



RING BLOWER

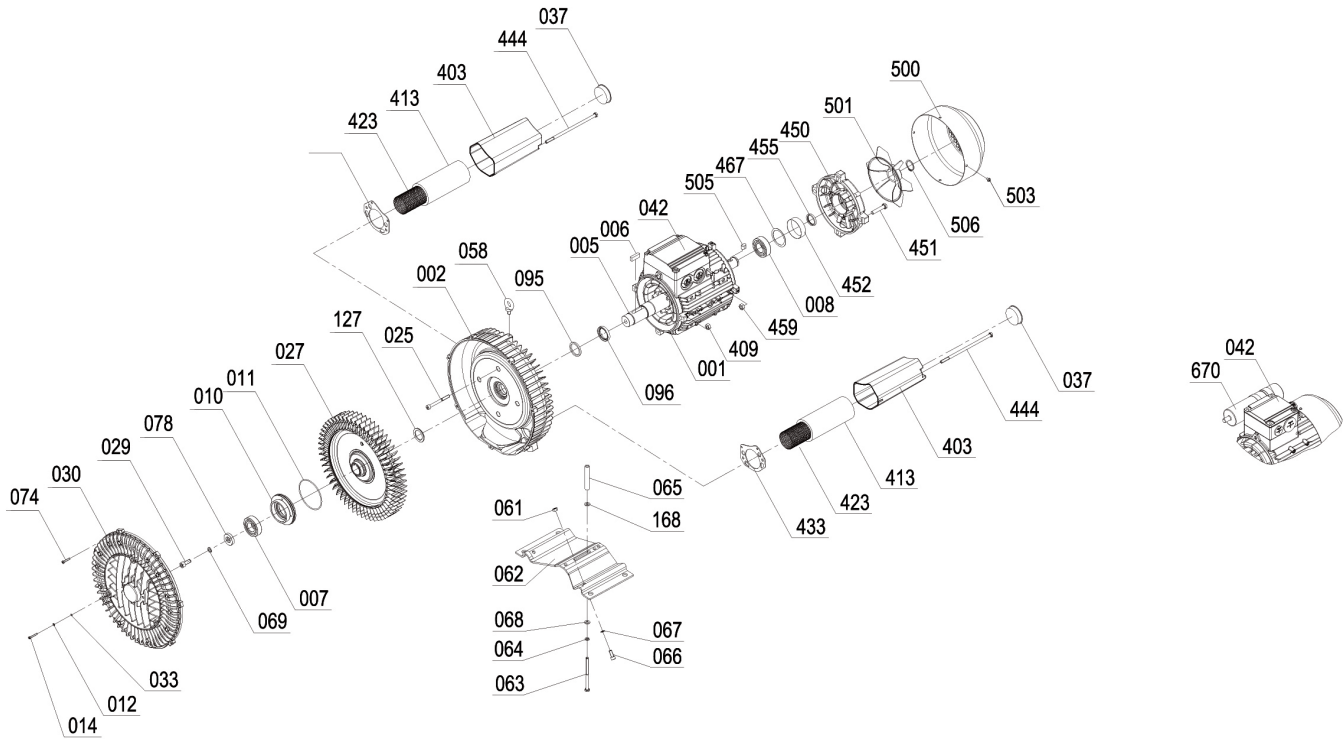
TURBO BLOWER

**พัดลมดูด - เป่าอากาศ
สำหรับใช้ในงานอุตสาหกรรม**

**ตัวหล่อ & ใบพัด
ทำจากเหล็ก & อลูมิเนียม
แข็งแรงทนทาน**



SPARE PART LISTS



No.	Description
001	Motor housing complete
002	Blower housing
005	Motor rotor
006	Parallel key
007	Deep groove ball bearing
008	Deep groove ball bearing
010	Bearing cover complete
011	O-ring
012	Washer
014	Screw
025	Screw
027	Impeller
029	Screw
030	Blower cover
033	O-ring
037	Cap
042	Terminal box, complete
058	Lifting eye bolts
061	Square nut
062	Base
063	Screw
064	Spring lock washer
065	Sleeve
066	Screw
067	Spring lock washer
068	Washer

No.	Description
069	Spring lock washer
074	Screw
078	Washer
095	Felt ring
096	Rotary shaft lip type seal
127	Washer
168	Washer
403	Silencer housing
409	Nut
413	Silencer inset
423	Net pipe
433	gasket
444	Screw
450	End shield
451	Screw
452	Rotary shaft lip type seal
455	Spring strap
459	Mut
467	Spring lock washer
500	Fan cowl
501	External fan
503	Screw
505	Parallel key
506	Retaining ring
670	Capacitor

PRODUCT INTRODUCTION

Operating principle

The blower include an impeller and a side channel formed with a semi-circular side wall, having an inlet and outlet. As the impeller rotates, the air between the impeller blades is radially and circumferentially accelerated and pushed into the side channel. Here it is further compressed and forced back towards the impeller blades where the air is further accelerated. As air transported along a spiral path through the impeller and side channel, each impeller blade increases the compression and acceleration unit the air reaches the point where the side channel is connected to the discharge flange, where it is discharged. This type of blower is also referred to by other such as Regenerative blower, Ring compressor, Side channel blower or Vortex blower.

The ring blower or exhauster increases the pressure of the aspirated gas by the creation, in the peripheral torodial channel, of a series of vortexes caused by the centrifugal thrust of the impeller. While the impeller is rotating, the vanes force the gas forward and, because of the centrifugal thrust, outwards, producing a helical motion. During this motion, the gas is recompressed repeatedly with a consequent linear pressure increase along the length of the channel.

Applications and advantages

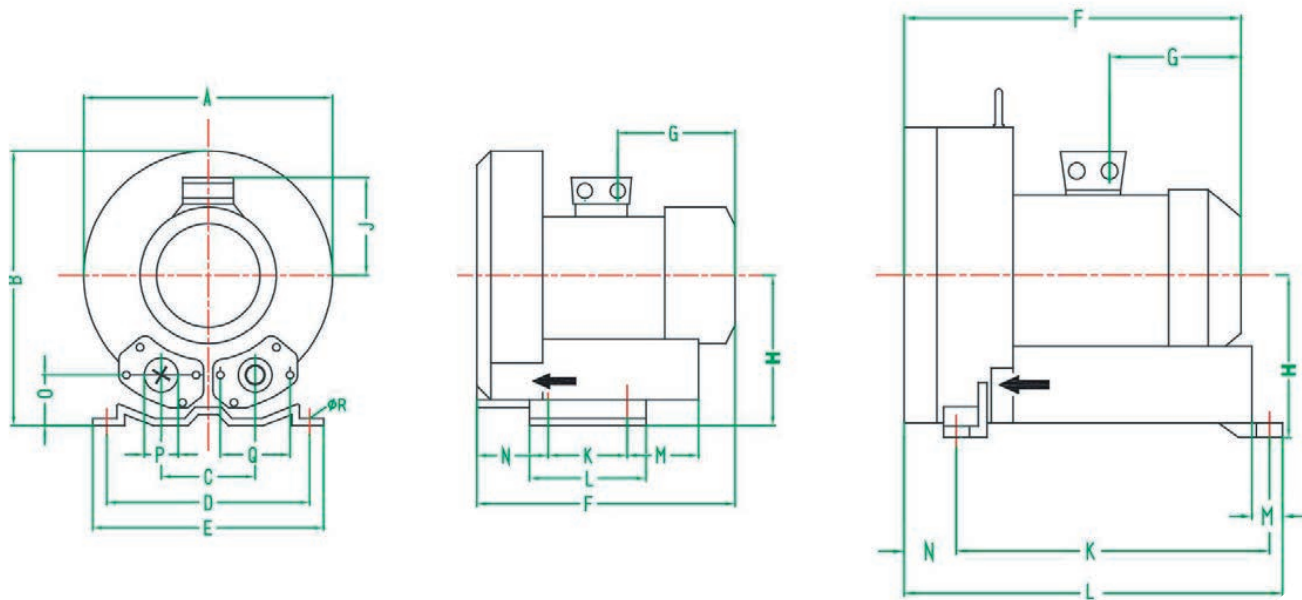
Ring blowers are suitable for all those applications requiring considerable higher pressures than that which can achieved using centrifugal fan. Side channel exhausters are used in all those applications requiring an operating vacuum higher than one achievable by a fan, but not high as to require the use of a vacuum pump. The rotating parts are not in contact with the casing. There is there is therefore no friction during operation and thus no inter lubrication is necessary. The gas moving through the machine there fore remains uncontaminated and completely oil-free. The other main feature are:

- Beautiful surface
- Easy installation
- Low noise level
- No vibration and therefore complete dynamic stability
- Pulsation free discharge
- Minimal maintenance
- Higher pressure ratios
- Cooler running bearings
- Long grease life
- Simple maintenance
- 100% oil free air
- Suitable to environment protection
- Small dimension

NORCE 2 KR types can be applied both as vacuum pump and compressor in continuous operation over the total stated performance curve range. The motors are available as standard for the input voltage range of 50 and 60 Hz and for protection category IP 54 as well as approved for CE and ROHS.

This motors are designed according to the DIN EN 60034/IEC 34 - 1 and temperature class F. For the three phase machines the tolerances +/- 10% for fixed voltage and for +/- 5% voltage range. The single phase machines are designed with a +/- 5% tolerances. If only 90% of the maximum allowed pressure will be used for continuous operating then. The allowed voltage range add to +/- 10% the frequency tolerances is maximum +/- 2%

2KR single stage ring blower models and performance (IP54 50/60 Hz three phase)									
MODEL	Freq. Hz	Output Power Kw	Voltage V	Rated Current A	Max Airflow M3/h	Max Static Suction mbar	Max Static Pressure mbar	Moise dB(A)	Weight Kg
2KR010-7AH16	50	0.2	200 - 240 ▲ /345 - 415 Y	1.75 ▲ /1.0 Y	55	-80	90	46	5
	60	0.23	220 - 275 ▲ /380 - 480 Y	1.75 ▲ /1.0 Y	68	-110	120	48	5
2KR210-7AH16	50	0.4	200 - 240 ▲ /345 - 415 Y	2.6 ▲ /1.5 Y	80	-120	130	53	10
	60	0.5	220 - 275 ▲ /380 - 480 Y	2.6 ▲ /1.5 Y	98	-150	160	56	10
2KR410-7AH16	50	0.85	200 - 240 ▲ /345 - 415 Y	4.0 ▲ /2.3 Y	145	-160	160	63	16
	60	0.95	220 - 275 ▲ /380 - 480 Y	3.85 ▲ /2.25 Y	175	-160	160	64	16
2KR510-7AH26	50	1.6	200 - 240 ▲ /345 - 415 Y	7.5 ▲ /4.3 Y	210	-200	190	64	23
	60	2.05	220 - 275 ▲ /380 - 480 Y	7.6 ▲ /4.4 Y	255	-220	210	70	23
2KR710-7AH16	50	2.2	200 - 240 ▲ /345 - 415 Y	9.7 ▲ /5.6 Y	318	-190	190	69	30
	60	2.55	220 - 275 ▲ /380 - 480 Y	10.3 ▲ /6.0 Y	379	-190	190	72	30
2KR710-7AH26	50	3	200 - 240 ▲ /345 - 415 Y	12.5 ▲ /7.2 Y	318	-260	270	69	36
	60	3.45	220 - 275 ▲ /380 - 415 Y	12.6 ▲ /7.3 Y	376	-240	230	72	36
2KR710-7AH37	50	4	345 - 415 ▲ /600 - 720 Y	9.0 ▲ /5.2 Y	318	-290	360	69	40
	60	4.6	380 - 480 ▲ /660 - 720 Y	9.0 ▲ /5.2 Y	376	-320	310	72	40
2KR810-7AH17	50	5.5	345 - 415 ▲ /600 - 720 Y	12.9 ▲ /7.4 Y	530	-300	300	70	63
	60	6.3	380 - 480 ▲ /660 - 720 Y	12.9 ▲ /7.45 Y	620	-300	280	74	63
2KR810-7AH27	50	7.5	345 - 415 ▲ /600 - 720 Y	16.7 ▲ /9.6 Y	530	-320	430	70	66
	60	8.6	380 - 480 ▲ /660 - 720 Y	17.3 ▲ /10.0 Y	620	-350	400	74	66
2KR910-7AH17	50	12.5	345 - 415 ▲ /600 - 720 Y	28.0 ▲ /16.2 Y	1050	-290	280	74	116
	60	14.5	380 - 480 ▲ /660 - 720 Y	29.0 ▲ /16.7 Y	1250	-270	260	79	116
2KR910-7AH37	50	18.5	345 - 415 ▲ /600 - 720 Y	37.0 ▲ /21.0 Y	1050	-360	460	74	126
	60	21.3	380 - 480 ▲ /660 - 720 Y	39.0 ▲ /22.5 Y	1250	-380	420	79	126
2KR single stage ring blower models and performance (IP54 50/60 Hz three phase)									
2KR010A01	50	0.2	200 - 240 V	1.43	40	-60	70	50	6
	60	0.23	200 - 240 V	1.3	50	-70	80	51	6
2KR210-7AA11	50	0.37	200 - 240 V	2.7	80	-110	110	53	11
	60	0.45	200 - 240 V	3.0	96	-130	140	56	11
2KR410-7AA11	50	0.80	200 - 240 V	5.2	145	-150	160	63	15
	60	0.90	200 - 240 V	5.8	175	-160	140	64	15
2KR510-7AA21	50	1.5	200 - 240 V	9	210	-190	200	64	24

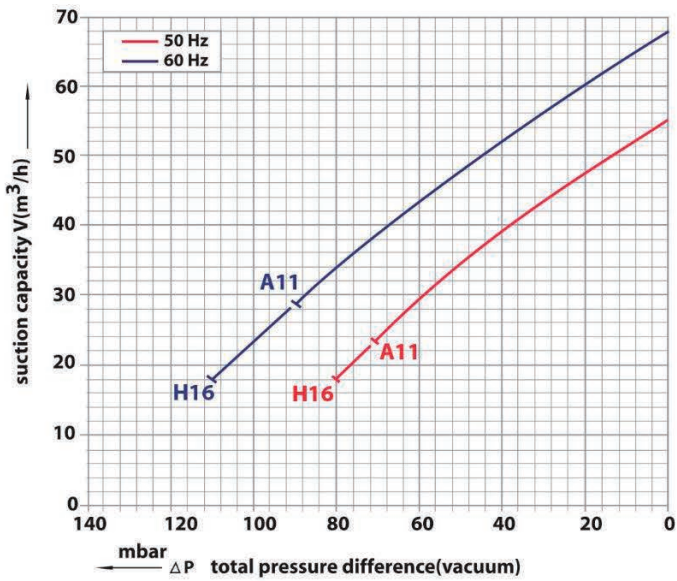


Dimension

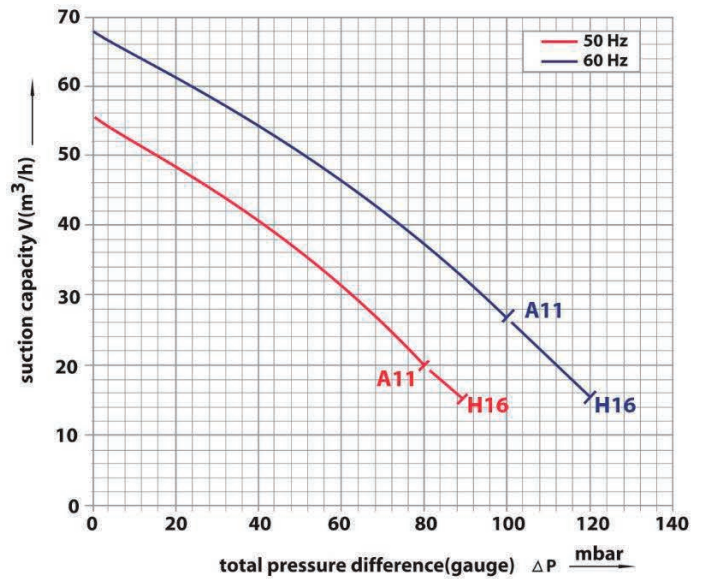
Model	Phase	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	ΦR
2KR010 - 7AA11	1	190	203	72	155	172	242	124	102	101	80	101	108	53	30	G1	46	8.5
2KR010 - 7AH16	3	190	203	72	155	172	242	124	102	101	80	101	108	53	30	G1	46	8.5
2KR210 - 7AA11	1	246	247	90	205	230	256	135	128	111	83	108	75	71	39	G1 1/4	64	10
2KR210 - 7AH16	3	246	247	90	205	230	256	135	128	111	83	108	75	71	39	G1 1/4	64	10
2KR410 - 7AA11	1	286	302	115	225	255	294	156	154	120	95	130	70	75	46	G1 1/2	72	12
2KR410 - 7AH16	3	286	302	115	225	255	292	156	154	120	95	130	70	75	46	G1 1/2	72	12
2KR510 - 7AA21	1	334	337	120	260	295	345	191	175	128	115	155	96	87	48	G2	83	14
2KR510 - 7AH26	3	334	337	120	260	295	346	191	175	128	115	155	96	87	48	G2	83	14
2KR710 - 7AH16	3	382	384	125	290	325	377	191	197	128	140	180	84	109	54	G2	83	15
2KR710 - 7AH27	3	382	384	125	290	325	409	188	197	135	140	180	84	109	54	G2	83	15
2KR710 - 7AH37	3	382	384	152	290	325	432	209	197	148	140	180	84	109	54	G2	83	15
2KR810 - 7AH17	3	451	461	152	356	394	433	226	240	167	170	217	140	124	65	G2 1/2	94	15
2KR810 - 7AH27	3	451	461	152	356	394	433	205	240	167	170	217	140	124	65	G2 1/2	94	15
2KR910 - 7AH17	3	550	569	207	360	415	611	291	300	197	533	644	39	89	92	G4	150	15
2KR910 - 7AH37	3	550	569	207	360	415	611	291	300	197	533	644	39	89	92	G4	150	15

2KR 010 SERIES

Performance curve for vacuum pump

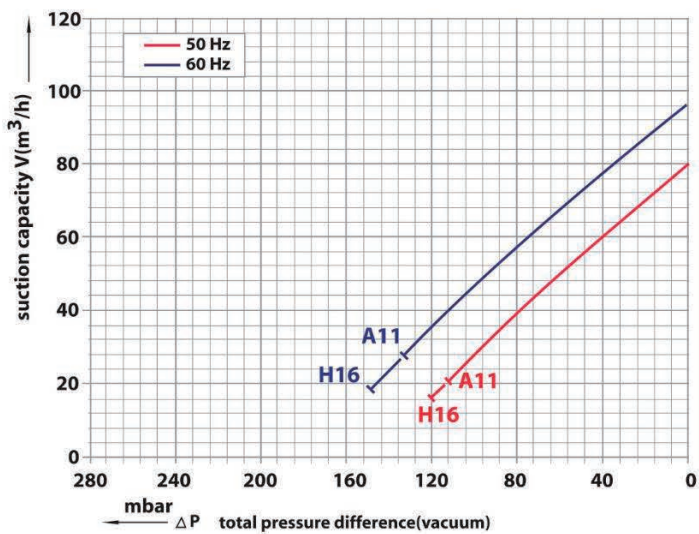


Performance curve for Compressor

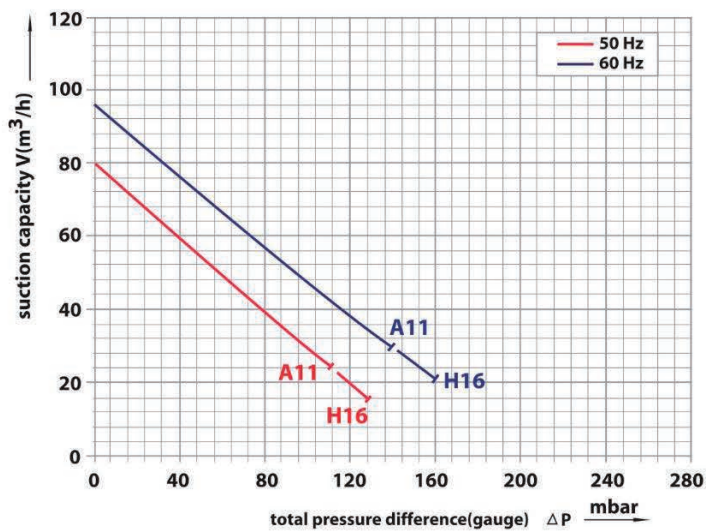


2KR 210 SERIES

Performance curve for vacuum pump

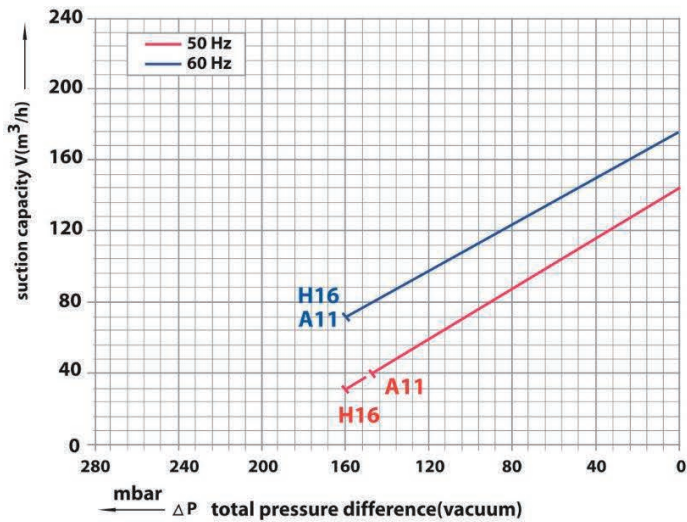


Performance curve for Compressor

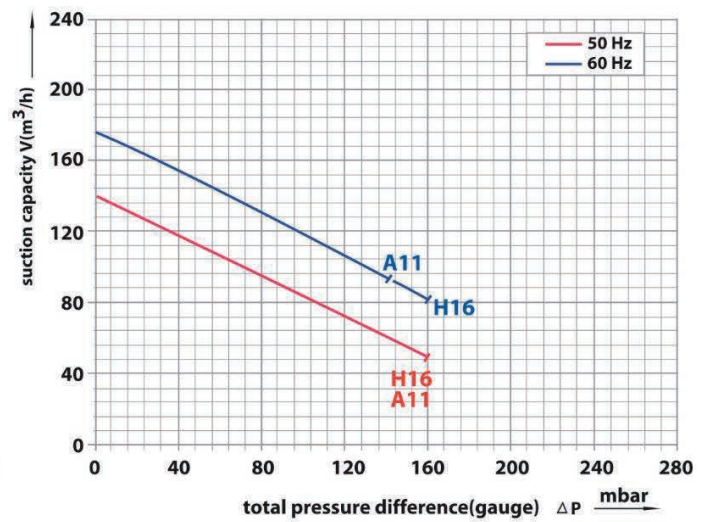


2KR 410 SERIES

Performance curve for vacuum pump

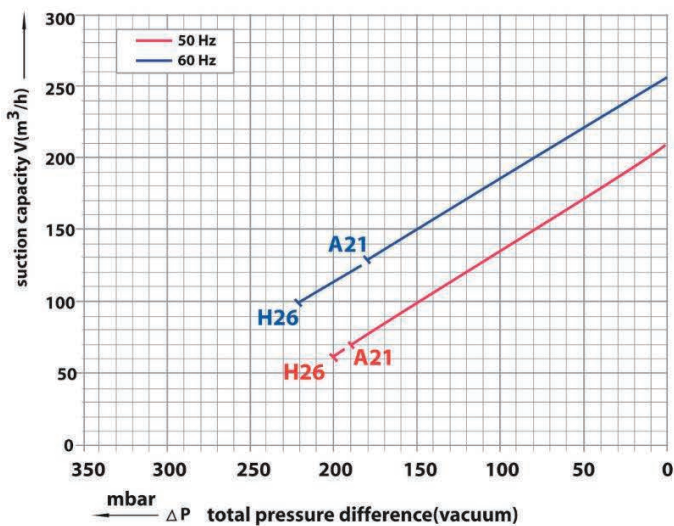


Performance curve for Compressor

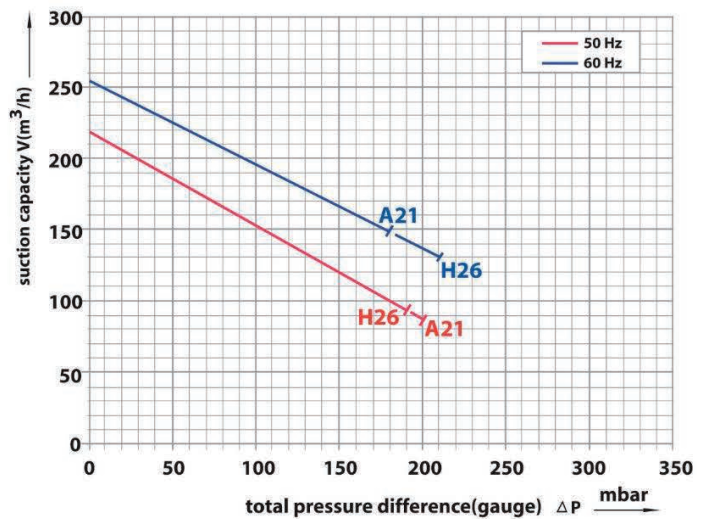


2KR 510 SERIES

Performance curve for vacuum pump

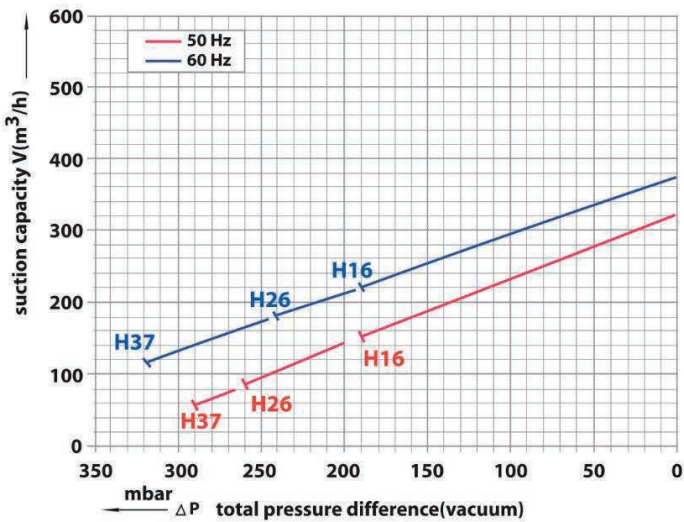


Performance curve for Compressor

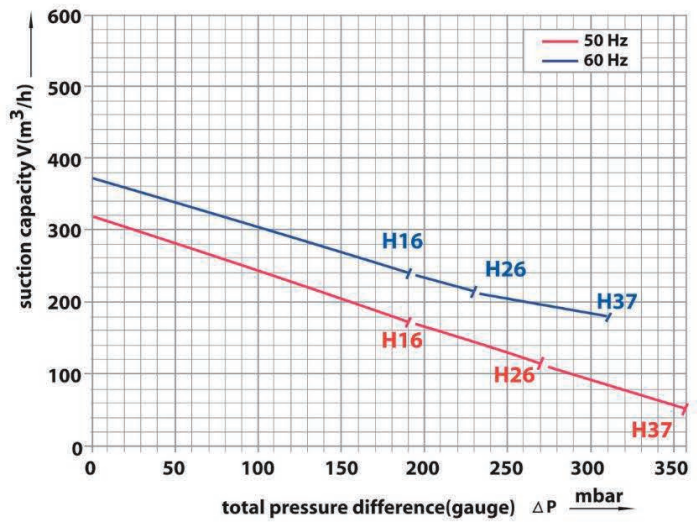


2KR 710 SERIES

Performance curve for vacuum pump

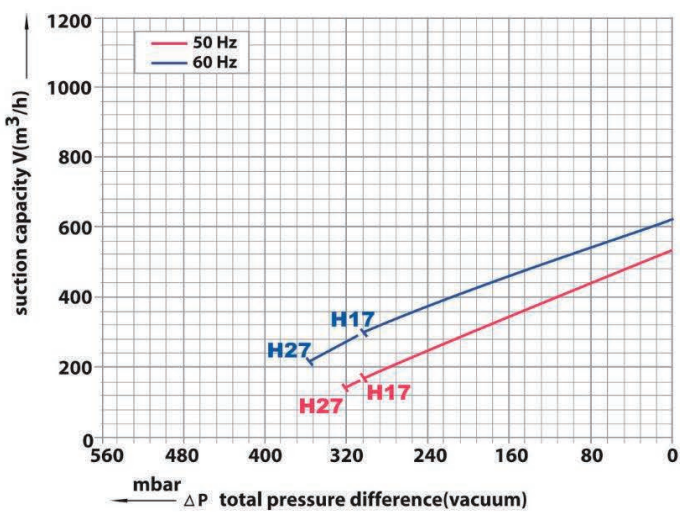


Performance curve for Compressor

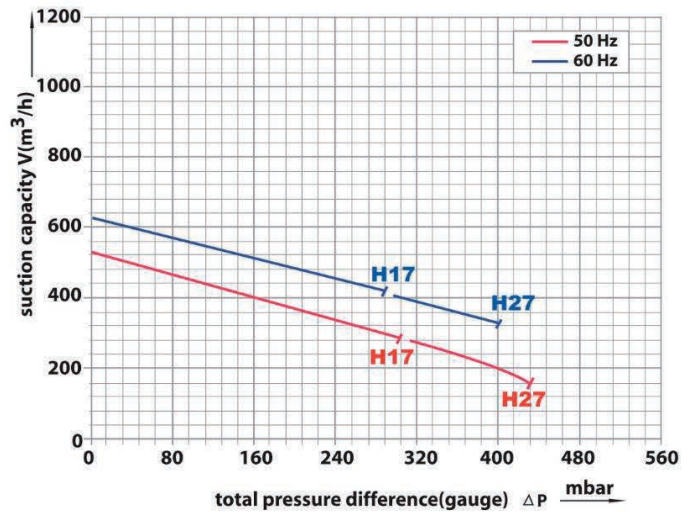


2KR 810 SERIES

Performance curve for vacuum pump

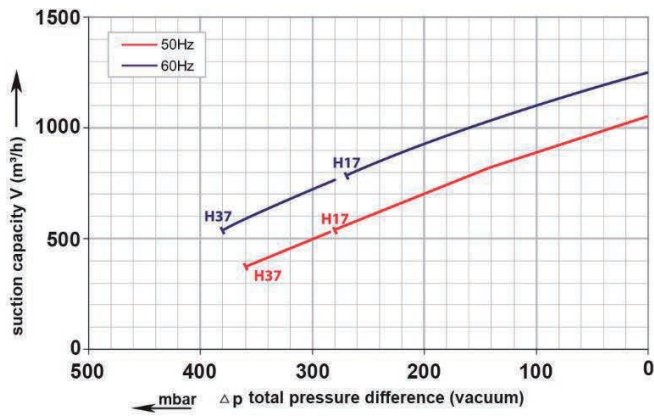


Performance curve for Compressor

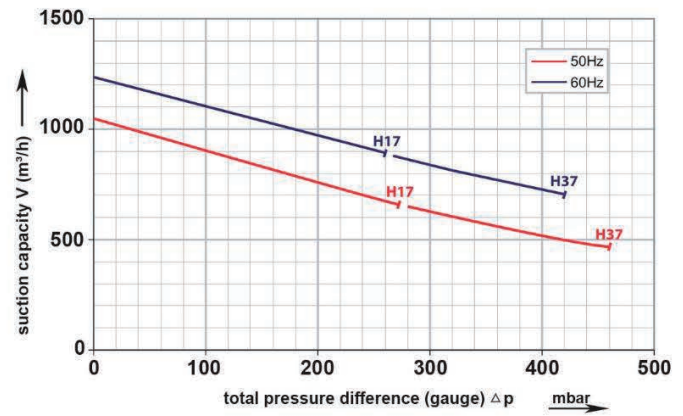


2KR 910 SERIES

Performance curve for Vacuum pump

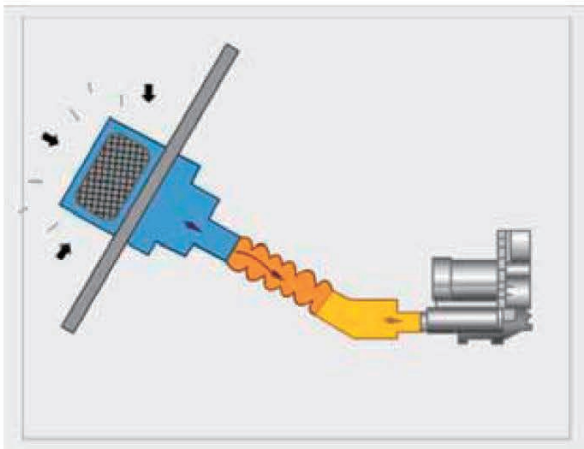


Performance curve for Compressor

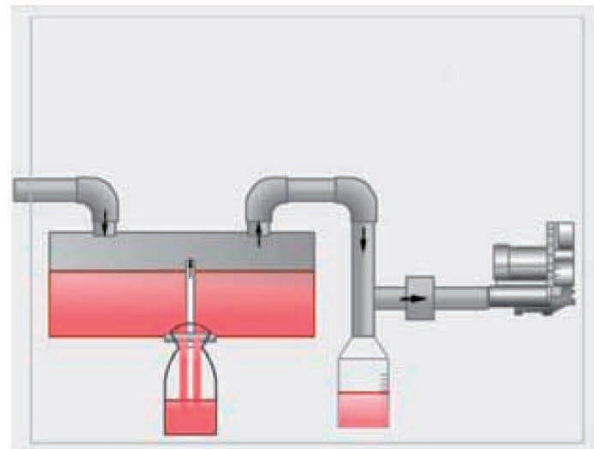


Blower Application (Vacuum)

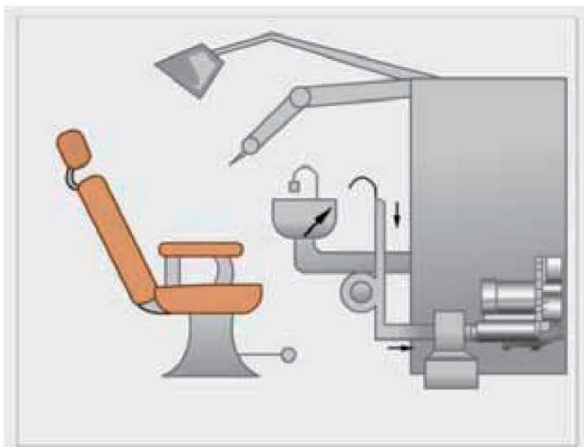
Evaporator



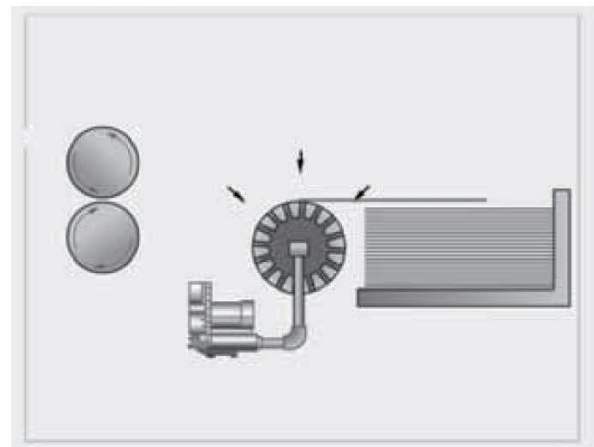
Bottling



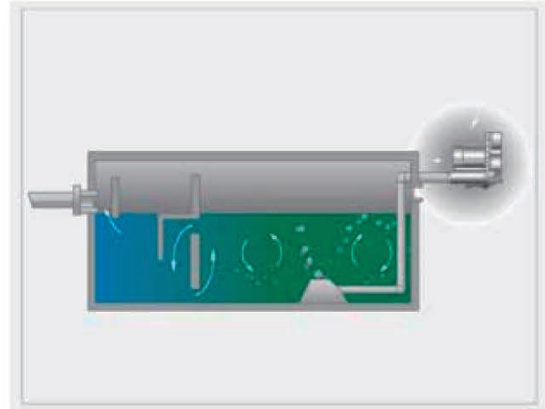
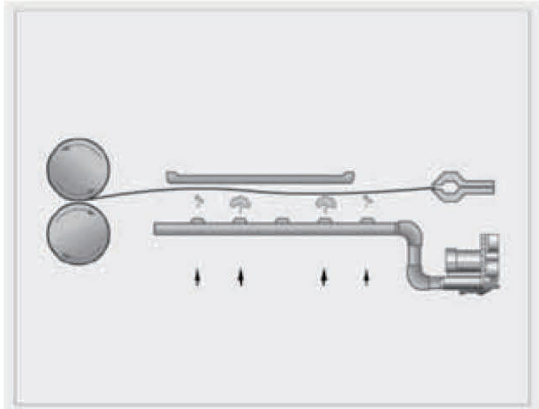
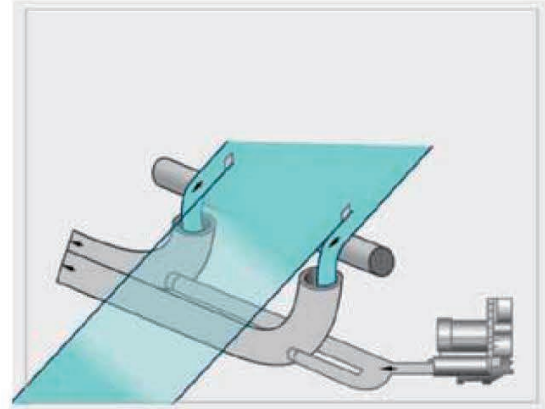
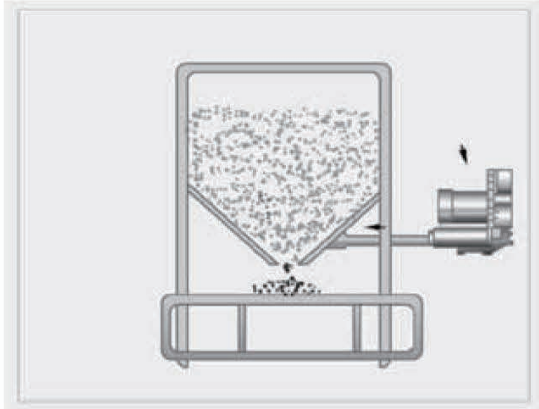
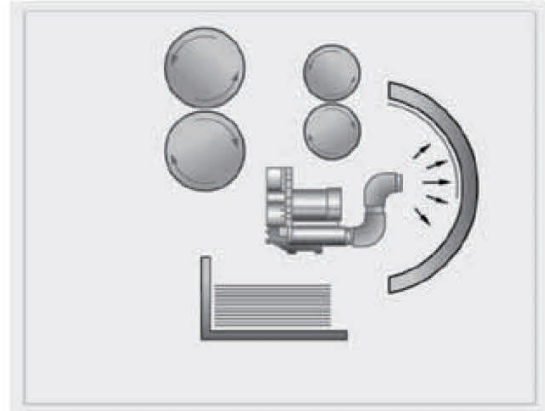
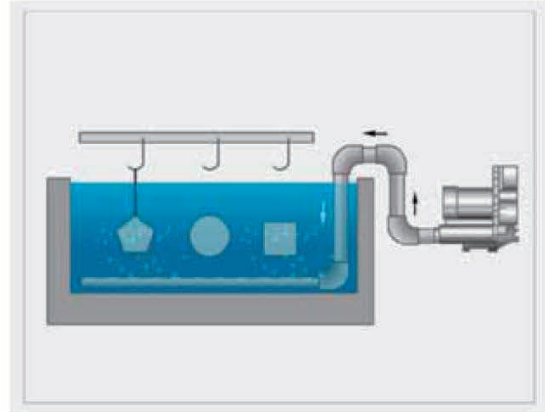
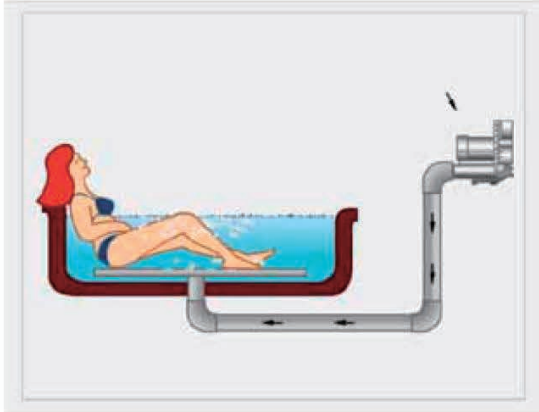
Med suction



Paper holding



Blower Application (Pressure)



RING BLOWER

Applications Drawing

Fuel Injection	Bottle Washing Machine	Ribbon Collecting	Cleaning Nozzle
<p>blower high pressure air fuel</p>	<p>water drop empty bottle blower</p>	<p>cutter wheel blower</p>	<p>blower gray seat water drop print circuit board</p>
Cutting Air-Pad	Feeding Air	Documents Conveying	Electrolysis Mixer
<p>knife paper blower</p>	<p>blower animal dung 1.5 ~ 1.8 cm</p>	<p>examination pharmacy heat cashier blower</p>	<p>blower electrolytic cell</p>
Breeding Pool	Presses Machine	Powder & Granule Conveying	An Incinerator
<p>blower oxygen</p>	<p>blower</p>	<p>granule blower control room</p>	<p>wind knife air blower</p>
Smog Inhale or Blow	Car Washing	Printed Dryer	Blow the Universe After Clean
<p>blower wind knife</p>	<p>blower wind knife</p>	<p>blower adding cooker warm wind</p>	<p>blower wind knife</p>

RING BLOWER

Applications Drawing

Printing Suck	Welding Smog Collecting	Textile Machinery Suck	Photograph
<p>blower print</p>	<p>blower filter filter box exhaust welding rod</p>	<p>yarn dewatering hole blower</p>	<p>blower curved negative plate</p>
Raw Material Conveying	Printing Stabilizing	Duct Collecting	Vacuum Dehydration
<p>blower filter valve air</p>	<p>blower roller sucking</p>	<p>blower filter collecting box</p>	<p>blower spring wheel knife dry sludge filtering gas and water separation</p>
Book Packager	Wasted Ribbon Collecting	Milk Box Feeding	Soybean Curd Machine
<p>cutter support bar ben blower</p>	<p>cloth cut broken suction port release blower</p>	<p>blower</p>	<p>blower</p>
Processing Stabilizing	Smog Sucking inner Tunnel	Ironing Machine	Gas Decomposing
<p>machining processing table blower</p>	<p>tunnel blower</p>	<p>oil pressure cloth blower</p>	<p>barrel blower filter</p>

CENTRIFUGAL BLOWERS - TURBO BLOWERS

Product ID: CX SERIES

● Applications

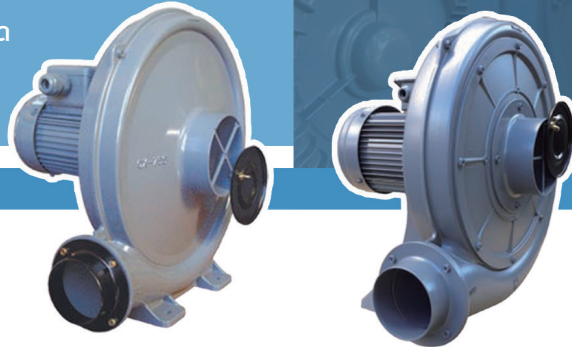
- Printing Machines
- Burning Machines
- Plastic Extruders, Laminating, Film Making Machines
- Uniform Temperature Equipment
- Household Machines
- Dust Collectors
- Textile Machines
- Pollution Machines
- Hot Air Blowers
- Dryers Machines
- Incinerators
- Machinery for the Food and Beverage Industries
- Machinery for Cooling
- Woodworking Machines
- Grain Elevators

Features:

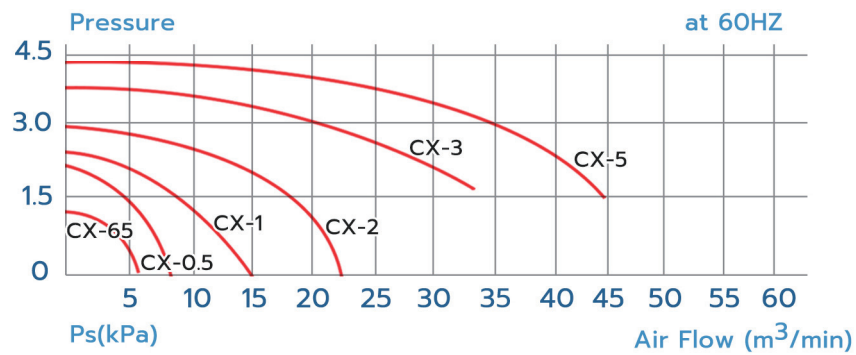
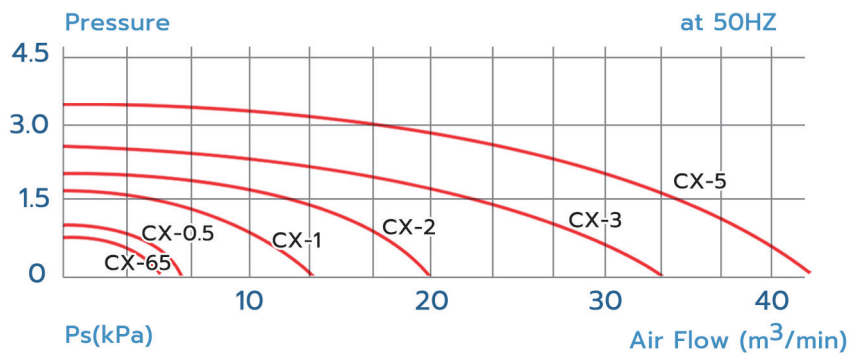
- High pressure. Larger flow. Light weight.
- Cast iron alloy material was Widespread be use, offer light products.
- I.E.C. Designed motor, Squirrel Cage Induction Motors & specially designated shaft can satisfy long-time-continue operation.
- Professional impeller designed, high pressure, larger flow, Low noise, and long life.
- Special air-flow-adjust designs offer stable flows and easily control.
- Full range styles and sufficiently finished products of each model make quickly delivery be possible.

MODEL : CX

อุปกรณ์สร้างแรงลมและแรงดัน
ทำงานด้วยมอเตอร์ไฟฟ้าใบพัดเคลื่อนที่
เพื่อให้แรงลมและแรงดันที่เหมาะสมกับ
การใช้งานในอุตสาหกรรมต่างๆ



Dimensions of Outline
Installation and Connection



at 50/60Hz

MODEL	PHASE	OUTPUT (KW)	VOLTAGE (V)	CURRENT (A)	PRESSURE (Max) (kpa)	AIR FLOW (Max) (m3/min)	IN/OUT LET (mm)		NOISE LEVEL (dB)	WEIGHT (Kg)
							IN	OUT		
CX-65	1Ø 3Ø	0.2	220 220/380	1.5 1.1/0.9	0.7/1.1	4.5/5.3	100	65	65/70	7
CX-0.5	1Ø 3Ø	0.4	220 220/380	2.5 1.9/1.2	1.1/1.6	7/8	100	75	70/75	10
CX-1	1Ø 3Ø	0.74	220 220/380	5 3/1.9	1.7/2.4	13/15	125	100	75/80	16
CX-2	3Ø	1.5	220/380	5.5/3.5	2/3	20/23	125	100	82/90	26
CX-3	3Ø	2.2	220/380	8/5	2.4/3.7	32/37	252	125	87/95	37
CX-5	3Ø	3.7	220/380	13/7.5	3.2/4.4	46/53	252	150	92/100	52

TURBO BLOWER

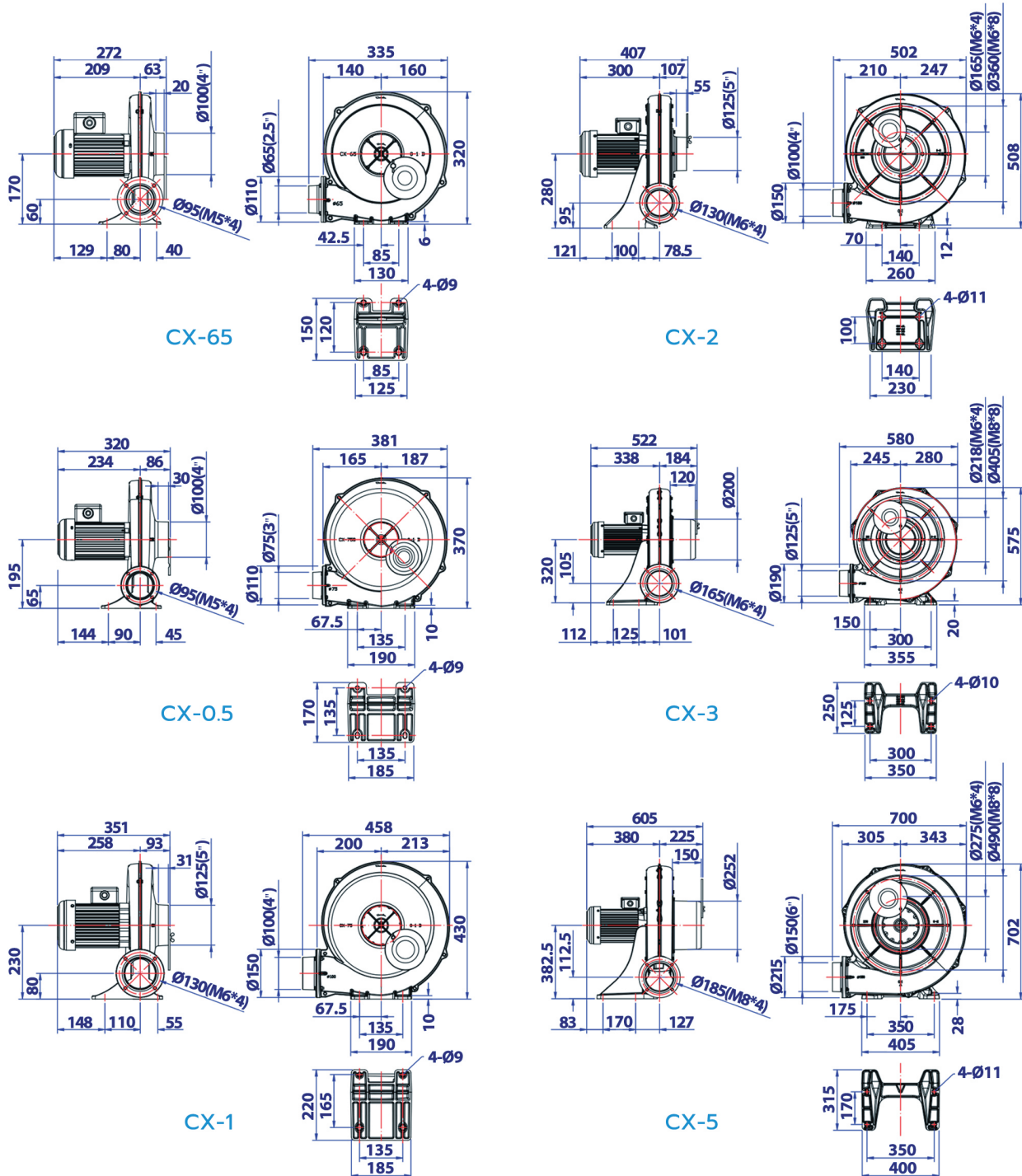
MODEL : CX

อุปกรณ์สร้างแรงลมและแรงดัน
ทำงานด้วยมอเตอร์ไฟฟ้าขับเคลื่อนใบพัด
เพื่อให้แรงลมและแรงดันที่เหมาะสมกับ
การใช้งานในอุตสาหกรรมต่างๆ



Dimensions of Outline
Installation and Connection

Dimensions (mm)





NORCE

TRANSMISSION

บริษัท กรุงเทพเกียร์ รุ่งเรืองแมคคาณิก จำกัด
ที่อยู่สำนักงานใหญ่ : 333/224 ซ.เพชรเกษม 110 ถ.เพชรเกษม
แขวงหนองค้างพลู เขตหนองแขม กทม. 10160
ที่อยู่โรงงาน : 9/98 ม.3 ต.ตอนไถ่ อ.กระทุ่มแบน
จ.สมุทรสาคร 74110
โทรศัพท์ : 034-446-210 (AUTO 10 LINE)
แฟกซ์ : 034-446-211
E-mail : bangkokgear@hotmail.com
www.bangkokgear.com