12	121	203	225	-	180	-	-	-	45	14	-	-	-	10
507	361	551	405	587	441	2x125	3x125	14	12	121	203	225	-	180	-	-	-	45	14	-	-	-	10
569	404	629	464	669	504	2x125	3x125	14	14	197	289	324	692	250	408	53	632	-	23	468	23	711	12
569	404	629	464	669	504	2x125	3x125	14	14	197	289	324	692	250	408	53	632	-	23	468		711	12
569	404	629	464	669	504	2x125	3x125	14	14	133	234	260	692	205	408	53	632	-	17	493		666	10
569	404	629	464	669	504	2x125	3x125	14	14	133	234	260	692	205	408	53	632	-	17	493		666	10
638	453	698	513	738	553	2x160	3x160	14	14	237	337	372	762	300	457	53	702	-	23	527	23	810	12
638	453	698	513	738	553	2x160	3x160	14	14	237	337	372	762	300	457	53	702	-	23	527	23	810	12
638	453	698	513	738	553	2x160	3x160	14	14	197	289	324	762	250	457	53	702	-	23	517	23	760	12
638	453	698	513	738	553	2x160	3x160	14	14	197	289	324	762	250	457	53	702	-	23	517	23	760	12



Holes for base on suction inlet



Discharge flange

Suction flange

VCRP

Single inlet centrifugal fan,
backward curved blades with direct drive, clean air

QUICK SELECTION TABLE

Model	Motor	Power Installed kW	RPM	dB(A)	Total pressure PT = Pa Flow rate v = m³/h										
					930	1080	1190	1330	1500	1700	1900	2150	2400	2700	3050
250/2	71 B-2	0.55	2820	70	870	850	830	800	760	720	680	600	520	380	-
280/2	80 B-2	1.10	2840	72	-	-	-	1100	1060	1030	1000	960	910	850	770
310/2	90L-2	2.20	2850	76	-	-	-	-	-	-	1390	1360	1320	1280	1230
350/2	100LA-2	3.00	2900	79	-	-	-	-	-	-	-	-	-	1850	1820
400/2	112M-2	4.00	2900	82	-	-	-	-	-	-	-	-	-	-	-
400/2	132SA-2	5.50	2900	84	-	-	-	-	-	-	-	-	-	-	-
450/2	132SB-2	7.50	2900	86	-	-	-	-	-	-	-	-	-	-	-
450/2	160M-2	11.00	2930	88	-	-	-	-	-	-	-	-	-	-	-
500/2	160M-2	15.00	2940	89	-	-	-	-	-	-	-	-	-	-	-
500/2	160L-2	18.50	2940	92	-	-	-	-	-	-	-	-	-	-	-
310/4	63B-4	0.18	1310	57	290	280	270	260	250	230	210	180	140	80	-
350/4	71B-4	0.37	1360	60	-	-	-	400	390	380	370	350	330	300	270
400/4	80A-4	0.55	1370	64	-	-	-	-	-	-	520	500	490	470	450
450/4	80B-4	0.75	1380	65	-	-	-	-	-	-	-	-	-	610	600
450/4	90S-4	1.10	1390	67	-	-	-	-	-	-	-	-	-	660	650
500/4	90L-4	1.50	1400	69	-	-	-	-	-	-	-	-	-	-	-
500/4	100L-4	2.20	1420	71	-	-	-	-	-	-	-	-	-	-	-
560/4	100LA-4	3.00	1430	72	-	-	-	-	-	-	-	-	-	-	-
560/4	112M-4	4.00	1430	74	-	-	-	-	-	-	-	-	-	-	-
630/4	132SA-4	5.50	1440	75	-	-	-	-	-	-	-	-	-	-	-
630/4	132M-4	7.50	1450	78	-	-	-	-	-	-	-	-	-	-	-
500/6	80A-6	0.55	930	57	-	-	-	-	-	-	-	-	350	340	330
500/6	80B-6	0.75	930	59	-	-	-	-	-	-	-	-	270	360	350
560/6	90S-6	0.75	930	60	-	-	-	-	-	-	-	-	-	-	-
560/6	90L-6	1.10	930	62	-	-	-	-	-	-	-	-	-	-	-
630/6	100L-6	1.50	950	66	-	-	-	-	-	-	-	-	-	-	-
630/6	112M-6	2.20	950	68	-	-	-	-	-	-	-	-	-	-	-

Performance data was measured with suitable instruments in our laboratories.

Air performance at 15 °C temperature with a pressure of 760 mmH₂O.

The indicated flow rate and pressure performances refer to the installation of the fan unit with ducted discharge.

The reported noise is expressed as sound pressure, measured at a distance of 1.5 m in free field.

The power values indicated refer to the actual installed power of the fan unit.

Refer to the performance curves for the correct model selection.



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Total pressure PT = Pa																	
Flow rate v = m ³ /h																	
3450	3850	4250	4750	5400	6150	6850	7650	8500	9500	10800	12000	13500	13300	17000	19000	21600	24200
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
670	520	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1780	1740	990	870	680	-	-	-	-	-	-	-	-	-	-	-	-	-
1780	1740	1680	1600	1500	1370	1220	980	-	-	-	-	-	-	-	-	-	-
-	2130	2100	2070	2010	1940	1840	1700	1480	950	-	-	-	-	-	-	-	-
-	2310	2260	2200	2140	2070	1970	1850	1710	1480	1170	760	-	-	-	-	-	-
-	-	-	-	2690	2680	2670	2630	2580	2440	2200	1870	1270	-	-	-	-	-
-	-	-	-	2920	2890	2840	2780	2660	2530	2340	2130	1850	1560	1070	-	-	-
-	-	-	-	-	-	-	3350	3310	3270	3200	3090	2910	2680	2270	1460	-	-
-	-	-	-	-	-	-	3700	3660	3570	3460	3340	3200	3020	2810	2490	2000	1220
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
230	170	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
430	390	350	300	230	-	-	-	-	-	-	-	-	-	-	-	-	-
590	580	560	520	460	370	190	-	-	-	-	-	-	-	-	-	-	-
640	620	590	570	530	480	410	320	-	-	-	-	-	-	-	-	-	-
-	760	750	740	730	710	660	570	430	170	-	-	-	-	-	-	-	-
-	870	850	830	810	770	730	690	630	540	400	-	-	-	-	-	-	-
-	-	-	-	980	970	960	940	910	840	740	600	290	-	-	-	-	-
-	-	-	-	1100	1070	1040	1010	9700	930	860	780	660	530	290	-	-	-
-	-	-	-	-	-	-	1280	1260	1240	1210	1170	1090	980	810	470	-	-
-	-	-	-	-	-	-	1530	1500	1460	1420	1370	1320	1230	1130	1010	820	520
320	310	290	260	210	140	-	-	-	-	-	-	-	-	-	-	-	-
340	330	320	300	270	230	190	-	-	-	-	-	-	-	-	-	-	-
430	420	410	400	380	360	320	270	170	-	-	-	-	-	-	-	-	-
470	460	450	440	420	400	380	350	310	230	-	-	-	-	-	-	-	-
-	-	-	-	560	550	540	520	500	450	380	270	-	-	-	-	-	-
-	-	-	-	600	590	580	570	550	510	470	420	350	230	-	-	-	-

VCRP

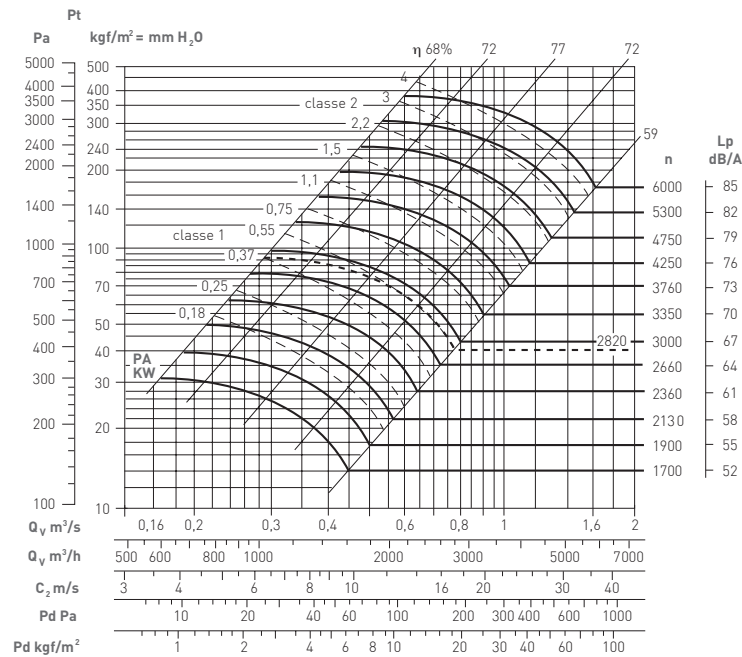
Single inlet centrifugal fan,
backward curved blades with direct drive, clean air

CHARACTERISTIC CURVES

Q= Flow rate expressed in m³/h, m³/s and cfm

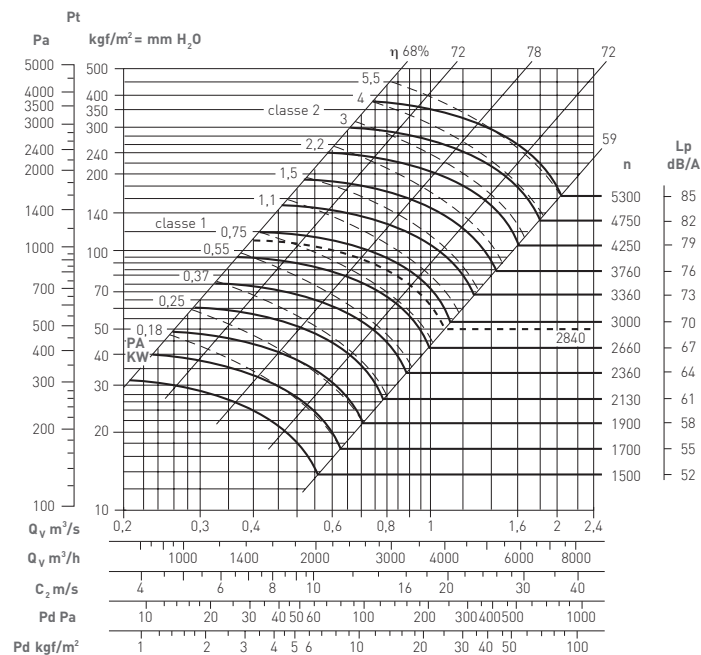
Pe= Static pressure expressed in mmH₂O, e Pa

VCRP 250



Fan weight 30 Kgf
 PD² e GD² = 0,145 Kgf²m
 Maximum rotation speed
 <100 °C = 4950
 100 ÷ 200 °C = 4500
 200 ÷ 300 °C = 4000
 Tolerance on noise level + 3 dB
 Tolerance on absorbed power ± 3%

VCRP 280



Fan weight 41 Kgf
 PD² e GD² = 0,195 Kgf²m
 Maximum rotation speed
 <100 °C = 3950
 100 ÷ 200 °C = 3550
 200 ÷ 300 °C = 3120
 Tolerance on noise level + 3 dB
 Tolerance on absorbed power ± 3%



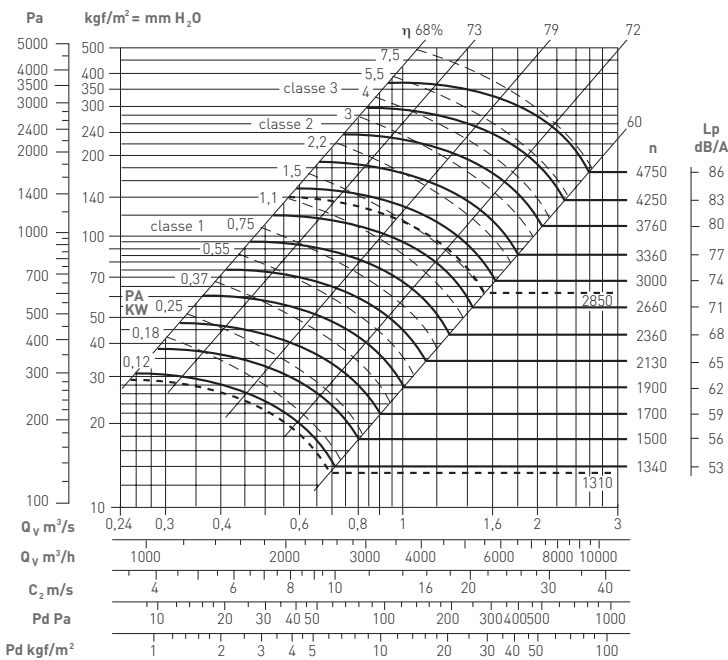
Ventilation

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Q= Flow rate expressed in m³/h, m³/s and cfm

Pe= Static pressure expressed in mmH₂O, e Pa

VCRP 310



Fan weight 46 Kgf

PD² e GD² = 0,32 Kgf²m

Maximum rotation speed

<100 °C = 3100

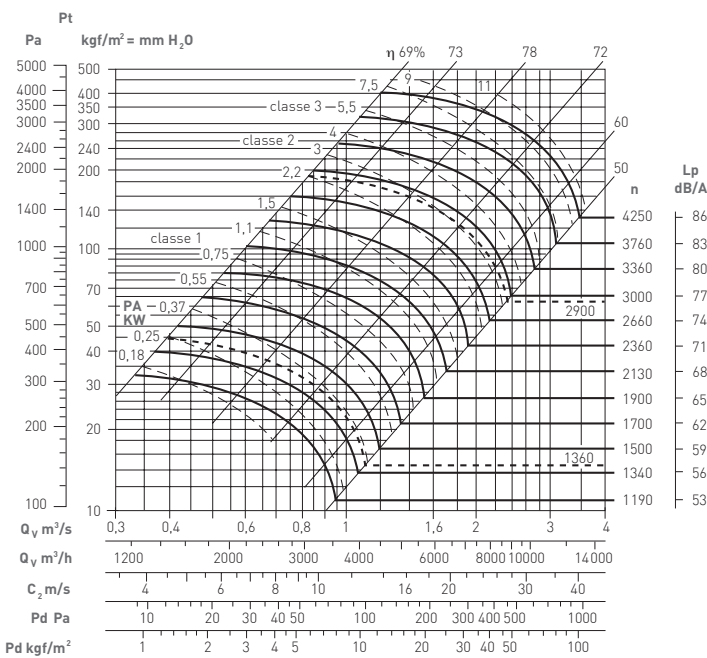
100 ÷ 200 °C = 2800

200 ÷ 300 °C = 2500

Tolerance on noise level + 3 dB

Tolerance on absorbed power ± 3%

VCRP 350



Fan weight 72 Kgf

PD² e GD² = 0,52 Kgf²m

Maximum rotation speed

<100 °C = 2800

100 ÷ 200 °C = 2500

200 ÷ 300 °C = 2250

Tolerance on noise level + 3 dB

Tolerance on absorbed power ± 3%

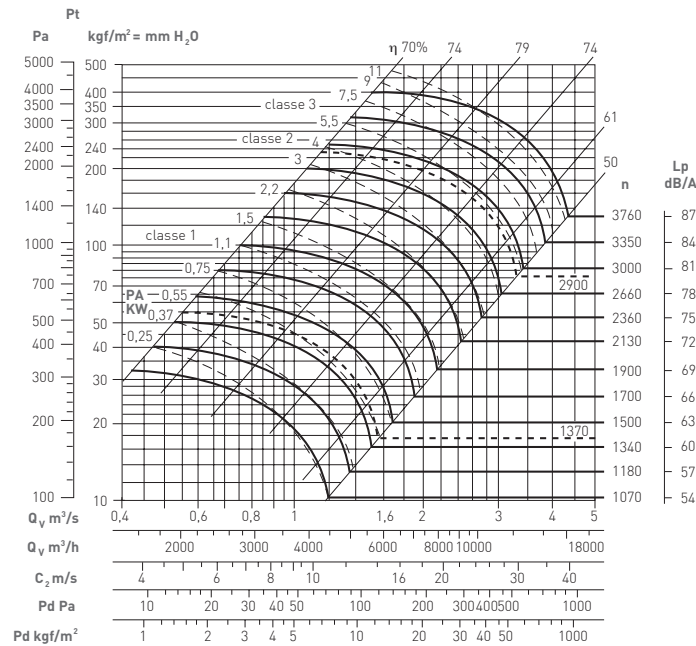
VCRP

Single inlet centrifugal fan,
backward curved blades with direct drive, clean air

Q= Flow rate expressed in m³/h, m³/s and cfm

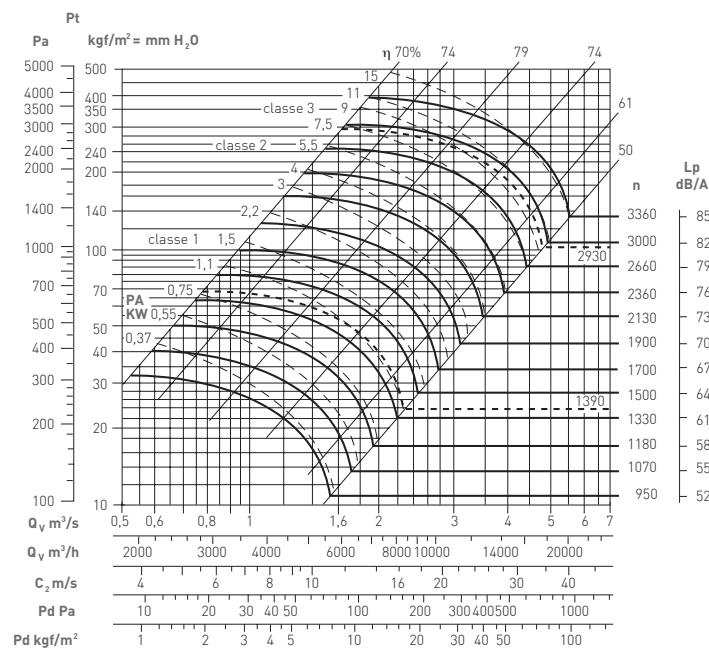
Pe= Static pressure expressed in mmH₂O, e Pa

VCRP 400



Fan weight 85 Kgf
 PD² e GD² = 1,1 Kgf²m
 Maximum rotation speed
 <100 °C = 2840
 100 ÷ 200 °C = 2250
 200 ÷ 300 °C = 2000
 Tolerance on noise level + 3 dB
 Tolerance on absorbed power ± 3%

VCRP 450



Fan weight 100 Kgf
 PD² e GD² = 1,9 Kgf²m
 Maximum rotation speed
 <100 °C = 2200
 100 ÷ 200 °C = 2000
 200 ÷ 300 °C = 1870
 Tolerance on noise level + 3 dB
 Tolerance on absorbed power ± 3%



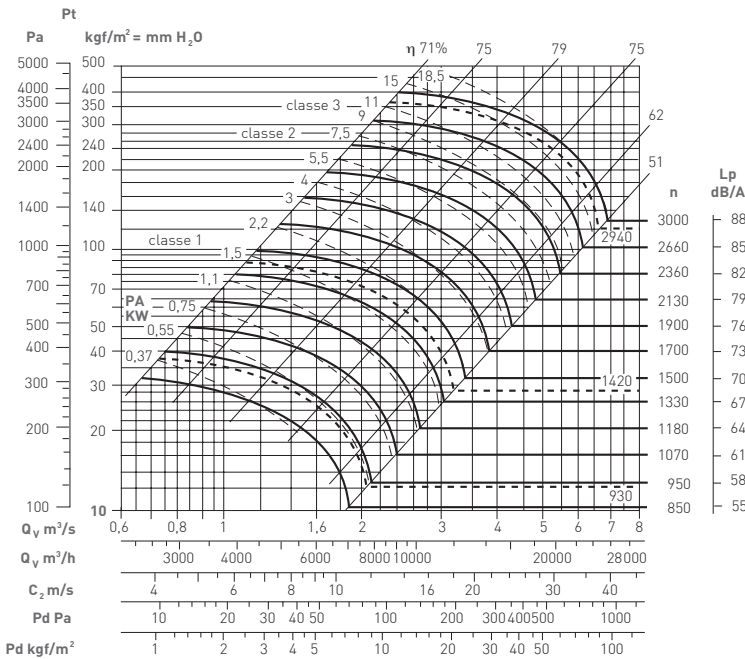
Ventilation

Comfort and performance
at maximum efficiency
energy

Q= Flow rate expressed in m³/h, m³/s and cfm

Pe= Static pressure expressed in mmH₂O, e Pa

VCRP 500



Fan weight 141 Kg

PD² e GD² = 3,1 Kg²m

Maximum rotation speed

<100 °C = 2050

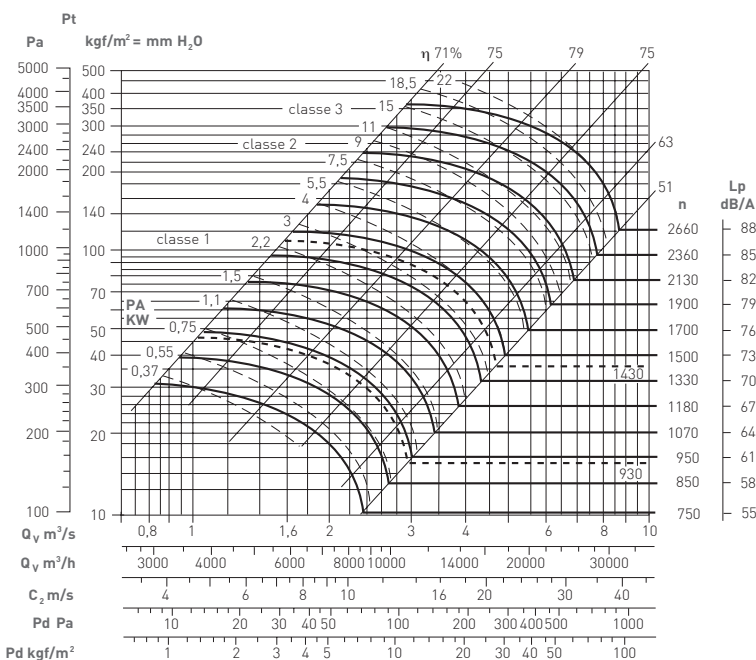
100 ÷ 200 °C = 1800

200 ÷ 300 °C = 1580

Tolerance on noise level + 3 dB

Tolerance on absorbed power ± 3%

VCRP 560



Fan weight 178 Kg

PD² e GD² = 5,5 Kg²m

Maximum rotation speed

<100 °C = 1800

100 ÷ 200 °C = 1600

200 ÷ 300 °C = 1400

Noise tolerance + 3 dB

Tolerance on absorbed power ± 3%

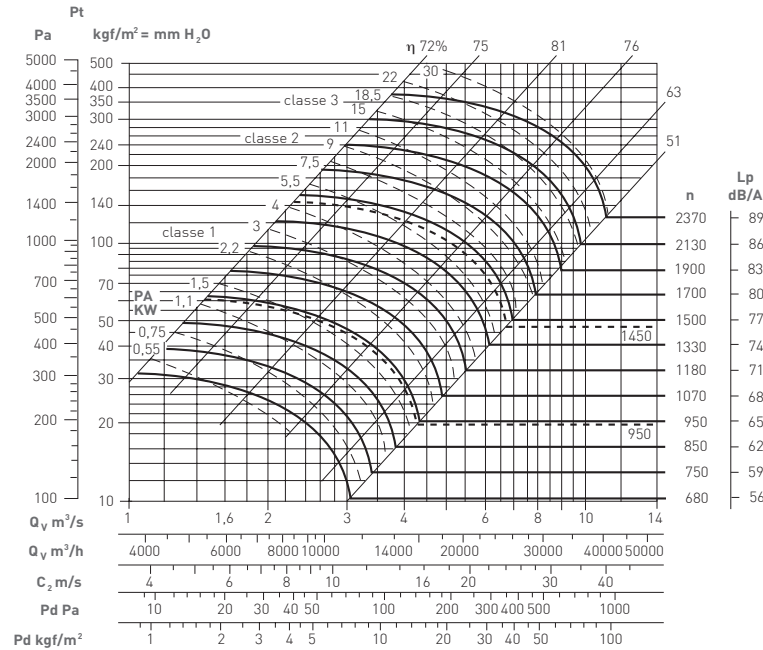
VCRP

Single inlet centrifugal fan,
backward curved blades with direct drive, clean air

Q= Flow rate expressed in m³/h, m³/s and cfm

Pe= Static pressure expressed in mmH₂O, e Pa

VCRP 630



Fan weight 230 Kgf

PD² e GD² = 8,7 Kgf²m

Maximum rotation speed

< 100 °C = 1600

100 ÷ 200 °C = 1390

200 ÷ 300 °C = 1250

Tolerance on noise level + 3 dB

Tolerance on absorbed power ± 3%

ACCESSORIES



Torque counter flanges



Suction cone



Discharge cone



Wall brackets



Motor cover



Vibrostop



Electrical panel



Nozzle anti-spark



Switch on/off

All images are only indicative of the product type and may differ from the actual article.



AVAILABLE MODELS

Model	Motor	Installed Power kW	RPM
250/2	71 B-2	0,55	2820
280/2	80 B-2	1,10	2840
310/2	90L-2	2,20	2850
350/2	100LA-2	3,00	2900
400/2	112M-2	4,00	2900
400/2	132SA-2	5,50	2900
450/2	132SB-2	7,50	2900
450/2	160M-2	11,00	2930
500/2	160M-2	15,00	2940
500/2	160L-2	18,50	2940
310/4	63B-4	0,18	1310
350/4	71B-4	0,37	1360
400/4	80A-4	0,55	1370
450/4	80B-4	0,75	1380
450/4	90S-4	1,10	1390
500/4	90L-4	1,50	1400
500/4	100L-4	2,20	1420
560/4	100LA-4	3,00	1430
560/4	112M-4	4,00	1430
630/4	132SA-4	5,50	1440
630/4	132M-4	7,50	1450
500/6	80A-6	0,55	930
560/6	90S-6	0,75	930
560/6	90L-6	1,10	930
630/6	100L-6	1,50	950
630/6	112M-6	2,20	950

* For RD and LG 180 and 225 orientations, contact the sales office