



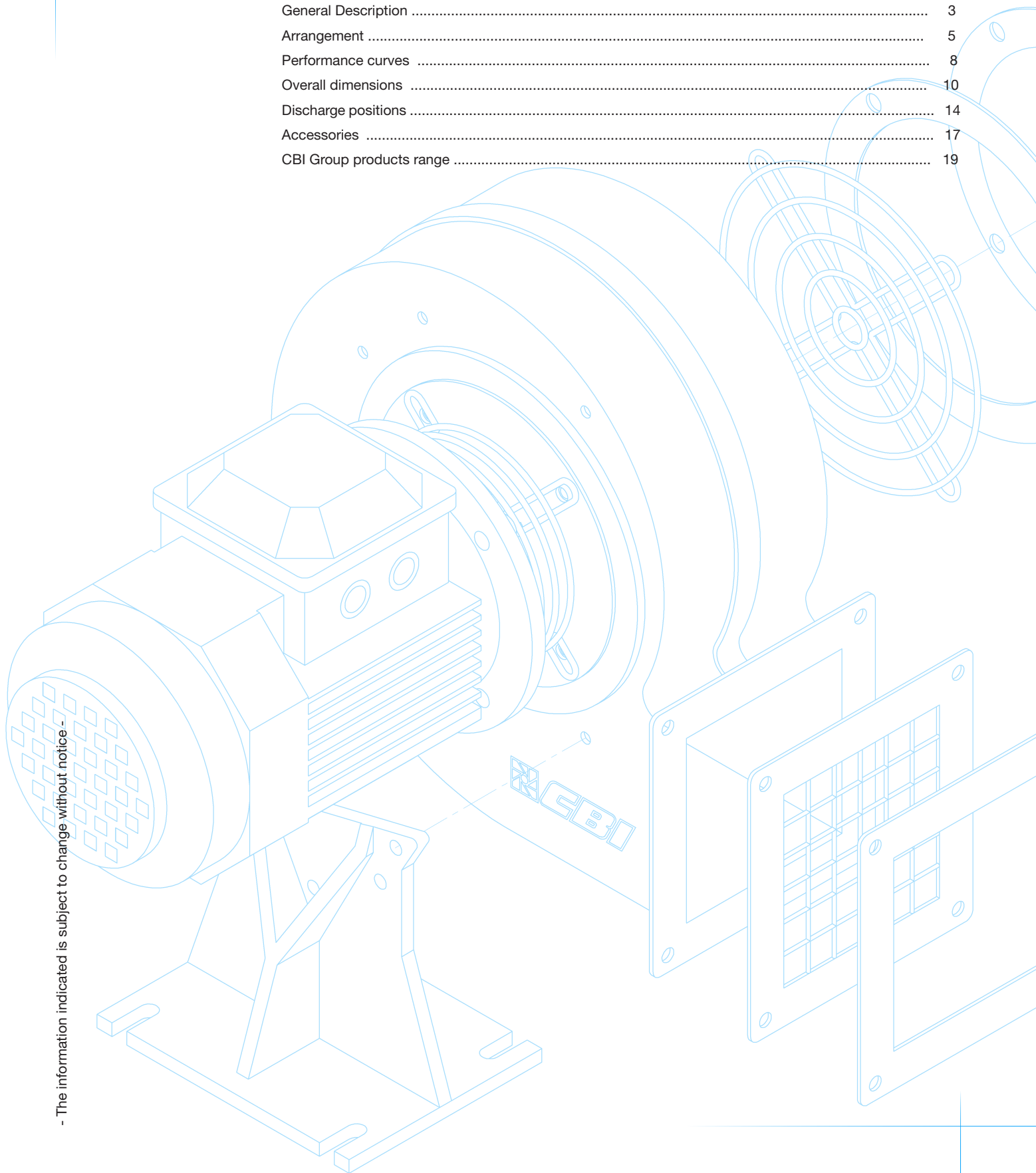
VRP



V E N T I L A T I O N P R O D U C T S

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General Description

The VRP series centrifugal fans directly coupled to the electric motor are the result of our experience in the design and construction of fluid-carrying systems.

Versatility and reliability are the main characteristics of this series, which is suitable for many areas such as steam intake, drying systems, plastic moulding machines and all applications requiring a small amount of flow with limited pressure.

VRP Series

The housing is in steel sheet with Pittsburgh seaming.

The impeller is the forward curved type in galvanized plate. The series is produced in 4 sizes with 200mm to 300 mm diameter impellers.

The fans can have clockwise rotation (RD) or counter clockwise rotation (LG).

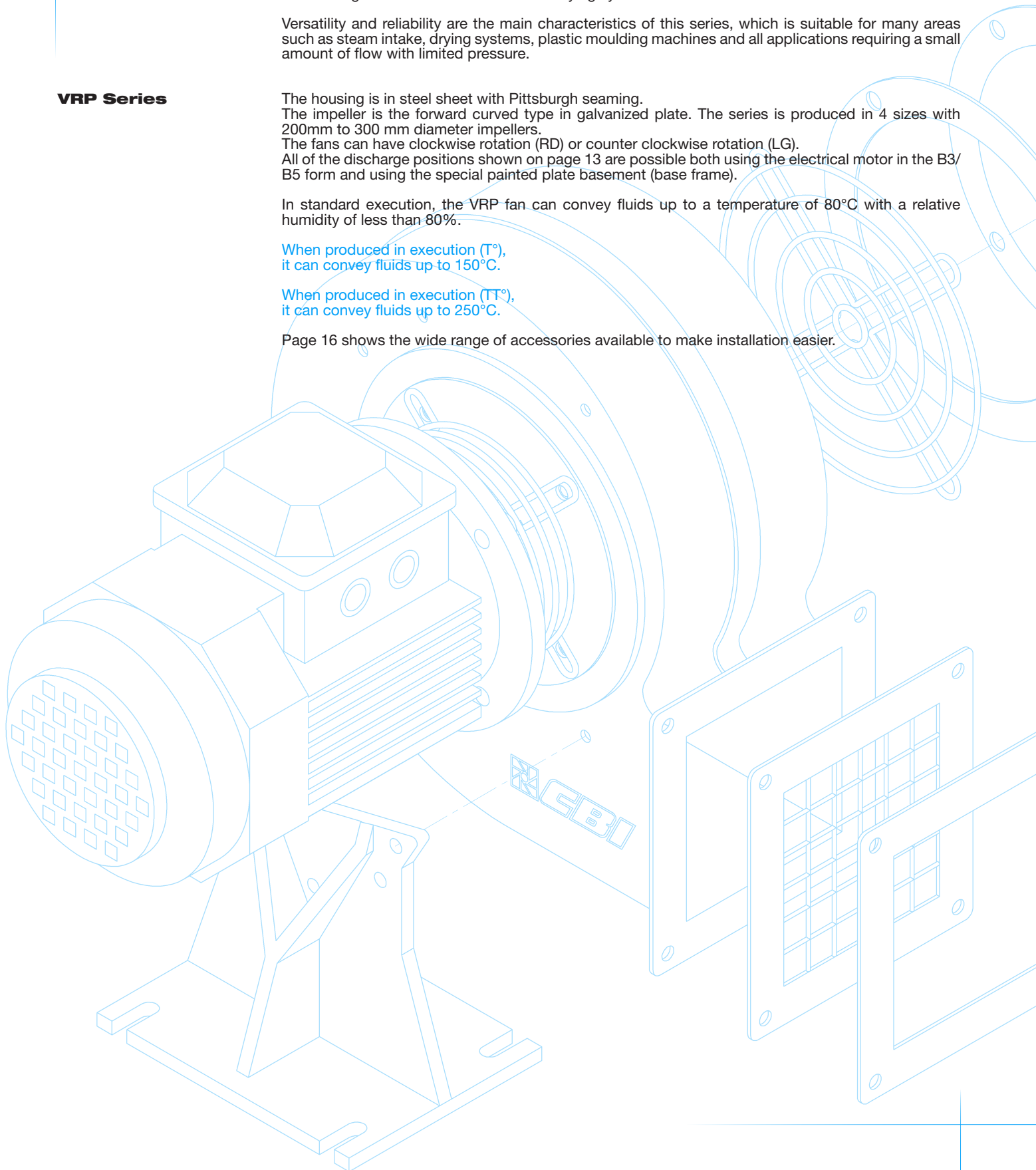
All of the discharge positions shown on page 13 are possible both using the electrical motor in the B3/B5 form and using the special painted plate basement (base frame).

In standard execution, the VRP fan can convey fluids up to a temperature of 80°C with a relative humidity of less than 80%.

When produced in execution (T°),
it can convey fluids up to 150°C.

When produced in execution (TT°),
it can convey fluids up to 250°C.

Page 16 shows the wide range of accessories available to make installation easier.



Electric Motor

The electric motors in the VRP series are compliant with Unel-Mec standards. They are enclosed with external ventilation and can be flanged (B5), or with feet and flange (B3/B5) upon request.

For power ≤ 3 kW they are three-phase with voltage V 230/400 / 50 Hz - V 265/460 7 60 Hz. Greater powers have a voltage of V 400/690 / 50 Hz - V 460/790 7 60 Hz.

All have IP55 protection and insulating class F.
From kW 0.75, IE2 efficiency class.

For execution (TT°), the motors are only three phase insulated in class H IE1, suitable for operation in environmental temperatures greater than 40°C.

Special voltages in the Eex-d or IE3 efficiency class (NEMA Premium) can also be supplied upon request.

Special executions

Series VRP fans can be supplied with the following variations:

- Aisi 304 impeller
- all parts in contact with the fluid in Aisi 304.
- Ral 5009 powder coated housing
- Ral painted housing upon request.
- Atex group 3, category 2

The performance of the VR and VRP fans was measured with outlet ducting according to UNI 7179 - 73P fig. 1 and AMCA 210-85 fig. 7.

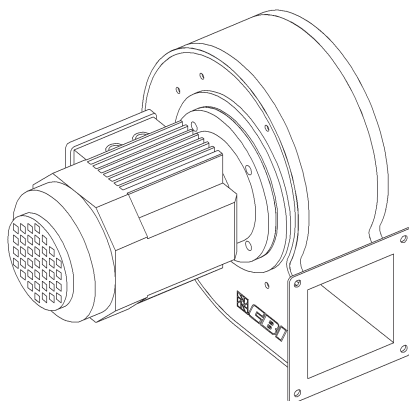
The impellers are statically and dynamically balanced with electronic equipment according to ISO 1940 grade Q=2.5.

The selection curves are valid for fluid with a density of 1.2 kg/m³ which is equivalent to air conditions at 20°C at sea level.

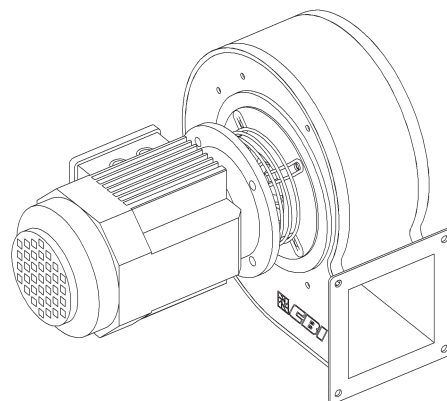
The sound pressure values LP(A) are expressed in dB(A) and are measured in free field at a distance of 1.5 m with a free inlet and ducted discharge.



Arrangement 5

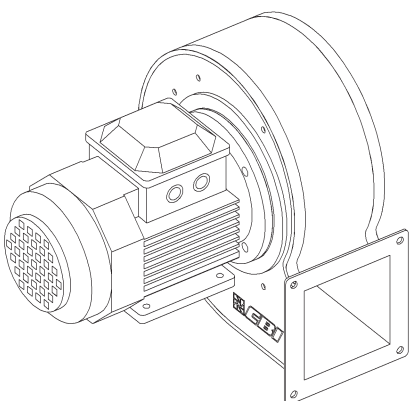


**Standard
Execution**

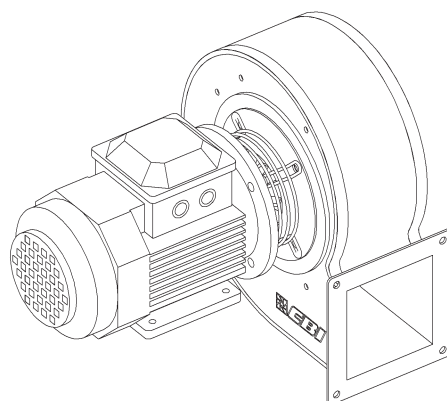


Execution -T-

Arrangement 5S

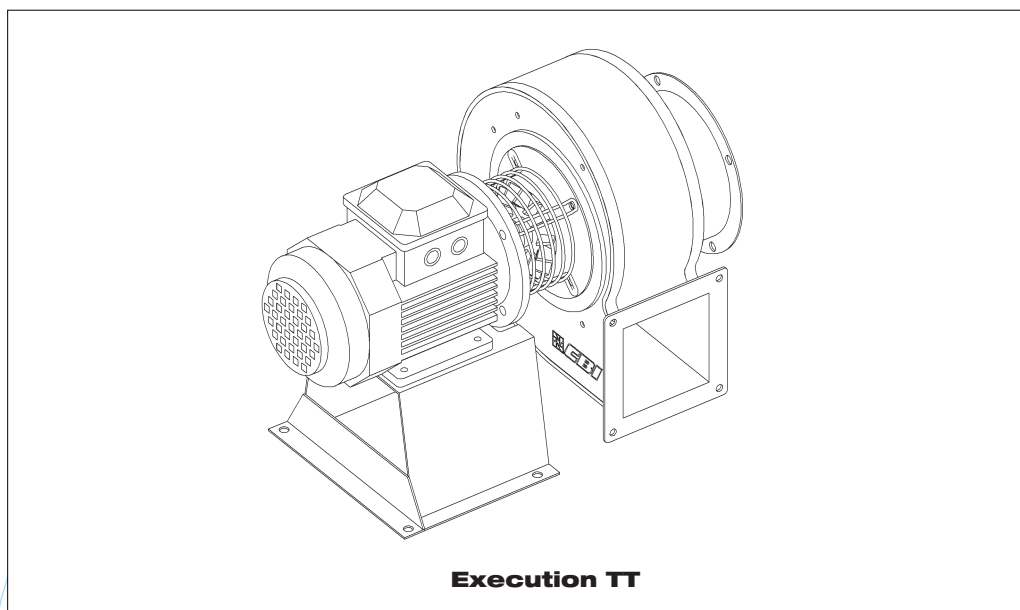


**Standard
Execution**

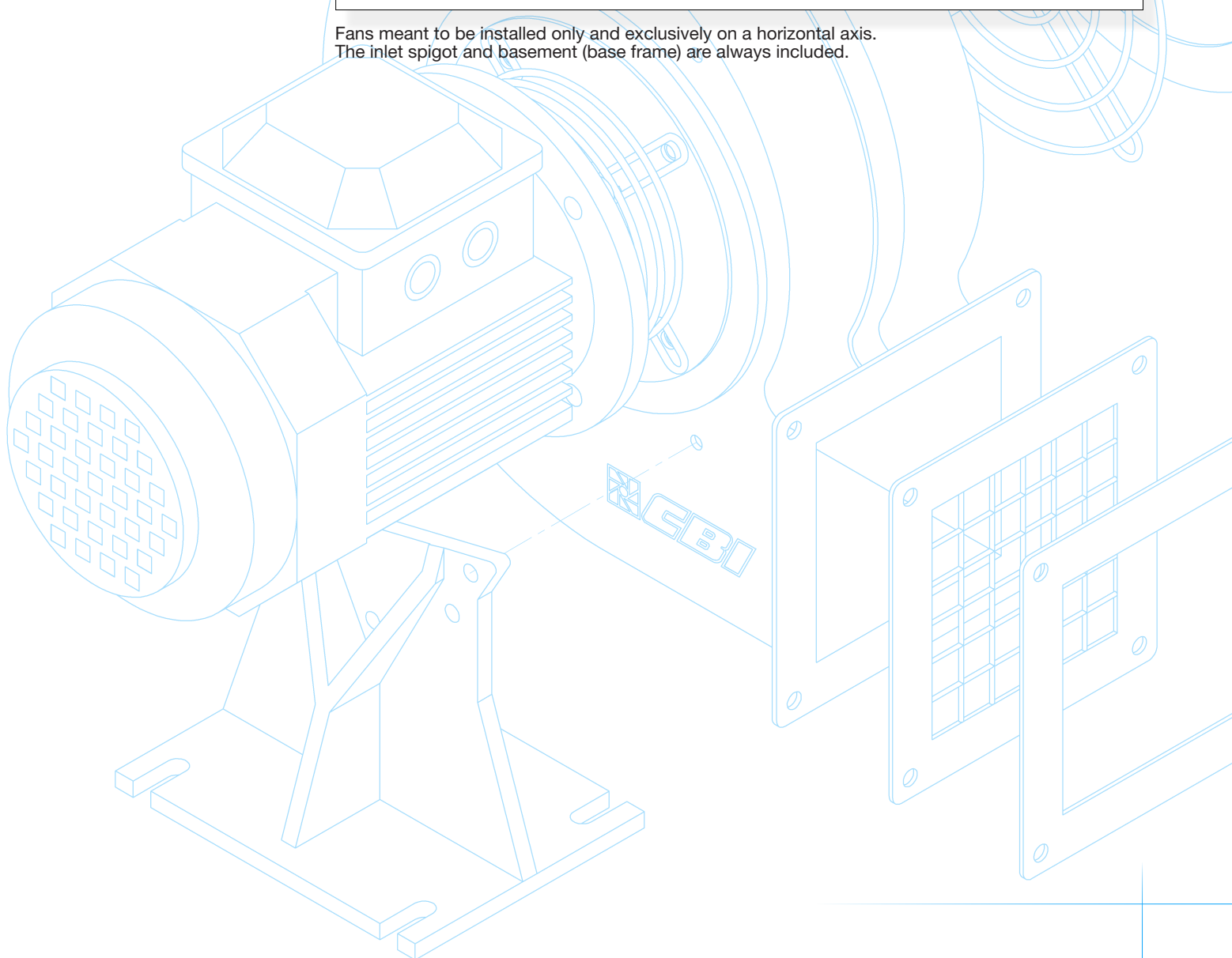


Execution -T-

Arrangement 4



Fans meant to be installed only and exclusively on a horizontal axis.
The inlet spigot and basement (base frame) are always included.

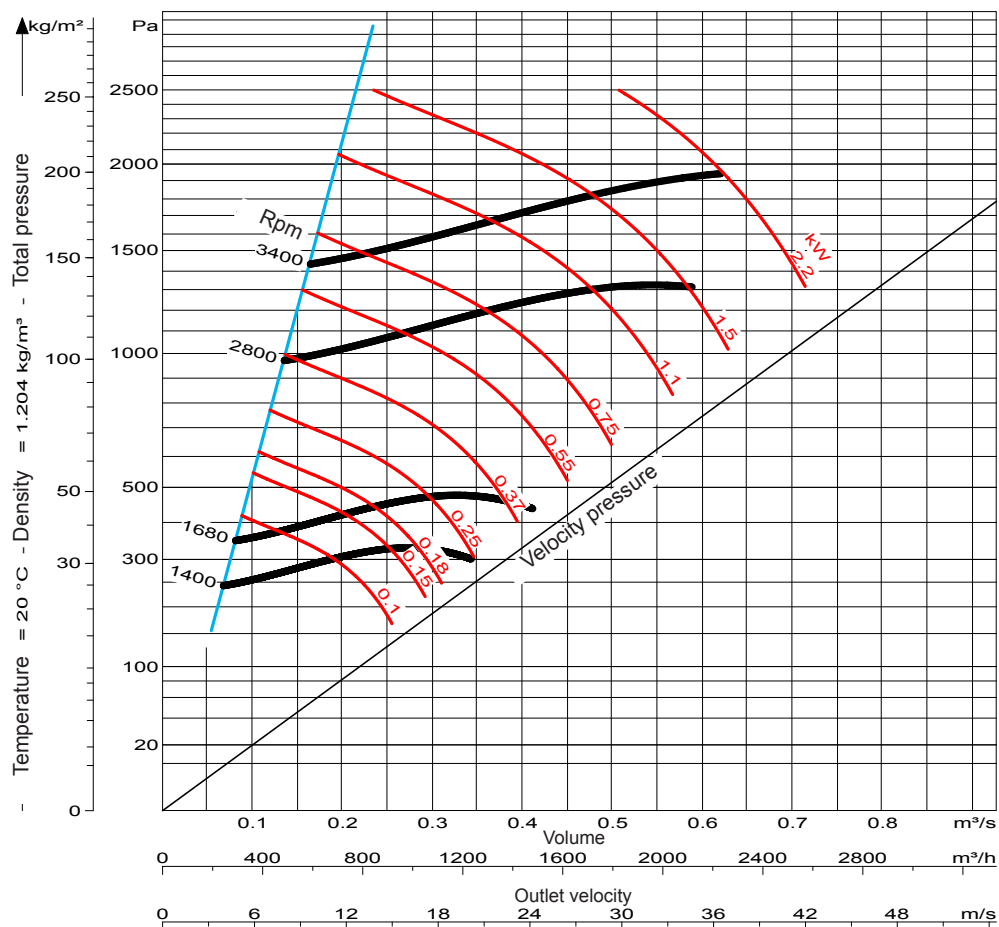


VRP 20

Impeller diameter: 200 mm
J = 0,04 kg m²

	Hz50			
Rpm	1400	1400	2800	2800
kW	0,25	0,37	1,1	1,5
Motor	71	71	80	90
Lp(A)	51	53	72	74

	Hz60			
Rpm	1680	1680	3400	3400
kW	0,37	0,55	1,5	2,2
Motor	71	71	90S	90L
Lp(A)	57	59	77	79

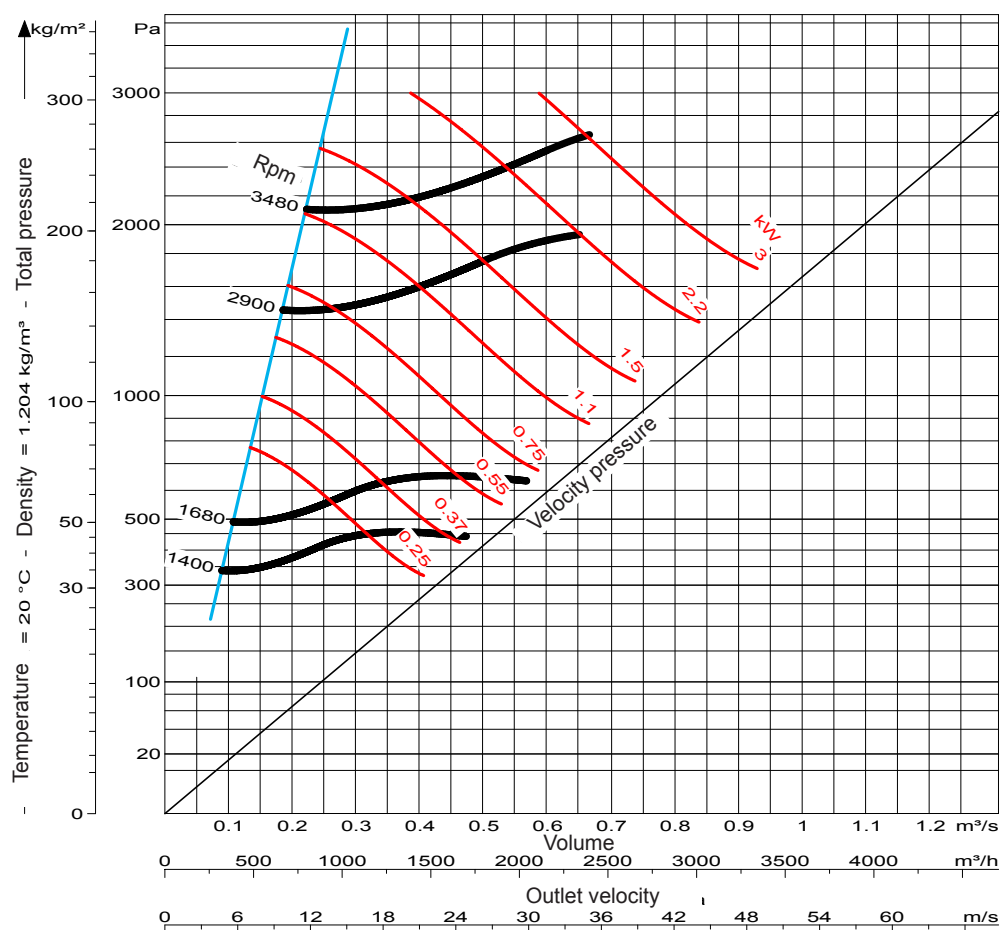


VRP 25

Impeller diameter: 230 mm
J = 0,08 kg m²

	Hz50			
Rpm	1400	1400	2900	2900
kW	0,55	0,75	1,50	2,2
Motor	80	80	90S	90L
Lp(A)	54	56	76	77

	Hz60			
Rpm	1680	1680	3480	3480
kW	0,75	1,1	2,2	3
Motor	80	80	90L	100L
Lp(A)	59	61	80	82

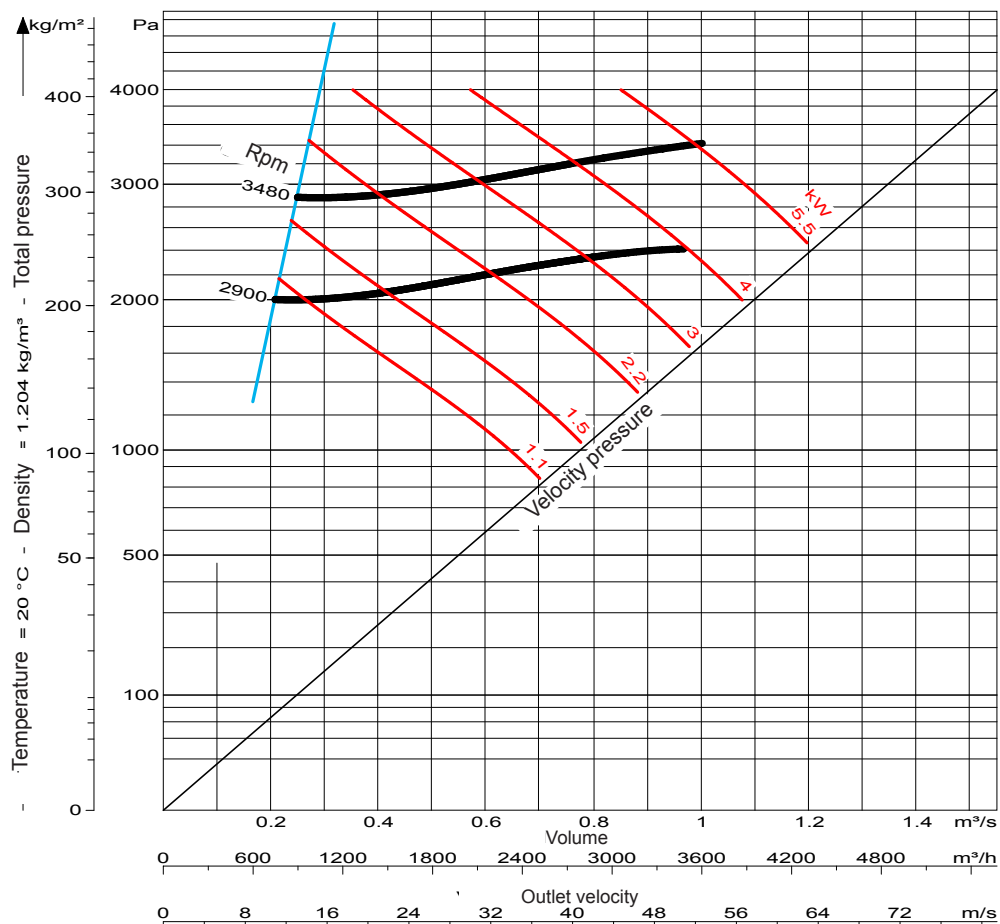


VRP 28

Impeller diameter: 250 mm
J = 0,11 kg m²

	Hz50			
Rpm	2900	2900	-	-
kW	3	4	-	-
Motor	100	112	-	-
Lp(A)	76	78	-	-

	Hz60			
Rpm	3480	3480	-	-
kW	4	5,5	-	-
Motor	112	112	-	-
Lp(A)	81	83	-	-

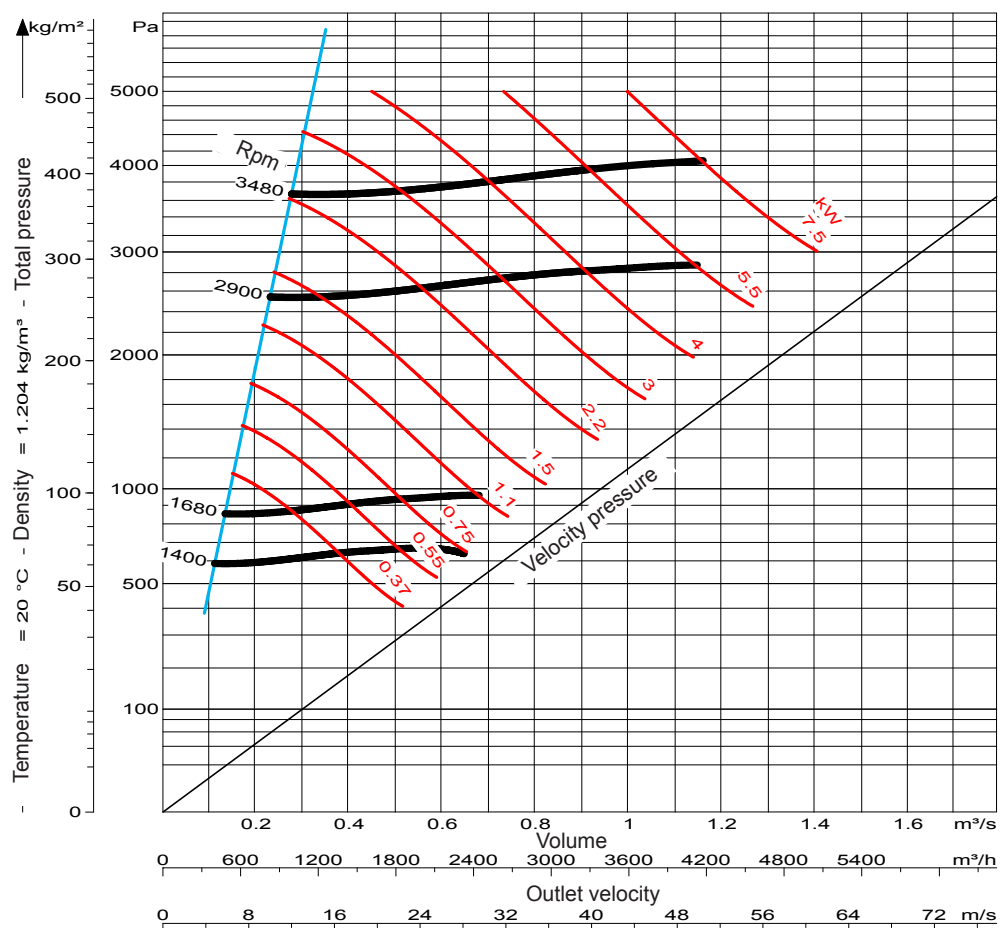


VRP 30

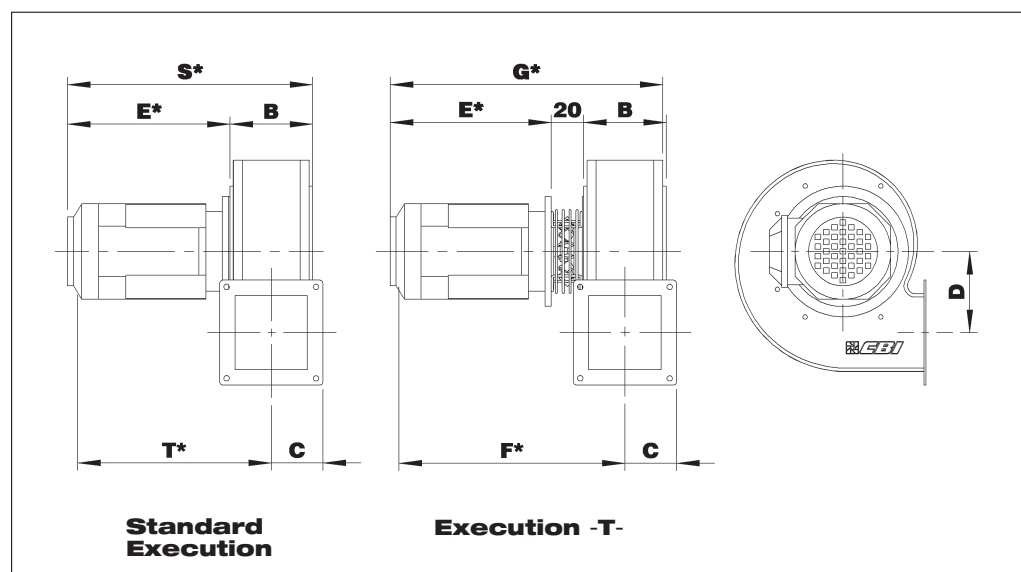
Impeller diameter: 300 mm
J = 0,132 kg m²

	Hz50			
Rpm	1400	2900	2900	-
kW	0,75	4	5,5	-
Motor	80	112	112	-
Lp(A)	59	78	80	-

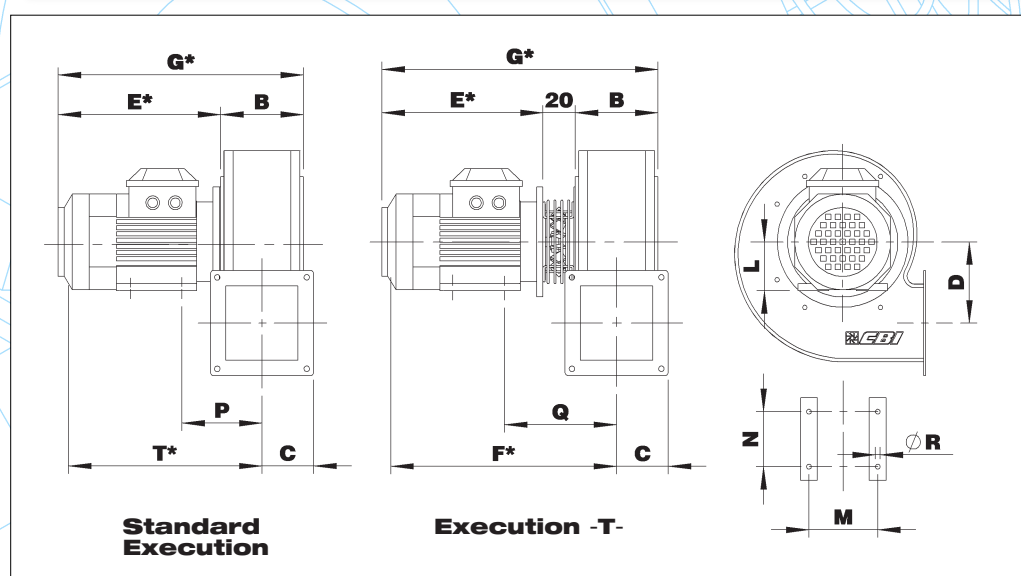
	Hz60			
Rpm	1680	3480	3480	-
kW	1,1	5,5	7,5	-
Motor	80	112	132	-
Lp(A)	64	83	85	-



Overall dimensions Arrangement 5



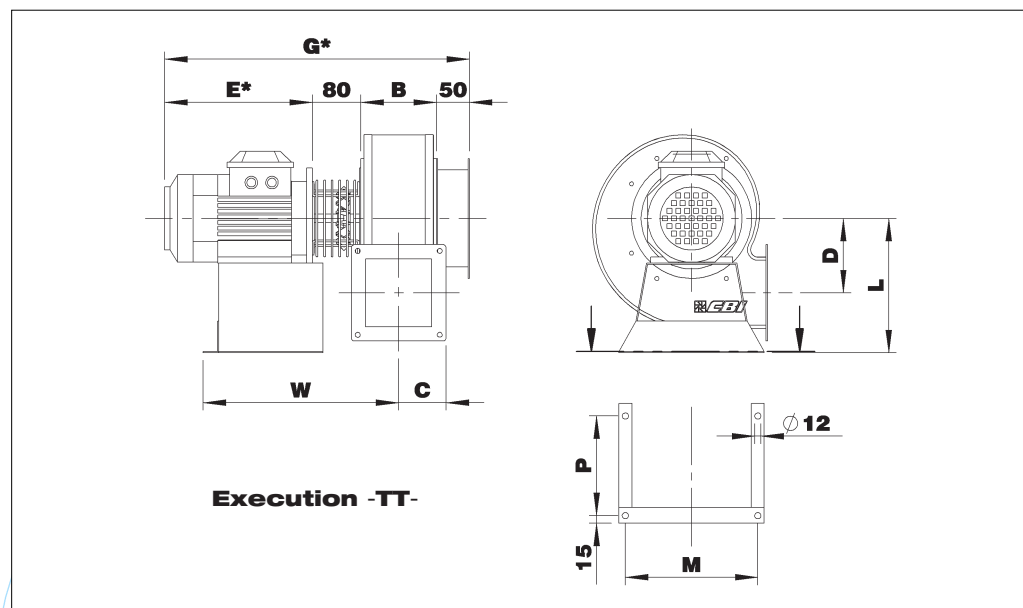
Overall dimensions Arrangement 5S



VRP	MOT.	B	C	D	E*	F*	G*	L	M	N	P	Q	R	S*	T*
20	71/4	137	95	142	215	303,3	372	71	112	90	112	132	7	352	283,5
20	80/2	137	95	142	269	357,3	426	80	125	100	117	137	9	406	337,5
20	71/4	137	95	142	215	303,5	372	71	112	90	112	132	7	352	283,5
20	90S/2	137	95	142	285	373,5	442	90	140	100	123	143	9	422	353,5
20	90L/2	137	95	142	285	373,5	442	90	140	125	123	143	9	422	353,5
25	80/4	148	100	152,5	269	363	437	80	125	100	124	144	9	417	343
25	90S/2	148	100	162,5	310	404	478	90	140	100	130	150	9	458	384
25	90L/2	148	100	162,5	310	404	478	90	140	125	130	150	9	458	384
25	100/2	148	100	162,5	310	404	478	90	140	140	130	150	9	458	384
28	100/2	148	100	162,5	347	441	515	100	160	140	137	157	12	495	421
28	112/2	148	100	162,5	373	467	541	112	190	140	144	164	12	521	447
30	80/4	143	97,5	193	269	360,5	486	80	125	100	121,5	141,5	9	411	340,5
30	100/2	143	97,5	193	347	449,5	510	100	160	140	134,5	154,5	12	490	429,5
30	112/2	143	97,5	193	373	464,5	536	112	190	140	141,5	161,5	12	516	444,5
30	132/2	143	97,5	193	405	497,5	470	132	216	140	160,5	180,5	12	550	477,5

* Maximum size

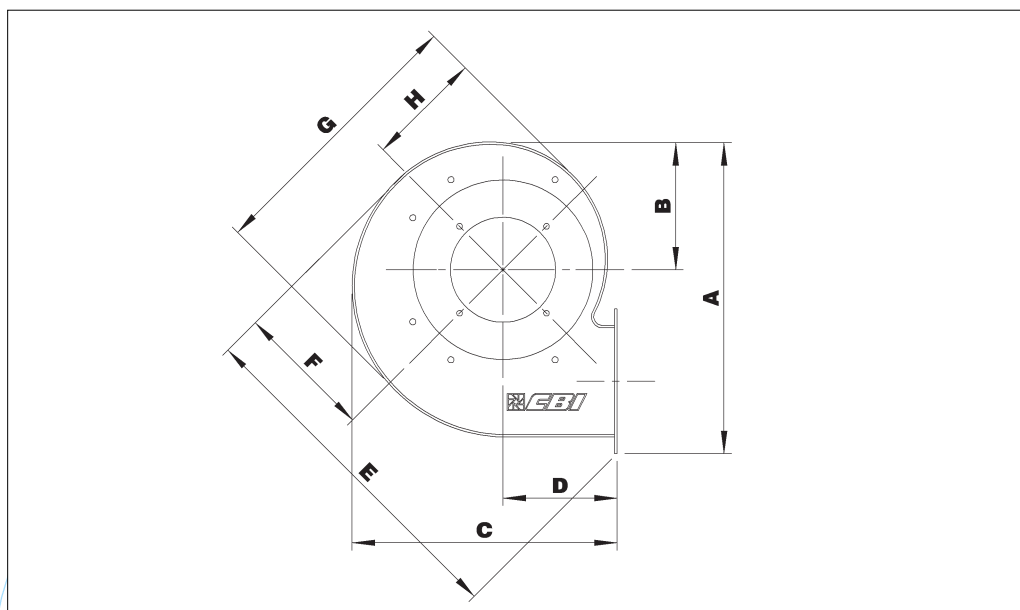
Overall dimensions Arrangement 4



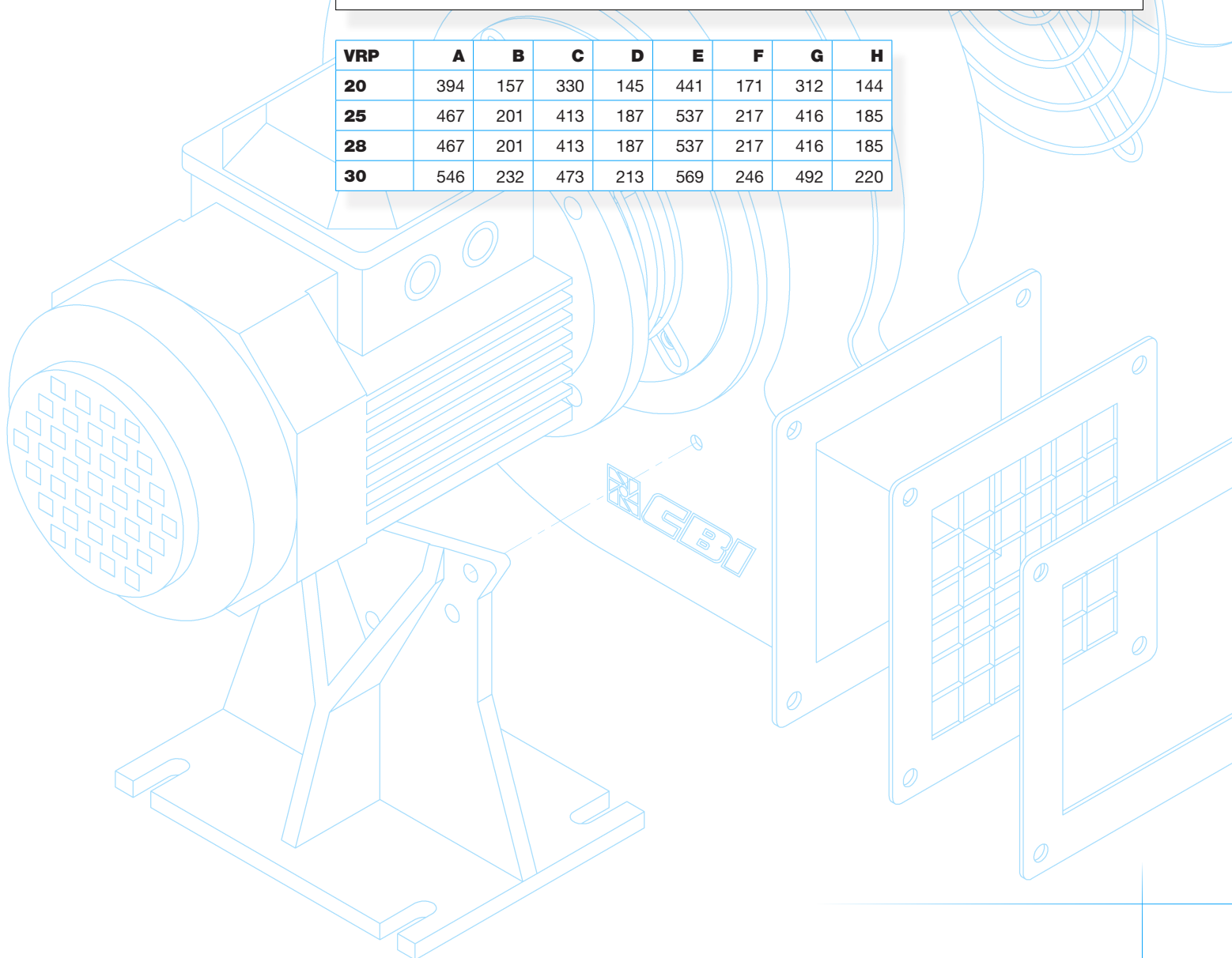
VRP	MOT.	B	C	D	E*	G*	L	M	P	W
20	80/2	137	95	142	269	536	265	260	185	412
20	80/4	137	95	142	269	536	265	260	185	412
20	90/2	137	95	142	285	552	275	260	185	412
25	80/4	148	100	152,5	269	547	330	370	235	438
25	90/2	148	100	162,5	310	588	340	370	235	438
28	100/2	148	100	162,5	347	625	350	370	235	438
28	112/2	148	100	162,5	373	651	362	370	235	438
30	80/4	143	97,5	193	269	596	330	370	235	438
30	100/2	143	97,5	193	347	620	350	370	235	438
30	112/2	143	97,5	193	373	646	362	370	235	438
30	132/2	143	97,5	193	405	580	382	370	235	438

* Maximum size

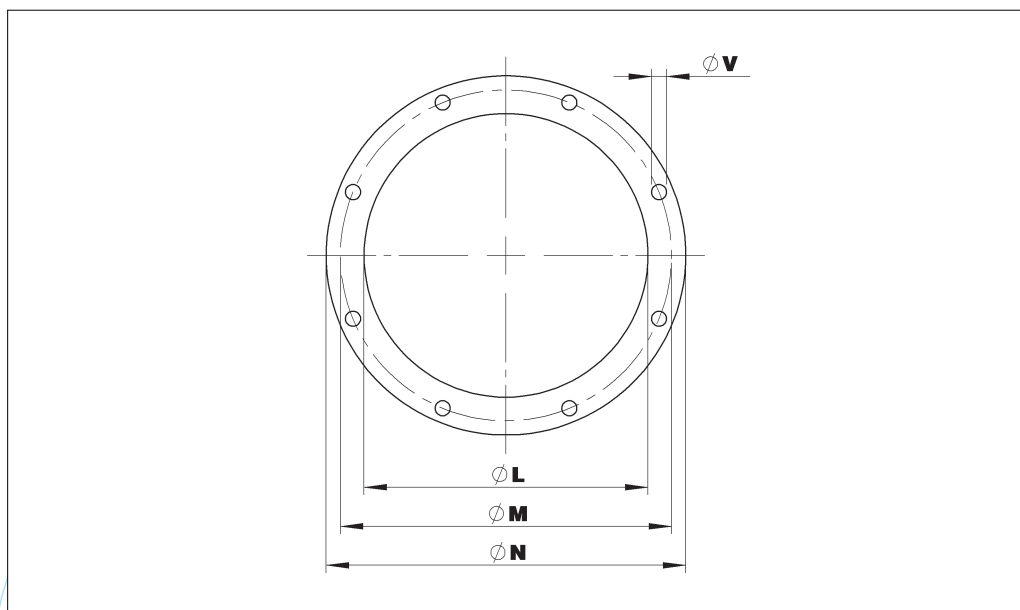
Housing dimensions



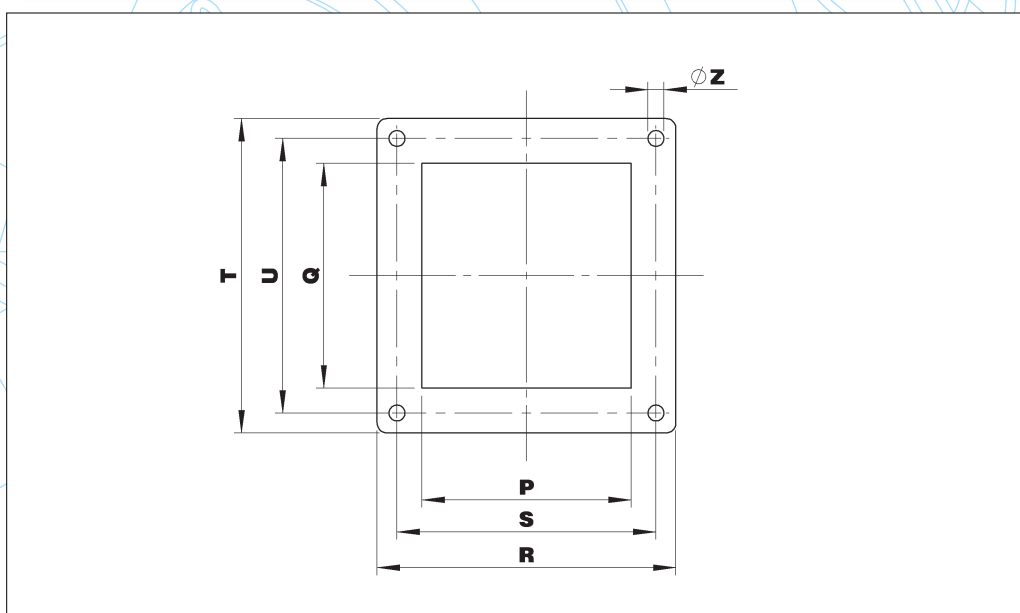
VRP	A	B	C	D	E	F	G	H
20	394	157	330	145	441	171	312	144
25	467	201	413	187	537	217	416	185
28	467	201	413	187	537	217	416	185
30	546	232	473	213	569	246	492	220



Inlet flange



Outlet flange



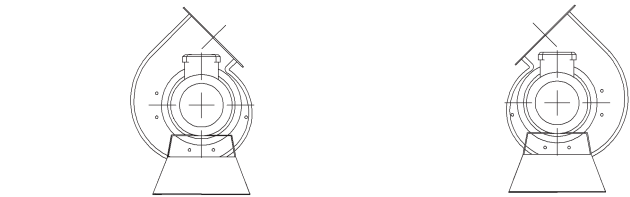
VRP	L	M	N	P	Q	R	S	T	U	V	Z
20	150	180	210	130	140	190	165	190	165	11	12
25	200	230	260	140	145	200	175	205	180	11	12
28	200	230	260	140	145	200	175	205	180	11	12
30	240	270	300	135	175	195	165	240	210	11	12

**Discharge positions
Arrangement 5S
with base frame
Motor side view**



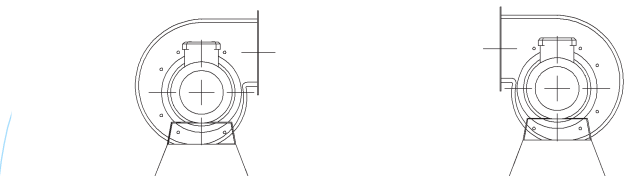
RD 0

LG 0



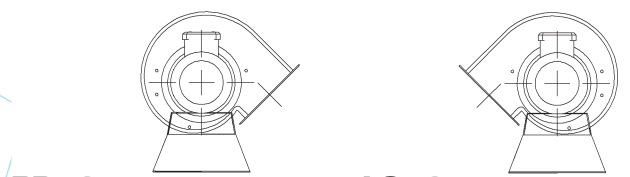
RD 45

LG 45



RD 90

LG 90



RD 135

LG 135



RD 180

LG 180



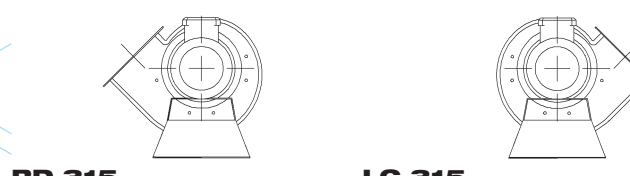
RD 225

LG 225



RD 270

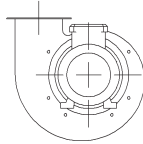
LG 270



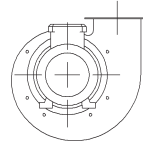
RD 315

LG 315

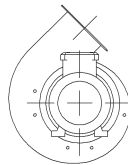
**Discharge positions
Arrangement 5S
Motor side view**



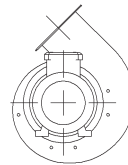
RD 0



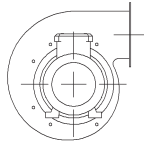
LG 0



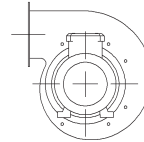
RD 45



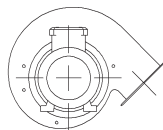
LG 45



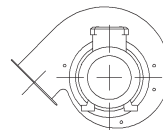
RD 90



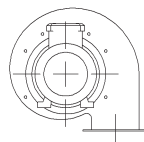
LG 90



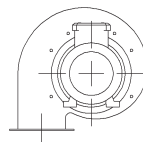
RD 135



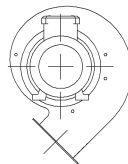
LG 135



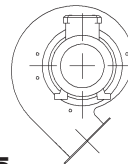
RD 180



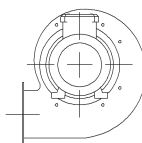
LG 180



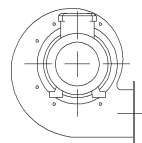
RD 225



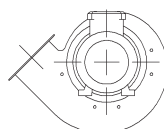
LG 225



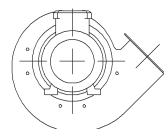
RD 270



LG 270



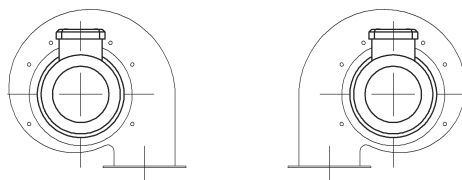
RD 315



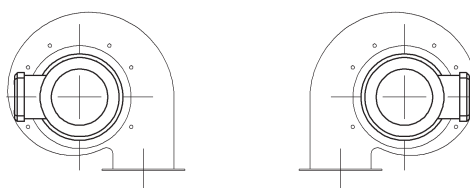
LG 315

Terminal connection box position

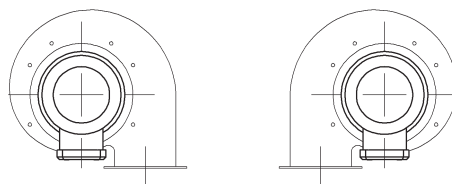
Upon request, the terminal connection box on the electric motor can have 4 different positions related to the outlet. If not expressly requested, the fan is supplied with the terminal connection box in the position opposite the outlet (MS0).



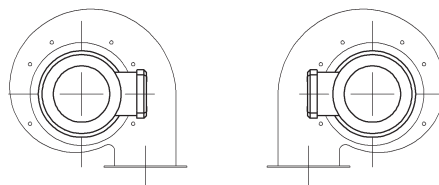
MS 0



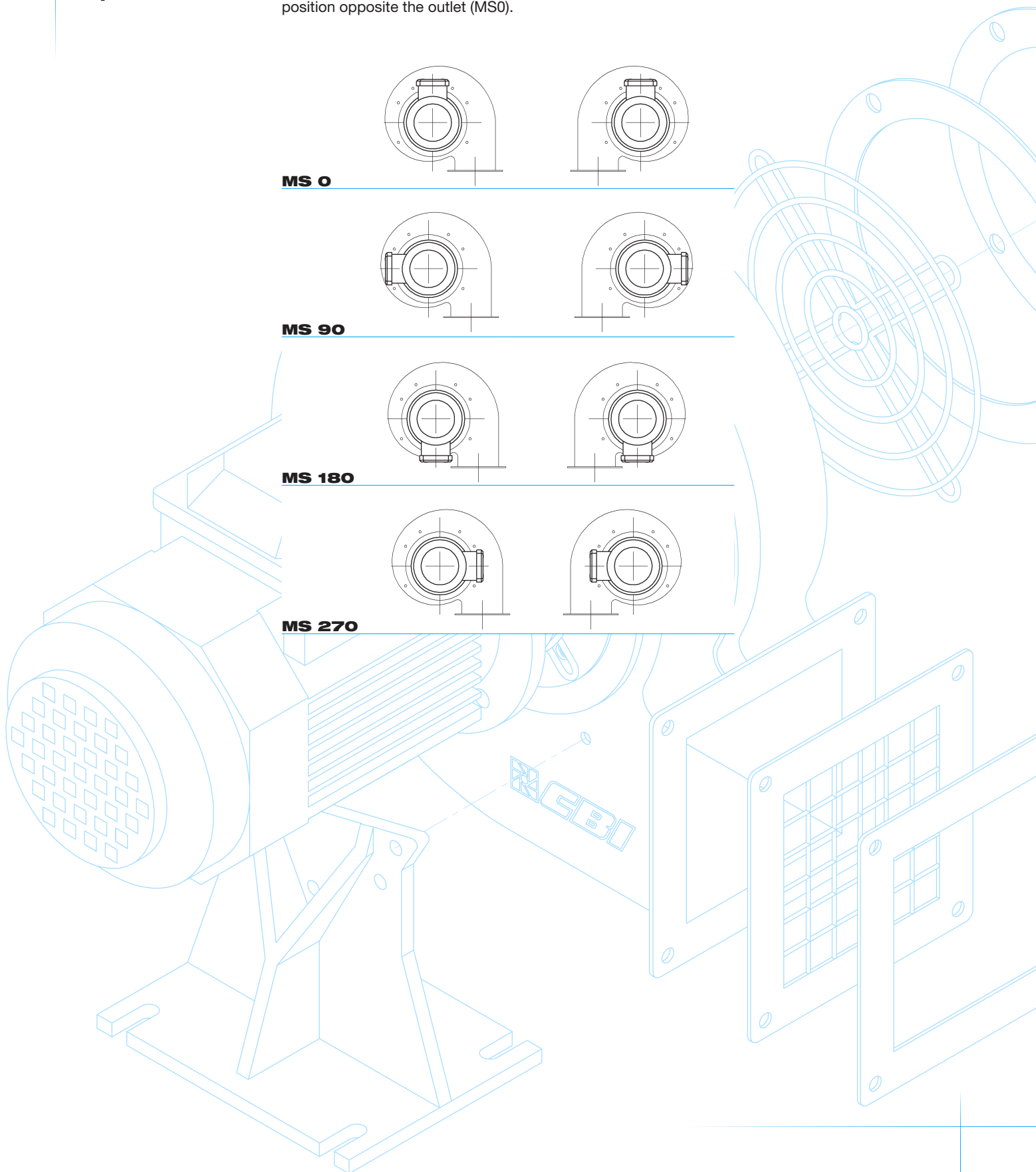
MS 90



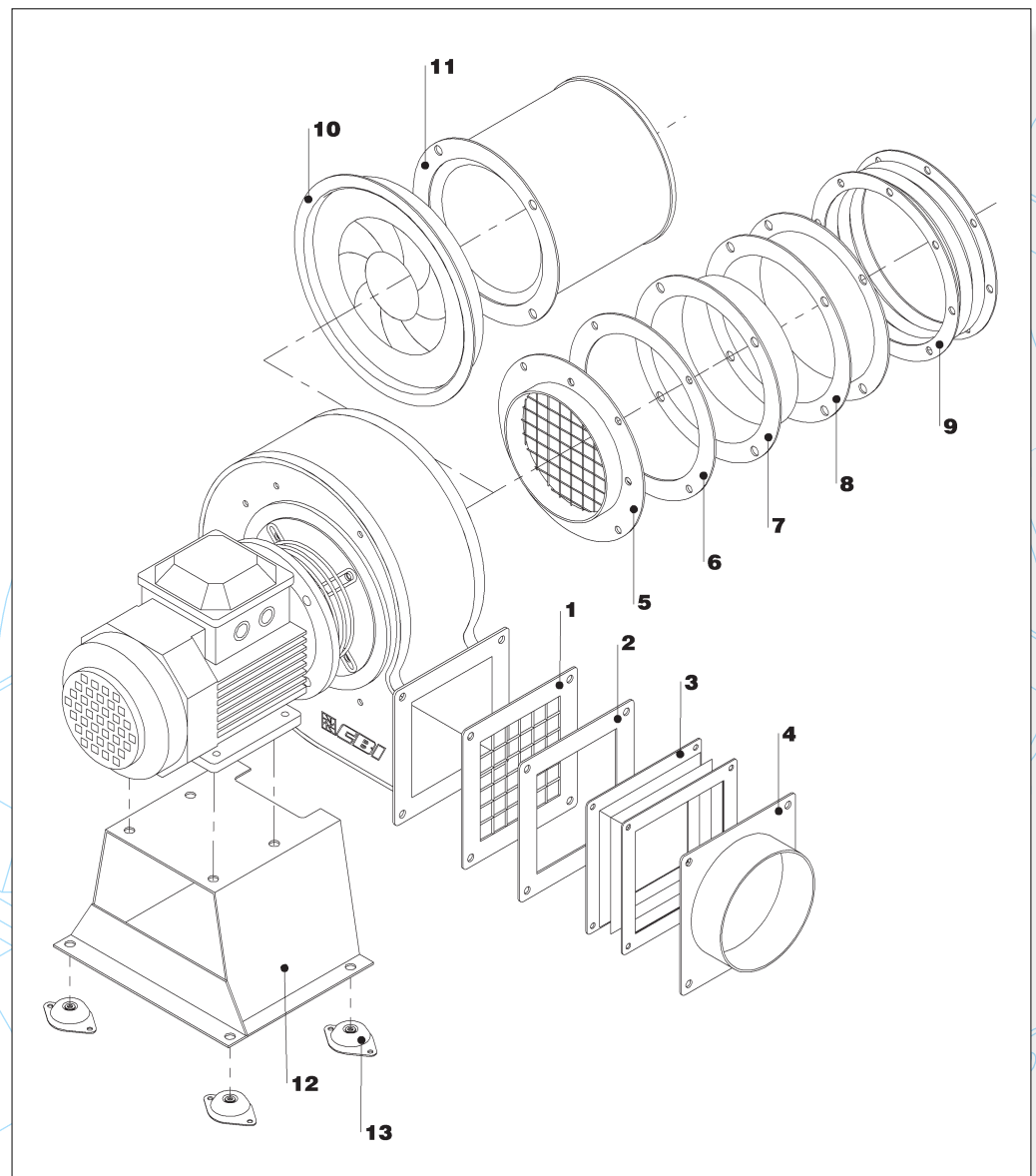
MS 180



MS 270

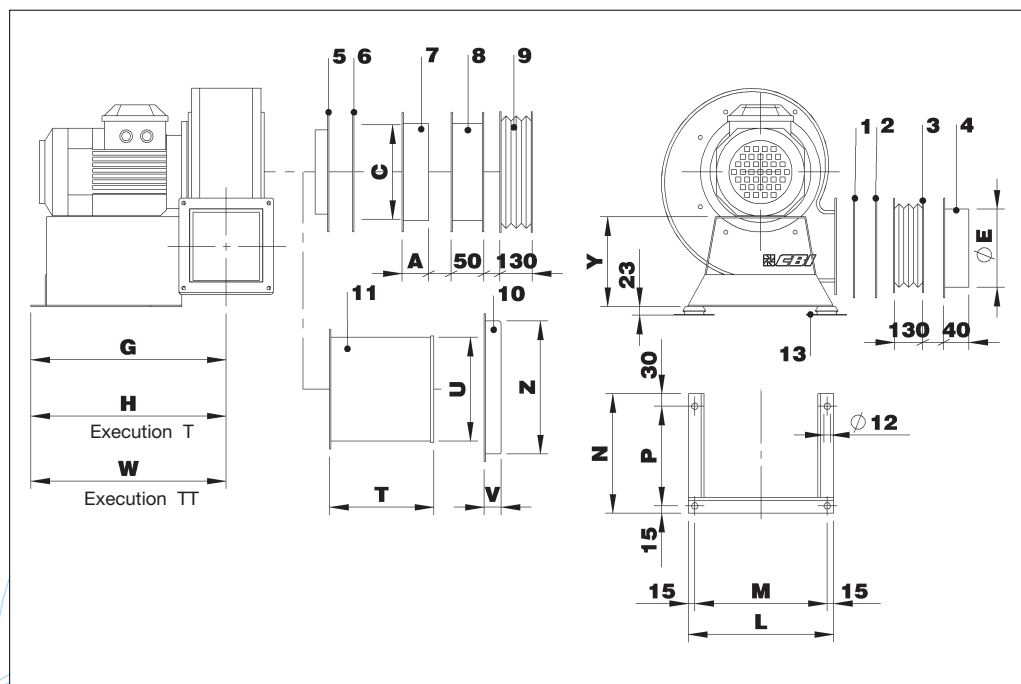


Accessories



1. Outlet screen
 2. Outlet counterflange
 3. Outlet flexible connection
 4. Smooth outlet spigot
 5. Inlet screen*
 6. Inlet counterflange
 7. Smooth inlet spigot
 8. Flanged inlet spigot**
 9. Inlet flexible connection
 10. Diaphragm damper
 11. Inlet filter
 12. Base frame**
 13. Rubber Isolators
- * Always included
 ** Always included in execution -TT-

Accessory dimensions



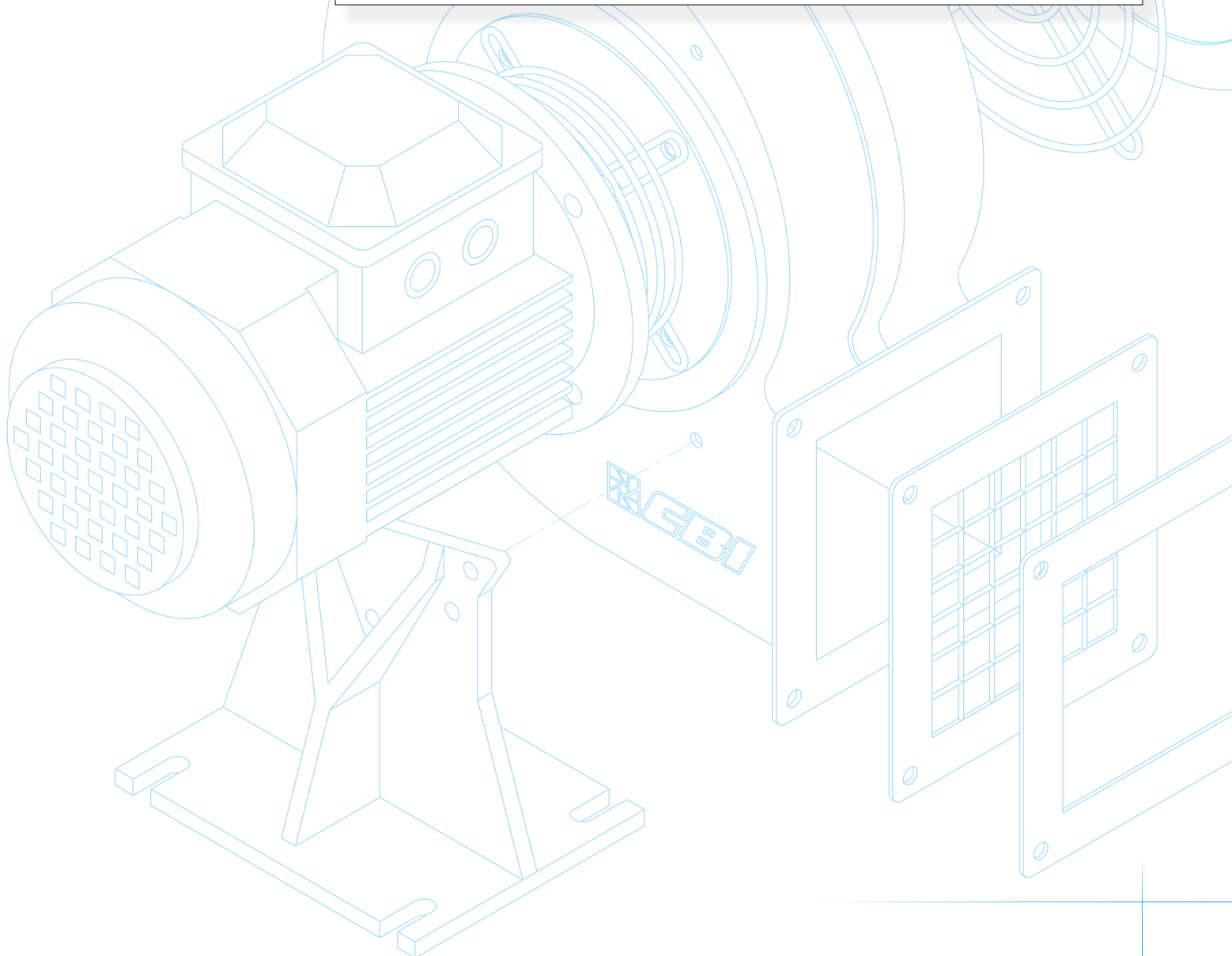
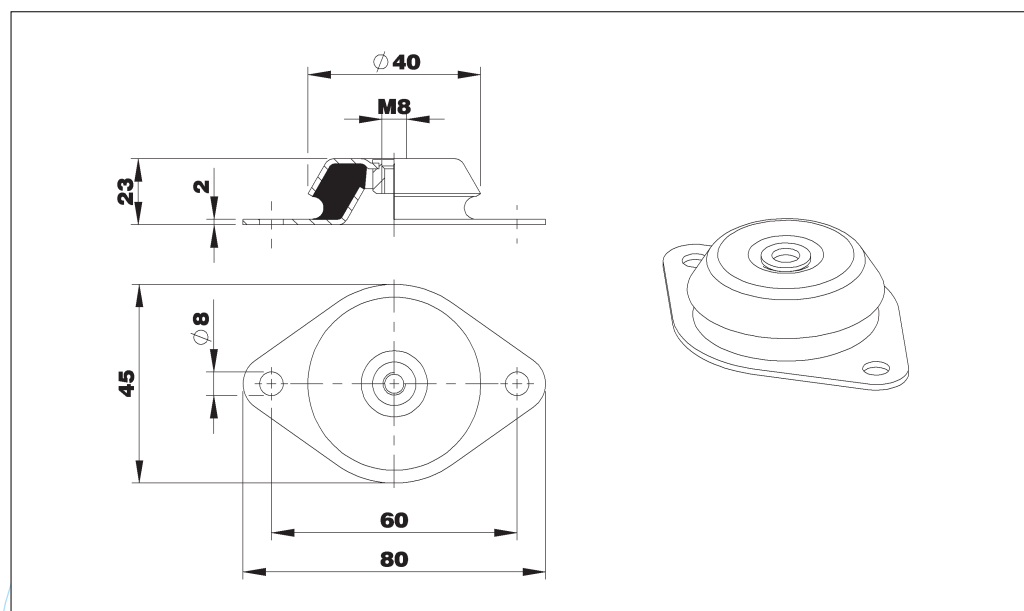
1. Outlet screen
2. Outlet counterflange
3. Outlet flexible connection
4. Smooth outlet spigot
5. Inlet screen*
6. Inlet counterflange
7. Smooth inlet spigot
8. Flanged inlet spigot**
9. Inlet flexible connection
10. Diaphragm damper
11. Inlet filter
12. Base frame**
13. Rubber Isolators

* Always included

** Always included in execution -TT-

VRP	A	C	E	G	H	L	M	N	P	T	U	V	Z	W	Y
20	40	150	130	312	362	290	260	230	185	120	180	30	288	392	185
25	20	200	160	368	418	400	370	280	235	-	-	-	-	448	250
28	20	200	160	368	418	400	370	280	235	-	-	-	-	448	250
30	40	240	175	365	415	400	370	280	235	-	-	-	-	445	250

Rubber Isolators



CBI Group Products Range

Axial Fans



GAV/GAX
300.000 m³/h
1.300 Pa



EFA
480.000 m³/h
1.800 Pa



AP
35.000 m³/h
100 Pa



CBJET
470.000 m³/h
8000 N



GAT
50.000 m³/h
600 Pa



AXL
830.000 m³/h
5.000 Pa

Centrifugal Fans



Ch
600.000 m³/h
4.500 Pa



K
250.000 m³/h
5.500 Pa



ChT
600.000 m³/h
3.000 Pa



SB/MB/XB
350.000 m³/h
20.000 Pa



H
10.000 m³/h
15.000 Pa

Ventilation Products



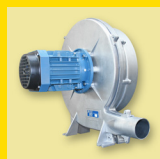
VR
1.500 m³/h
1.600 Pa



VRP
4.500 m³/h
4.300 Pa



APS/APF
2.300 m³/h
3.800 Pa



DT
400 m³/h
4.000 Pa



N
11.000 m³/h
8.000 Pa



CBS
5.000 m³/h
4.000 Pa

Light Ventilation



ARIES
17.500 m³/h
650 Pa



PULSAR
18.500 m³/h
250 Pa

Multistage



BCN
600 m³/h
22.000 Pa



TBS
2.000 m³/h
44.000 Pa



HG
1.900 m³/h
47.000 Pa



SSM/SSB
650 m³/h
60.000 Pa

Heavy Duty Fans



Iskenderun Steel Plant
Turkey



Heidelberg Cement Plant
Sweden



CMC Steel Plant
USA



Tokyo Steel Plant
Japan



Maurice Lemaire Tunnel
France



Edison Power Plant
Italy



Unisteel Steel Plant
Kuwait

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