



# VAKUUM BOHEMIA s.r.o.

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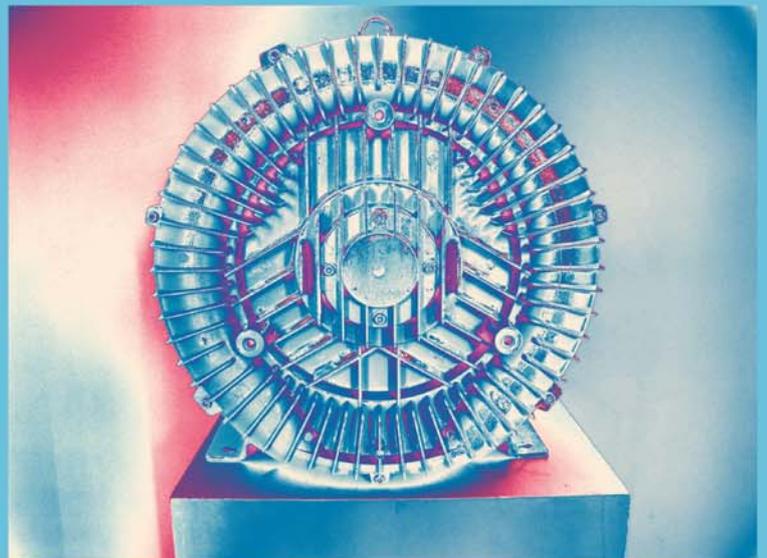
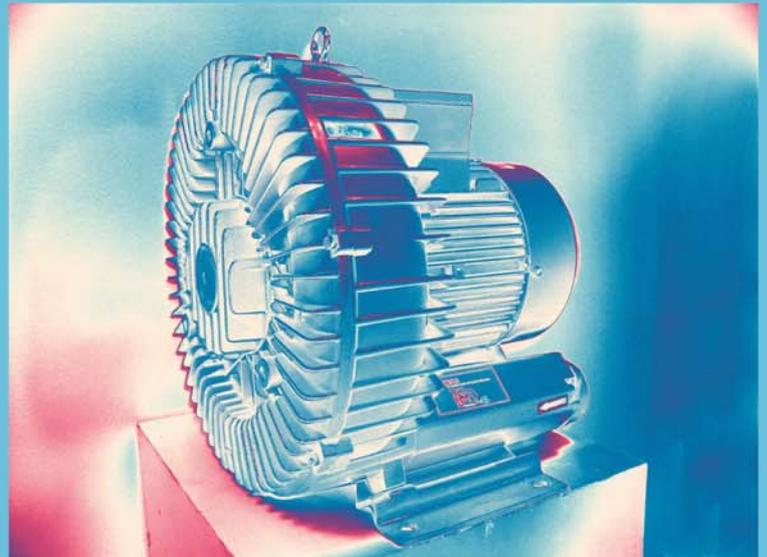
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ISO 9001



SIDE CHANNEL BLOWER **LINE RT**

**RT**  
**RT**  
**RT**  
**RT**



# Technical Data

For 3x208 - 255 / 360-440 V, 50 Hz  
or 220 - 240 V, 50 Hz

**IP54**  
hot class F

## Single stage blower

Type No.	Characteristics curve	Output kW	Stock Voltage A	Maximum Air Flow m <sup>3</sup> /min	Security top limit Vaccum/Pressure mbar	Noise level dB	Connexion G"	Weight kg			
RT-1002	21F	0.18	0.9/0.52	0.8	-50/60	53	1	6.5			
RT-1002-1			2.9/1.45								
RT-1002L	22F	0.2	0.9/0.52		-70/70	50					
RT-1003			1.2/0.69								
RT-1003-1			3.0/1.5		53						
RT-2005	31F	0.4	2.1/1.2	1.4	-110/130	58	1¼	11			
RT-2005-1			5.6/2.8					11.5			
RT-2005L	32F		2.1/1.2					11.5			
RT-2005L-1			5.6/2.8					12			
RT-3009	41F	0.75	3.3/1.9	2.4	-140/140	63	1½	14.5			
RT-3009-1			13/6.5					15			
RT-3009L	42F		3.3/1.9					15			
RT-3009L-1			13/6.5					15.5			
RT-3011	43F	0.9	4.2/2.4		-165/180			15.5			
RT-3015	44F	1.3	4.6/2.7		-175/200			16			
RT-4011	51F	0.9	4.2/2.4	3.6	-130/130	70	2	20.5			
RT-4011-1			8.0					21			
RT-4015	52F	1.3	5.7/3.3					22			
RT-4015-1			9.5		22.5						
RT-4015L			5.7/3.3		22.5						
RT-4015L-1			9.5		22.5						
RT-4018-1	53F	1.5	12.3								23
RT-4019	53F	1.75	6.7/3.9					-210/220			23
RT-4019L	54F		6.7/3.9					23.5			
RT-4026	55F	2.2	7.8/4.5					-220/270			26
RT-5026	61F	2.2	9.7/5.6	5.2	-230/230	72	2	32			
RT-5026-2			16.7					33.5			
RT-5026			9.7/5.6					33			
RT-6037	62F	3.4	12.5/7.2		-260/280	72	2	35			
RT-6037-2			28	36.5							
RT-6037L			12.5/7.2	36							
RT-6046	63F	4	14.3/8.2		-270/330			38			
RT-7063	81F	5.5	21/12	9.2	-270/300	74	2½	78			
RT-8086	82F	7.5	27/15.6		-300/400			82			
RT-9110	91F	9	36/20.8	18.9	-200/200	76	4	100			
RT-9150	92F	13	46.8/27		-300/300			112			
RT-9220	93F	20	66.7/38.6		-350/450			159			

The technical data is based on 1 bar ( abs. ) free atmosphere and 20°C with Inlet air density 1,2 kg/m<sup>3</sup>, includes 10% variance.

# Technical Data

For 3x208 - 255 / 360-440 V, 50 Hz  
or 220 - 240 V, 50 Hz

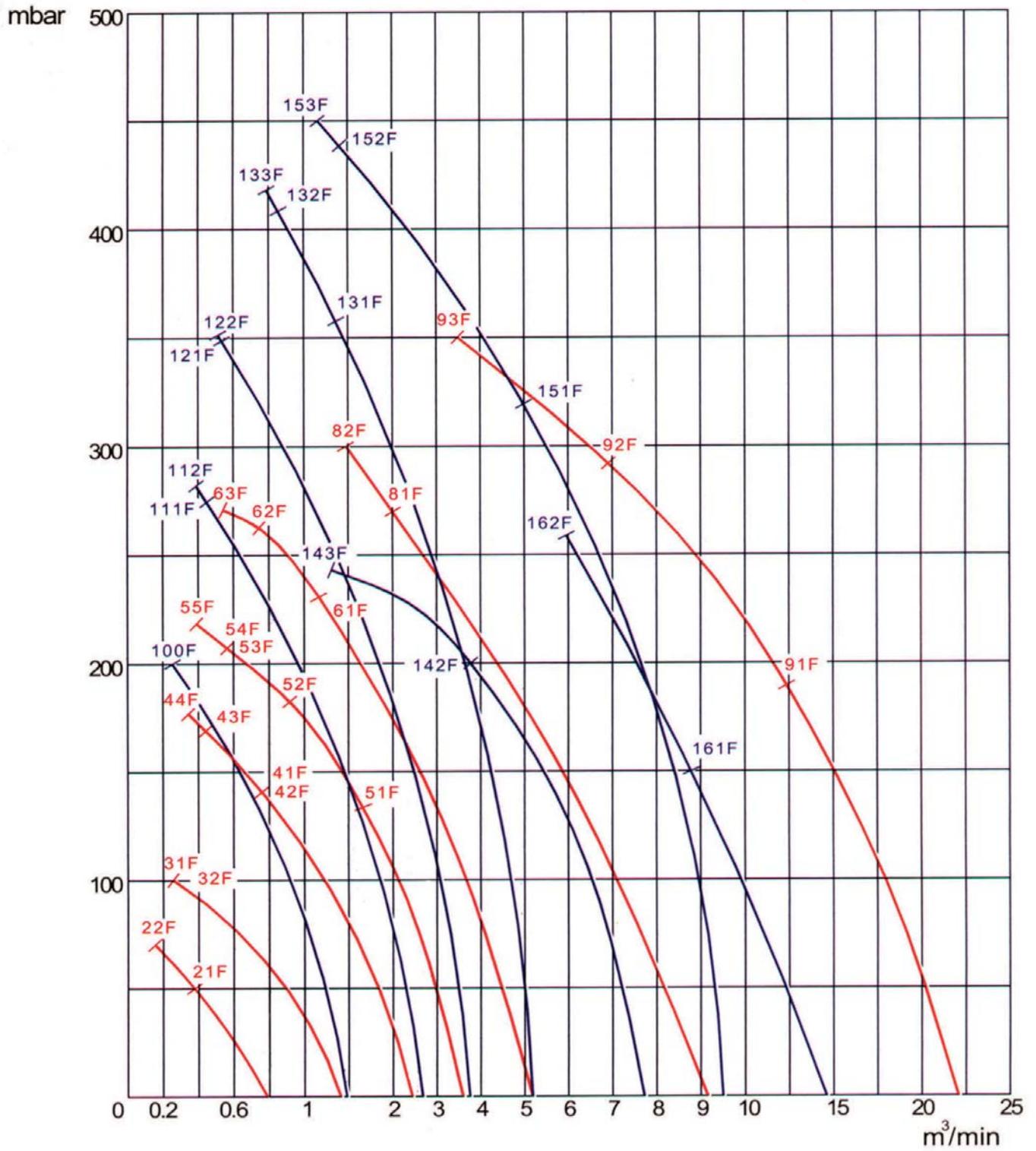
**IP54**  
hot class F

## Double stage blower

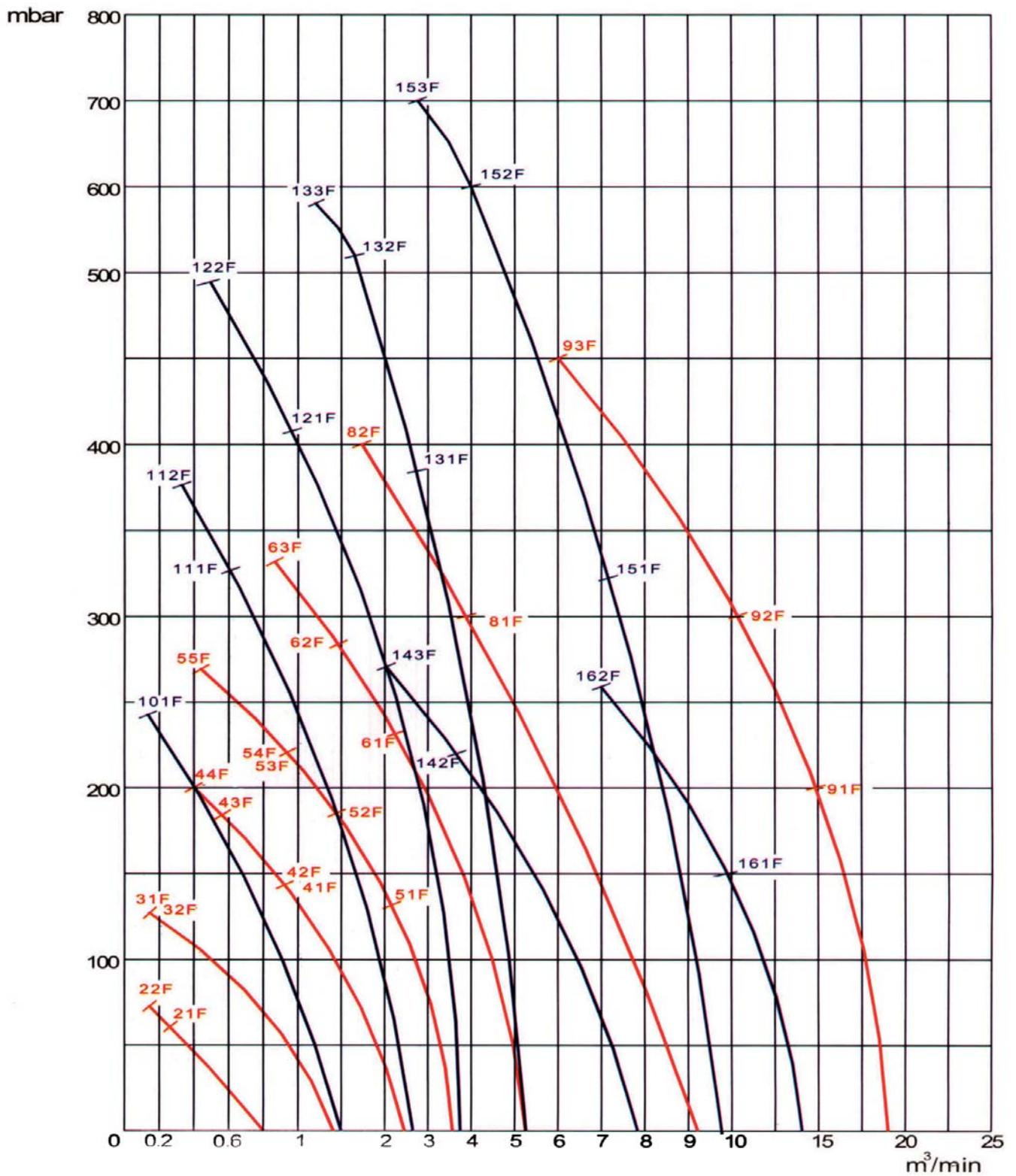
Type No.	Characte- ristics curve	Output kW	Stock Voltage A	Maximum Air Flow m <sup>3</sup> /min	Security top limit Vaccum/Pressure mbar	Noise level dB	Connexion G"	Weight kg
RT-23009	101F	0.75	3.3/1.9	1,5	200/240	60	1¼	17
RT-33019	111F	1.75	6.7/3.9	2,6	275/320	66	1½	25
RT-33026	112F	2.2	7.8/4.5	2,6	280/375	66	1½	28
RT-43037	121F	3.4	12.5/7.2	3,7	345/410	74	2	43
RT-43046	122F	4.0	14.3/8.2	3,7	355/495	74	2	45
RT-63046	131F	4.0	14.3/8.2	5,2	360/380	75	2	55
RT-63063	132F	5.5	21/12	5,2	410/515	75	2	72
RT-63086	133F	7.5	27/15.6	5,2	420/580	75	2	81
RT-64063	142F	5.5	21/12	7,8	200/220	75	2	70
RT-64086	143F	7.5	27/15.6	7,8	240/270	75	2	81
RT-83086	151F	7.5	27/15.6	9,6	320/320	76	2½	112
RT-83130	152F	11	46.8/27	9,6	430/600	76	2½	142
RT-83190	153F	16	65/37.5	9,6	450/700	76	2½	160
RT-84086	161F	7.5	27/15.6	14,2	150/150	76	2½	110
RT-84130	162F	11	46.8/27	14,2	260/260	76	2½	140

The technical data is based on 1 bar ( abs. ) free atmosphere and 20°C  
with Inlet air density 1,2 kg/m<sup>3</sup>, includes 10% variance.

# Suction Curve 50 Hz



# Blowing curve 50 Hz



# Dimensions (mm)

Type - line	RT-1 ...	RT-2 ...	RT-3 ...	RT-4 ...	RT-5 ...	RT-6 ...	RT-7 ...	RT-8 ...	RT-9 ...	RT-23009	RT-33019	RT-33026	RT-43037	RT-43046	RT-63046	RT-63063	RT-63086	RT-83086	RT-83130	RT-83190	RT-64063	RT-64086	RT-84086	RT-84130	
Fig.	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	3	3	3	3	1	1	1	1	
A	200	244	284	332	383	466	560	284	308	364	424	424	424	486	486	424	486	486	424	486	486	424	486	486	
A'								303	316	418	427	427	372	372											
B	214	249	300	338	415	556	530	272	306	371	415	415	556	556	445	556	556	445	556	556	445	556	556	556	
C	70	92	115	122	125	147	210	46	57,5	61	62,5	62,5	73,5	144	125	147	288	125	147	288	125	147	288	288	
D	165	205	225	260	290	365	360	205	225	260	290	290	365	365	290	365	365	290	365	365	290	365	365	365	
E	185	227	253	296	330	422	414	227	253	296	330	330	422	422	330	442	442	330	442	442	330	442	442	442	
F	178		238	300	338	462	663	293	314	386	434	434	590	700	434	590	700	434	590	700	434	590	700	700	
G		119	107	152	157	163	163	117	152	157	157	163	163	313	163	163	313	163	163	313	163	163	313	313	
H	108	130	152	176	196	270	305	130	152	176	196	196	270	270	226	270	270	226	270	270	226	270	270	270	
H'								110	152	141	158	158	190	190											
I	23,5	29		25	25	31	35	29		25	25	25	31	31	25	31	31	25	31	31	25	31	31	31	
J		114	124	134	160	180	211	115	134	160	160	180	180	211	180	180	211	180	180	211	180	180	211	211	
K		83	95	115	140	280	600	83	95	115	140	140	280	280	140	280	280	140	280	280	140	280	280	280	
L	100	108	130	155	180	316	632	108	130	155	180	180	316	316	180	316	316	180	316	316	180	316	316	316	
M	96,5	70,5	68,5	102	92	155		73	68,5	102	92	92	155	265	92	155	265	92	155	265	92	155	265	265	
N	82	72,5	74,5	83	106	26,5	96	137	151	169	202	202	155	155	202	155	155	202	155	155	202	155	155	155	
O	38	40	42,5	44	51	84	95	40	42,5	44	51	51	84	109	81	84	109	81	84	109	81	84	109	109	
P G''	1	1 1/4	1 1/2	2	2	2 1/2	4	1 1/4	1 1/2	2	2	2	2 1/2	2 1/2	2	2 1/2	2 1/2	2	2 1/2	2 1/2	2	2 1/2	2 1/2	2 1/2	
Q	50	64	68	83	83	128	150	64	68	83	83	83	128	128	83	128	128	83	128	128	83	128	128	128	
R	4* Ø12	4* Ø10	4* Ø12	4* Ø14	4* Ø15	4* Ø16	3* Ø16	4* Ø10	4* Ø12	4* Ø14	4* Ø15	4* Ø15	4* Ø16	4* Ø16	4* Ø15	4* Ø16	4* Ø15	4* Ø16	4* Ø16	4* Ø16	4* Ø15	4* Ø16	4* Ø16	4* Ø16	4* Ø16
S	2,5	2,3	3	4	4	28	2,3	2,3	3	4	4	4	28	28	34	28	28	34	28	28	34	28	28	28	
T					42	42				42	42	42	42	55	42	42	42	55	42	42	42	42	42	55	
U							89	89	105	111	127	127	60	60											
V		140	174	200	240	408	140	140	174	200	240	240	408	408	240	408	408	240	408	408	240	408	408	408	
W		129	156	158	172	263	192	192	238	258	268	353	392	397	353	392	397	353	392	397	353	392	397	397	
X		1/2"	1/2"	1/2"	3/4"	3/4"	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"	1"	3/4"	3/4"	1"	3/4"	3/4"	1"	3/4"	3/4"	1"	1"	

Fig. 1

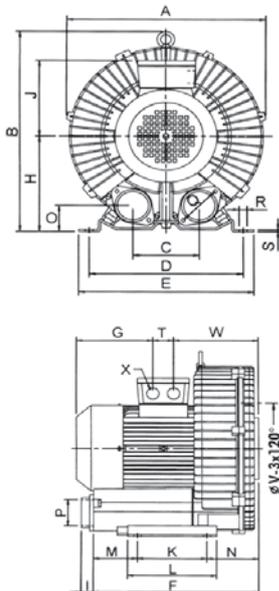


Fig. 2

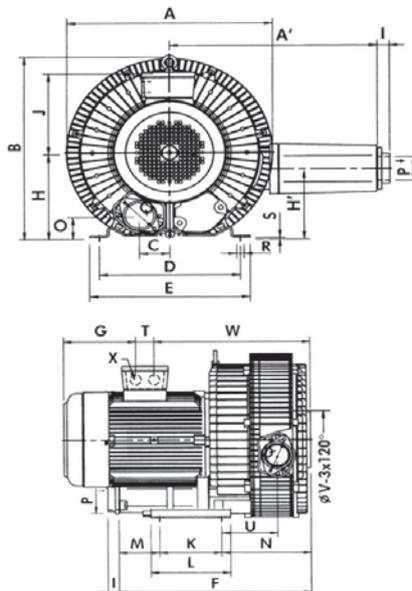
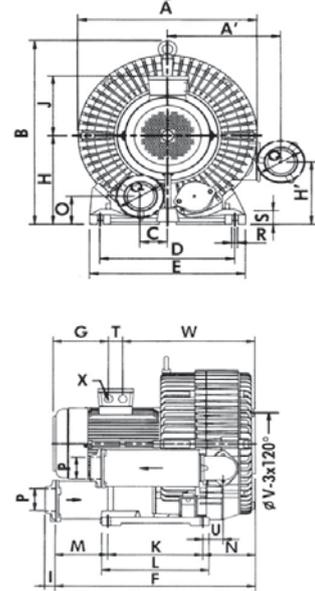


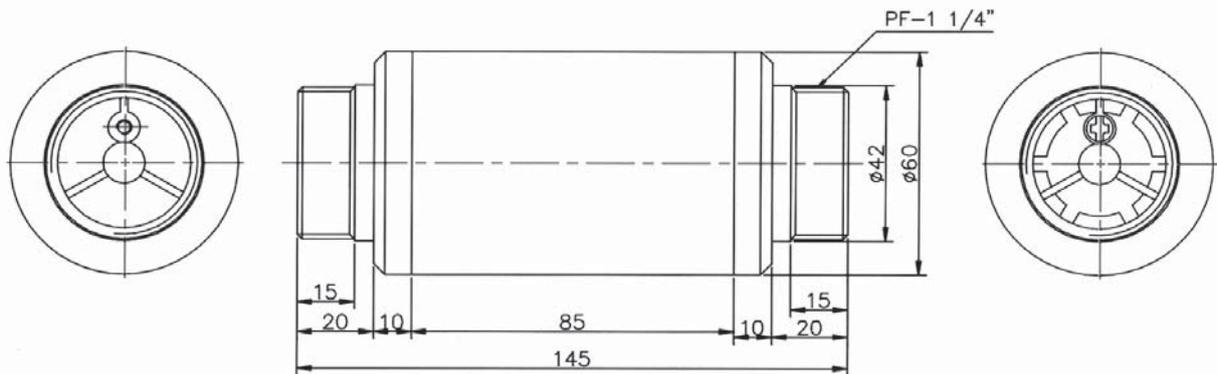
Fig. 3



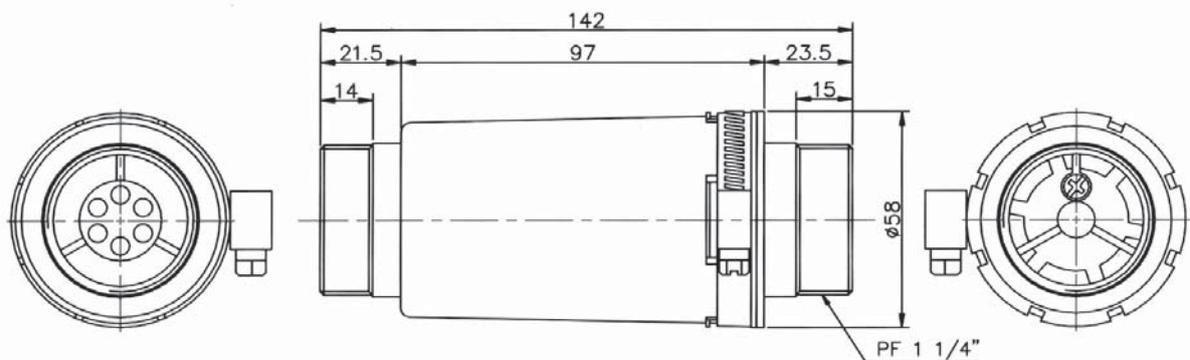
# Adjustable pressure and vacuum relief valve

Type	Concept	Screw	Range
RV-03	PVC	G-1 1/4"	0-300 mbar
RV-36	PVC	G-1 1/4"	300-600 mbar
RV-A03	Al	G-1 1/4"	0-300 mbar
RV-A36	Al	G-1 1/4"	300-600 mbar

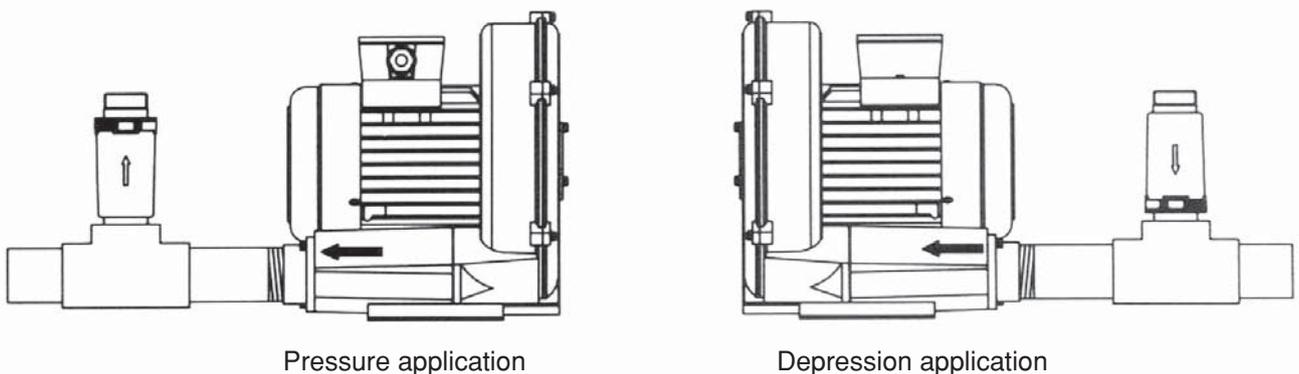
Relief Valve AL



Relief Valve PVC



Pressure and vacuum relief valve shall be installed to protect motor



# Side Channel Blower Construction

## Motor

Vakuu Bohemia blowers are driven by 2-pole motor with protection and insulation class F for 2 Horse power and below, and insulation class H for 3 Horse power and above. Ce mark, approval are acquired.

## Shaft Seal

Maintenance-free Shift seal separated the motor from the impeller.

## Casting

Compact and Slid, The part for the impeller and the motor are individual.

## Silencer

The inlet and outlet are constructed as silence.

## Instruction for Operation

Currency consumed would be increased following the raising of vakuu and pressure. Connector would be triplex when currency instillation is too high. To prevent over load is to install a pressure relief valve on the inlet or the outlet under usány of limited ampére and over load protektor.

## Selection Example

1. Be sure of application on static pressure and air volume efore usány performance table.
2. 208.255/360-440V is standart. Specify when requiremenr is different.

## Easy to Install

Vakuu Bohemia blower really is a komplete unit ready for immediate installatiom ether as a vakuu pamp or as acompressor. The unit can be mounted in any position, horizontally or vertically.

## High Reliability

Compared with the other brabd blowers, Vakuu Bohemia blower has the high-developed design which results in a pump construction with one noviny part, a feature ensuring maximum operating at each end of the Shift outsider the dumping chamber.

The advantages are:

- Higher pressure ratios achievable
- Cooler bearing temperature
- Longer grease life
- Easier Access for maintenance

## Low Noise Level

The use of direkt-driving Vakuu Bohemia low-noise motor and integral silencers ensure a low noise level.

## Model of Operation

Vakuu Bohemia blower includes an impeller and a side channel formel with a semi-circular side wall and having an inlet and outlet. As the impeller rotates, the gas between the impeller blades is radically and circumferentially accelerated and pushed into the side channel. Here i tis compressed and forced back towards the impeller blades where i tis again radically and circumferentially accelerated. I tis thus transported slony a siral path through the impeller and side channel, until it reaches the point where the side channel is connected to the discharge flance. Here the gas is discharge.

## No Oily Odors

The impeller rotates with absolutely no contact between it and the housing. This means no lubrication is required, gurenteeing 100% oil-free operetaion.

## High Efficiency

Under serious QC kontrol and with over many years experience, the perts used in Vakuu Bohemia blower are of top duality and all motors are TEFC and insulation class F is for 2 Horse power and below, and insulatiom class H is for 3 Horse power and above. The pump is separated form the motor mainte-nance-free seal.