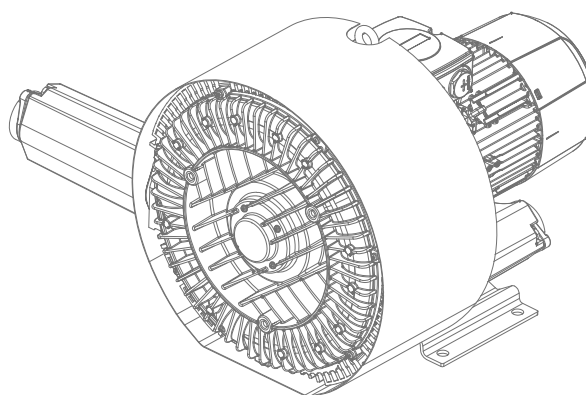
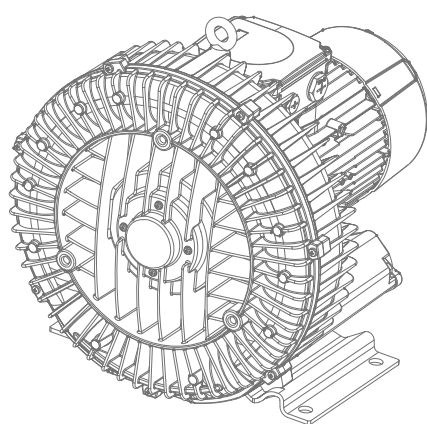


GREENCO®

2RB系列

漩涡式气泵配高效节能电机

Side channel blower with high efficiency motor

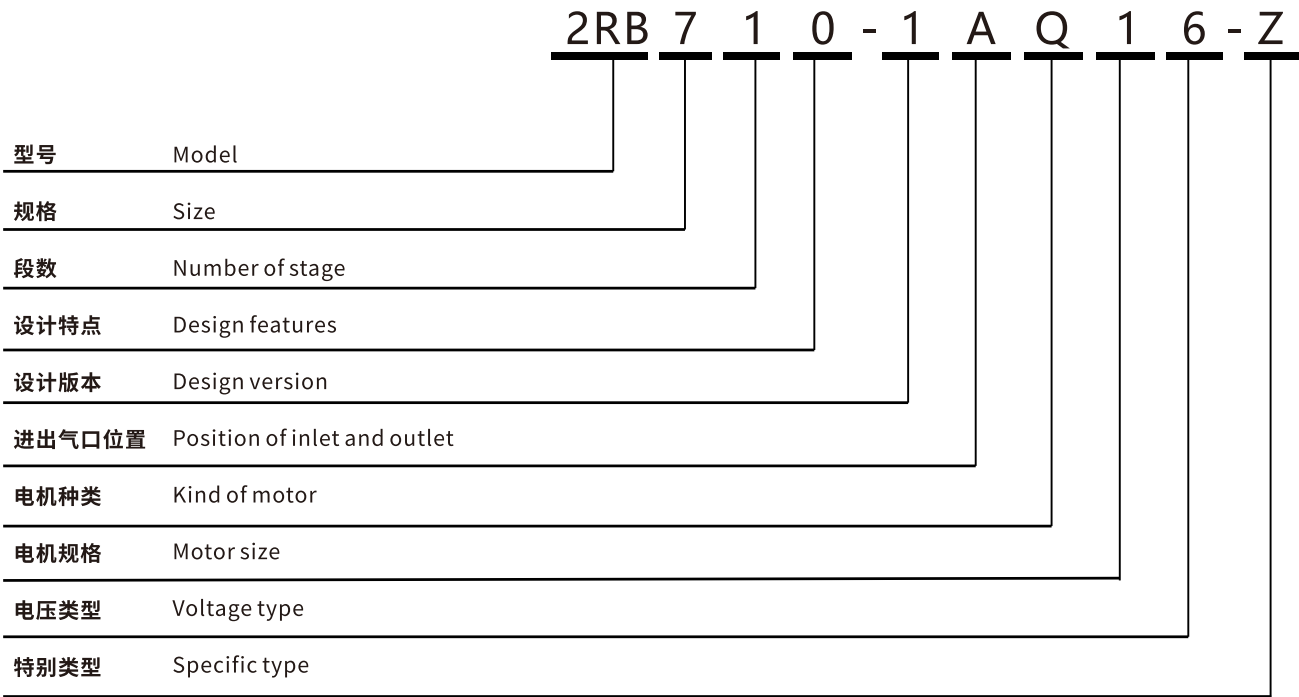


浙江格凌实业有限公司

ZHEJIANG GREENCO INDUSTRY CO.,LTD.

订购规格型号详解

Order Model System and Specification



*型号: 2RB,3RB,4RB	*Model: 2RB,3RB,4RB
*规格:0,1,2,3,4,5,6,7,8,9,10	*Size:0,1,2,3,4,5,6,7,8,9,10
*段数: 单数 (单段), 双数 (双段)	*Number of stage:Odd number (single stage),even number (double stage)
*设计特点: 0 配电机 3, 无电机	*Desig features:0 with Electric motor 3 without electric motor
*设计版本: 7老版本, 1新版本	*Design version: 7 old version 1 new version
*进出气口位置: A 进气口和出气口平行的	*Position of inlet and outlet: A inlet and outlet are parallel
H 进气口和出气口垂直的	H inlet and outlet are vertical
B 吸气口在前盖上	B suction port at cover
G 中泵体进出气口并联	G Centre section are parallel
*电机种类: Q 6根接线柱, P 9根接线柱	*Kind of motor: Q with 6 wiring terminal P with 9 wiring terminal
*电机规格: 所能配的电机电功率排序	*Motor size:The sequence of motor power sizes
*电压类型: 详情参看第22页	*Voltage: For more detail see page22
*特别类型: Z 热保护器	*Specific type: Z thermal protector
S 长轴	S Long shaft
T 镀特氟龙	T teflon coating
N 镀镍	N nickel coating
A 阳极氧化	A anodizing

2RB 3AC(系列三相)



漩涡式气泵在真空和压力操作的选型和订购参数。
Selection and ordering data for side channel blowers in vacuum and pressure operation.

规格型号	IE3功率	频率	输出功率	电压	电流	最大流量	最大真空	最大压力	噪音	净重	口径尺寸
MODEL · In stock	IE3 Power Kw	Freq Hz	Output power Kw	Voltage V	Current A	Max airflow m³/h	Max static vacuum mbar	Max static pressure mbar	Noise dB(A)	Net.W Kg	Size Inch
·2RB 310-1AQ16	0.75	50	0.95	220-240Δ/380-420Y	3.6Δ/2.1Y	110	-180	190	55	15	G 1'1/4
		60	1.1	440-480Y	2.1Y	140	-210	210	57		
·2RB 410-1AQ16	0.75	50	0.95	220-240Δ/380-420Y	3.6Δ/2.1Y	145	-180	170	63	17	G 1'1/2
		60	1.1	440-480Y	2.1Y	175	-170	160	64		
·2RB 410-1AQ26	1.1	50	1.3	220-240Δ/380-420Y	4.9Δ/2.85Y	145	-190	220	63	20	G 1'1/2
		60	1.6	440-480Y	2.75Y	175	-220	210	64		
·2RB 430-1AQ16	0.75	50	0.95	220-240Δ/380-420Y	3.6Δ/2.1Y	180	-110	110	64	18	G 1'1/2
		60	1.1	440-480Y	2.1Y	210	-100	100	66		
·2RB 430-1AQ26	1.1	50	1.3	220-240Δ/380-420Y	4.9Δ/2.85Y	180	-180	180	64	21	G 1'1/2
		60	1.6	440-480Y	2.75Y	210	-190	170	66		
·2RB 510-1AQ06	0.75	50	0.95	220-240Δ/380-420Y	3.6Δ/2.1Y	210	-90	90	64	19	G 2'
		60	1.1	440-480Y	2.1Y	255	-80	80	70		
·2RB 510-1AQ16	1.1	50	1.3	220-240Δ/380-420Y	4.9Δ/2.85Y	210	-170	170	64	22	G 2'
		60	1.6	440-480Y	2.75Y	255	-150	140	70		
·2RB 510-1AQ26	1.5	50	1.75	220-240Δ/380-420Y	6.0 Δ / 3.45 Y	210	-230	220	64	25	G 2'
		60	2.0	440-480Y	3.4Y	255	-210	200	70		
·2RB 510-1AQ36	2.2	50	2.5	220-240Δ/380-420Y	8.6 Δ / 5.0 Y	210	-250	310	64	29	G 2'
		60	3.0	440-480Y	5.2Y	255	-280	320	70		
·2RB 530-1AQ16	1.1	50	1.3	220-240Δ/380-420Y	4.9Δ/2.85Y	270	-120	110	65	23	G 2'
		60	1.6	440-480Y	2.75Y	330	-90	80	71		
·2RB 530-1AQ26	1.5	50	1.75	220-240Δ/380-420Y	6.0 Δ / 3.45 Y	270	-180	170	65	26	G 2'
		60	2.0	440-480Y	3.4Y	330	-160	140	71		
·2RB 530-1AQ36	2.2	50	2.5	220-240Δ/380-420Y	8.6 Δ / 5.0 Y	270	-220	260	65	30	G 2'
		60	3.0	440-480Y	5.2Y	330	-260	250	71		
·2RB 610-1AQ06	1.5	50	1.75	220-240Δ/380-420Y	6.0 Δ / 3.45 Y	265	-140	130	66	27	G 2'
		60	2.0	440-480Y	3.4Y	315	-120	120	72		
·2RB 610-1AQ16	2.2	50	2.5	220-240Δ/380-420Y	8.6 Δ / 5.0 Y	265	-230	200	66	32	G 2'
		60	3.0	440-480Y	5.2Y	315	-200	200	72		
·2RB 610-1AQ26	3.0	50	3.45	220-240Δ/380-420Y	12.0 Δ/ 6.9Y	265	-280	300	66	36	G 2'
		60	4.0	440-480Y	6.7Y	315	-290	290	72		
·2RB 630-1AQ06	1.5	50	1.75	220-240Δ/380-420Y	6.0 Δ / 3.45 Y	345	-120	110	66	29	G 2'
		60	2.0	440-480Y	3.4Y	415	-110	100	72		
·2RB 630-1AQ16	2.2	50	2.5	220-240Δ/380-420Y	8.6 Δ / 5.0 Y	345	-200	190	66	34	G 2'
		60	3.0	440-480Y	5.2Y	415	-190	180	72		
·2RB 630-1AQ26	3.0	50	3.45	220-240Δ/380-420Y	12.0 Δ/ 6.9Y	345	-230	280	66	38	G 2'
		60	4.0	440-480Y	6.7Y	415	-250	270	72		
·2RB 710-1AQ06	1.5	50	1.75	220-240Δ/380-420Y	6.0 Δ / 3.45 Y	318	-130	120	69	30	G 2'
		60	2.0	440-480Y	3.4Y	376	-110	110	72		
·2RB 710-1AQ16	2.2	50	2.5	220-240Δ/380-420Y	8.6 Δ / 5.0 Y	318	-200	190	69	34	G 2'
		60	3.0	440-480Y	5.2Y	376	-190	180	72		
·2RB 710-1AQ26	3.0	50	3.45	220-240Δ/380-420Y	12.0 Δ/ 6.9Y	318	-260	270	69	40	G 2'
		60	4.0	440-480Y	6.7Y	376	-260	250	72		
·2RB 710-1AQ37	4.0	50	4.6	380-420Δ/660-725Y	8.6Δ/ 5.0Y	318	-290	360	69	45	G 2'
		60	5.3	440-480Δ	8.50Δ	376	-330	360	72		
·2RB 730-1AQ16	2.2	50	2.5	220-240Δ/380-420Y	8.6 Δ / 5.0 Y	420	-160	150	70	35	G 2'
		60	3.0	440-480Y	5.2Y	500	-140	120	73		

2RB 3AC(系列三相)

GREENCO®

漩涡式气泵在真空和压力操作的选型和订购参数。
Selection and ordering data for side channel blowers in vacuum and pressure operation.

规格型号	IE3功率	频率	输出功率	电压	电流	最大流量	最大真空	最大压力	噪音	净重	口径尺寸
MODEL · In stock	IE3 Power Kw	Freq Hz	Output power Kw	Voltage V	Current A	Max airflow m³/h	Max static vacuum mbar	Max static pressure mbar	Noise dB(A)	Net.W Kg	Size Inch
·2RB 730-1AQ26	3.0	50	3.45	220-240Δ/380-420Y	12.0 Δ/ 6.9Y	420	-240	220	70	42	G 2'
		60	4.0	440-480Y	6.7Y	500	-230	200	73		
·2RB 730-1AQ37	4.0	50	4.6	380-420Δ/660-725Y	8.6Δ/ 5.0Y	420	-260	320	70	47	G 2'
		60	5.3	440-480Δ	8.50Δ	500	-300	310	73		
·2RB 810-1AQ07	4.0	50	4.6	380-420Δ/660-725Y	8.6Δ/ 5.0Y	530	-220	210	71	57	G 2'1/2
		60	5.3	440-480Δ	8.50Δ	620	-190	180	74		
·2RB 810-1AQ17	5.5	50	6.3	380-420Δ/660-725Y	11,8Δ / 6,8 Y	530	-320	320	71	65	G 2'1/2
		60	7.3	440-480Δ	12,0Δ	620	-300	280	74		
·2RB 810-1AQ27	7.5	50	8.6	380-420Δ/660-725Y	15,5Δ / 8,9Y	530	-320	450	71	74	G 2'1/2
		60	9.9	440-480Δ	15,3Δ	620	-380	420	74		
·2RB 830-1AQ07	4.0	50	4.6	380-420Δ/660-725Y	8.6Δ/ 5.0Y	700	-150	140	71	59	G 2'1/2
		60	5.3	440-480Δ	8.50Δ	840	-120	110	74		
·2RB 830-1AQ17	5.5	50	6.3	380-420Δ/660-725Y	11,8Δ / 6,8 Y	700	-250	230	71	67	G 2'1/2
		60	7.3	440-480Δ	12,0Δ	840	-220	190	74		
·2RB 830-1AQ27	7.5	50	8.6	380-420Δ/660-725Y	15,5Δ / 8,9Y	700	-290	340	71	76	G 2'1/2
		60	9.9	440-480Δ	15,3Δ	840	-340	310	74		
·2RB 910-1AQ07	7.5	50	8.6	380-420Δ/660-725Y	15,5Δ / 8,9Y	1050	-190	180	74	102	G 4'
		60	9.9	440-480Δ	15,3Δ	1250	-150	140	79		
·2RB 910-1AQ17	11.0	50	12.6	380-420Δ/660-725Y	23,3 Δ/ 13,4 Y	1050	-290	280	74	118	G 4'
		60	14.5	440-480Δ	23,0Δ	1250	-270	260	79		
·2RB 910-1AQ27	15.0	50	17.3	380-420Δ/660-725Y	31,7 Δ/ 18,3 Y	1050	-350	410	74	130	G 4'
		60	19.9	440-480Δ	31,4Δ	1250	-380	380	79		
·2RB 910-1AQ37	18.5	50	21.3	380-420Δ/660-725Y	38,3 Δ/ 22,1 Y	1050	-360	500	74	145	G 4'
		60	24.5	440-480Δ	38,0Δ	1250	-380	460	79		
·2RB 930-1AQ07	7.5	50	8.6	380-420Δ/660-725Y	15,5Δ / 8,9Y	1370	-120	110	75	105	G 4'
		60	9.9	440-480Δ	15,3Δ	1650	-80	70	80		
·2RB 930-1AQ17	11.0	50	12.6	380-420Δ/660-725Y	23,3 Δ/ 13,4 Y	1370	-210	200	75	121	G 4'
		60	14.5	440-480Δ	23,0Δ	1650	-170	160	80		
·2RB 930-1AQ27	15.0	50	17.3	380-420Δ/660-725Y	31,7 Δ/ 18,3 Y	1370	-310	300	75	133	G 4'
		60	19.9	440-480Δ	31,4Δ	1650	-270	260	80		
·2RB 930-1AQ37	18.5	50	21.3	380-420Δ/660-725Y	38,3 Δ/ 22,1 Y	1370	-320	370	75	148	G 4'
		60	24.5	440-480Δ	38,0Δ	1650	-340	340	80		
·2RB 1010-1AQ27	15.0	50	17.3	380-420Δ/660-725Y	31,7 Δ/ 18,3 Y	2150	-190	170	81	146	G 5'
		60	19.9	440-480Δ	31,4Δ	2580	-150	130	82		
·2RB 1010-1AQ37	18.5	50	21.3	380-420Δ/660-725Y	38,3 Δ/ 22,1 Y	2150	-220	210	81	158	G 5'
		60	24.5	440-480Δ	38,0Δ	2580	-180	170	82		
·2RB 320-1HQ26	0.75	50	0.95	220-240Δ/380-420Y	3.6Δ/2.1Y	110	-250	280	62	18	G 1'1/4
		60	1.1	440-480Y	2.1Y	140	-260	250	65		
·2RB 320-1HQ36	1.1	50	1.3	220-240Δ/380-420Y	4.9Δ/2.85Y	110	-280	370	62	21	G 1'1/4
		60	1.6	440-480Y	2.75Y	140	-300	380	65		
·2RB 420-1HQ36	1.5	50	1.75	220-240Δ/380-420Y	6.0 Δ / 3.45 Y	150	-310	280	65	28	G 1'1/2
		60	2.0	440-480Y	3.4Y	180	-300	250	68		
·2RB 420-1HQ46	2.2	50	2.5	220-240Δ/380-420Y	8.6 Δ / 5.0 Y	150	-320	420	65	32	G 1'1/2
		60	3.0	440-480Y	5.2Y	180	-350	440	68		
·2RB 520-1HQ46	3.0	50	3.45	220-240Δ/380-420Y	12.0 Δ/ 6.9Y	230	-370	410	72	47	G 2'
		60	4.0	440-480Y	6.7Y	275	-400	380	74		
·2RB 520-1HQ57	4.0	50	4.6	380-420Δ/660-725Y	8.6Δ/ 5.0Y	230	-370	500	72	60	G 2'
		60	5.3	440-480Δ	8.50Δ	275	-410	530	74		
·2RB 720-1HQ16	2.2	50	2.5	220-240Δ/380-420Y	8.6 Δ / 5.0 Y	320	-160	170	73	53	G 2'
		60	3.0	440-480Y	5.2Y	385	-130	120	76		

2RB 3AC(系列三相)



漩涡式气泵在真空和压力操作的选型和订购参数。
Selection and ordering data for side channel blowers in vacuum and pressure operation.

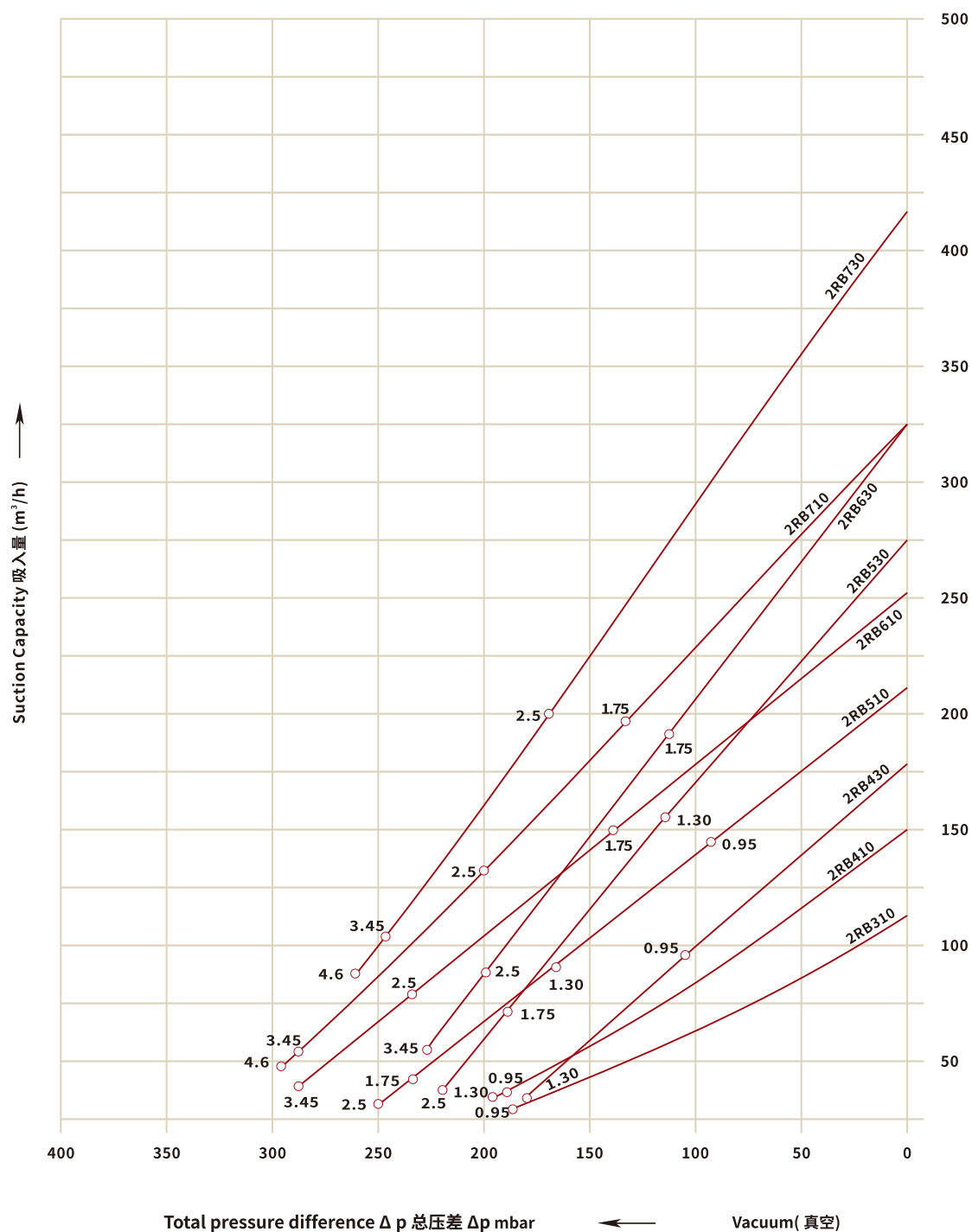
规格型号	IE3功率	频率	输出功率	电压	电流	最大流量	最大真空	最大压力	噪音	净重	口径尺寸
MODEL · In stock	IE3 Power Kw	Freq Hz	Output power Kw	Voltage V	Current A	Max airflow m³/h	Max static vacuum mbar	Max static pressure mbar	Noise dB(A)	Net.W Kg	Size Inch
·2RB 720-1HQ26	3.0	50	3.45	220-240Δ/380-420Y	12.0 Δ/ 6.9Y	320	-260	270	73	58	G 2'
		60	4.0	440-480Y	6.7Y	385	-230	200	76		
·2RB 720-1HQ37	4.0	50	4.6	380-420Δ/660-725Y	8.6Δ/ 5.0Y	320	-400	360	73	65	G 2'
		60	5.3	440-480Δ	8.50Δ	385	-350	320	76		
·2RB 720-1HQ47	5.5	50	6.3	380-420Δ/660-725Y	11,8Δ / 6,8 Y	320	-420	530	73	71	G 2'
		60	7.3	440-480Δ	12,0Δ	385	-440	490	76		
·2RB 720-1HQ57	7.5	50	8.6	380-420Δ/660-725Y	15,5Δ / 8,9Y	320	-420	610	73	82	G 2'
		60	9.9	440-480Δ	15,3Δ	385	-440	670	76		
·2RB 740-1GQ37	4.0	50	4.6	380-420Δ/660-725Y	8.6Δ/ 5.0Y	500	-180	160	74	65	G 2'
		60	5.3	440-480Δ	8.50Δ	600	-130	120	78		
·2RB 740-1GQ47	5.5	50	6.3	380-420Δ/660-725Y	11,8Δ / 6,8 Y	500	-240	260	74	73	G 2'
		60	7.3	440-480Δ	12,0Δ	600	-210	200	78		
·2RB 740-1GQ57	7.5	50	8.6	380-420Δ/660-725Y	15,5Δ / 8,9Y	500	-240	320	74	84	G 2'
		60	9.9	440-480Δ	15,3Δ	600	-270	300	78		
·2RB 820-1HQ27	7.5	50	8.6	380-420Δ/660-725Y	15,5Δ / 8,9Y	520	-430	400	74	94	G 2'1/2
		60	9.9	440-480Δ	15,3Δ	620	-360	330	78		
·2RB 820-1HQ37	11.0	50	12.6	380-420Δ/660-725Y	23,3 Δ/ 13,4 Y	520	-460	650	74	124	G 2'1/2
		60	14.5	440-480Δ	23,0Δ	620	-480	580	78		
·2RB 820-1HQ47	15.0	50	17.3	380-420Δ/660-725Y	31,7 Δ/ 18,3 Y	520	-460	670	74	136	G 2'1/2
		60	19.9	440-480Δ	31,4Δ	620	-480	750	78		
·2RB 840-1GQ27	7.5	50	8.6	380-420Δ/660-725Y	15,5Δ / 8,9Y	900	-200	180	74	90	G 2'1/2
		60	9.9	440-480Δ	15,3Δ	1050	-150	120	78		
·2RB 840-1GQ37	11.0	50	12.6	380-420Δ/660-725Y	23,3 Δ/ 13,4 Y	900	-320	330	74	120	G 2'1/2
		60	14.5	440-480Δ	23,0Δ	1050	-310	280	78		
·2RB 840-1GQ47	15.0	50	17.3	380-420Δ/660-725Y	31,7 Δ/ 18,3 Y	900	-320	420	74	132	G 2'1/2
		60	19.9	440-480Δ	31,4Δ	1050	-340	440	78		
·2RB 920-1HQ17	11.0	50	12.6	380-420Δ/660-725Y	23,3 Δ/ 13,4 Y	1110	-270	240	76	158	G 4'
		60	14.5	440-480Δ	23,0Δ	1310	-220	190	80		
·2RB 920-1HQ27	15.0	50	17.3	380-420Δ/660-725Y	31,7 Δ/ 18,3 Y	1110	-410	360	76	169	G 4'
		60	19.9	440-480Δ	31,4Δ	1310	-360	300	80		
·2RB 920-1HQ37	18.5	50	21.3	380-420Δ/660-725Y	38,3 Δ/ 22,1 Y	1110	-440	480	76	179	G 4'
		60	24.5	440-480Δ	38,0Δ	1310	-440	410	80		
·2RB 920-1HQ47	22.0	50	25.3	380-420Δ/660-725Y	46,5 Δ/ 26,8 Y	1110	-440	590	76	191	G 4'
		60	29.0	440-480Δ	46,5Δ	1310	-450	540	80		
·2RB 940-1GQ27	15.0	50	17.3	380-420Δ/660-725Y	31,7 Δ/ 18,3 Y	1940	-150	140	76	164	G 4'
		60	19.9	440-480Δ	31,4Δ	2310	-110	90	80		
·2RB 940-1GQ37	18.5	50	21.3	380-420Δ/660-725Y	38,3 Δ/ 22,1 Y	1940	-220	200	76	174	G 4'
		60	24.5	440-480Δ	38,0Δ	2310	-160	150	80		
·2RB 940-1GQ47	22.0	50	25.3	380-420Δ/660-725Y	46,5 Δ/ 26,8 Y	1940	-300	300	76	186	G 4'
		60	29.0	440-480Δ	46,5Δ	2310	-280	250	80		
·2RB 943-1BQ27	15.0	50	17.3	380-420Δ/660-725Y	31,7 Δ/ 18,3 Y	2050	-160	170	76	224	G 5'
		60	19.9	440-480Δ	31,4Δ	2480	-120	110	80		
·2RB 943-1BQ37	18.5	50	21.3	380-420Δ/660-725Y	38,3 Δ/ 22,1 Y	2050	-250	230	76	234	G 5'
		60	24.5	440-480Δ	38,0Δ	2480	-190	180	80		
·2RB 943-1BQ47	22.0	50	25.3	380-420Δ/660-725Y	46,5 Δ/ 26,8 Y	2050	-310	280	76	246	G 5'
		60	29.0	440-480Δ	46,5Δ	2480	-270	230	80		
·2RB 963-1BQ17	22.0	50	25.3	380-420Δ/660-725Y	46,5 Δ/ 26,8 Y	3050	-150	130	80	286	G 6'
		60	29.0	440-480Δ	46,5Δ	3580	-140	120	86		
·2RB 963-1BQ27	30.0	50	34.5	380-420Δ/660-725Y	63.0 Δ/ 36,4 Y	3050	-240	220	80	324	G 6'
		60	40.0	440-480Δ	63.0Δ	3580	-220	200	86		



下面的性能曲线是在抽吸15°C空气，排气压力1013mbar的工况下测出的，允差±10%，吸入空气和环境温度不超过25°C时，即可达到图示总压差。

The performance curves are valid for pumping air at 15°C at the inlet flanges with an air pressure of 1.013mbar and a tolerance of ±10%. The total pressure differences are valid up to an intake and ambient temperature of 25°C.

Vacuum Selection diagram 50Hz—真空选型图表 50Hz

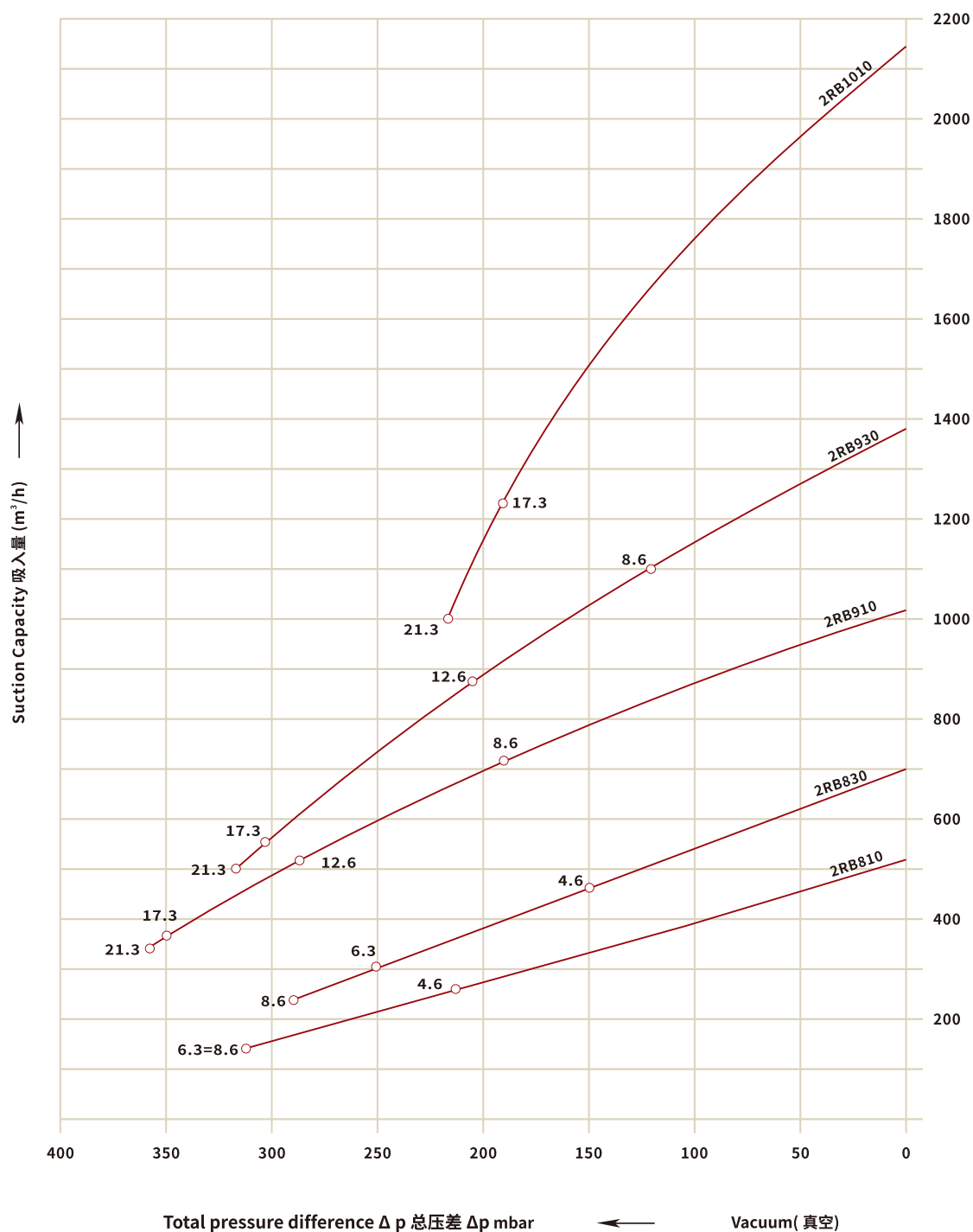




下面的性能曲线是在抽吸15°C空气，排气压力1013mbar的工况下测出的，允差±10%，吸入空气和环境温度不超过25°C时，即可达到图示总压差。

The performance curves are valid for pumping air at 15°C at the inlet flanges with an air pressure of 1.013mbar and a tolerance of ±10%. The total pressure differences are valid up to an intake and ambient temperature of 25°C.

Vacuum Selection diagram 50Hz—真空选型图表 50Hz

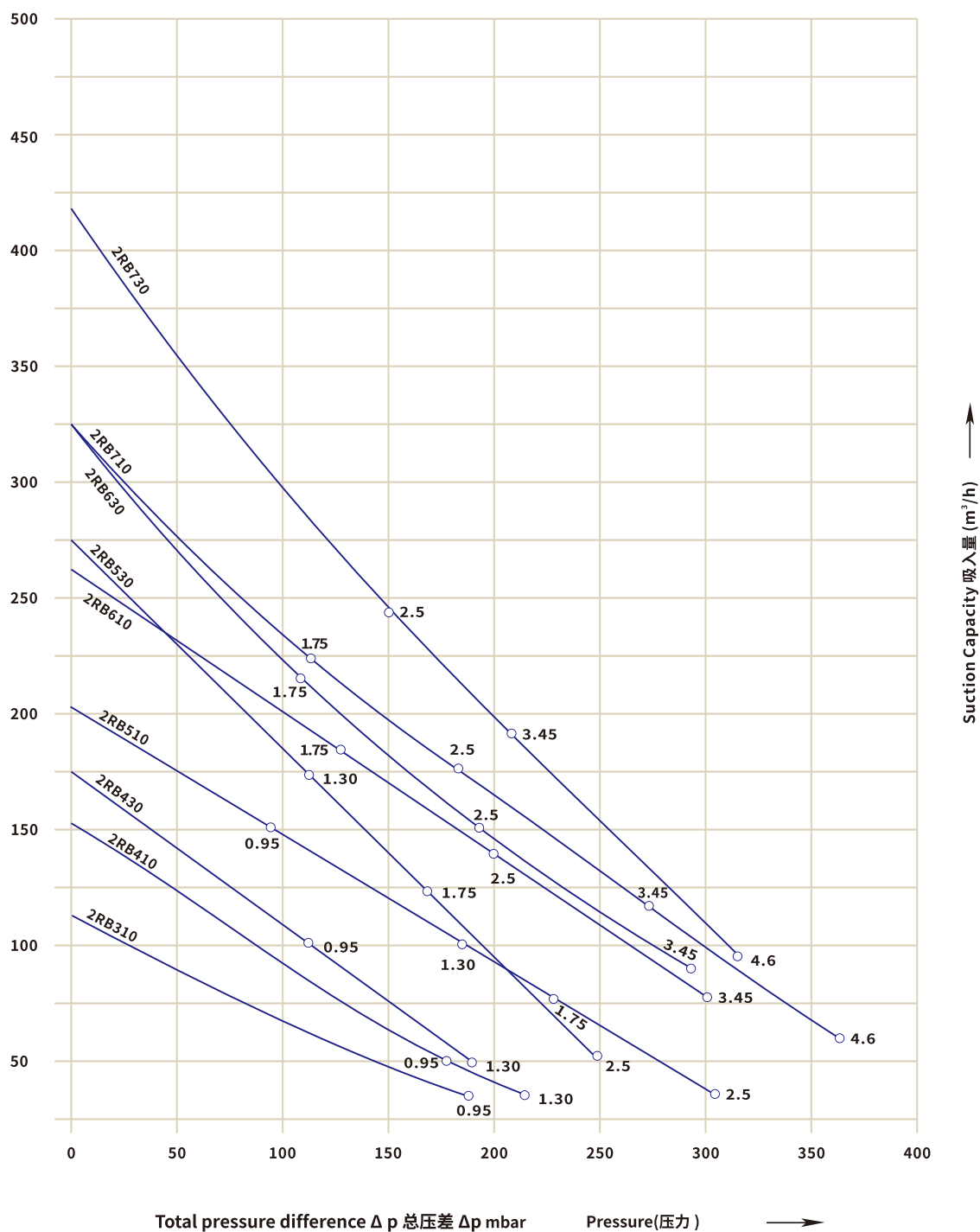




下面的性能曲线是在抽吸15°C空气，排气压力1013mbar的工况下测出的，允差±10%，吸入空气和环境温度不超过25°C时，即可达到图示总压差。

The performance curves are valid for pumping air at 15°C at the inlet flanges with an air pressure of 1.013mbar and a tolerance of ±10%. The total pressure differences are valid up to an intake and ambient temperature of 25°C.

Pressure Selection diagram 50Hz—压力选型图表 50Hz

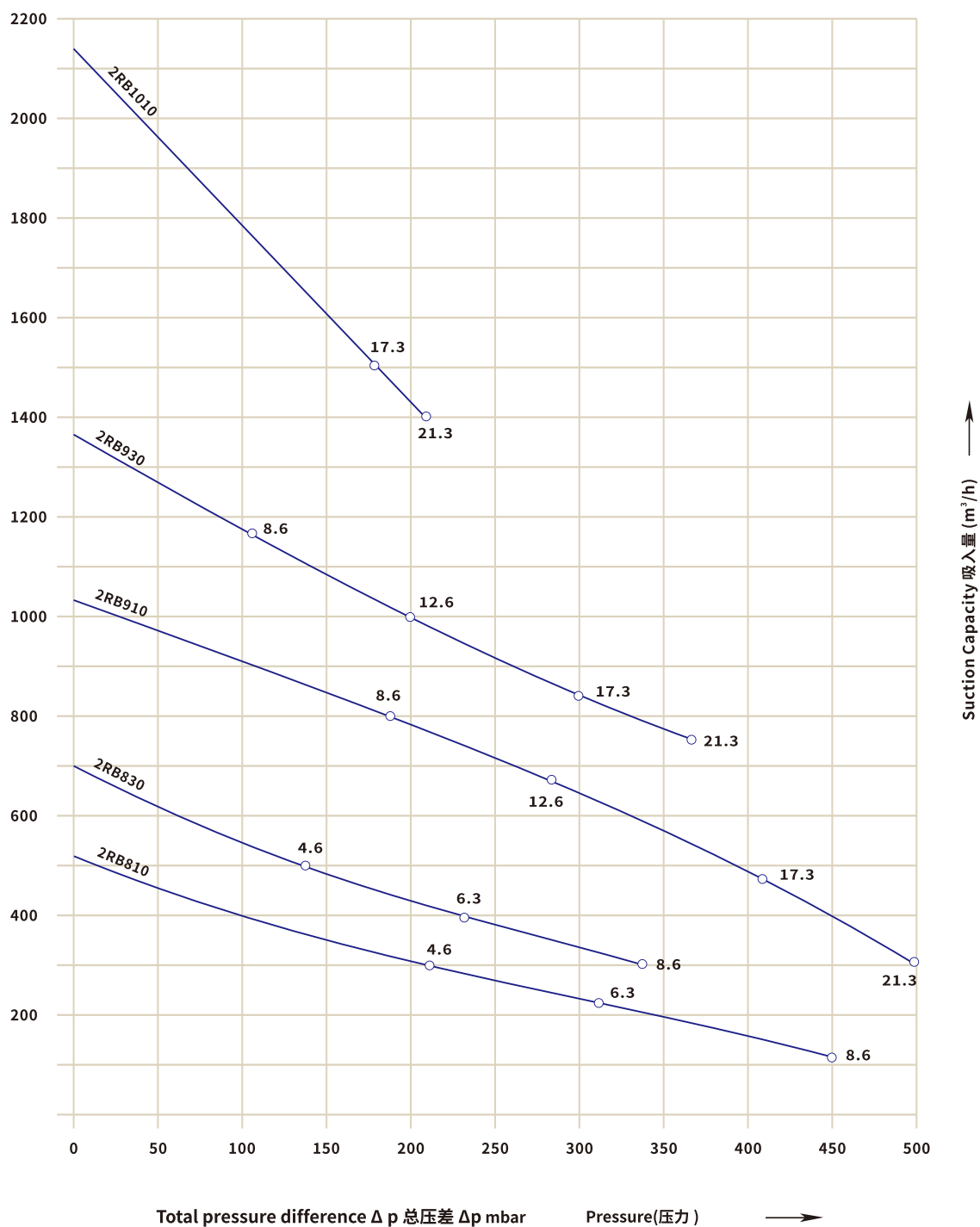




下面的性能曲线是在抽吸15°C空气，排气压力1013mbar的工况下测出的，允差±10%，吸入空气和环境温度不超过25°C时，即可达到图示总压差。

The performance curves are valid for pumping air at 15°C at the inlet flanges with an air pressure of 1.013mbar and a tolerance of ±10%. The total pressure differences are valid up to an intake and ambient temperature of 25°C.

Pressure Selection diagram 50Hz—压力选型图表 50Hz

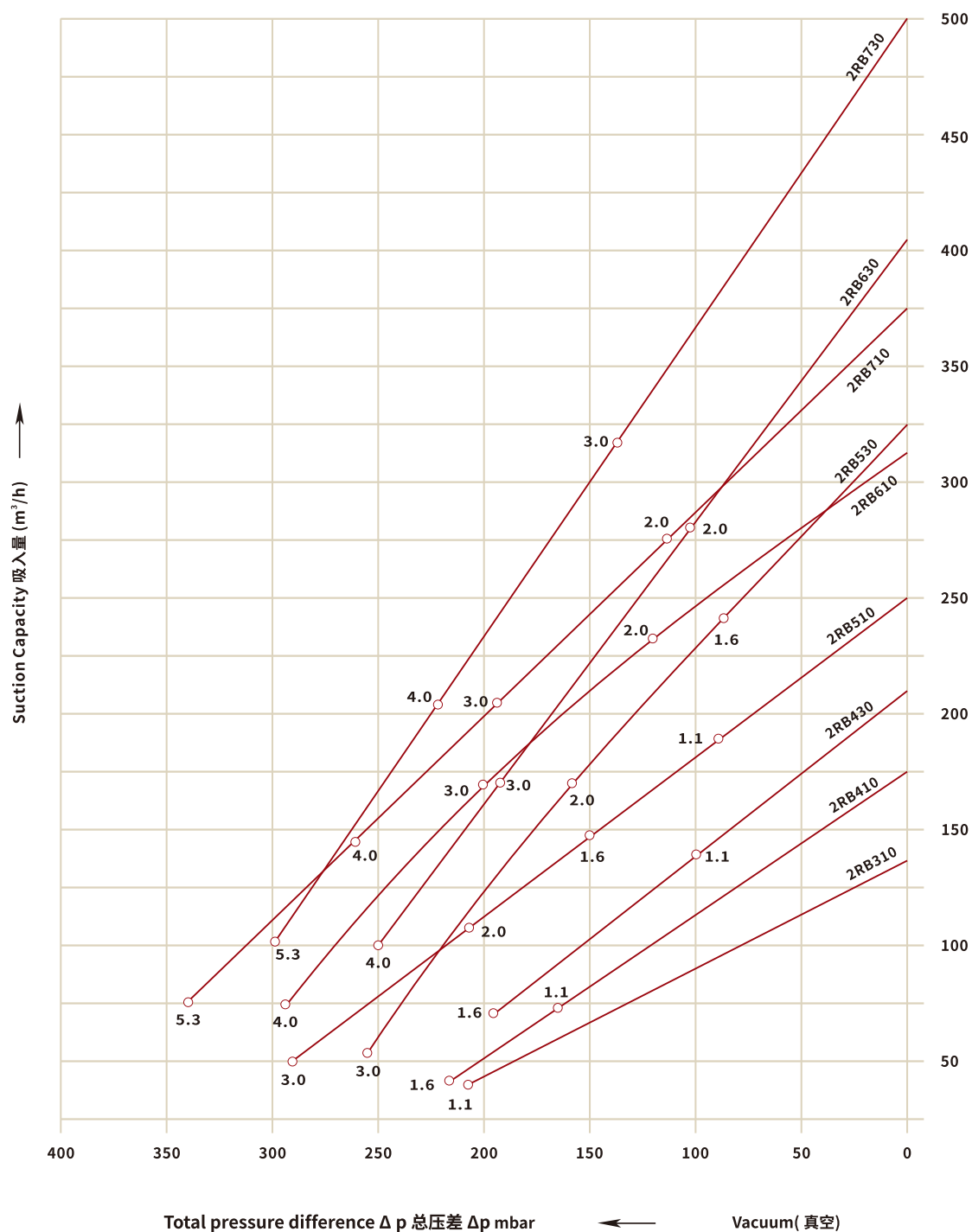




下面的性能曲线是在抽吸15°C空气，排气压力1013mbar的工况下测出的，允差±10%，吸入空气和环境温度不超过25°C时，即可达到图示总压差。

The performance curves are valid for pumping air at 15°C at the inlet flanges with an air pressure of 1.013mbar and a tolerance of ±10%. The total pressure differences are valid up to an intake and ambient temperature of 25°C.

Vacuum Selection diagram 60Hz——真空选型图表 60Hz

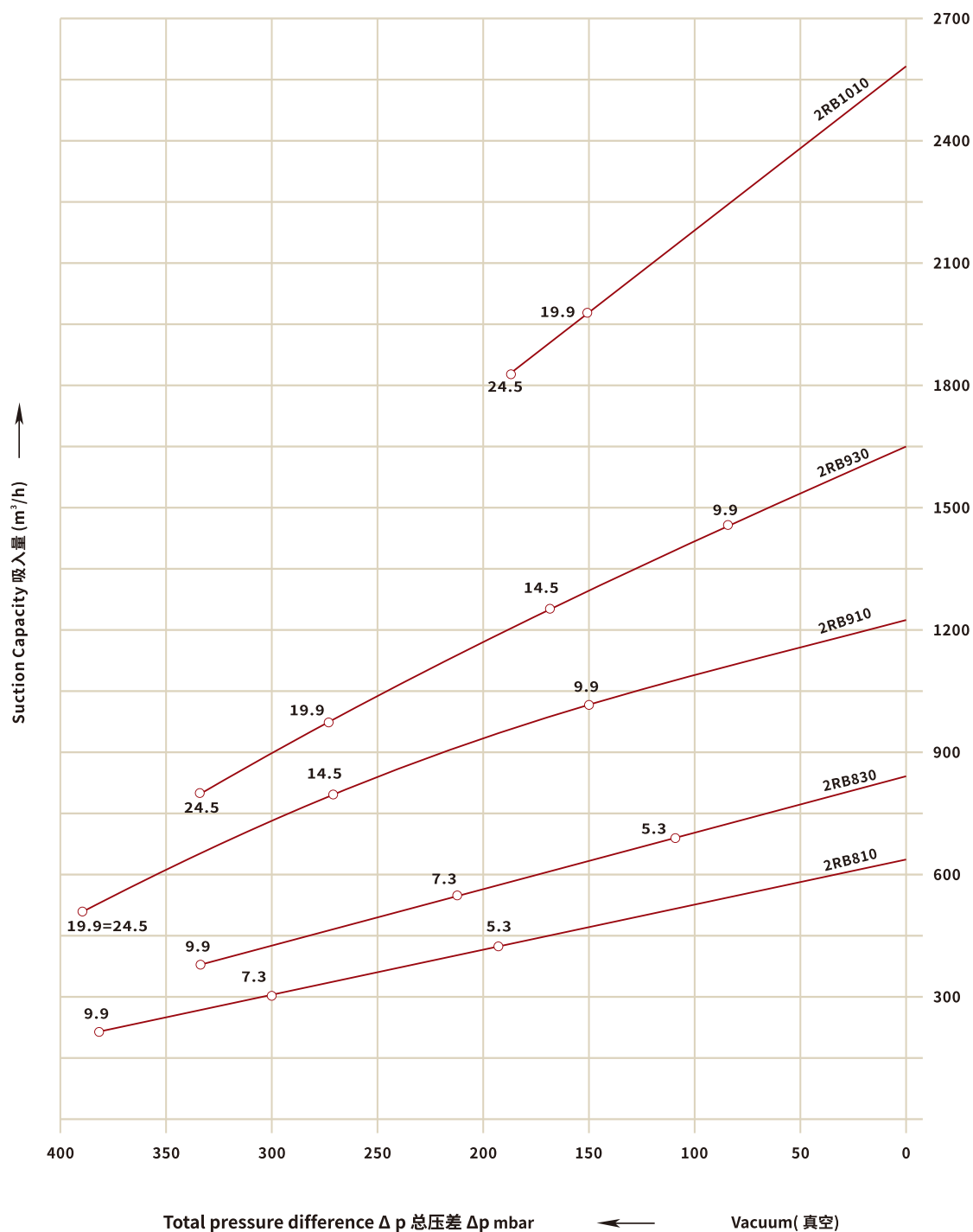




下面的性能曲线是在抽吸15°C空气，排气压力1013mbar的工况下测出的，允差±10%，吸入空气和环境温度不超过25°C时，即可达到图示总压差。

The performance curves are valid for pumping air at 15°C at the inlet flanges with an air pressure of 1.013mbar and a tolerance of ±10%. The total pressure differences are valid up to an intake and ambient temperature of 25°C.

Vacuum Selection diagram 60Hz—真空选型图表 60Hz

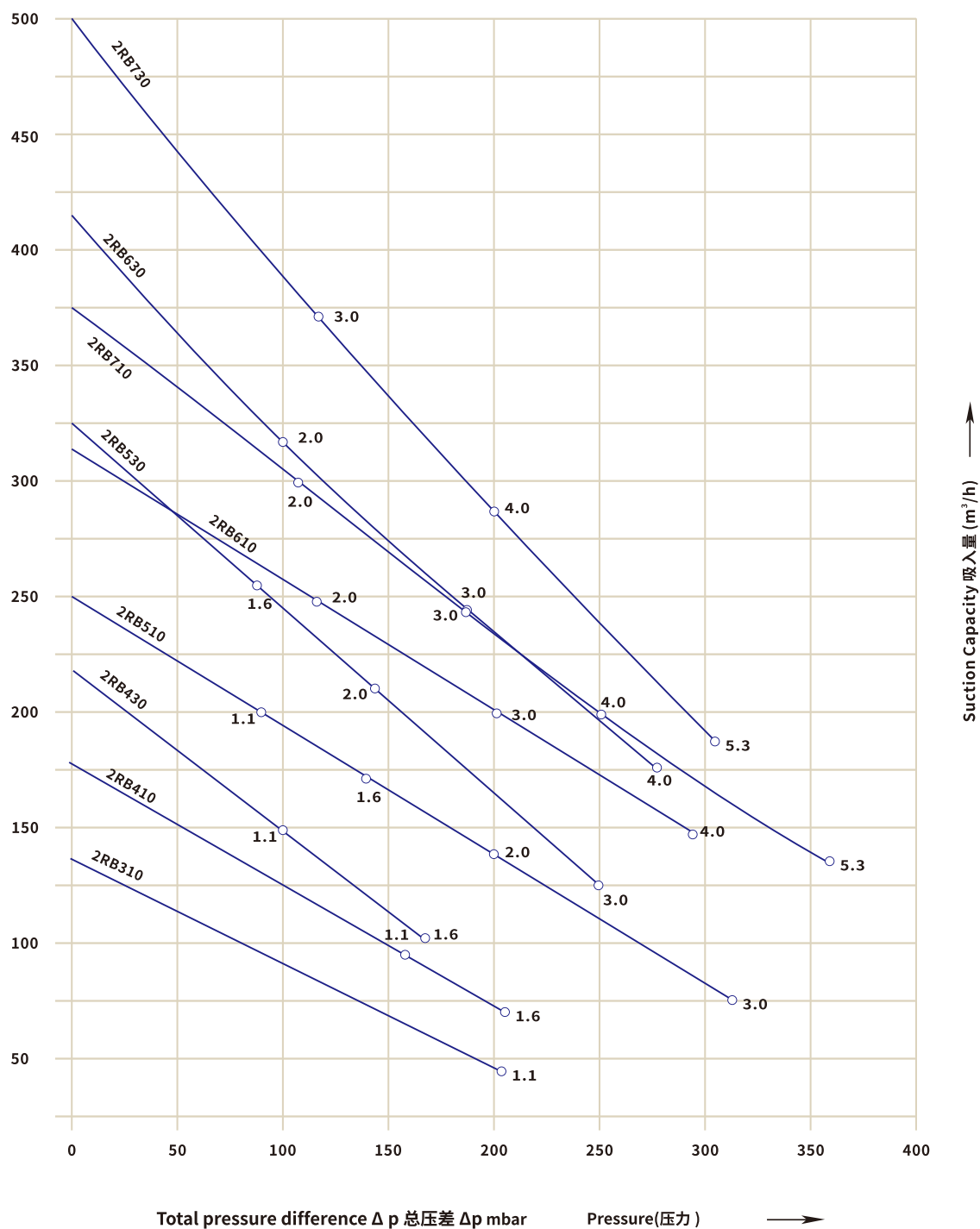




下面的性能曲线是在抽吸15°C空气，排气压力1013mbar的工况下测出的，允差±10%，吸入空气和环境温度不超过25°C时，即可达到图示总压差。

The performance curves are valid for pumping air at 15°C at the inlet flanges with an air pressure of 1.013mbar and a tolerance of ±10%. The total pressure differences are valid up to an intake and ambient temperature of 25°C.

Pressure Selection diagram 60Hz—压力选型图表 60Hz





下面的性能曲线是在抽吸15°C空气，排气压力1013mbar的工况下测出的，允差±10%，吸入空气和环境温度不超过25°C时，即可达到图示总压差。

The performance curves are valid for pumping air at 15°C at the inlet flanges with an air pressure of 1.013mbar and a tolerance of ±10%. The total pressure differences are valid up to an intake and ambient temperature of 25°C.

Pressure Selection diagram 60Hz——压力选型图表 60Hz

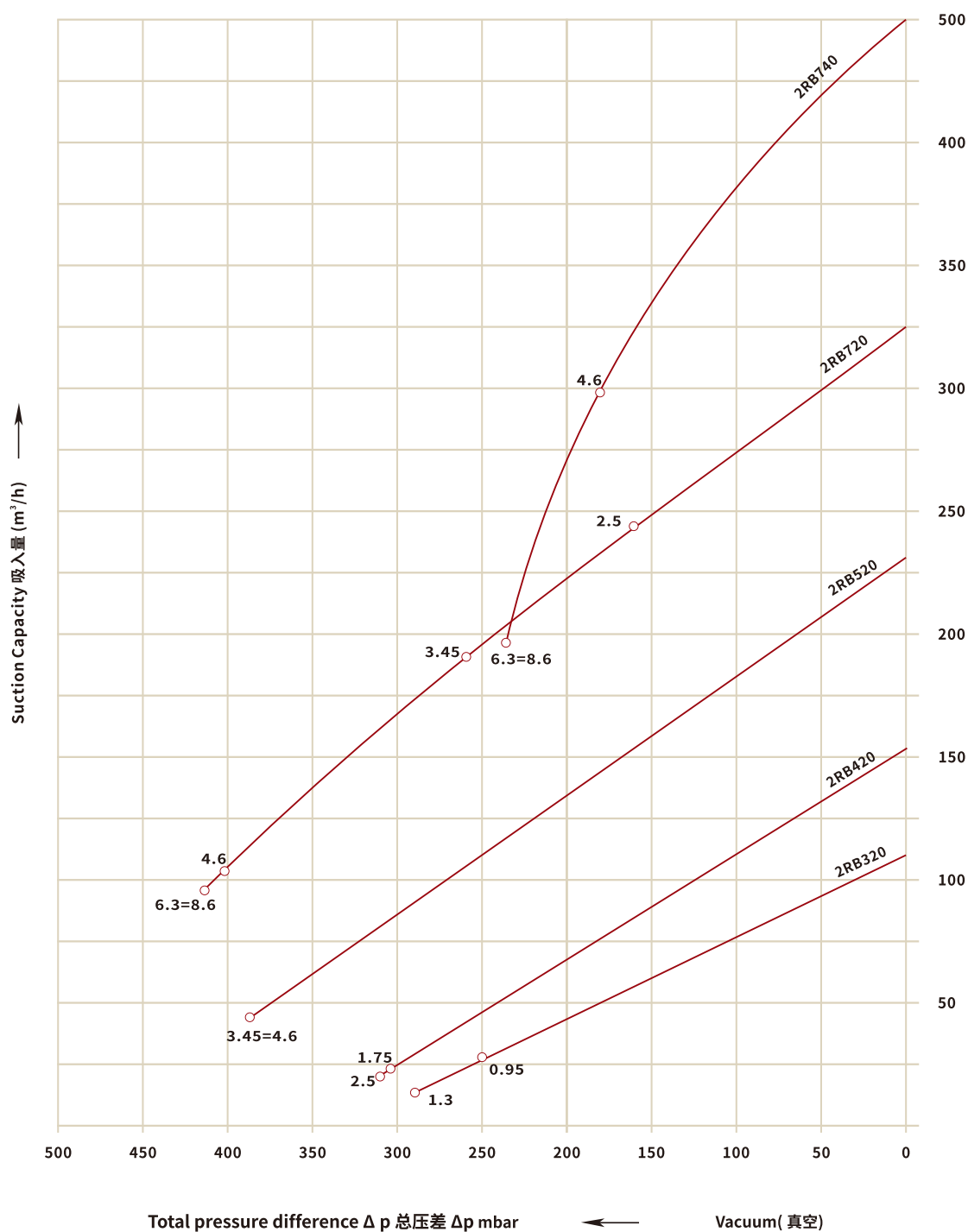




下面的性能曲线是在抽吸15°C空气，排气压力1013mbar的工况下测出的，允差±10%，吸入空气和环境温度不超过25°C时，即可达到图示总压差。

The performance curves are valid for pumping air at 15°C at the inlet flanges with an air pressure of 1.013mbar and a tolerance of ±10%.The total pressure differences are valid up to an intake and ambient temperature of 25°C .

Vacuum Selection diagram 50Hz—真空选型图表 50Hz

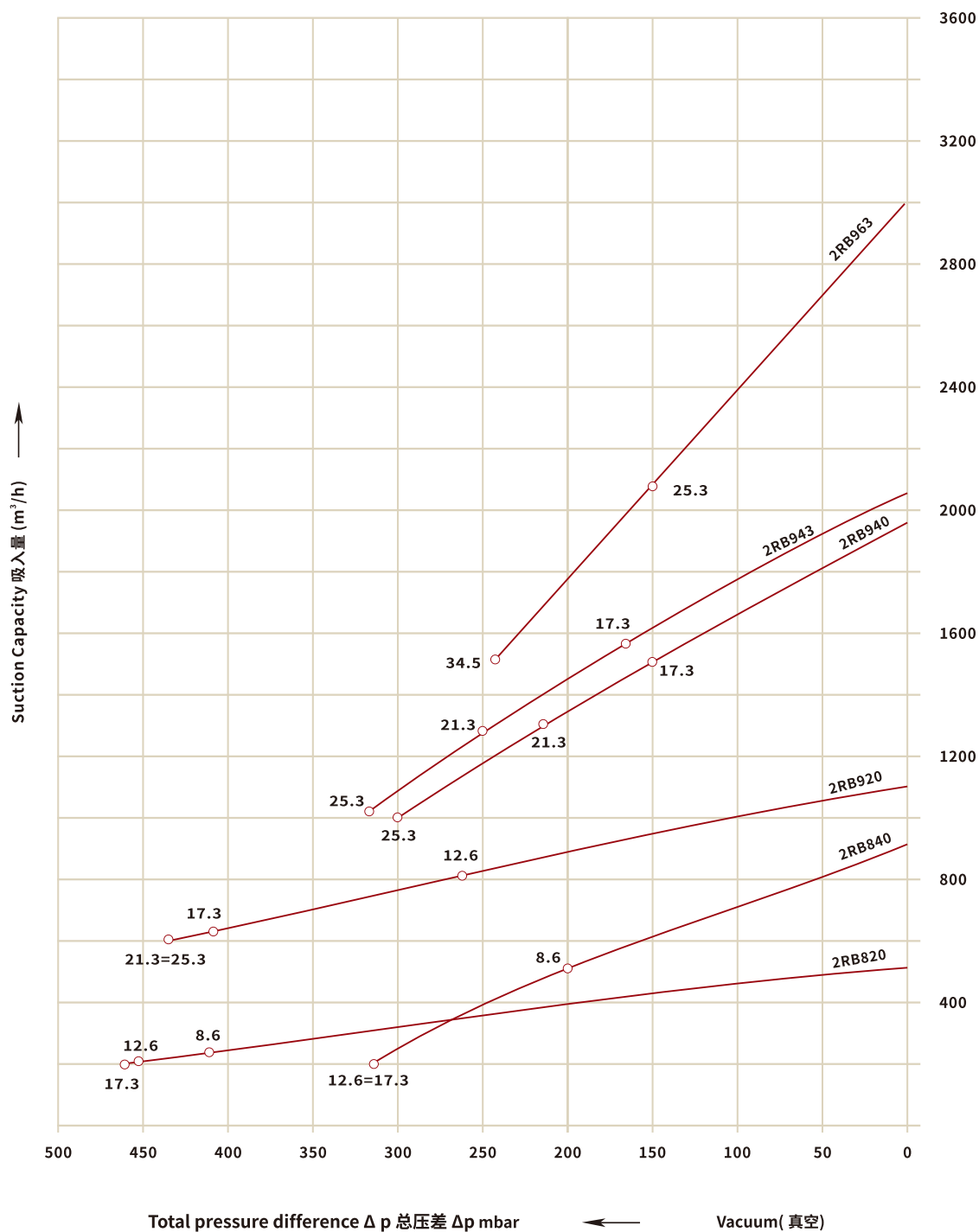




下面的性能曲线是在抽吸15°C空气，排气压力1013mbar的工况下测出的，允差±10%，吸入空气和环境温度不超过25°C时，即可达到图示总压差。

The performance curves are valid for pumping air at 15°C at the inlet flanges with an air pressure of 1.013mbar and a tolerance of ±10%. The total pressure differences are valid up to an intake and ambient temperature of 25°C.

Vacuum Selection diagram 50Hz—真空选型图表 50Hz

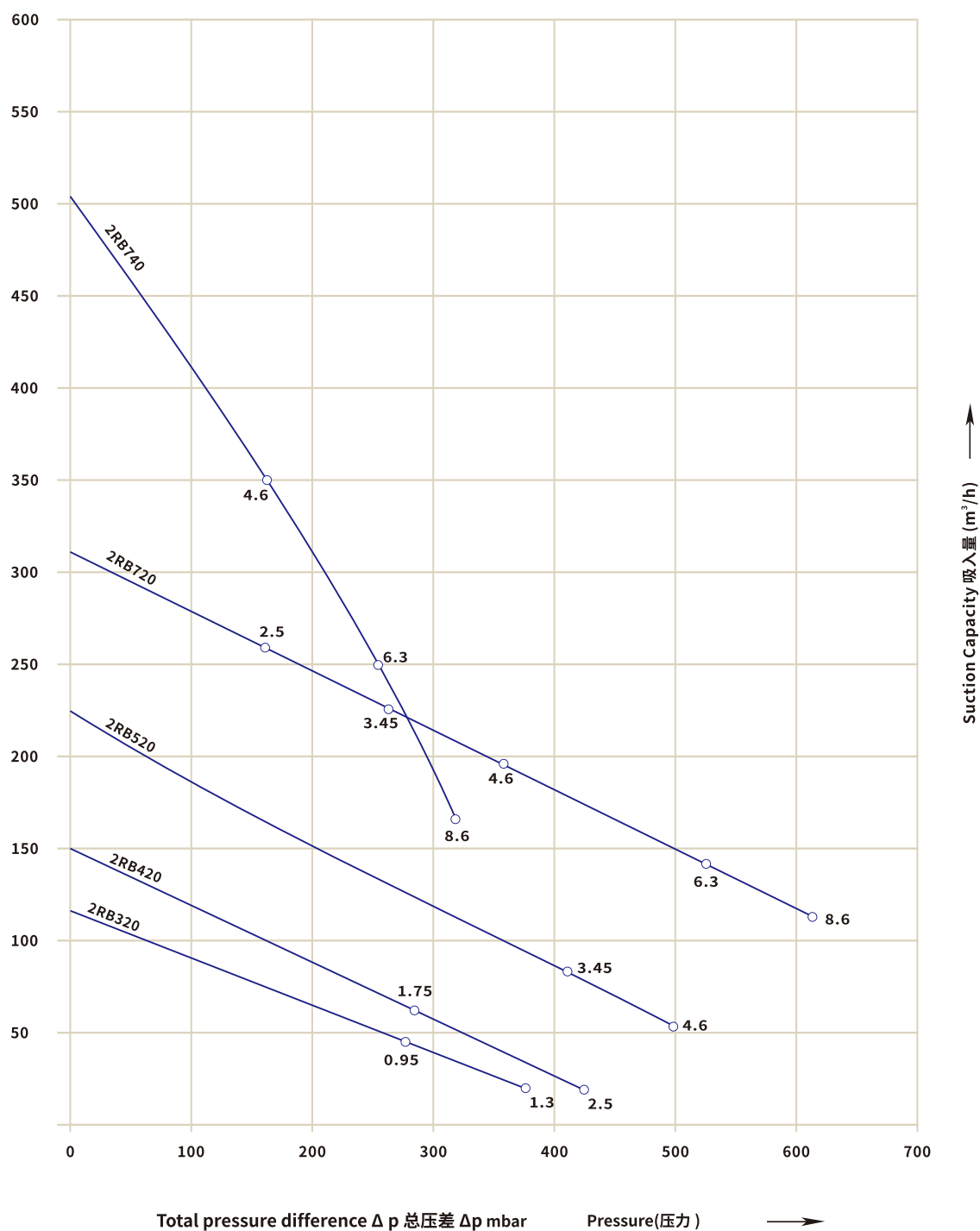




下面的性能曲线是在抽吸15°C空气，排气压力1013mbar的工况下测出的，允差±10%，吸入空气和环境温度不超过25°C时，即可达到图示总压差。

The performance curves are valid for pumping air at 15°C at the inlet flanges with an air pressure of 1.013mbar and a tolerance of ±10%. The total pressure differences are valid up to an intake and ambient temperature of 25°C.

Pressure Selection diagram 50Hz—压力选型图表 50Hz

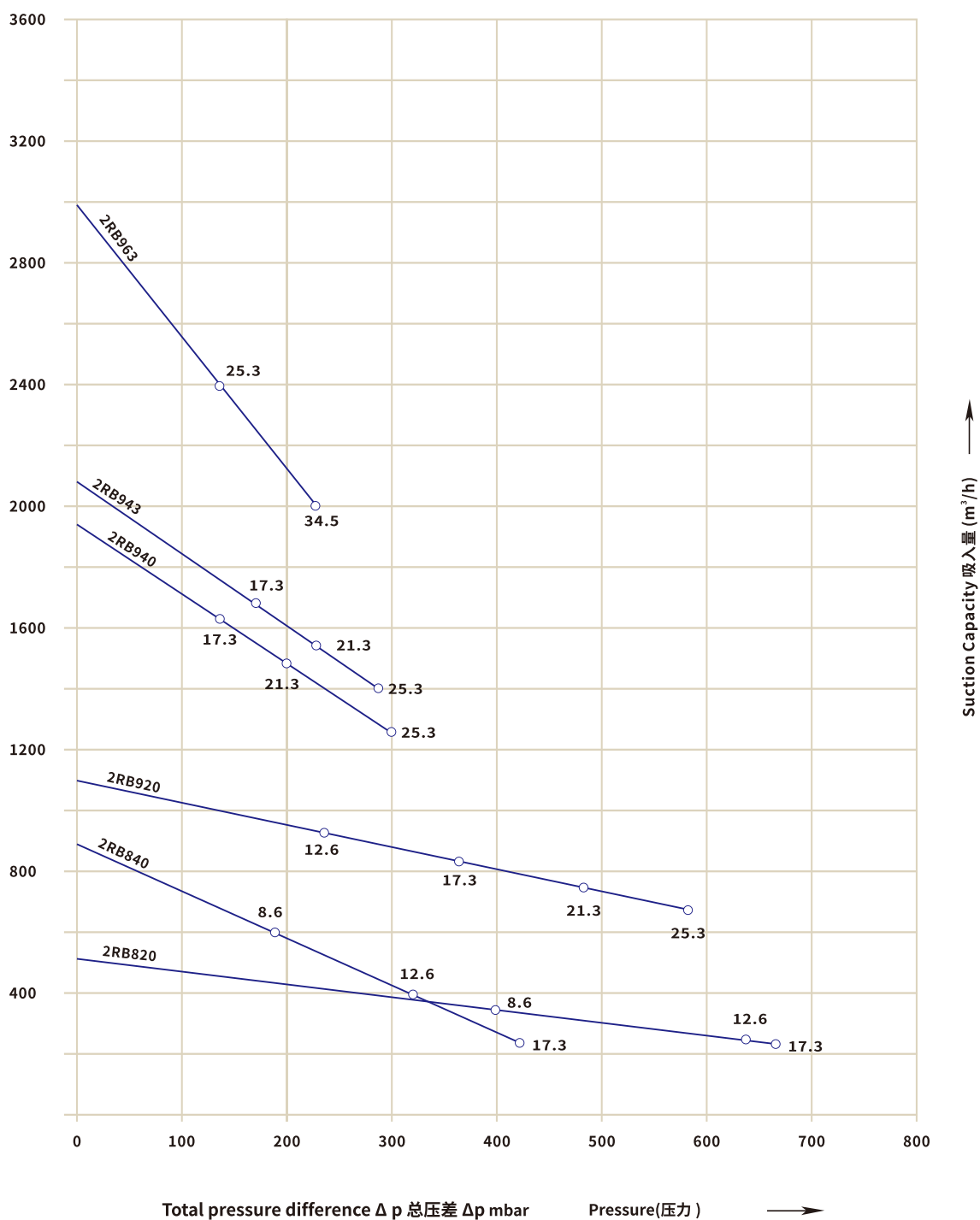




下面的性能曲线是在抽吸15°C空气，排气压力1013mbar的工况下测出的，允差±10%，吸入空气和环境温度不超过25°C时，即可达到图示总压差。

The performance curves are valid for pumping air at 15°C at the inlet flanges with an air pressure of 1.013mbar and a tolerance of ±10%. The total pressure differences are valid up to an intake and ambient temperature of 25°C.

Pressure Selection diagram 50Hz—压力选型图表 50Hz

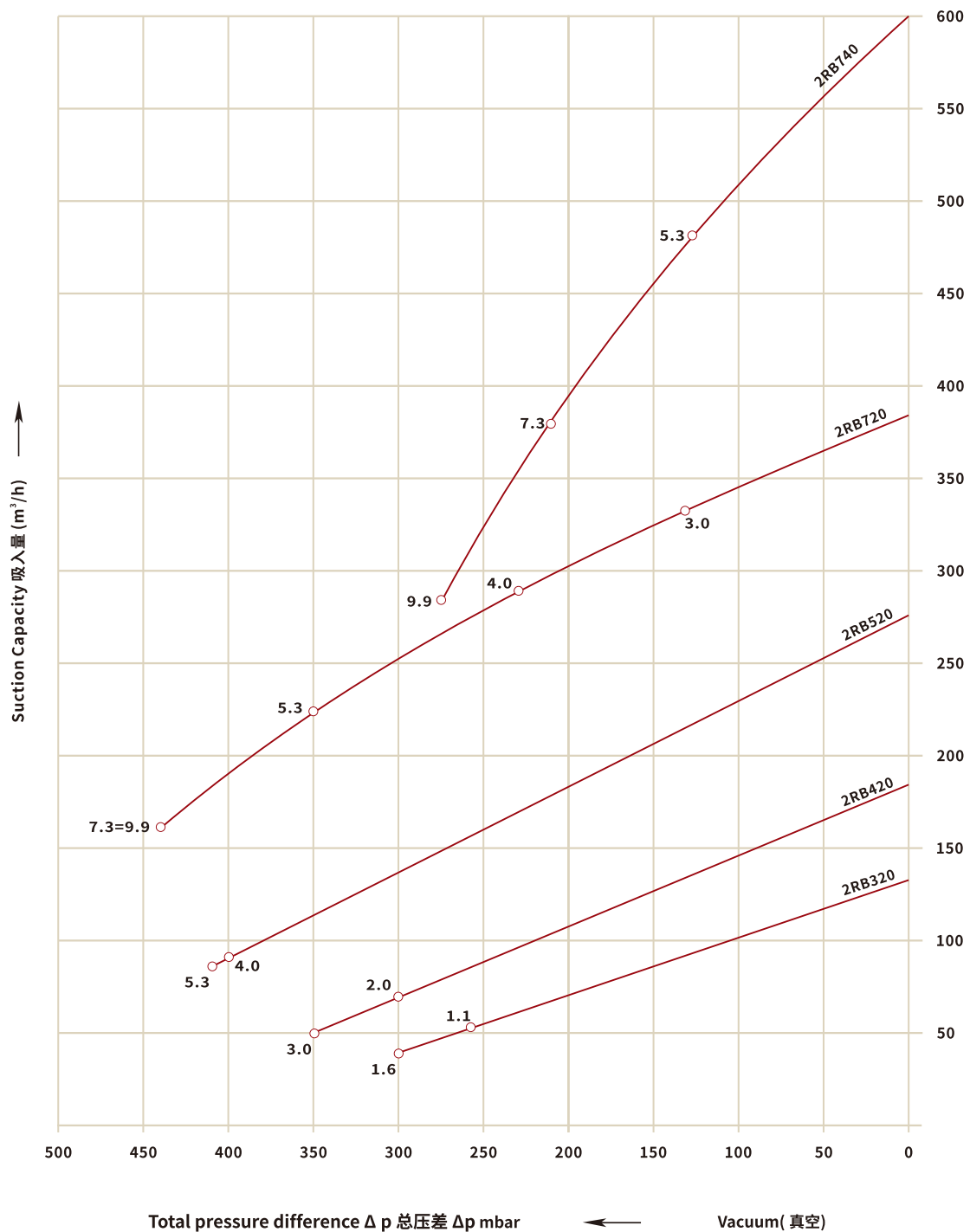




下面的性能曲线是在抽吸15°C空气，排气压力1013mbar的工况下测出的，允差±10%，吸入空气和环境温度不超过25°C时，即可达到图示总压差。

The performance curves are valid for pumping air at 15°C at the inlet flanges with an air pressure of 1.013mbar and a tolerance of ±10%. The total pressure differences are valid up to an intake and ambient temperature of 25°C.

Vacuum Selection diagram 60Hz—真空选型图表 60Hz

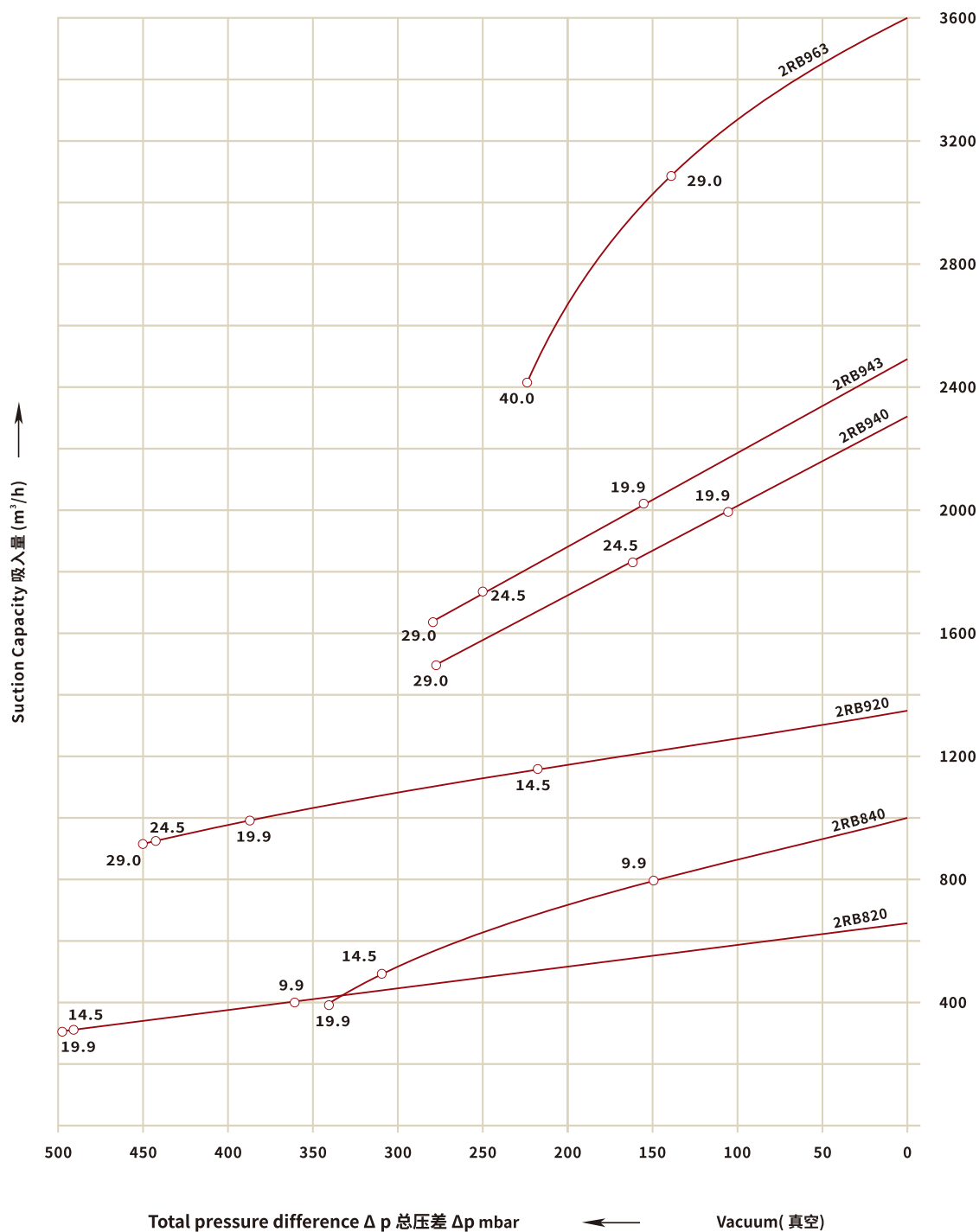




下面的性能曲线是在抽吸15°C空气，排气压力1013mbar的工况下测出的，允差±10%，吸入空气和环境温度不超过25°C时，即可达到图示总压差。

The performance curves are valid for pumping air at 15°C at the inlet flanges with an air pressure of 1.013mbar and a tolerance of ±10%. The total pressure differences are valid up to an intake and ambient temperature of 25°C.

Vacuum Selection diagram 60Hz—真空选型图表 60Hz

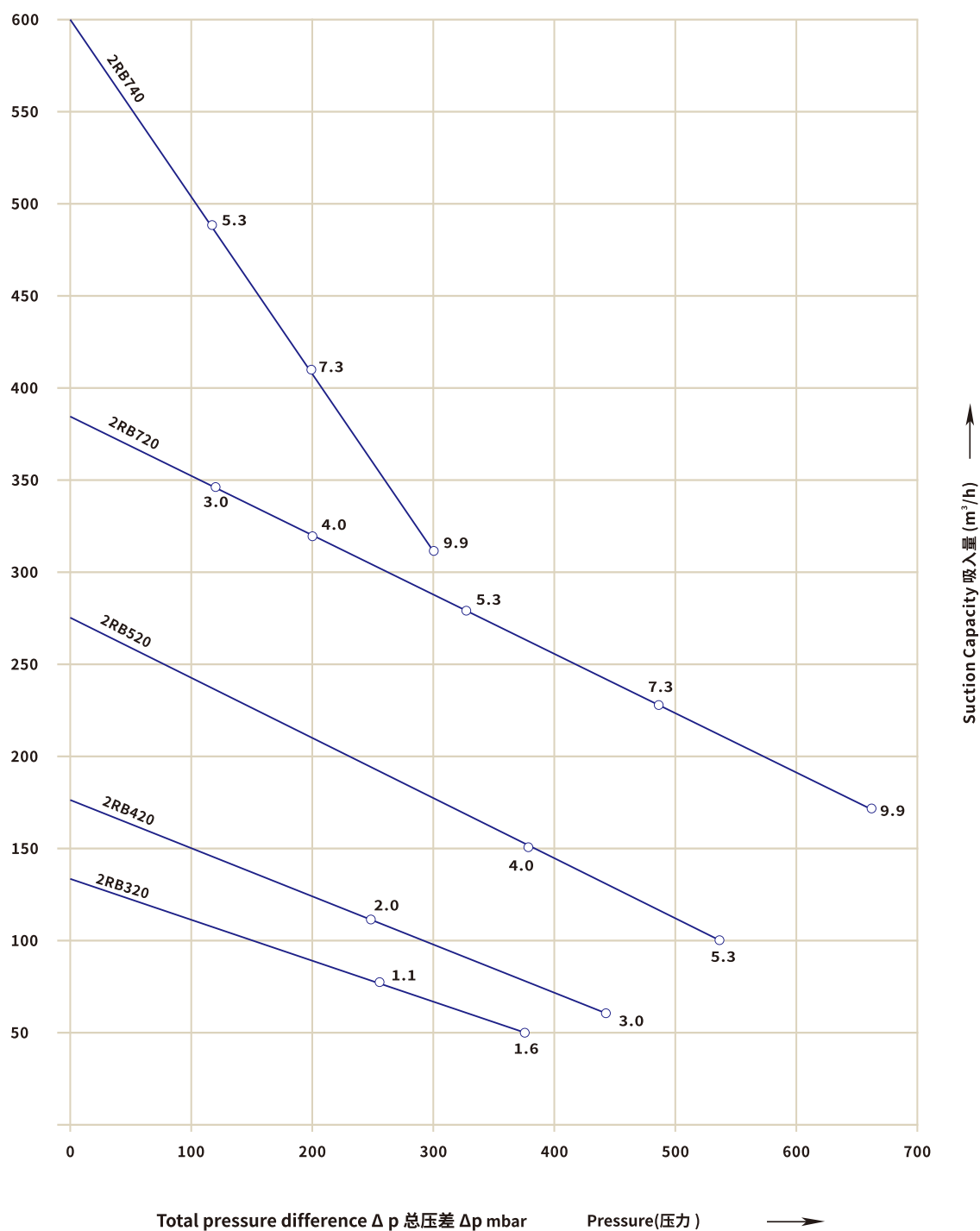




下面的性能曲线是在抽吸15°C空气，排气压力1013mbar的工况下测出的，允差±10%，吸入空气和环境温度不超过25°C时，即可达到图示总压差。

The performance curves are valid for pumping air at 15°C at the inlet flanges with an air pressure of 1.013mbar and a tolerance of ±10%. The total pressure differences are valid up to an intake and ambient temperature of 25°C.

Pressure Selection diagram 60Hz—压力选型图表 60Hz

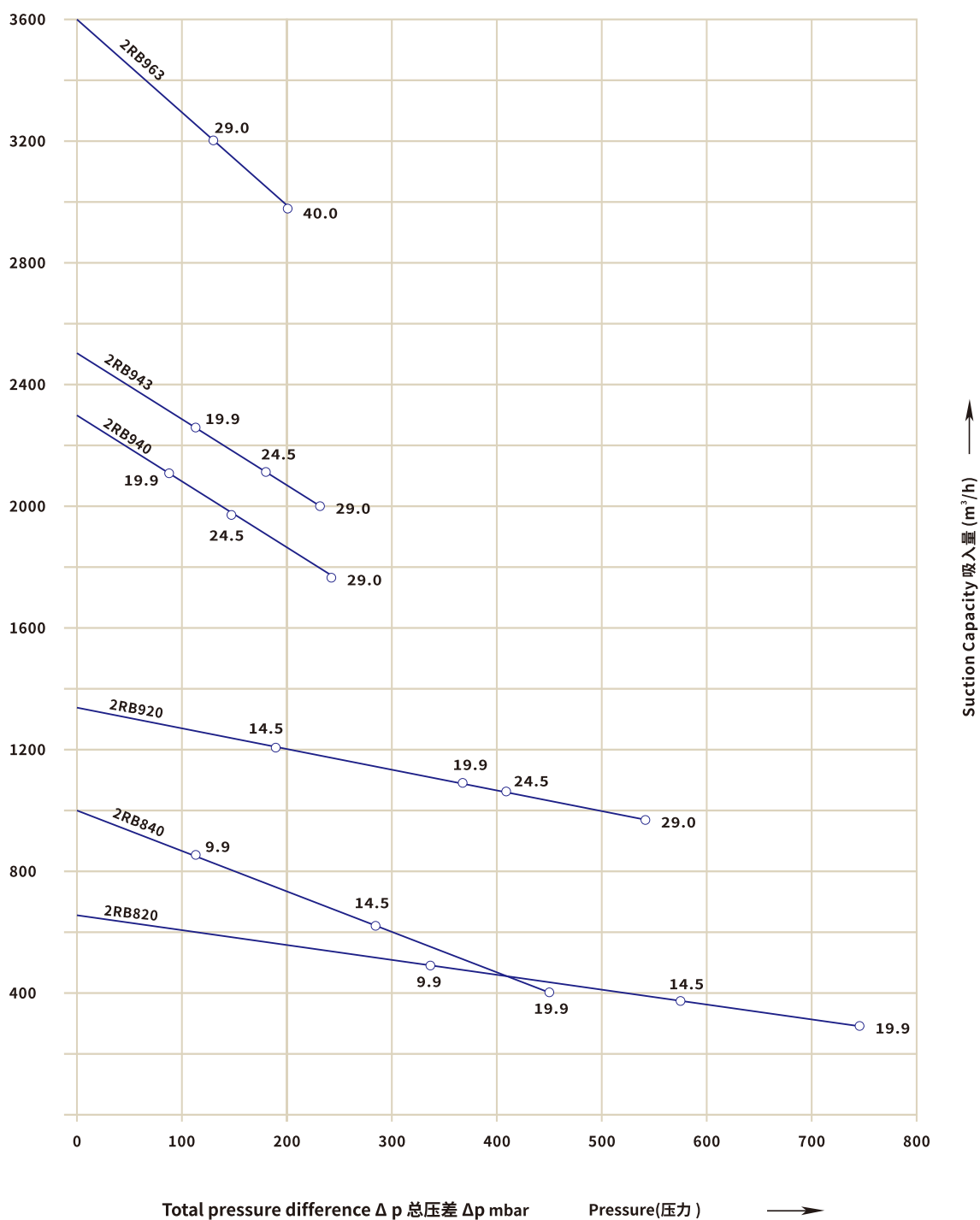




下面的性能曲线是在抽吸15°C空气，排气压力1013mbar的工况下测出的，允差±10%，吸入空气和环境温度不超过25°C时，即可达到图示总压差。

The performance curves are valid for pumping air at 15°C at the inlet flanges with an air pressure of 1.013mbar and a tolerance of ±10%. The total pressure differences are valid up to an intake and ambient temperature of 25°C.

Pressure Selection diagram 60Hz——压力选型图表 60Hz



换算表 Conversion tables



压力换算表 Pressure

初始单位 Beginning units	换算因子 Conversion factor	目标单位 Resulting units
Pa	0.01	Mbar
hPa	1.0	mbar
kPa	10.0	mbar
mm H ₂ O	0.098	mbar
m H ₂ O	98.07	mbar
at	980.7	mbar
inch H ₂ O	2.491	mbar
PSI lpt/in ²	68.948	mbar
mbar	100	Pa
mbar 1	10.2	mm H ₂ O
mbar	10.2 · 10 ⁻³	m H ₂ O
mbar	1.02 · 10 ⁻³	at
mbar	0.4016	inch H ₂ O
mbar	14.505 · 10 ⁻³	PSI lpt/in ²

换算举例

250[inch H₂O] · 2.491=622.5[mbar]

下面的公式用来把“以水银柱高度度量的真空度”换算成“绝对压力”

1013-x[inches of mercury vacuum] · 33.8≈Y[mbar abs.]

绝对压力

绝压是以理想真空（绝压为零）为基准而得到的测量值。所以绝压总是比参考值大。

表压

表压是指高于标准大气压压力的测量值。即以标准大气压为基准。因此实际测量值总是比基准值大。

真空度

真空度是指低于标准大气压压力的测量值。测量基准仍为标准大气压，所以实际测量值总比基准值小。

Example of conversion

250[inch H₂O]2.491=622.5[mbar]

The following formula is used to convert values from “inches of mercury vacuum” to “mbar abs.”

1013-x[inches of mercury vacuum]·33.8≈Y[mbar abs.]

Absolute pressure

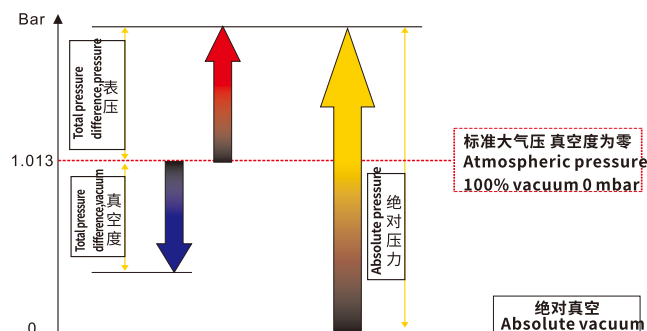
The pressure measured from absolute zero, using ideal vacuum as the datum. The measured pressure is always greater than the reference pressure.

Total pressure difference, pressure

The pressure measured above the prevailing atmospheric pressure. The datum is the prevailing atmospheric pressure and the measured pressure is always higher than the datum.

Total pressure difference, vacuum

The pressure measured lower than the prevailing atmospheric pressure. The datum is the prevailing atmospheric pressure and the measured pressure is always lower than the datum.



抽吸能力换算表 Suction capacity

初始单位 Beginning units	换算因子 Conversion factor	目标单位 Resulting units
l/min	0.06	m ³ /h
gal/min	0.227	m ³ /h
ft ³ /min	1.699	m ³ /h
m ³ /h	16.667	i/min
m ³ /h	4.403	gal/min
m ³ /h	0.588	ft ³ /min

功率换算表 Electrical power

初始单位 Beginning units	换算因子 Conversion factor	目标单位 Resulting units
hp	0.746	kW
btu/h	293.1	kW
kW	1.341	hp
kW	3.41 · 10 ⁻³	Btu/h

重量换算表 Weight

初始单位 Beginning units	换算因子 Conversion factor	目标单位 Resulting units
lbm	0.454	kg
kg	2.205	lbm

长度换算表 Length

初始单位 Beginning units	换算因子 Conversion factor	目标单位 Resulting units
in.	25.4mm	
in.	0.0254	m
ft	305	mm
ft	0.305	m
m	39.37	in.
m	3.28	f

温度换算表 Temperature conversion

换算自 from	Conversion 至 to	
°F	K	$T [K] = \frac{T [°F] + 459.67}{1.8}$
°F	°C	$t [°C] = \frac{T [°F] - 32}{1.8}$
K	°F	$t [°F] = 1.8 \cdot T [K] - 459.67$
°C	°F	$t [°F] = 1.8 \cdot t [°C] + 32$



电机的效率等级依照美国 NEMA标准 MG1-12. NP=NEMA Premium;
效率等级IE3 以及欧盟 EN 60034 标准 “旋转电机”，效率等级IE3.
电机服务系数（SF）依据 NEMA MG1-12 标准的电机效率。
三相电机的电压容差为 +/-10%.
频率容差最大为±2%.

The motors according to NEMA MG1-12. NP=NEMA Premium;
NEMA Premium includes IE3 and the EN 60034 norm
“Rotating electrical machines” .

Service factor (SF) and motor efficiency according NEMA MG1-12.
Voltage tolerances for three phase motors are +/-10%.
The frequency tolerance is +/- 2 % maximum.

Motor for alternate voltages							
Voltage range 电压范围		Efficiency standard 效率标准	 60 Hz	87 Hz 5000rpm	100 Hz 6000rpm	2RB ...-1.  	
50 Hz	60Hz						
3 Phase							
200 VΔ	200 V YY / 230 VΔ / 400 VY		•	345 VΔ	400 VΔ		P 1
190-210 VΔ	190-210 VYY / 220-240 VΔ / 380-420VY	IE3					
200 V YY / 230 VΔ / 400 VY	230 V YY / 460 VY		•	400 VΔ	----		P 6
190-210 VYY / 220-240 VΔ / 380-420VY	220-240 VYY / 440-480VY	IE3					
190-210 VΔ	220-240 VΔ / 380-420VY	IE3	•	345 VΔ	400 VΔ		Q 1
475-525 V Y	550-600 V Y		•	----	----		Q 3
475-525 VΔ	550-600 VΔ		•	----	----		Q 5
220-240 VΔ / 380-420 V Y	440-480VY	IE3	•	400 VΔ	----		Q 6
400 VΔ / 690 V Y	460 VΔ		•	----	----		Q 7

关于漩涡气泵配套以上不同电压和频率的技术参数，请到网站www.greenco.cn下载相关的性能曲线，外形尺寸，2D和3D图纸等相关信息

Regarding the technical parameters of the side channel blower corresponding to different voltages and frequencies mentioned above, please download the relevant performance curves, dimensions, 2D and 3D drawings and other information from the website www.greenco.cn.



GREENCO

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传真：0576-86409555

E-mail: greenco@greenco.cn

[Http://www.greenco.cn](http://www.greenco.cn)

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Wenling Zhejiang China

P.C: 317523

Tel: 0086-576-86465325

Fax: 0086-576-86409555

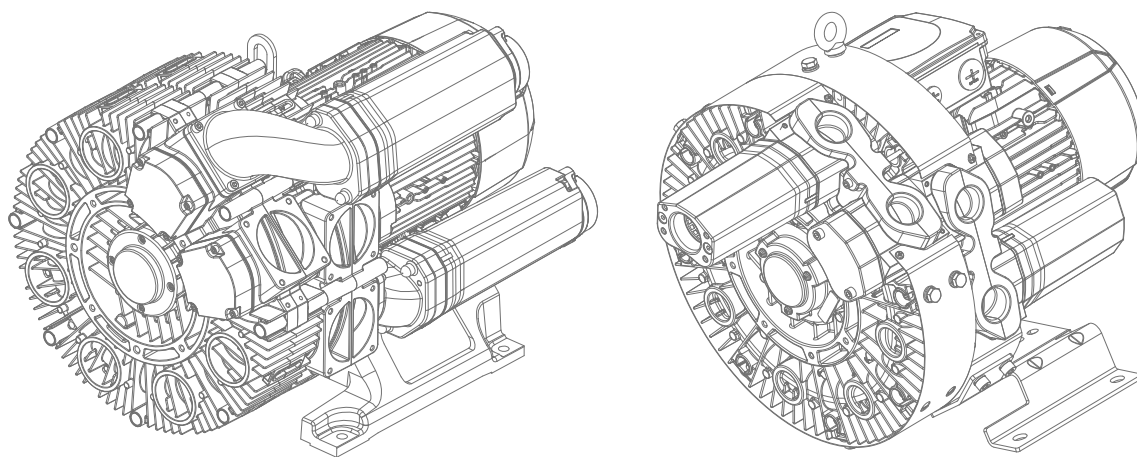
E-mail: greenco@greenco.cn

[Http://www.greenco.cn](http://www.greenco.cn)

GREENCO[®]

3RB/4RB系列

漩涡式气泵配高效节能电机
Side channel blower with high efficiency motor



浙江格凌实业有限公司

ZHEJIANG GREENCO INDUSTRY CO.,LTD.

订购规格型号详解 Order Model System and Specification

		3RB	350	-	2	A	A	Q	4	7	-	Z
型号	Model											
规格	Size											
段数	Number of stage											
设计特点	Design features											
进出口位置	Position of inlet and outlet											
电机种类	Kind of motor											
电机规格	Motor size											
电压类型	Voltage type											
特别类型	Specific type											

型号: 2RB,3RB,4RB

规格:250,350,550,750

段数:1单段,2 双段, 3 三段

设计特点: A 配电机 Y, 无电机

进出口位置: A 进气口和出气口平行的 B 吸气口在前盖上

电机种类: Q 6根接线柱, P 9根接线柱

电机规格: 所能配的电机电功率排序

电压类型: 详情参看第14页

特别类型: Z 热保护器 S 长轴 T 镀特氟龙 N 镀镍 A 阳极氧化

*Model: 2RB,3RB,4RB

*Size:250,350,550,750

*Number of stage:1 single stage, 2 double stage, 3 three stage

*Desig features:A with electric motor Y without electric motor

*Position of inlet and outlet: A inlet and outlet are parallel B suction port at cover

*Kind of motor: Q with 6 wiring terminal P with 9 wiring terminal

*Motor size:The sequence of motor power sizes

*Voltage: For more detail see page14

Specific type: Z thermal protector S Long shaft T teflon coating

N nickel coating A anodizing

		4RB	5	2	0	-	0	A	Q	2	6	-	1	-	Z
型号	Model														
规格	Size														
段数	Number of stage														
设计特点	Design features														
产品编号	Position of inlet and outlet														
进出口位置	Model type														
电机种类	Kind of motor														
电机规格	Motor size														
电压类型	Voltage type														
设计版本	Design version														
特别类型	Specific type														

型号: 2RB,3RB,4RB

规格:2,3,4,5,6

段数:1单段,2 双段, 3 三段

设计特点: 0 配电机 3, 无电机

进出口位置: A 进气口和出气口平行的 B 吸气口在前盖上

电机种类: Q 6根接线柱, P 9根接线柱

电压类型: 详情参看第14页

电机规格: 所能配的电机电功率排序

设计版本:8老版本, 1新版本

特别类型: Z 保护器 S 长轴 T 镀特氟龙 N 镀镍

A 阳极氧化 F 防爆

*Model: 2RB,3RB,4RB

*Size: 2,3,4,5,6

*Number of stage:1 single stage, 2 double stage, 3 three stage

*Desig features:0 with Electric motor 3 without electric motor

*Position of inlet and outlet: A inlet and outlet are parallel B suction port at cover

*Kind of motor: Q with 6 wiring terminal P with 9 wiring terminal

*Voltage: For more detail see page14

*Motor size:The sequence of motor power sizes

*Design version: 8 old version 1 new version

*Specific type: Z thermal protector S Long shaft T teflon coating

N nickel coating A anodizing F explosion-proof



漩涡式气泵在真空和压力操作的选型和订购参数。

Selection and ordering data for side channel blowers in vacuum and pressure operation.

规格型号	IE3功率	频率	输出功率	电压	电流	最大流量	最大真空	最大压力	净重	口径尺寸
MODEL · In stock	IE3 Power Kw	Freq Hz	Output power Kw	Voltage V	Current A	Max airflow m³/h	Max static vacuum mbar	Max static pressure mbar	Net.W Kg	Size Inch
·3RB 250-2AAQ26	3.0	50	3.45	220-240Δ/380-420Y	12.0 Δ/ 6.9Y	230	-300	260	82	G 2'
		60	4.0	440-480Y	6.7Y	280	-280	250		
·3RB 250-2AAQ37	4.0	50	4.6	380-420Δ/660-725Y	8.6Δ/ 5.0Y	230	-430	420	88	G 2'
		60	5.3	440-480Δ	8.50Δ	280	-460	460		
·3RB 250-2AAQ47	5.5	50	6.3	380-420Δ/660-725Y	11,8Δ / 6,8 Y	230	-530	720	97	G 2'
		60	7.3	440-480Δ	12,0Δ	280	-580	700		
·3RB 250-2AAQ57	7.5	50	8.6	380-420Δ/660-725Y	15,5Δ / 8,9Y	230	-530	900	108	G 2'
		60	9.9	440-480Δ	15,3Δ	280	-580	880		
·3RB 250-3AAQ37	4.0	50	4.6	380-420Δ/660-725Y	8.6Δ/ 5.0Y	230	-420	430	107	G 2'
		60	5.3	440-480Δ	8.50Δ	280	-550	450		
·3RB 250-3AAQ47	5.5	50	6.3	380-420Δ/660-725Y	11,8Δ / 6,8 Y	230	-650	850	116	G 2'
		60	7.3	440-480Δ	12,0Δ	280	-650	820		
·3RB 250-3AAQ57	7.5	50	8.6	380-420Δ/660-725Y	15,5Δ / 8,9Y	230	-650	1020	124	G 2'
		60	9.9	440-480Δ	15,3Δ	280	-650	1020		
·3RB 350-1AAQ26	3.0	50	3.45	220-240Δ/380-420Y	12.0 Δ/ 6.9Y	315	-320	310	76	G 2'1/2
		60	4.0	440-480Y	6.7Y	370	-320	270		
·3RB 350-1AAQ37	4.0	50	4.6	380-420Δ/660-725Y	8.6Δ/ 5.0Y	315	-350	440	82	G 2'1/2
		60	5.3	440-480Δ	8.50Δ	370	-390	410		
·3RB 350-1AAQ47	5.5	50	6.3	380-420Δ/660-725Y	11,8Δ / 6,8 Y	315	-350	500	88	G 2'1/2
		60	7.3	440-480Δ	12,0Δ	370	-390	510		
·3RB 350-2AAQ37	4.0	50	4.6	380-420Δ/660-725Y	8.6Δ/ 5.0Y	320	-420	370	114	G 2'1/2
		60	5.3	440-480Δ	8.50Δ	380	-360	290		
·3RB 350-2AAQ47	5.5	50	6.3	380-420Δ/660-725Y	11,8Δ / 6,8 Y	320	-530	550	120	G 2'1/2
		60	7.3	440-480Δ	12,0Δ	380	-580	470		
·3RB 350-2AAQ57	7.5	50	8.6	380-420Δ/660-725Y	15,5Δ / 8,9Y	320	-530	820	126	G 2'1/2
		60	9.9	440-480Δ	15,3Δ	380	-580	730		
·3RB 350-2AAQ67	11	50	12.6	380-420Δ/660-725Y	23,3 Δ/ 13,4 Y	320	-420	870	142	G 2'1/2
		60	14.5	440-480Δ	23,0Δ	380	-360	930		
·3RB 350-3AAQ47	5.5	50	6.3	380-420Δ/660-725Y	11,8Δ / 6,8 Y	320	-590	480	146	G 2'1/2
		60	7.3	440-480Δ	12,0Δ	380	-530	380		
·3RB 350-3AAQ57	7.5	50	8.6	380-420Δ/660-725Y	15,5Δ / 8,9Y	320	-650	750	152	G 2'1/2
		60	9.9	440-480Δ	15,3Δ	380	-650	630		
·3RB 350-3AAQ67	11	50	12.6	380-420Δ/660-725Y	23,3 Δ/ 13,4 Y	320	-650	1020	178	G 2'1/2
		60	14.5	440-480Δ	23,0Δ	380	-650	1050		
·3RB 550-1AAQ37	4.0	50	4.6	380-420Δ/660-725Y	8.6Δ/ 5.0Y	480	-270	240	92	G 3'
		60	5.3	440-480Δ	8.50Δ	565	-210	170		
·3RB 550-1AAQ47	5.5	50	6.3	380-420Δ/660-725Y	11,8Δ / 6,8 Y	480	-380	400	98	G 3'
		60	7.3	440-480Δ	12,0Δ	565	-400	340		
·3RB 550-1AAQ57	7.5	50	8.6	380-420Δ/660-725Y	15,5Δ / 8,9Y	480	-380	550	104	G 3'
		60	9.9	440-480Δ	15,3Δ	565	-410	520		
·3RB 550-2AAQ57	7.5	50	8.6	380-420Δ/660-725Y	15,5Δ / 8,9Y	480	-530	450	159	G 3'
		60	9.9	440-480Δ	15,3Δ	580	-460	350		
·3RB 550-2AAQ67	11	50	12.6	380-420Δ/660-725Y	23,3 Δ/ 13,4 Y	480	-530	760	175	G 3'
		60	14.5	440-480Δ	23,0Δ	580	-540	640		
·3RB 550-2AAQ77	15	50	17.3	380-420Δ/660-725Y	31,7 Δ/ 18,3 Y	480	-530	890	185	G 3'
		60	19.9	440-480Δ	31,4Δ	580	-540	920		
·3RB 550-3AAQ67	11	50	12.6	380-420Δ/660-725Y	23,3 Δ/ 13,4 Y	480	-610	640	208	G 3'
		60	14.5	440-480Δ	23,0Δ	580	-590	500		
·3RB 550-3AAQ77	15	50	17.3	380-420Δ/660-725Y	31,7 Δ/ 18,3 Y	480	-610	980	217	G 3'
		60	19.9	440-480Δ	31,4Δ	580	-590	870		
·3RB 550-3AAQ87	18.5	50	21.3	380-420Δ/660-725Y	38,3 Δ/ 22,1 Y	480	-610	1020	230	G 3'
		60	24.5	440-480Δ	38,0Δ	580	-590	1020		



漩涡式气泵在真空和压力操作的选型和订购参数。

Selection and ordering data for side channel blowers in vacuum and pressure operation.

规格型号	IE3功率	频率	输出功率	电压	电流	最大流量	最大真空	最大压力	净重	口径尺寸
MODEL · In stock	IE3 Power Kw	Freq Hz	Output power Kw	Voltage V	Current A	Max airflow m³/h	Max static vacuum mbar	Max static pressure mbar	Net.W Kg	Size Inch
·3RB 750-1AAQ47	5.5	50	6.3	380-420Δ/660-725Y	11,8Δ / 6,8 Y	750	-220	200	120	G 4"
		60	7.3	440-480Δ	12,0Δ	880	-150	120		
·3RB 750-1AAQ57	7.5	50	8.6	380-420Δ/660-725Y	15,5Δ / 8,9Y	750	-360	330	132	G 4"
		60	9.9	440-480Δ	15,3Δ	880	-300	250		
·3RB 750-1AAQ67	11	50	12.6	380-420Δ/660-725Y	23,3 Δ/ 13,4 Y	750	-380	540	148	G 4"
		60	14.5	440-480Δ	23,0Δ	880	-410	470		
·3RB 750-1AAQ77	15	50	17.3	380-420Δ/660-725Y	31,7 Δ/ 18,3 Y	740	-380	550	160	G 4"
		60	19.9	440-480Δ	31,4Δ	880	-410	590		
·3RB 750-2AAQ67	11	50	12.6	380-420Δ/660-725Y	23,3 Δ/ 13,4 Y	720	-530	420	192	G 4"
		60	14.5	440-480Δ	23,0Δ	840	-450	320		
·3RB 750-2AAQ77	15	50	17.3	380-420Δ/660-725Y	31,7 Δ/ 18,3 Y	720	-530	670	204	G 4"
		60	19.9	440-480Δ	31,4Δ	840	-530	560		
·3RB 750-2AAQ87	18.5	50	21.3	380-420Δ/660-725Y	38,3 Δ/ 22,1 Y	720	-530	750	228	G 4"
		60	24.5	440-480Δ	38,0Δ	840	-530	750		
·3RB 750-2AAQ97	22.0	50	25.3	380-420Δ/660-725Y	79,7 Δ/ 46,0 Y	720	-530	860	260	G 4"
		60	28.5	440-480Δ	45,0Δ	840	-530	900		
·3RB 750-3AAQ77	15	50	17.3	380-420Δ/660-725Y	31,7 Δ/ 18,3 Y	690	-600	590	242	G 4"
		60	19.9	440-480Δ	31,4Δ	795	-590	450		
·3RB 750-3AAQ87	18.5	50	21.3	380-420Δ/660-725Y	38,3 Δ/ 22,1 Y	690	-600	800	254	G 4"
		60	24.5	440-480Δ	38,0Δ	795	-590	640		
·3RB 750-3AAQ97	22.0	50	25.3	380-420Δ/660-725Y	79,7 Δ/ 46,0 Y	690	-600	980	302	G 4"
		60	28.5	440-480Δ	45,0Δ	795	-590	820		

规格型号	IE3功率	频率	输出功率	电压	电流	最大流量	最大真空	最大压力	净重	口径尺寸
MODEL · In stock	IE3 Power Kw	Freq Hz	Output power Kw	Voltage V	Current A	Max airflow m³/h	Max static vacuum mbar	Max static pressure mbar	Net.W Kg	Size Inch
·4RB 210-0AQ36-1	0.75	50	0.95	220-240Δ/380-420Y	3.6Δ/2.1Y	47	-230	290	21	G 1 1/4"
		60	1.1	440-480Y	2.1Y	57	-300	420		
·4RB 220-0AQ36-1	0.75	50	0.95	220-240Δ/380-420Y	3.6Δ/2.1Y	47	-370	490	25	G 1 1/4"
		60	1.1	440-480Y	2.1Y	60	-480	480		
·4RB 220-0AQ56-1	1.5	50	1.75	220-240Δ/380-420Y	4.9Δ/2.85Y	47	-370	650	30	G 1 1/4"
		60	2.0	440-480Y	2.75Y	60	-500	860		
·4RB 310-0AQ36-1	0.75	50	0.95	220-240Δ/380-420Y	3.6Δ/2.1Y	65	-280	350	22	G 1 1/4"
		60	1.1	440-480Y	2.1Y	76	-340	340		
·4RB 310-0AQ46-1	1.1	50	1.3	220-240Δ/380-420Y	4.9Δ/2.85Y	65	-280	350	25	G 1 1/4"
		60	1.6	440-480Y	2.75Y	76	-340	460		
·4RB 320-0AQ46-1	1.1	50	1.3	220-240Δ/380-420Y	4.9Δ/2.85Y	65	-440	480	29	G 1 1/4"
		60	1.6	440-480Y	2.75Y	76	-510	480		
·4RB 320-0AQ56-1	1.5	50	1.75	220-240Δ/380-420Y	6.0 Δ / 3.45 Y	65	-440	660	33	G 1 1/4"
		60	2.0	440-480Y	3.4Y	76	-540	630		
·4RB 320-0AQ66-1	2.2	50	2.5	220-240Δ/380-420Y	8.6 Δ / 5.0 Y	65	-440	750	39	G 1 1/4"
		60	3.0	440-480Y	5.2Y	76	-540	890		



漩涡式气泵在真空和压力操作的选型和订购参数。

Selection and ordering data for side channel blowers in vacuum and pressure operation.

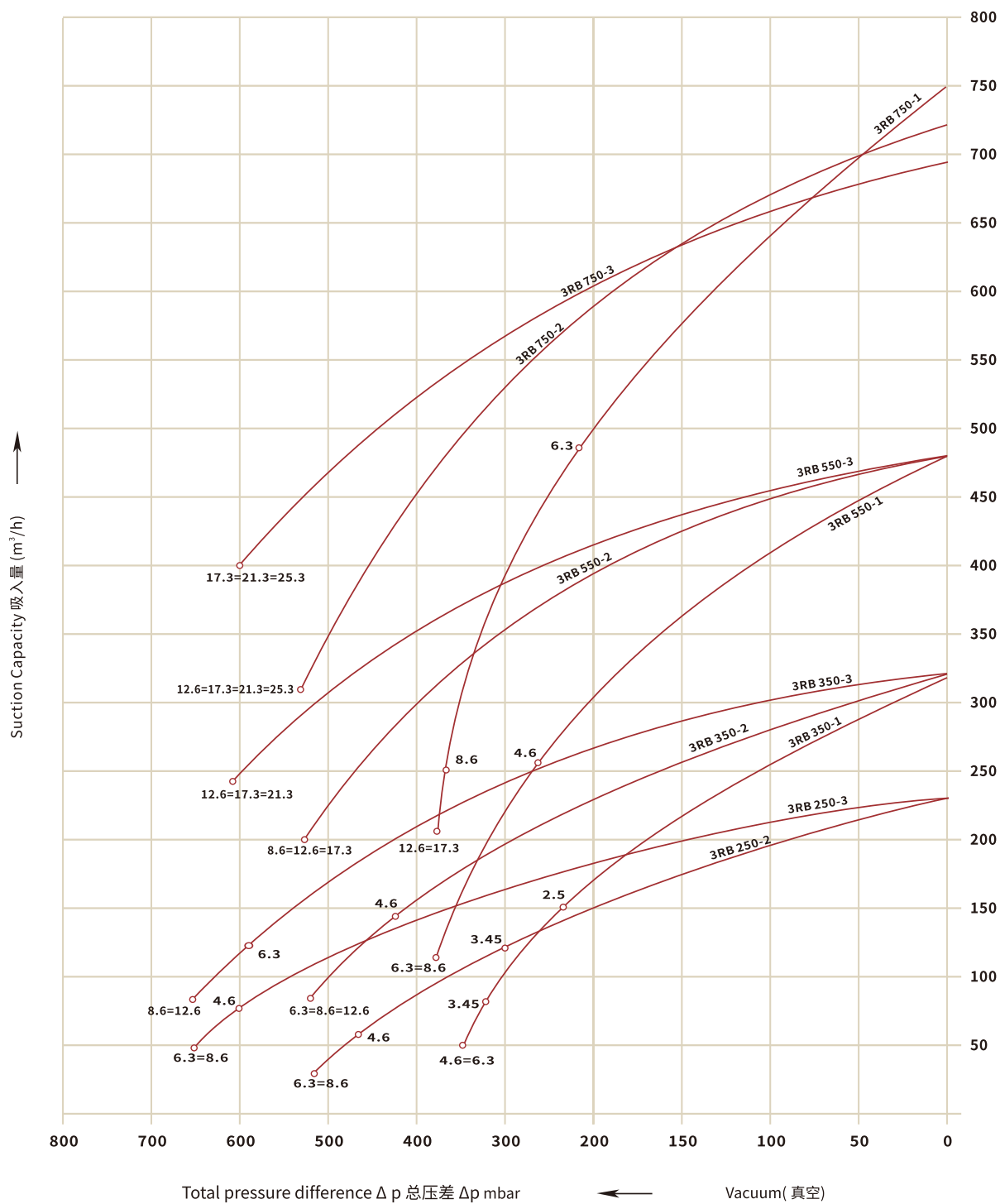
规格型号	IE3功率	频率	输出功率	电压	电流	最大流量	最大真空	最大压力	净重	口径尺寸
MODEL · In stock	IE3 Power Kw	Freq Hz	Output power Kw	Voltage V	Current A	Max airflow m³/h	Max static vacuum mbar	Max static pressure mbar	Net.W Kg	Size Inch
-4RB 330-0AQ56-1	1.5	50	1.75	220-240Δ/380-420Y	6.0 Δ / 3.45 Y	65	-650	730	38	G 1 1/4
		60	2.0	440-480Y	3.4Y	76	-680	780		
-4RB 330-0AQ66-1	2.2	50	2.5	220-240Δ/380-420Y	8.6 Δ / 5.0 Y	65	-650	980	43	G 1 1/4
		60	3.0	440-480Y	5.2Y	76	-680	1000		
-4RB 410-0AQ16-1	1.1	50	1.3	220-240Δ/380-420Y	4.9Δ/2.85Y	87	-300	390	24	G 1 1/4
		60	1.6	440-480Y	2.75Y	105	-350	370		
-4RB 410-0AQ26-1	2.2	50	2.5	220-240Δ/380-420Y	8.6 Δ / 5.0 Y	87	-310	430	30	G 1 1/4
		60	3.0	440-480Y	5.2Y	105	-370	510		
-4RB 420-0AQ26-1	1.5	50	1.75	220-240Δ/380-420Y	6.0 Δ / 3.45 Y	87	-500	460	36	G 1 1/4
		60	2.0	440-480Y	3.4Y	105	-500	410		
-4RB 420-0AQ36-1	2.2	50	2.5	220-240Δ/380-420Y	8.6 Δ / 5.0 Y	87	-500	730	41	G 1 1/4
		60	3.0	440-480Y	5.2Y	105	-550	700		
-4RB 420-0AQ46-1	3.0	50	3.45	220-240Δ/380-420Y	12.0 Δ/ 6.9Y	87	-500	830	46	G 1 1/4
		60	4.0	440-480Y	6.7Y	105	-560	950		
-4RB 430-0AQ36-1	2.2	50	2.5	220-240Δ/380-420Y	8.6 Δ / 5.0 Y	87	-650	680	48	G 1 1/4
		60	3.0	440-480Y	5.2Y	105	-680	700		
-4RB 430-0AQ46-1	3.0	50	3.45	220-240Δ/380-420Y	12.0 Δ/ 6.9Y	87	-650	1000	54	G 1 1/4
		60	4.0	440-480Y	6.7Y	105	-680	980		
-4RB 510-0AQ16-1	1.5	50	1.75	220-240Δ/380-420Y	6.0 Δ / 3.45 Y	120	-310	360	30	G 1 1/4
		60	2.0	440-480Y	3.4Y	145	-340	330		
-4RB 510-0AQ26-1	2.2	50	2.5	220-240Δ/380-420Y	8.6 Δ / 5.0 Y	120	-310	420	35	G 1 1/4
		60	3.0	440-480Y	5.2Y	145	-370	490		
-4RB 520-0AQ26-1	2.2	50	2.5	220-240Δ/380-420Y	8.6 Δ / 5.0 Y	120	-490	540	46	G 1 1/4
		60	3.0	440-480Y	5.2Y	145	-520	500		
-4RB 520-0AQ56-1	3.0	50	3.45	220-240Δ/380-420Y	12.0 Δ/ 6.9Y	120	-500	730	51	G 1 1/4
		60	4.0	440-480Y	6.7Y	145	-560	680		
-4RB 520-0AQ77-1	4.0	50	4.6	380-420Δ/660-725Y	8.6Δ/ 5.0Y	120	-500	820	56	G 1 1/4
		60	5.3	440-480Δ	8.50Δ	145	-560	900		
-4RB 530-0AQ66-1	3.0	50	3.45	220-240Δ/380-420Y	12.0 Δ/ 6.9Y	120	-680	680	63	G 1 1/4
		60	4.0	440-480Y	6.7Y	145	-690	620		
-4RB 530-0AQ77-1	4.0	50	4.6	380-420Δ/660-725Y	8.6Δ/ 5.0Y	120	-680	950	68	G 1 1/4
		60	5.3	440-480Δ	8.50Δ	145	-690	900		
-4RB 610-0AQ16-1	2.2	50	2.5	220-240Δ/380-420Y	8.6 Δ / 5.0 Y	165	-370	400	39	G 1 1/4
		60	3.0	440-480Y	5.2Y	195	-370	350		
-4RB 610-0AQ26-1	3.0	50	3.45	220-240Δ/380-420Y	12.0 Δ/ 6.9Y	165	-370	480	44	G 1 1/4
		60	4.0	440-480Y	6.7Y	195	-410	510		
-4RB 620-0AQ26-1	3.0	50	3.45	220-240Δ/380-420Y	12.0 Δ/ 6.9Y	165	-570	480	59	G 1 1/4
		60	4.0	440-480Y	6.7Y	195	-510	420		
-4RB 620-0AQ47-1	4.0	50	4.6	380-420Δ/660-725Y	8.6Δ/ 5.0Y	165	-660	690	64	G 1 1/4
		60	5.3	440-480Δ	8.50Δ	195	-630	620		
-4RB 620-0AQ77-1	5.5	50	6.3	380-420Δ/660-725Y	11,8Δ / 6,8 Y	165	-660	1000	74	G 1 1/4
		60	7.3	440-480Δ	12,0Δ	195	-630	930		
-4RB 630-0AQ57-1	5.5	50	6.3	380-420Δ/660-725Y	11,8Δ / 6,8 Y	170	-680	950	88	G 1 1/4
		60	7.3	440-480Δ	12,0Δ	200	-640	840		
-4RB 630-0AQ67-1	7.5	50	8.6	380-420Δ/660-725Y	15,5Δ / 8,9Y	170	-680	1050	94	G 1 1/4
		60	9.9	440-480Δ	15,3Δ	200	-650	1080		



下面的性能曲线是在抽吸15°C空气，排气压力1013mbar的工况下测出的，允差±10%，吸入空气和环境温度不超过25°C时，即可达到图示总压差。

The performance curves are valid for pumping air at 15°C at the inlet flanges with an air pressure of 1.013mbar and a tolerance of ±10%. The total pressure differences are valid up to an intake and ambient temperature of 25°C.

Vacuum Selection diagram 50Hz—真空选型图表 50Hz

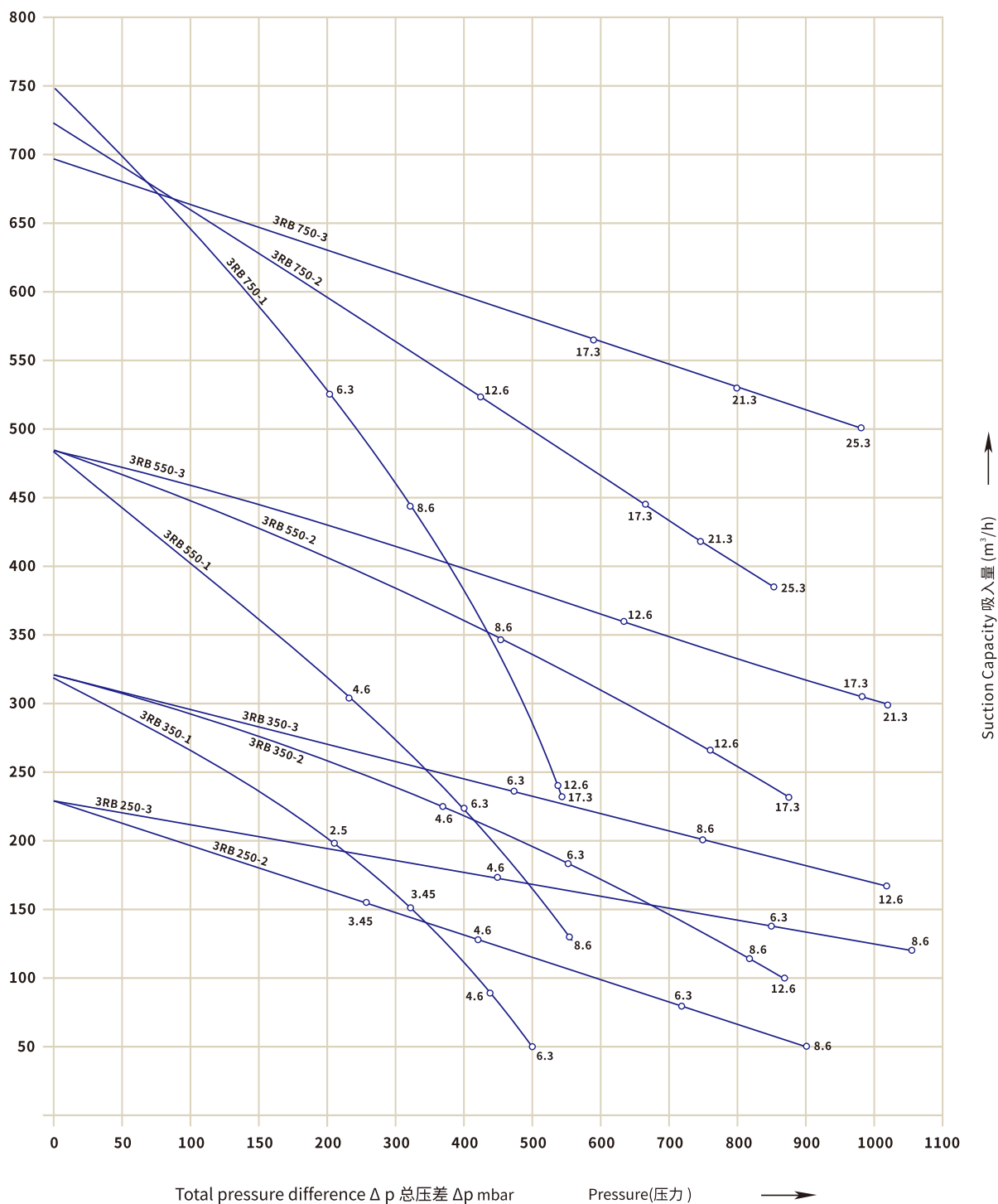




下面的性能曲线是在抽吸15°C空气，排气压力1013mbar的工况下测出的，允差±10%，吸入空气和环境温度不超过25°C时，即可达到图示总压差。

The performance curves are valid for pumping air at 15°C at the inlet flanges with an air pressure of 1.013mbar and a tolerance of ±10%.The total pressure differences are valid up to an intake and ambient temperature of 25°C .

Pressure Selection diagram 50Hz—压力选型图表 50Hz

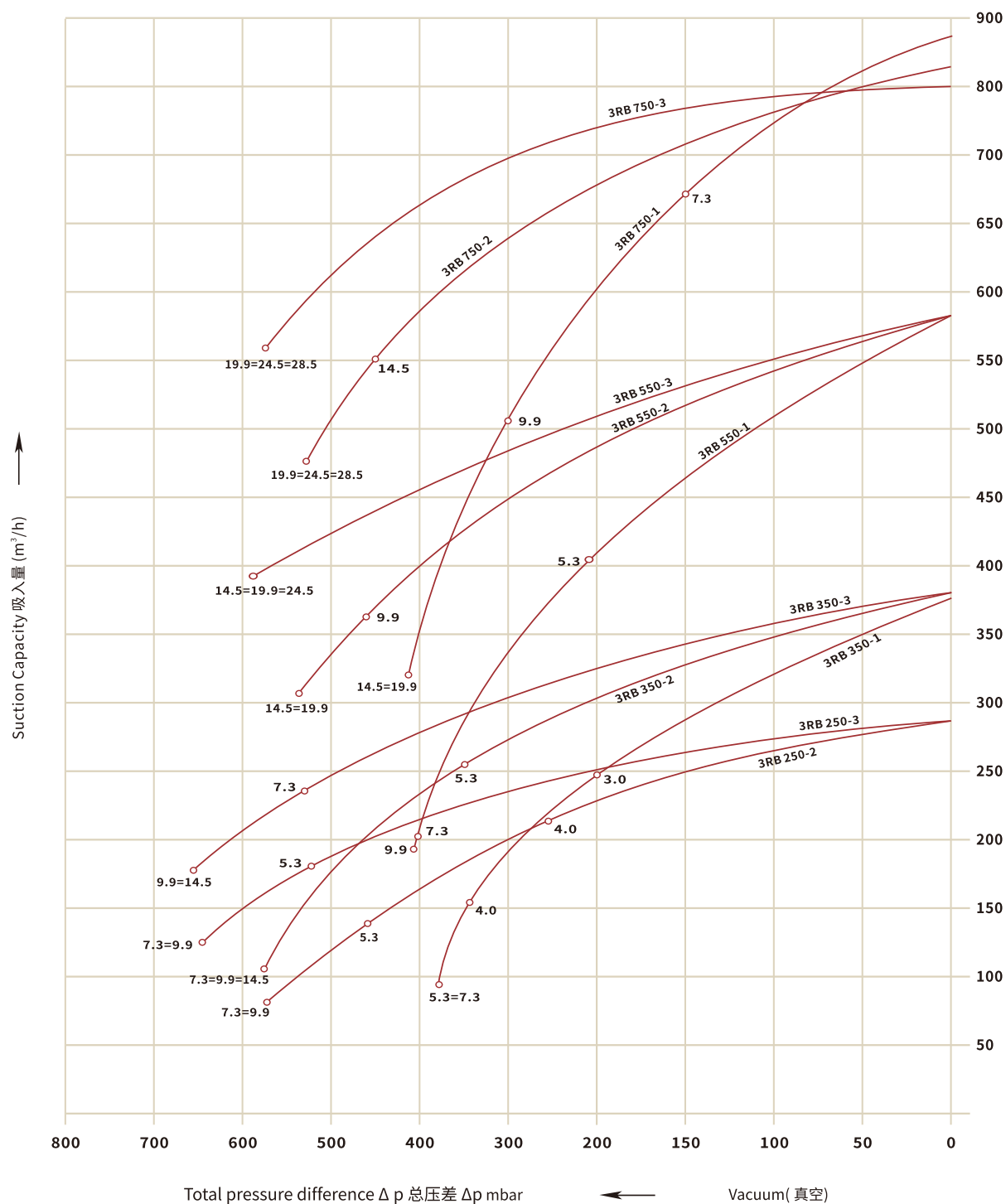




下面的性能曲线是在抽吸15°C空气，排气压力1013mbar的工况下测出的，允差±10%，吸入空气和环境温度不超过25°C时，即可达到图示总压差。

The performance curves are valid for pumping air at 15°C at the inlet flanges with an air pressure of 1.013mbar and a tolerance of ±10%. The total pressure differences are valid up to an intake and ambient temperature of 25°C.

Vacuum Selection diagram 60Hz—真空选型图表 60Hz

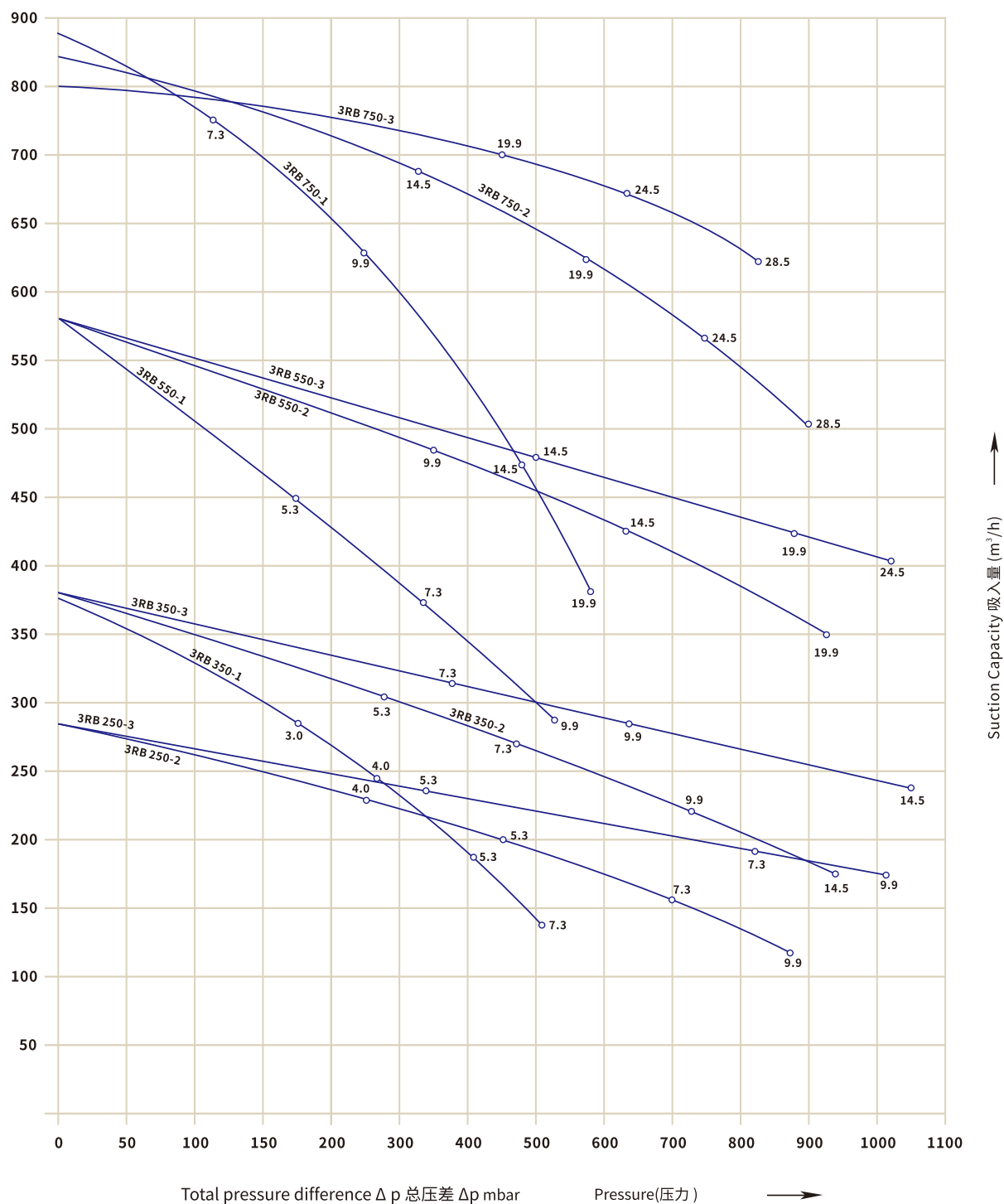




下面的性能曲线是在抽吸15°C空气，排气压力1013mbar的工况下测出的，允差±10%，吸入空气和环境温度不超过25°C时，即可达到图示总压差。

The performance curves are valid for pumping air at 15°C at the inlet flanges with an air pressure of 1.013mbar and a tolerance of ±10%.The total pressure differences are valid up to an intake and ambient temperature of 25°C .

Pressure Selection diagram 60Hz—压力选型图表 60Hz

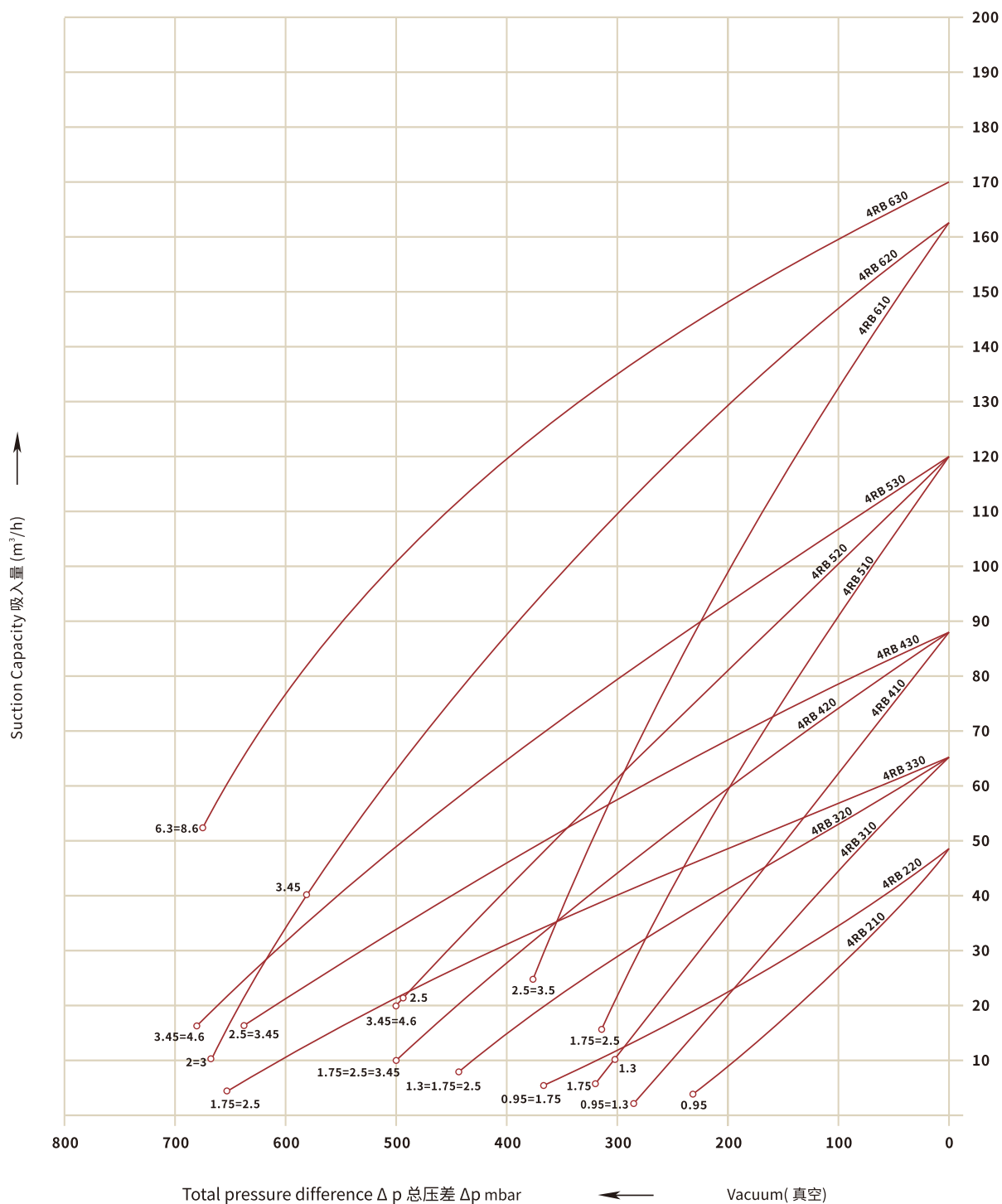




下面的性能曲线是在抽吸15°C空气，排气压力1013mbar的工况下测出的，允差±10%，吸入空气和环境温度不超过25°C时，即可达到图示总压差。

The performance curves are valid for pumping air at 15°C at the inlet flanges with an air pressure of 1.013mbar and a tolerance of ±10%. The total pressure differences are valid up to an intake and ambient temperature of 25°C.

Vacuum Selection diagram 50Hz—真空选型图表 50Hz

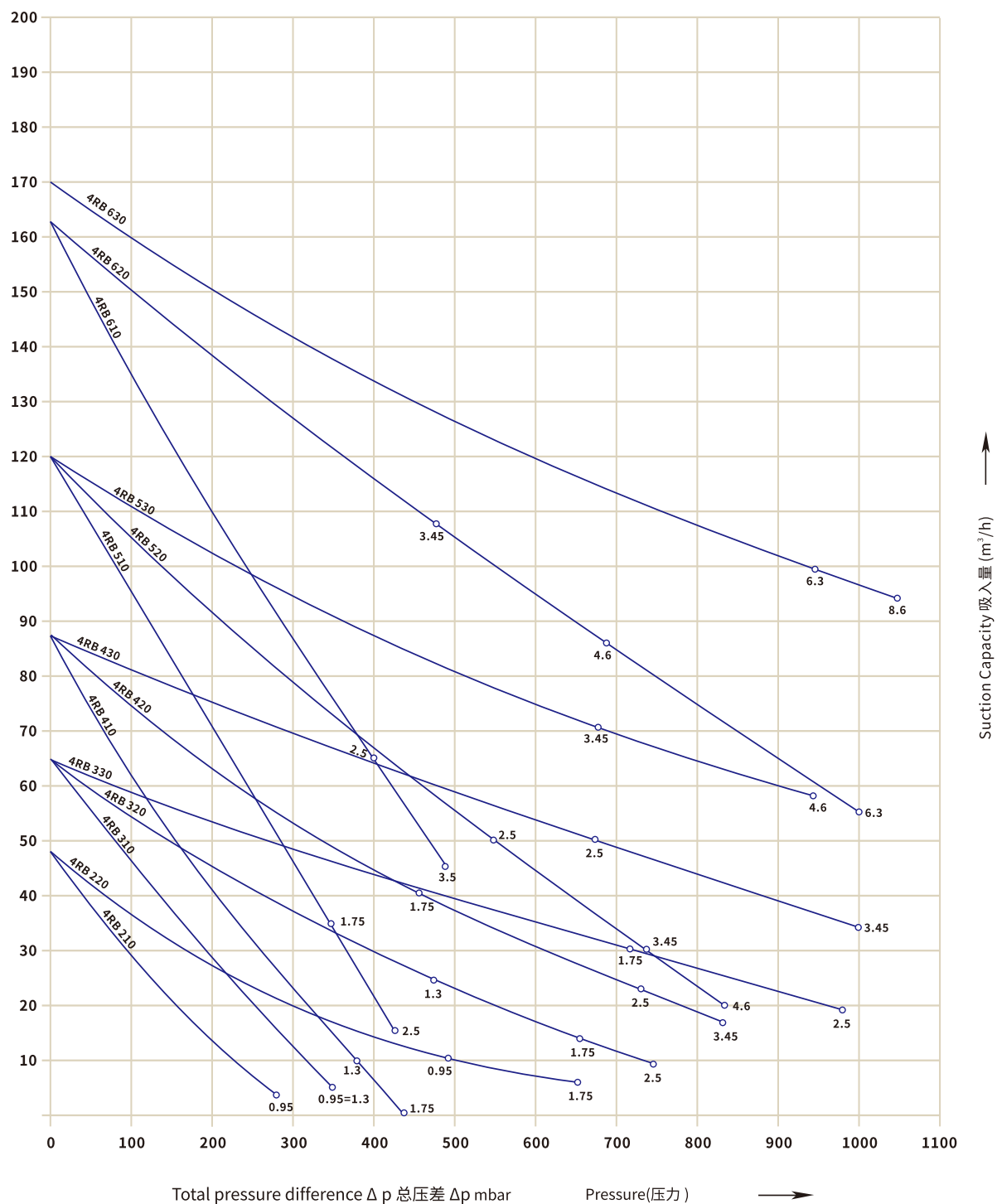




下面的性能曲线是在抽吸15°C空气，排气压力1013mbar的工况下测出的，允差±10%，吸入空气和环境温度不超过25°C时，即可达到图示总压差。

The performance curves are valid for pumping air at 15°C at the inlet flanges with an air pressure of 1.013mbar and a tolerance of ±10%. The total pressure differences are valid up to an intake and ambient temperature of 25°C.

Pressure Selection diagram 50Hz—压力选型图表 50Hz

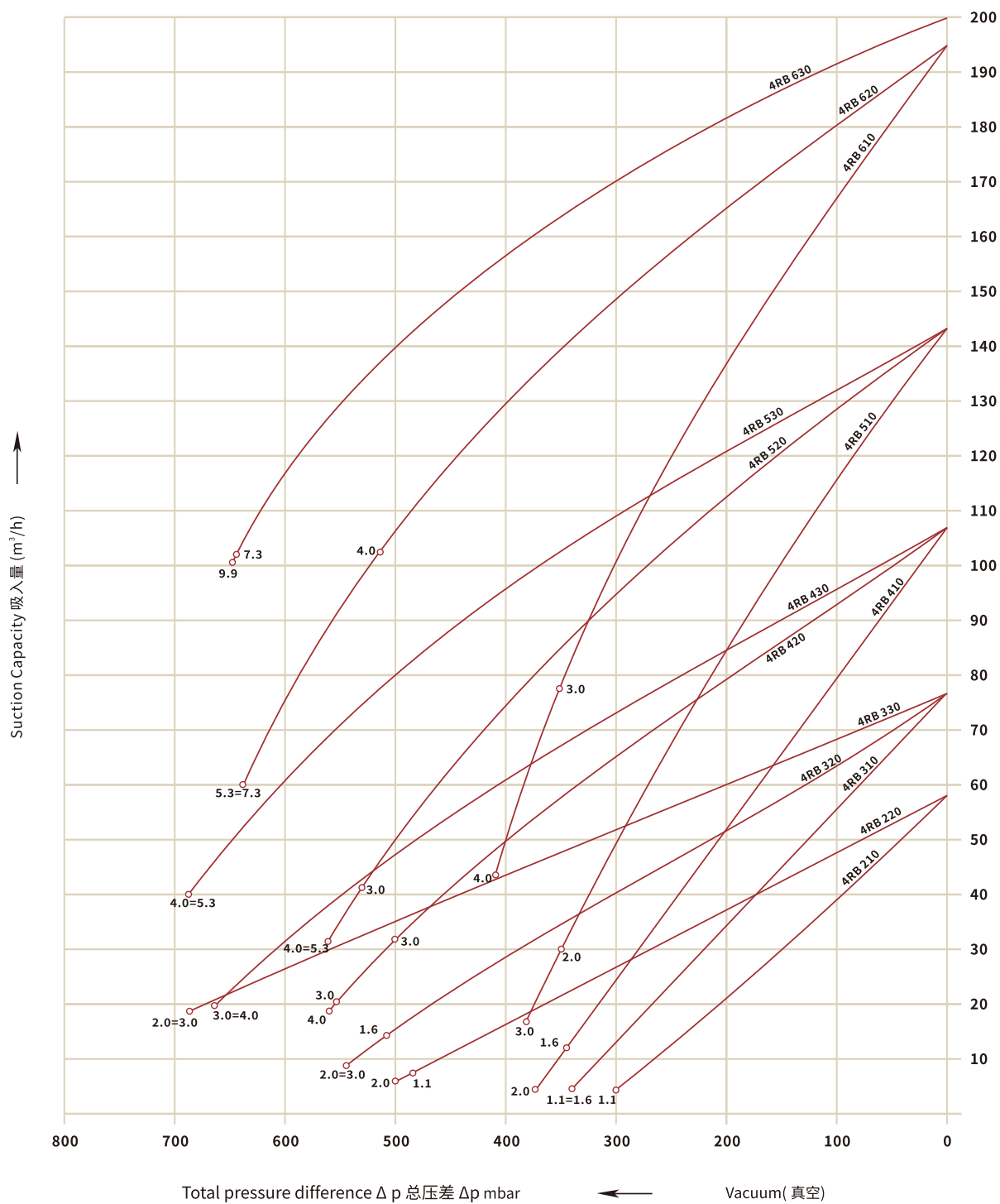




下面的性能曲线是在抽吸15°C空气，排气压力1013mbar的工况下测出的，允差±10%，吸入空气和环境温度不超过25°C时，即可达到图示总压差。

The performance curves are valid for pumping air at 15°C at the inlet flanges with an air pressure of 1.013mbar and a tolerance of ±10%. The total pressure differences are valid up to an intake and ambient temperature of 25°C.

Vacuum Selection diagram 60Hz—真空选型图表 60Hz

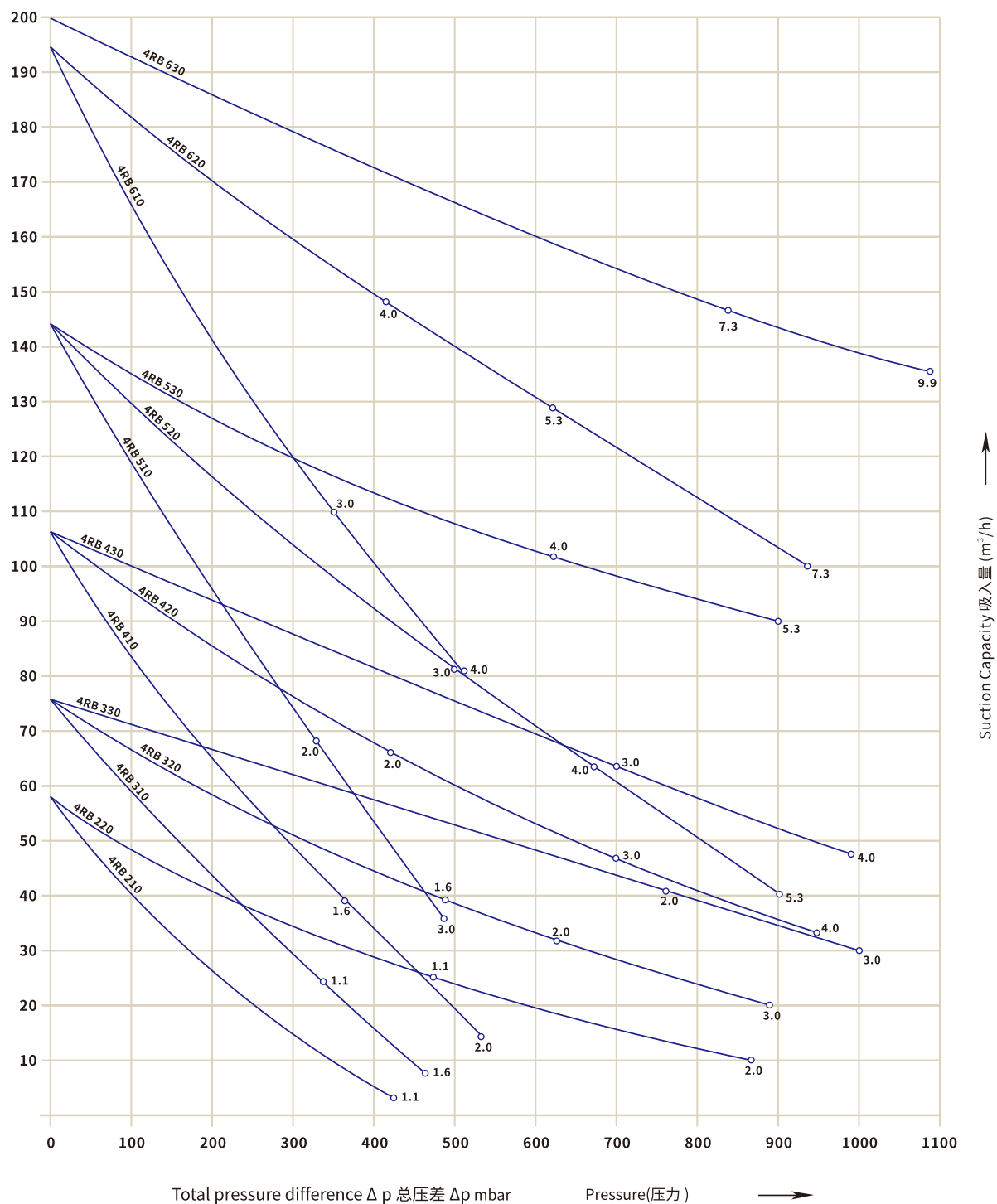




下面的性能曲线是在抽吸15°C空气，排气压力1013mbar的工况下测出的，允差±10%，吸入空气和环境温度不超过25°C时，即可达到图示总压差。

The performance curves are valid for pumping air at 15°C at the inlet flanges with an air pressure of 1.013mbar and a tolerance of ±10%. The total pressure differences are valid up to an intake and ambient temperature of 25°C.

Pressure Selection diagram 60Hz—压力选型图表 60Hz



换算表 Conversion tables



压力换算表 Pressure

初始单位 Beginning units	换算因子 Conversion factor	目标单位 Resulting units
Pa	0.01	Mbar
hPa	1.0	mbar
kPa	10.0	mbar
mm H ₂ O	0.098	mbar
m H ₂ O	98.07	mbar
at	980.7	mbar
inch H ₂ O	2.491	mbar
PSI lpt/in ²	68.948	mbar
mbar	100	Pa
mbar 1	10.2	mm H ₂ O
mbar	10.2 · 10 ⁻³	m H ₂ O
mbar	1.02 · 10 ⁻³	at
mbar	0.4016	inch H ₂ O
mbar	14.505 · 10 ⁻³	PSI lpt/in ²

换算举例

250[inch H₂O] · 2.491=622.5[mbar]

下面的公式用来把“以水银柱高度度量的真空度”换算成“绝对压力”

1013-x[inches of mercury vacuum] · 33.8≈Y[mbar abs.]

绝对压力

绝压是以理想真空（绝压为零）为基准而得到的测量值。所以绝压总是比参考值大。

表压

表压是指高于标准大气压压力的测量值。即以标准大气压为基准。因此实际测量值总是比基准值大。

真空度

真空度是指低于标准大气压压力的测量值。测量基准仍为标准大气压，所以实际测量值总比基准值小。

Example of conversion

250[inch H₂O]2.491=622.5[mbar]

The following formula is used to convert values from “inches of mercury vacuum” to “mbar abs.”

1013-x[inches of mercury vacuum]·33.8≈Y[mbar abs.]

Absolute pressure

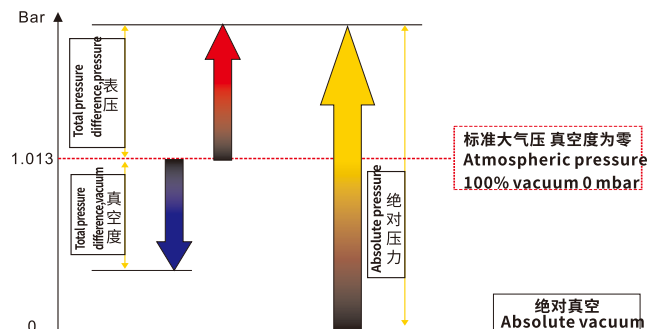
The pressure measured from absolute zero, using ideal vacuum as the datum. The measured pressure is always greater than the reference pressure.

Total pressure difference, pressure

The pressure measured above the prevailing atmospheric pressure. The datum is the prevailing atmospheric pressure and the measured pressure is always higher than the datum.

Total pressure difference, vacuum

The pressure measured lower than the prevailing atmospheric pressure. The datum is the prevailing atmospheric pressure and the measured pressure is always lower than the datum.



抽吸能力换算表 Suction capacity

初始单位 Beginning units	换算因子 Conversion factor	目标单位 Resulting units
l/min	0.06	m ³ /h
gal/min	0.227	m ³ /h
ft ³ /min	1.699	m ³ /h
m ³ /h	16.667	i/min
m ³ /h	4.403	gal/min
m ³ /h	0.588	ft ³ /min

功率换算表 Electrical power

初始单位 Beginning units	换算因子 Conversion factor	目标单位 Resulting units
hp	0.746	kW
btu/h	293.1	kW
kW	1.341	hp
kW	3.41 · 10 ⁻³	Btu/h

重量换算表 Weight

初始单位 Beginning units	换算因子 Conversion factor	目标单位 Resulting units
lbm	0.454	kg
kg	2.205	lbm

长度换算表 Length

初始单位 Beginning units	换算因子 Conversion factor	目标单位 Resulting units
in.	25.4mm	
in.	0.0254	m
ft	305	mm
ft	0.305	m
m	39.37	in.
m	3.28	f

温度换算表 Temperature conversion

换算自 from	Conversion 至 to	
°F	K	$T [K] = \frac{T [°F] + 459.67}{1.8}$
°F	°C	$t [°C] = \frac{T [°F] - 32}{1.8}$
K	°F	$t [°F] = 1.8 \cdot T [K] - 459.67$
°C	°F	$t [°F] = 1.8 \cdot t [C] + 32$



电机的效率等级依照美国 NEMA标准 MG1-12. NP=NEMA Premium;
效率等级IE3 以及欧盟 EN 60034 标准 “旋转电机”，效率等级IE3.
电机服务系数（SF）依据 NEMA MG1-12 标准的电机效率。
三相电机的电压容差为 +/-10%。
频率容差最大为±2%。

The motors according to NEMA MG1-12. NP=NEMA Premium;
NEMA Premium includes IE3 and the EN 60034 norm
“Rotating electrical machines” .

Service factor (SF) and motor efficiency according NEMA MG1-12.
Voltage tolerances for three phase motors are +/-10%.
The frequency tolerance is +/- 2 % maximum.

Motor for alternate voltages							
Voltage range 电压范围		Efficiency standard 效率标准	 60 Hz	87 Hz 5000rpm	100 Hz 6000rpm	2RB ...-1. □ . □	
50 Hz	60Hz						
3 Phase							
200 VΔ	200 V YY / 230 VΔ / 400 VY		•	345 VΔ	400 VΔ		P 1
190-210 VΔ	190-210 VYY / 220-240 VΔ / 380-420VY	IE3					
200 V YY / 230 VΔ / 400 VY	230 V YY / 460 VY		•	400 VΔ	----		P 6
190-210 VYY / 220-240 VΔ / 380-420VY	220-240 VYY / 440-480VY	IE3					
190-210 VΔ	220-240 VΔ / 380-420VY	IE3	•	345 VΔ	400 VΔ		Q 1
475-525 V Y	550-600 V Y		•	----	----		Q 3
475-525 VΔ	550-600 VΔ		•	----	----		Q 5
220-240 VΔ / 380-420 V Y	440-480VY	IE3	•	400 VΔ	----		Q 6
400 VΔ / 690 V Y	460 VΔ		•	----	----		Q 7

关于漩涡气泵配套以上不同电压和频率的技术参数，请到网站www.greenco.cn下载相关的性能曲线，外形尺寸，2D和3D图纸等相关信息

Regarding the technical parameters of the side channel blower corresponding to different voltages and frequencies mentioned above, please download the relevant performance curves, dimensions, 2D and 3D drawings and other information from the website www.greenco.cn.



GREENCO

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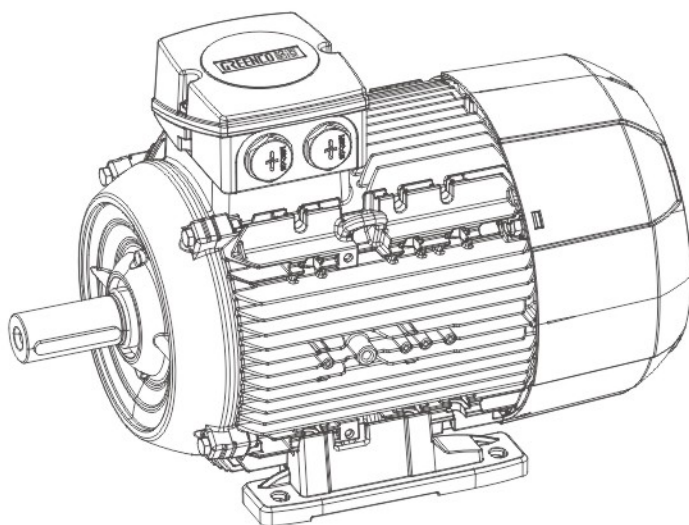
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GREENCO 格凌

Develop And Produce Higher Quality Of Industrial Motor



浙江格凌实业有限公司

ZHEJIANG GREENCO INDUSTRY CO.,LTD.

About GREENCO

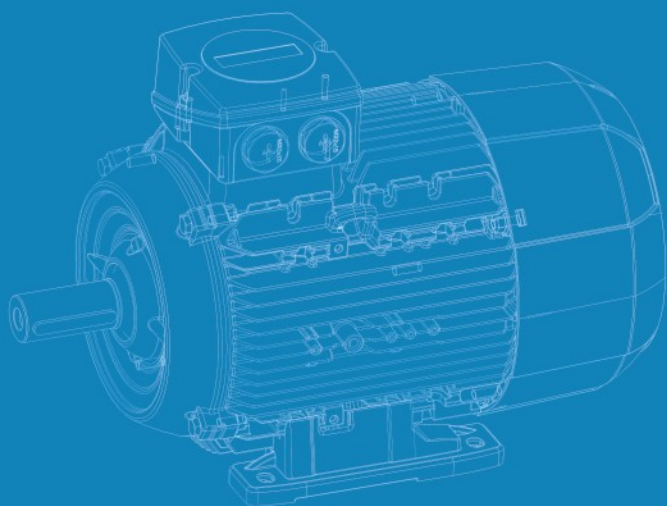
➤ 关于格凌

Zhejiang Greenco Industrial Co., Ltd. was founded in 2001, covering an area of 10,8000 square meters. It is a national high-tech enterprise specializing in the research, development, production and sales of industrial motors and air fluid equipment. The company is among the first batch of national "Specialized, Refined, Characteristic and Novel" Little Giant Enterprises and a provincial Hidden Champion Enterprise. It has established a provincial-level enterprise technology center, obtained 50 national patents (including 15 invention patents) through independent research and development, and participated in the formulation of 1 industry standard and 2 Zhejiang Manufacturing Group Standards.

The company has profound technical accumulation and strong comprehensive manufacturing capabilities. It owns a complete manufacturing industrial chain, ranging from stamping, casting, surface stress relief treatment, injection molding, precision machining, assembly to automatic spraying. This enables strict quality control over every part, and allows for quick response to customized needs.

The company has always been committed to providing customers with innovative, efficient and sustainable motor solutions. The new 1LE3、1LE4 series motor adopts an aluminum shell design, featuring a compact structure and excellent performance, which is suitable for installation in systems with limited space. It offers multiple installation methods and different protection levels, and has passed multiple certifications such as UL, ROHS and CE.

GREENCO 格凌



Develop And Produce Higher Quality Of Industrial Motor

www.greenco.cn

Green Power, Efficient Future

Polished in a fiercely competitive market, we strive to build an outstanding international brand and become a pacesetter for the sustainable development of the motor industry.



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02	Overview
08	Order No
11	Technical data table
15	Options
16	Dimension drawings

➤ Overview

Aluminum Housing Motor

Rated output:	0.18-22KW
Frame size:	63 ~ 180
Voltage and Frequency:	support multiple voltage and frequency
Cooling method:	IC411 as standard, IC416 is optional
Oiling device:	The sealed ball bearing as standard, no re-grease device
Degree of protection:	IP55
Degree of insulation:	F
Coolant temperature:	-15 ~ 40 °C
Site altitude above sea level:	not exceed 1000 m

1LE3 series of motors is the newly designed high efficiency low voltage three phase asynchronous motor, the housing material have two options, cast iron or aluminum¹⁾, is designed for continuous duty operation(S1). 1LE3 series of motors owns the features of high efficiency, novel structure, beautiful appearance, low noise, small vibration, high degree of insulation, etc, also can be used in the fields of fans, pump, compressors and textile machine.

Compared with cast iron frame motor, the quality of aluminum motor is lighter and the surface quality is better.

1) Please find the cast iron frame motor content in another catalog.

➤ Construction and mounting type

Construction type	With feet and without flange on the end-shield (DE)					
Mounting type	IM B3 FS ³⁾ 80 ~ 160	IM B6 FS 80 ~ 160	IM B7 FS80 ~ 160	IM B8 FS 80 ~ 160	IM V5 ¹⁾ FS 80 ~ 160	IM V6 ²⁾ FS 80 ~ 160
Diagram						
Letter, position 14th of Motor code	A	T	U	V	C	D

Construction type	Without feet and with flange on the end-shield (DE)			Without feet and with flange on the end-shield (DE)		
Mounting type	IM B5 FS 80 ~ 160	IM V1 ¹⁾ FS 80 ~ 160	IM V3 ²⁾ FS 80 ~ 160	IM B35 FS 80 ~ 160	IM V15 ¹⁾ FS 80 ~ 160	IM V35 ²⁾ FS 80 ~ 160
Diagram						
Letter, position 14th of Motor code	F	G	H	J	W	Y

Construction type	Without feet and with C-flange on the end-shield (DE)			Without feet and with C-flange on the end-shield (DE)
Mounting type	IM B14 FS 80 ~ 112	IM V18 ¹⁾ FS 80 ~ 112	IM V19 ²⁾ FS 80 ~ 112	IM B34 FS80 ~ 112
Diagram				
Letter, position 14th of Motor code	K	M	L	N

1) At outdoor application, the using of protective cover (Option code H00) is recommended

2) At out door application the protection of shaft again jet-water is recommended.

➤ Nameplate

GREENCO® No.BN 170218 10/0025 IEC/EN60034 IP55 TH.CL F						
Hz	Kw	rpm	V	A	P.F	nom.eff
50	1.1	2885	190-210 YY	4.5	0.85	IE3 82.7%
			220-240 △	3.9		
			380-420 Y	2.25		
60	1.3	3500	220-240 YY	4.6	0.85	IE3 84.0%
			440-480 Y	2.3		
60	1.1	3500	230 YY	3.96	0.84	NP 84.0%
			460 Y	1.98		



➤ Bearing system

1LE3 series AL frame motors are supplied with the sealed ball bearing as standard. And the floating bearings are assembled. The standard bearing can endure a maximum cantilever force, the increased cantilever bearing design (Option code: L22) should be considered.
the increased cantilever bearing design (Option code: L22)
Should be considered.

Bearing Assignment

Frame size	Pole	Standard design			Increased cantilever-bearing (Option code:L22)		
		DE bearing	NDE bearing (Horizontal mounting)	NDE bearing (Vertical mounting)	DE bearing	NDE bearing (Horizontal mounting)	NDE bearing (Vertical mounting)
63	2, 4, 6	6204 2RZ C3	6204 2RZ C3	6204 2RZ C3	-	-	-
71	2, 4, 6	6205 2RZ C3	6205 2RZ C3	6205 2RZ C3	-	-	-
80	2, 4, 6	6204 2RZ C3	6204 2RZ C3	6204 2RZ C3	-	-	-
90	2, 4, 6	6205 2RZ C3	6205 2RZ C3	6205 2RZ C3	-	-	-
100	2, 4, 6	6206 2RZ C3	6206 2RZ C3	6206 2RZ C3	-	-	-
112	2, 4, 6	6206 2RZ C3	6206 2RZ C3	6206 2RZ C3	6306 2RZ C3	6206 2RZ C3	6206 2RZ C3
132	2, 4, 6, 8	6208 2RZ C3	6208 2RZ C3	6208 2RZ C3	6308 2RZ C3	6208 2RZ C3	6208 2RZ C3
160	2	6209 2RZ C3	6209 2RZ C3	6209 2RZ C3	6309 2RZ C3	6209 2RZ C3	6209 2RZ C3
	4, 6, 8						
180	2, 4, 6, 8	6208 2RZ C3	6208 2RZ C3	6208 2RZ C3	6308 2RZ C3	6208 2RZ C3	6208 2RZ C3

Grease life and re-greasing interval

For permanent lubrication, the bearing grease lifetime is matched to the bearing lifetime. This can, however, only be achieved if the motor is operated in accordance with the catalog specifications.

For motors which can be regreased at defined regreasing intervals, the bearing lifetime can be extended and/or unfavorable factors such as temperature, mounting conditions, speed, bearing size and mechanical load can be compensated.

Grease life (Horizontal installation)

Frame size	Poles	Grease lifetime up to CT 40 °C ¹⁾
Grease for permanent lubrication bearing		
63 ~ 180	2, 4, 6, 8	20000 or 40000

Note:

1) If the coolant temperature is increased by 10 K, the grease lifetime and regreasing interval are halved.

2) 40000 h apply to horizontally installed motors with coupling output without additional axial loads.

■ When motor runs beyond the rated speed, the increase of motor vibration will result in the extra radial and axial force on bearing.

This will reduce the life of bearing;

■ When the motor vibration increase due to the environment or other equipment, the bearing also will endure more radial and axial force. This also will reduce the life of bearing;

■ If the coolant temperature is increased by 10 °C, the grease lifetime and regreasing interval is halved.

➤ Connection boxes technical data

Frame size	Contact screw thread	Cable entry size
63-71	M4	M25 x 1.5+M16x1.5
80 ~ 90	M4	M25 x 1.5+M16x1.5
100-112	M4	M32 x 1.5 + M32 x 1.5
132	M4	M32 x 1.5 + M32 x 1.5
160-180	M5	M40x1.5 + M40x1.5

➤ Vibration

1LE3 rotors are dynamically balanced to severity grade A using a half key.

Table below contains the effective vibration values for unloaded motors.

Vibration Grade	Frame size (mm)	56 ≤ FS ≤ 132		H>132	
	Mounting	Vibration displacement/μm	Vibration velocity/(mm/s)	Vibration displacement/μm	Vibration velocity/(mm/s)
A	Free suspension	45	2.8	45	2.8
	Rigid mounting	-	-	37	2.3 2.8 ¹⁾
B	Free suspension	18	1.1	29	1.8
	Rigid mounting	-	-	24	1.5 1.8 ¹⁾

Note:

1) The level are vibration velocity limit when the twice line frequency

vibration level is dominant defined by GB/T 10068-2020, for 2p

Motors that frame size bigger than 132mm.

➤ Electrical design

Rated Output

1LE3 motors rated output powers means that the motor runs under continuous duty S1 (IEC 60034 - 1) operation when operated at ambient temperature from -15 °C to 40 °C and at altitudes of up to 1000 m over sea.

Voltage and Frequency

IEC 60034-1 differentiates between Category A (combination of voltage deviation $\pm 5\%$ and frequency deviation $\pm 2\%$) and Category B (combination of voltage deviation $\pm 10\%$ and frequency deviation $+3\% / -5\%$) for voltage and frequency fluctuations. The motors can supply their rated torque in both Category A and B. In Category A, the temperature rise is approximately 10 K higher than during normal operation.

Standard 60034 - 1	Category A	Category B
Voltage deviation	$\pm 5\%$	$\pm 10\%$
Frequency deviation	$\pm 2\%$	$+3\% / -5\%$
According to the standard, longer operation is not recommended for Category B. $\pm 2\% +3\% / -5\%$		

Tolerance for electrical data

● Efficiency η at

Prated ≤ 150 kW: $-0.15 \times (1 - \eta)$

Prated > 150 kW: $-0.10 \times (1 - \eta)$

With η being a decimal number

● Power factor - $(1 - \cos\phi) / 6$

Minimum absolute value: 0.02

Maximum absolute value: 0.07

● Slip $\pm 20\%$ (for motors < 1 kW $\pm 30\%$ is admissible)

● Locked-rotor current $+20\%$

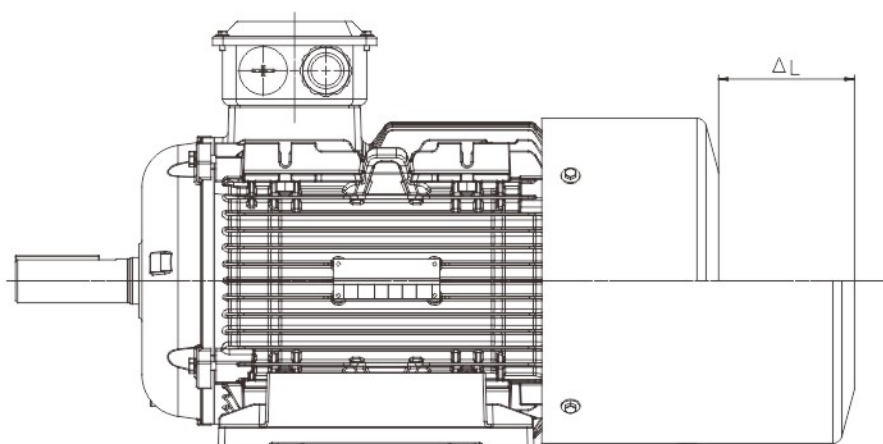
● Locked-rotor torque -15% to $+25\%$

● Breakdown torque -10%

● Moment of inertia $\pm 10\%$

The allowed maximum safe operating speed of 1LE3 motors shows the diagram

Frame size	2 pole		4 pole		6 pole		8 pole	
	Max.rpm	fmax	Max.rpm	fmax	Max.rpm	fmax	Max.rpm	fmax
63	5200	87	3600	120	2400	120	1800	120
71	5200	87	3600	120	2400	120	1800	120
80	5200	87	3600	120	2400	120	1800	120
90	5200	87	3600	120	2400	120	1800	120
100	5200	87	3600	120	2400	120	1800	120
112	5200	87	3600	120	2400	120	1800	120
132	4500	75	2700	90	2400	120	1800	120
160	4500	75	2700	90	2400	120	1800	120
180	4500	75	2700	90	2400	120	1800	120

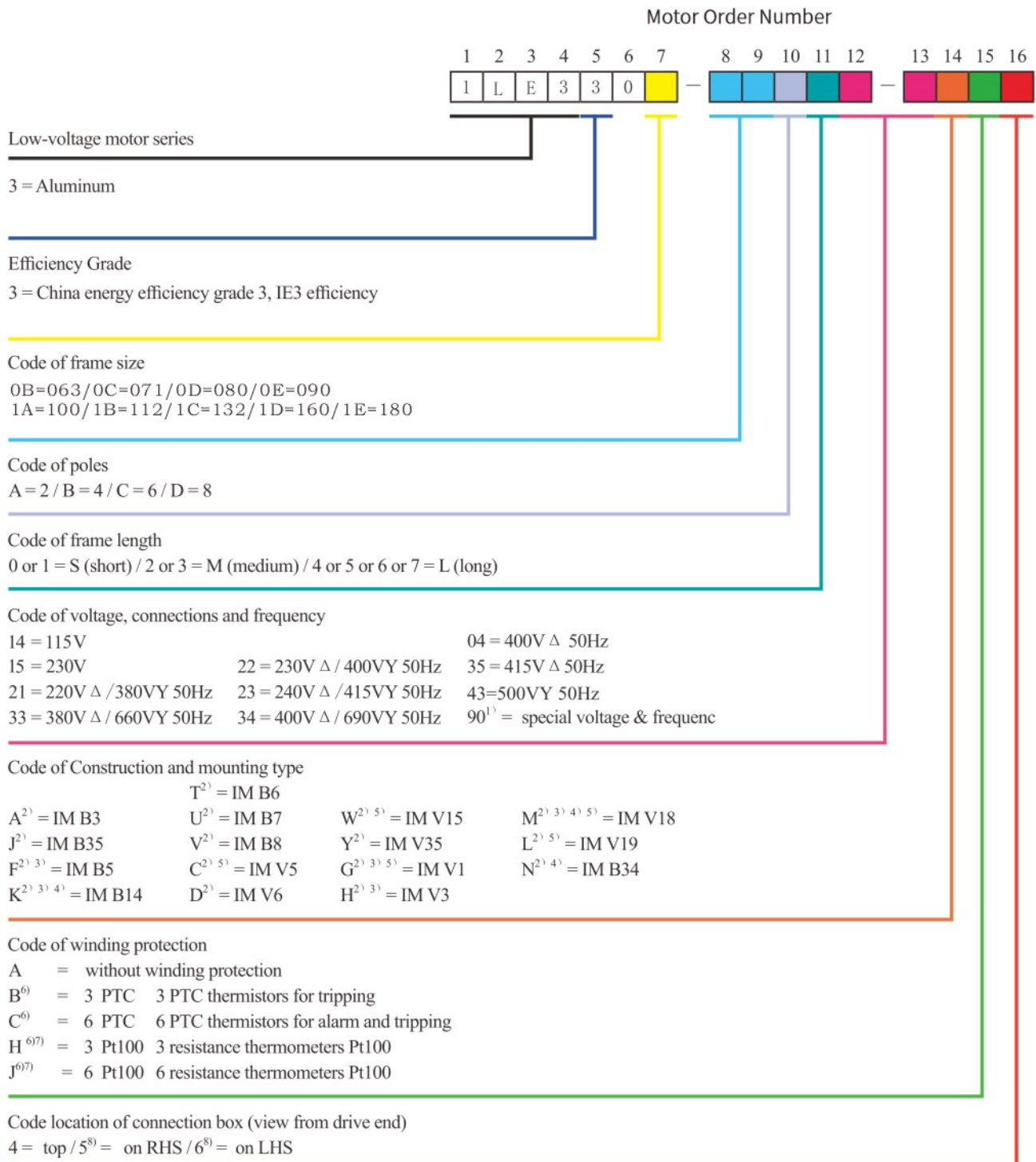


Technical data for separately fan

Motor frame size	rated voltage (V)	Rated frequency (Hz)	Rated output (W)	Current (A)	Speed (R/min)	ΔL
80	220V△/380Y	50	30	0.14/0.08	2800	60
90	220V△/380Y	50	30	0.14/0.08	2800	75
100	220V△/380Y	50	52	0.21/0.12	2800	65
112	220V△/380Y	50	52	0.21/0.12	2800	75
132	220V△/380Y	50	45	0.35/0.2	1400	75
160	220V△/380Y	50	45	0.35/0.2	1400	45

Note: The fan can be running with supply 210 ~ 240V△/360 ~ 420VY 50Hz, and also 220 ~ 260V△/380 ~ 480VY 60Hz. Other voltage supply, possible on Request.

➤ Motor Type and Order No.



➤ Foot note:

- 1) Order other voltages with voltage code 90 and the corresponding Option code (see under "Option").
- 2) The type of construction is stamped on the rating plate. When ordering with condensation drainage holes (order code H03), it is absolutely necessary to specify the type of construction for the exact position of the condensation drainage holes during manufacture.
- 3) For motor with IM B5, IM V1, IM V3, IM B14, IM V18 and IM V19 construction and mounting type, the 16th digit of motor order No. must be "4";
- 4) Only for FS80 ~ 112.
- 5) Without canopy, for protective cover with canopy needed Option code H00.
- 6) Choose this option, the connection box will be changed to cast iron.
- 7) Only applicable for frame size 100~160.
- 8) When connection box on the right or left side of motor, the cable entry from below as default.

➤ Order No. Example:

China Energy Efficiency Grade3 low voltage three phase asynchronous motor
4-pole, 15 kW, IM B3, 400V△/690VY 50 Hz, IP55, connection box at right side
and cable entry at bottom (view from DE)

Motor order code: 1LE3303-1DB43-3AA5

1	L	E	3	3	0	3	-	1	D	B	4	3	-	3	A	A	5
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

China Energy Efficiency Grade3 AI Frame
Low-voltage Three-phase Motor

Frame size: 160

Poles: 4

Iron core length: (L)

Voltage, connection method and frequency: 380V△/660VY 50Hz

Construction: IM B3

Winding protection None:

Connection box position at right side: Right Side

	Motor type							
	1	2	3	4	5	6	7	8
Version Number	1	A	V	3	□	□	□	□
Housing material Cast Aluminium								
Cooling method ventilated								
Energy efficiency grade China energy efficiency grade 3, IE3 efficiency								
Frame size 06=63; 07=71; 08=80; 09=90; 10=100; 11=112; 13=132; 16=160; 18=180								
Core length								
Poles A=2; B=4; C=6; D=8;								

Note: 1) Motor type used to apply certificates and etc.

1LE3 Standard Motors

Motors with Premium Efficiency IE3

Self-ventilated motors Aluminum series 1LE3303

IE3

Selection and ordering data

Operating values at rated output														Aluminum series		m _M B3	J
P _{rated} , 50 Hz	P _{rated} , 60 Hz ¹⁾	Frame size	n _{rated} , 50 Hz	T _{rated} , 50 Hz	IE class	η _{rated} , 50 Hz, 4/4	η _{rated} , 50 Hz, 3/4	cos- φ _{rated} , 50 Hz, 4/4	I _{rated} , 50 Hz, 400 V	T _{LR} / T _{rated} , 50 Hz	I _{LR} / I _{rated} , 50 Hz	T _B / T _{rated} , 50 Hz	L _p I _A , 50 Hz	1LE3303 – IE3 version in accordance with IEC 60034-30 Article No.			
kW	kW	FS	rpm	Nm		%	%		A				dB(A)	▲ New	kg	kgm ²	
• Cooling: self-ventilated (IC 411) • Efficiency: Premium Efficiency IE3, service factor (SF) 1.15 • Insulation: thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																	
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz ¹⁾																	
0.18	0.21	63M	2777	0.62	IE3	65.90	63.50	0.8	0.49	2.30	7.00	2.20	63	1LE3303-0BA2		4	0.000231
0.25	0.29	63M	2782	0.86	IE3	69.70	68.40	0.81	0.64	2.30	7.00	2.20	63	1LE3303-0BA3		5	0.000255
0.37	0.42	71M	2742	1.29	IE3	73.80	72.40	0.81	0.88	2.30	7.00	2.20	66	1LE3303-0CA2		7	0.000369
0.55	0.63	71M	2723	1.93	IE3	77.80	63.50	0.82	1.24	2.30	7.00	2.30	66	1LE3303-0CA3		8	0.000495
0.75	0.86	80M	2850	2.51	IE3	80.70	82.00	0.82	1.64	2.30	7.00	2.30	64	1LE3303-0DA2		11	0.001100
1.1	1.30	80M	2885	3.64	IE3	82.70	82.70	0.83	2.31	2.20	7.60	2.30	64	1LE3303-0DA3		13	0.001300
1.5	1.75	90S	2910	4.92	IE3	84.20	84.50	0.84	3.06	2.20	7.90	2.30	69	1LE3303-0EA0		17	0.002100
2.2	2.55	90L	2920	7.19	IE3	85.90	86.80	0.85	4.35	2.20	7.90	2.30	69	1LE3303-0EA4		21	0.003100
3	3.45	100L	2920	9.81	IE3	87.10	87.10	0.87	5.71	2.20	8.50	2.30	76	1LE3303-1AA4		27	0.005400
4	4.60	112M	2950	12.95	IE3	88.10	88.10	0.88	7.45	2.20	8.50	2.30	79	1LE3303-1BA2		33	0.012000
5.5	6.30	132S	2950	17.80	IE3	89.20	89.20	0.88	10.11	2.00	8.50	2.30	81	1LE3303-1CA0		48	0.024000
7.5	8.60	132M	2950	24.28	IE3	90.10	90.10	0.89	13.50	2.00	8.50	2.30	81	1LE3303-1CA2		56	0.031000
11	12.60	160M	2955	35.55	IE3	91.20	91.20	0.89	19.56	2.00	8.50	2.30	83	1LE3303-1DA2		80	0.053000
15	17.30	160M	2960	48.39	IE3	91.90	91.90	0.89	26.47	2.00	8.50	2.30	83	1LE3303-1DA3		91	0.061000
18.5	21.30	160L	2955	59.78	IE3	92.40	92.40	0.89	32.47	2.00	8.50	2.30	83	1LE3303-1DA4		108	0.068000
22	24.50	180M	2950	71.21	IE3	92.70	93.20	0.89	38.49	2.00	8.50	2.30	85	1LE3303-1EA2		140	0.080000
Voltages					Motor protection	No. of poles	Frame size	Motor type		Version					Order code(s)		
Frame sizes 63 M to 90 L: use of the 360° freely rotatable connection box for 2 and 4-pole motors ²⁾																	
50 Hz	230 V Δ/400 V Y	60 Hz ¹⁾	460 V Y	PTC thermis-	6	63 M ... 90 L	1LE3303-0D ... -0E	Standard				2 2 B	–				
50 Hz	400 V Δ/690 V Y	60 Hz ¹⁾	460 V Δ	tor with 1 temp sensor	6	63 M ... 90 L	1LE3303-0D ... -0E	Standard				3 4 B	–				
50 Hz	400 V Y	60 Hz ¹⁾	460 V Y	Without	6	63 M ... 90 L	1LE3303-0D ... -0E	Standard				0 2 A	–				
Frame sizes 100 L to 180 L: use of the 4 × 90° rotatable connection box																	
50 Hz	230 V Δ/400 V Y	60 Hz ¹⁾	460 V Y	Any	6	100 L ... 180 L	1LE3303-0D ... -0E	Standard				2 2	–				
50 Hz	400 V Δ/690 V Y	60 Hz ¹⁾	460 V Δ	Any	6	100 L ... 180 L	1LE3303-0D ... -0E	Standard				3 4	–				
50 Hz	500 V Y			Any	6	100 L ... 180 L	1LE3303-0D ... -0E	Without add. charge				2 7	–				
50 Hz	500 V Δ			Any	6	100 L ... 180 L	1LE3303-0D ... -0E	Without add. charge				4 0	–				
Further voltages ¹⁾												9 0	...				
Types of construction					No. of poles	Frame size	Motor type		Version					Order code(s)			
Without flange			IM B3 ³⁾		6	63 M ... 180 L	1LE3303-0D ... -0E	Standard					A	–			
With flange			IM B5 ³⁾		6	63 M ... 180 L	1LE3303-0D ... -0E	With additional charge					F	–			
With standard flange			IM B14 ³⁾		6	63 M ... 180 L	1LE3303-0D ... -0E	With additional charge					K	–			
Further types of construction												■	...				
Motor protection					No. of poles	Frame size	Motor type		Version					Order code(s)			
Frame sizes 100 L to 180 L: use of the 4 × 90° rotatable connection box																	
Without					6	80 L ... 180 L	1LE3303-0D ... -0E	Standard					A	–			
PTC thermistor with 3 temperature sensors					6	80 L ... 180 L	1LE3303-0D ... -0E	With additional charge					B	–			
Further motor protection												■	...				
Connection box position					No. of poles	Frame size	Motor type		Version					Order code(s)			
Connection box at top					6	63 M ... 180 L	1LE3303-0D ... -0E	Standard					4	–			
Further connection box positions																	
Special versions					No. of poles	Frame size	Motor type		Version					Order code(s)			
Forced-air cooled motors without ext. fan/fan cover (IC 416 6						63 M ... 180 L	1LE3303-0D ... -0E	1LE3303- . . .					-Z F90 +...+...+...				
Options								1LE3303- . . .					-Z...+...+...+...				

Self-ventilated motors Aluminum series 1LE3303

IE3

Selection and ordering data

Operating values at rated output														Aluminum series 1LE3303 Article No.		m _{IM} B3	J		
P _{rated} , 60 Hz P50	P _{rated} , 60 Hz P60	Frame size	n _{rated} , 60 Hz	T _{rated} , 60 Hz	IE Class	η _{rated} , 60 Hz, 4/4	η _{rated} , 60 Hz, 3/4	cos- φ _{Rated} , 60 Hz, 4/4	I _{Rated} , 60 Hz, 460 V	T _{LR} / T _{rated} , 60 Hz	I _{LR} / I _{rated} , 60 Hz	T _B / T _{rated} , 60 Hz	L _p /A, 60 Hz						
kW	kW	FS	rpm	Nm		%	%		A				dB(A)	▲ New		kg	kgm ²		
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																			
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz																			
0.18	0.21	63M	3401	0.59	IE3	65.50	64.00	0.8	0.47	2.30	7.00	2.20	63	1LE3303-0BA2		4	0.000231		
0.25	0.29	63M	3405	0.81	IE3	69.50	67.50	0.81	0.61	2.30	7.00	2.20	63	1LE3303-0BA3		5	0.000255		
0.37	0.42	71M	3370	1.19	IE3	73.40	71.80	0.81	0.86	2.30	7.00	2.20	66	1LE3303-0CA2		7	0.000369		
0.55	0.63	71M	3358	1.79	IE3	76.80	75.00	0.82	1.25	2.30	7.00	2.30	66	1LE3303-0CA3		8	0.000495		
0.75	0.86	80M	3485	2.36	IE3	77.50	82.00	0.82	1.70	2.30	7.00	2.30	64	1LE3303-0DA2		11	0.001100		
1.1	1.30	80M	3500	3.55	IE3	82.70	83.50	0.83	2.38	2.20	7.60	2.30	64	1LE3303-0DA3		13	0.001300		
1.5	1.75	90S	3500	4.77	IE3	85.50	84.80	0.84	3.06	2.20	7.90	2.30	69	1LE3303-0EA0		17	0.002900		
2.2	2.55	90L	3510	6.94	IE3	86.50	86.40	0.85	4.35	2.20	7.90	2.30	69	1LE3303-0EA4		21	0.002100		
3	3.45	100L	3510	9.39	IE3	88.50	87.50	0.87	5.62	2.20	8.50	2.30	76	1LE3303-1AA4		27	0.003100		
4	4.60	112M	3550	12.37	IE3	88.50	88.00	0.88	7.41	2.20	8.50	2.30	79	1LE3303-1BA2		33	0.003600		
5.5	6.30	132S	3555	16.92	IE3	89.50	89.40	0.88	10.04	2.00	8.50	2.30	81	1LE3303-1CA0		48	0.004900		
7.5	8.60	132M	3550	23.13	IE3	90.20	90.50	0.89	13.45	2.00	8.50	2.30	81	1LE3303-1CA2		56	0.004000		
11	12.60	160M	3555	33.85	IE3	91.00	90.40	0.89	19.53	2.00	8.50	2.30	83	1LE3303-1DA2		80	0.005400		
15	17.30	160M	3560	46.41	IE3	91.70	90.80	0.89	26.61	2.00	8.50	2.30	83	1LE3303-1DA3		91	0.005400		
18.5	21.30	160L	3560	57.13	IE3	91.70	91.10	0.89	32.76	2.00	8.50	2.30	83	1LE3303-1DA4		108	0.014000		
22	24.50	180M	3550	65.90	IE3	92.70	91.40	0.89	37.27	2.00	8.50	2.30	85	1LE3303-1EA2		140	0.014000		
Voltages										Version				Order code					
50 Hz 230 V△/400 VY										Standard				2	2	-			
50 Hz 400 V△/690 VY										Standard				3	4	-			
50 Hz 500 VY										Without additional charge				2	7	-			
50 Hz 500 V△										Without additional charge				4	0	-			
														9	0	...			
Types of construction										Version				Order code					
Without flange				IM B3 ³⁾						Standard				A	-				
With flange				IM B5 ³⁾						With additional charge				F	-				
With flange				IM B14 ³⁾						With additional charge				K	-				
																...			
Motor protection										Version				Order code					
Without										Standard				A	-				
PTC thermistor with 1 or 3 temperature sensors (frame sizes 80, 90 or 100 to 200)										With additional charge				B	-				
																...			
Terminal box position										Version				Order code					
Terminal box at top										Standard				4					
Special versions														Order code(s)					
Forced-air cooled motorsw/o ext. fan/fancover (IC416)										1LE3303-...  -Z F90 .+...+...+...									
										1LE3303-...  -Z ...+...+...+...									

Self-ventilated motors Aluminum series 1LE3303

IE3

Selection and ordering data

Operating values at rated output														Aluminum series			m _M B3	J
P _{rated} , 50 Hz	P _{rated} , 60 Hz ¹⁾	Frame size	n _{rated} , 50 Hz	T _{rated} , 50 Hz	IE class	η _{rated} , 50 Hz, 4/4	η _{rated} , 50 Hz, 3/4	cos- φ _{rated} , 50 Hz, 4/4	I _{rated} , 50 Hz, 400 V	T _{LR} / I _{rated} , 50 Hz	I _{LR} / I _{rated} , 50 Hz	T _B / T _{rated} , 50 Hz	L _{pfA} , 50 Hz	1LE3303 – IE3 version in accordance with IEC 60034-30 Article No.				
kW	kW	FS	rpm	Nm		%	%		A				dB(A)	▲ New	kg	kgm ²		
• Cooling: self-ventilated (IC 411) • Efficiency: Premium Efficiency IE3, service factor (SF) 1.15 • Insulation: thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
4-pole: 1500 rpm at 50 Hz, 3600 rpm at 60 Hz ¹⁾																		
0.12	0.14	63M	1360	0.84	IE3	64.80	63.70	0.72	0.37	2.10	6.60	2.20	57	1LE3303-0BB2	■ ■ ■ ■ ■	4	0.000305	
0.18	0.21	63M	1400	1.23	IE3	69.90	69.60	0.73	0.51	2.10	6.60	2.20	57	1LE3303-0BB3	■ ■ ■ ■ ■	5	0.000399	
0.25	0.29	71M	1410	1.69	IE3	73.50	73.20	0.74	0.66	2.10	6.60	2.20	60	1LE3303-0CB2	■ ■ ■ ■ ■	6	0.000717	
0.37	0.42	71M	1420	2.49	IE3	77.30	77.10	0.75	0.92	2.10	6.60	2.20	60	1LE3303-0CB2	■ ■ ■ ■ ■	7	0.000965	
0.55	0.63	80M	1432	3.67	IE3	81.30	82.00	0.75	1.30	2.40	6.60	2.30	61	1LE3303-0DB2	■ ■ ■ ■ ■	11	0.002100	
0.75	0.86	80M	1437	4.98	IE3	82.50	82.30	0.75	1.75	2.30	6.60	2.30	61	1LE3303-0DB3	■ ■ ■ ■ ■	14	0.002900	
1.1	1.25	90S	1443	7.28	IE3	84.10	84.60	0.76	2.48	2.30	6.80	2.30	64	1LE3303-0EB0	■ ■ ■ ■ ■	16	0.003600	
1.5	1.75	90L	1439	9.95	IE3	85.30	85.90	0.77	3.30	2.30	7.00	2.30	64	1LE3303-0EB4	■ ■ ■ ■ ■	19	0.004900	
2.2	2.55	100L	1442	14.57	IE3	86.70	86.70	0.81	4.52	2.30	7.60	2.30	69	1LE3303-1AB4	■ ■ ■ ■ ■	30	0.014000	
3	3.45	100L	1452	19.73	IE3	87.70	87.70	0.82	6.02	2.30	7.60	2.30	69	1LE3303-1AB5	■ ■ ■ ■ ■	30	0.014000	
4	4.60	112M	1453	26.29	IE3	88.60	88.60	0.82	7.95	2.20	7.80	2.30	70	1LE3303-1BB2	■ ■ ■ ■ ■	34	0.017000	
5.5	6.30	132S	1465	35.85	IE3	89.60	89.60	0.83	10.68	2.00	7.90	2.30	76	1LE3303-1CB0	■ ■ ■ ■ ■	64	0.046000	
7.5	8.60	132M	1463	48.95	IE3	90.40	90.40	0.84	14.26	2.00	7.50	2.30	76	1LE3303-1CB2	■ ■ ■ ■ ■	64	0.046000	
11	12.60	160M	1471	71.41	IE3	91.40	91.40	0.85	20.44	2.20	7.70	2.30	78	1LE3303-1DB2	■ ■ ■ ■ ■	83	0.083000	
15	17.30	160L	1473	97.24	IE3	92.10	92.10	0.86	27.34	2.20	7.80	2.30	78	1LE3303-1DB4	■ ■ ■ ■ ■	100	0.099000	
18.50	21.30	180M	1470	120.18	IE3	92.60	93.10	0.86	33.53	2.00	7.80	2.30	80	1LE3303-1EB2	■ ■ ■ ■ ■	134	0.130000	
22.00	25.30	180L	1470	142.91	IE3	93.00	93.70	0.86	39.70	2.00	7.80	2.30	80	1LE3303-1EB4	■ ■ ■ ■ ■	142	0.140000	
Voltages					Motor protection	No. of poles	Frame size		Motor type		Version				Order code(s)			
Frame sizes 63 M to 90 L: use of the 360° freely rotatable connection box for 2 and 4-pole motors ²⁾																		
50 Hz	230 V Δ/400 VY	60 Hz ¹⁾	460 VY	PTC thermis-	6	63 M ... 90 L		1LE3303-0D ... -0E		Standard		2	2	B	–			
50 Hz	400 V Δ/690 VY	60 Hz ¹⁾	460 V Δ	tor with 1 temp sensor	6	63 M ... 90 L		1LE3303-0D ... -0E		Standard		3	4	B	–			
50 Hz	400 VY	60 Hz ¹⁾	460 VY	Without	6	63 M ... 90 L		1LE3303-0D ... -0E		Standard		0	2	A	–			
Frame sizes 100 L to 180 L: use of the 4 × 90° rotatable connection box																		
50 Hz	230 V Δ/400 VY	60 Hz ¹⁾	460 VY	Any	6	100 L ... 180 L		1LE3303-0D ... -0E		Standard		2	2		–			
50 Hz	400 V Δ/690 VY	60 Hz ¹⁾	460 V Δ	Any	6	100 L ... 180 L		1LE3303-0D ... -0E		Standard		3	4		–			
50 Hz	500 VY			Any	6	100 L ... 180 L		1LE3303-0D ... -0E		Without add. charge		2	7		–			
50 Hz	500 V Δ			Any	6	100 L ... 180 L		1LE3303-0D ... -0E		Without add. charge		4	0		–			
Further voltages ¹⁾												9	0		...			
Types of construction						No. of poles	Frame size		Motor type		Version				Order code(s)			
Without flange		IM B3 ³⁾			6	63 M ... 180 L		1LE3303-0D ... -0E		Standard		A		–				
With flange		IM B5 ³⁾			6	63 M ... 180 L		1LE3303-0D ... -0E		With additional charge		F		–				
With standard flange		IM B14 ³⁾			6	63 M ... 180 L		1LE3303-0D ... -0E		With additional charge		K		–				
Further types of construction															...			
Motor protection						No. of poles	Frame size		Motor type		Version				Order code(s)			
Frame sizes 100 L to 180 L: use of the 4 × 90° rotatable connection box																		
Without						6	80 L ... 180 L		1LE3303-0D ... -0E		Standard		A		–			
PTC thermistor with 3 temperature sensors						6	80 L ... 180 L		1LE3303-0D ... -0E		With additional charge		B		–			
Further motor protection															...			
Connection box position						No. of poles	Frame size		Motor type		Version				Order code(s)			
Connection box at top						6	63 M ... 180 L		1LE3303-0D ... -0E		Standard		4		–			
Further connection box positions																		
Special versions						No. of poles	Frame size		Motor type						Order code(s)			
Forced-air cooled motors without ext. fan/fan cover (IC 416 6							63 M ... 180 L		1LE3303-0D ... -0E		1LE3303- . . . ■ ■ ■ ■ ■		-Z F90 + . . . + . . . + . . .					
Options											1LE3303- . . . ■ ■ ■ ■ ■		-Z . . . + . . . + . . . + . . .					

Self-ventilated motors Aluminum series 1LE3303

IE3

Selection and ordering data

Operating values at rated output														Aluminum series 1LE3303 Article No.		m _{IM B3}	J				
P _{rated} , 60 Hz P50	P _{rated} , 60 Hz P60	Frame size	n _{rated} , 60 Hz	T _{rated} , 60 Hz	IE Class	η _{rated} , 60 Hz, 4/4	η _{rated} , 60 Hz, 3/4	cos- φ _{Rated} , 60 Hz, 4/4	I _{Rated} , 60 Hz, 460 V	T _{LR} / T _{rated} , 60 Hz	I _{LR} / I _{rated} , 60 Hz	T _B / T _{rated} , 60 Hz	L _{pfA} , 60 Hz								
kW	kW	FS	rpm	Nm		%	%		A				dB(A)	▲ New		kg	kgm ²				
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																					
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz																					
0.12	0.14	63M	1720	0.67	IE3	66.00	64.50	0.72	0.43	2.10	6.60	2.20	57	1LE3303-0BB2	■ ■ ■ ■ ■	4	0.000305				
0.18	0.21	63M	1720	1.00	IE3	69.50	68.00	0.73	0.60	2.10	6.60	2.20	57	1LE3303-0BB3	■ ■ ■ ■ ■	5	0.000399				
0.25	0.29	71M	1735	1.38	IE3	73.40	72.00	0.74	0.77	2.10	6.60	2.20	60	1LE3303-0CB2	■ ■ ■ ■ ■	7	0.000717				
0.37	0.42	71M	1735	2.04	IE3	78.20	76.80	0.75	1.03	2.10	6.60	2.20	60	1LE3303-0CB2	■ ■ ■ ■ ■	8	0.000965				
0.55	0.63	80M	1732	3.47	IE3	83.50	82.00	0.75	1.45	2.30	6.60	2.30	61	1LE3303-0DB2	■ ■ ■ ■ ■	11	0.016000				
0.75	0.86	80M	1737	4.73	IE3	86.50	84.00	0.75	1.91	2.40	6.60	2.30	61	1LE3303-0DB3	■ ■ ■ ■ ■	14	0.017000				
1.1	1.25	90S	1742	6.85	IE3	86.50	84.00	0.76	2.74	2.30	6.80	2.30	64	1LE3303-0EB0	■ ■ ■ ■ ■	16	0.017000				
1.5	1.75	90L	1737	9.62	IE3	89.50	88.00	0.77	3.67	2.30	7.00	2.30	64	1LE3303-0EB4	■ ■ ■ ■ ■	19	0.024000				
2.2	2.55	100L	1741	13.99	IE3	89.50	88.00	0.81	5.08	2.30	7.60	2.30	69	1LE3303-1AB4	■ ■ ■ ■ ■	30	0.031000				
3	3.45	100L	1751	18.81	IE3	89.50	88.00	0.82	6.79	2.30	7.60	2.30	69	1LE3303-1AB5	■ ■ ■ ■ ■	30	0.031000				
4	4.60	112M	1751	25.09	IE3	91.70	90.00	0.82	8.83	2.20	7.80	2.30	70	1LE3303-1BB2	■ ■ ■ ■ ■	34	0.035000				
5.5	6.30	132S	1764	34.10	IE3	91.70	90.00	0.83	11.95	2.00	7.90	2.30	76	1LE3303-1CB0	■ ■ ■ ■ ■	64	0.034000				
7.5	8.60	132M	1761	46.63	IE3	92.40	91.00	0.84	15.99	2.00	7.50	2.30	76	1LE3303-1CB2	■ ■ ■ ■ ■	64	0.046000				
11	12.60	160M	1771	67.94	IE3	93.00	91.50	0.85	23.01	2.20	7.70	2.30	78	1LE3303-1DB2	■ ■ ■ ■ ■	83	0.083000				
15	17.30	160L	1771	93.28	IE3	93.60	92.00	0.86	31.02	2.20	7.80	2.30	78	1LE3303-1DB4	■ ■ ■ ■ ■	100	0.037000				
18.50	21.30	180M	1775	114.59	IE3	93.60	92.00	0.86	38.19	2.00	7.80	2.30	80	1LE3303-1EB2	■ ■ ■ ■ ■	134	0.037000				
22.00	25.30	180L	1775	136.11	IE3	94.10	92.50	0.86	45.13	2.00	7.80	2.30	80	1LE3303-1EA4	■ ■ ■ ■ ■	142	0.037000				
Voltages										Version				Order code							
50 Hz 230 V△/400 VY				60 Hz 460 VY				Standard				2	2	-							
50 Hz 400 V△/690 VY				60 Hz 460 V△				Standard				3	4	-							
50 Hz 500 VY								Without additional charge				2	7	-							
50 Hz 500 V△								Without additional charge				4	0	-							
												9	0	...							
Types of construction										Version				Order code							
Without flange				IM B3 ³⁾				Standard				A		-							
With flange				IM B5 ³⁾				With additional charge				F		-							
With flange				IM B14 ³⁾				With additional charge				K		-							
														...							
Motor protection										Version				Order code							
Without								Standard				A		-							
PTC thermistor with 1 or 3 temperature sensors (frame sizes 80, 90 or 100 to 200)								With additional charge				B		-							
														...							
Terminal box position										Version											
Terminal box at top								Standard					4								
Special versions														Order code(s)							
Forced-air cooled motorsw/o ext. fan/fancover (IC416)										1LE3303-... ■ ■ ■ ■ ■				-Z F90 .+ .+ .+ .+ .+							
										1LE3303-... ■ ■ ■ ■ ■				-Z ...+ .+ .+ .+ .+							

¹⁾ Operating values at rated output for 60 Hz are available on request.

²⁾ For converter-fed operation of shaft heights 80 and 90, ordering with PTC thermistors and their connection to the converter is recommended.

³⁾ Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (H03) and stamping of the type on the rating plate. The basic type IM B3, IM B5 or IM B14 is stamped as standard on the rating plate. When ordering with condensation drainage holes (H03), the type must be specified.

Options

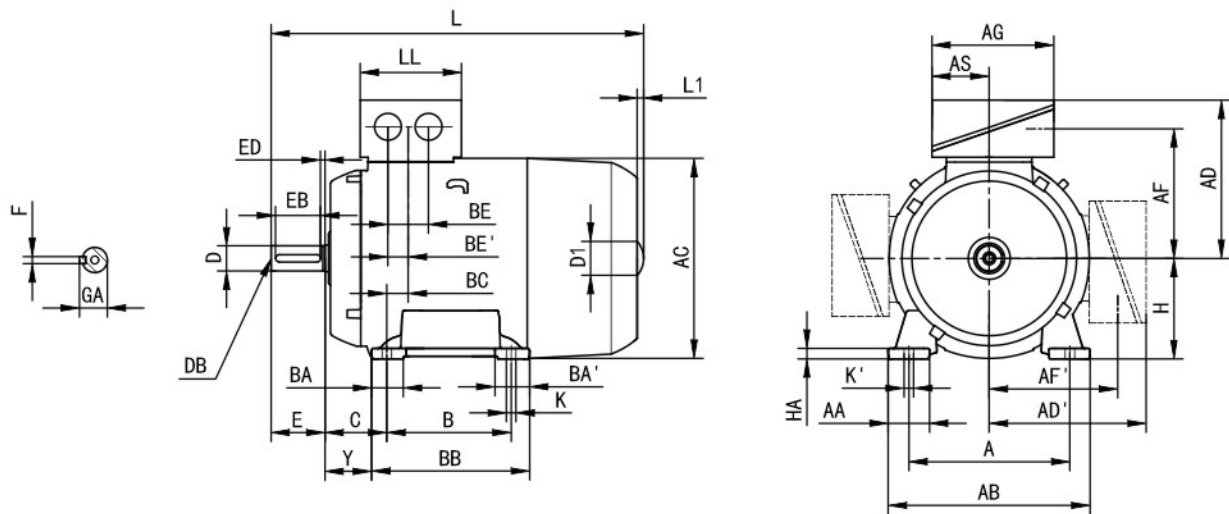
Motor order code	Option Code	Description	Application Scope
Voltages and frequency			
1LE3303-□□□□9-0□□□	M2A ²⁾¹⁴⁾	220V△/380VY 60Hz , 50Hz power output	FS63-180
	M2B ³⁾¹⁴⁾	380V△/660VY 60Hz , 50Hz power output	FS63-180
	M2C ²⁾¹⁴⁾	440VY 60Hz , 50Hz power output	FS63-180
	M2D ³⁾¹⁴⁾	440V△ 60Hz , 50Hz power output	FS63-180
	M2E ²⁾¹⁴⁾	460VY 60Hz , 50Hz power output	FS63-180
	M2F ³⁾¹⁴⁾	460V△ 60Hz , 50Hz power output	FS63-180
Windings and insulation			
—	N01	Temperature class 155 (F), used according to 155 (F), with service factor (SF1.15)	FS63-180
—	N10	Temperature class 180 (H)	FS63-180
—	Q04 ⁹⁾	Anti-condensation heater for 220 VAC (spaces heater)	FS63-180
Motor connection box			
—	R10 ^{5) 15)}	Rotation of the connection box through 90°, entry from DE	FS63-180
—	R11 ^{6) 15)}	Rotation of the connection box through 90°, entry from NDE	FS63-180
—	R12 ¹⁵⁾	Rotation of the connection box through 180°	FS63-180
—	H04	External earthing	FS63-180
—	X07	Cast iron connection box	FS63-180
—	X47	Connection boxes of the motors include 2 self-locking cable gland	FS112 ~ 160
Bearings			
—	L79	NSK Bearing	FS63-180
—	L80	SKF Bearing	FS63-180
—	L81	Other import brand bearing	FS63-180
—	L82	Domestic Brand Bearings	FS63-180
—	L20	Located bearing at DE	FS63-180

- 1) Order No. supplement Z with option code when ordering.
- 2) Only applicable to the motor whose power is 3kW and below.
- 3) Only applicable to the motor whose power is 3kW and above.
- 4) When choose these options, the connection boxes will be changed to cast iron shell.
- 5) Not applicable to the FS80~100 flange mounted motors.
- 6) Not applicable to the outlet on top.
- 7) H00, F70 can't be used with this option.

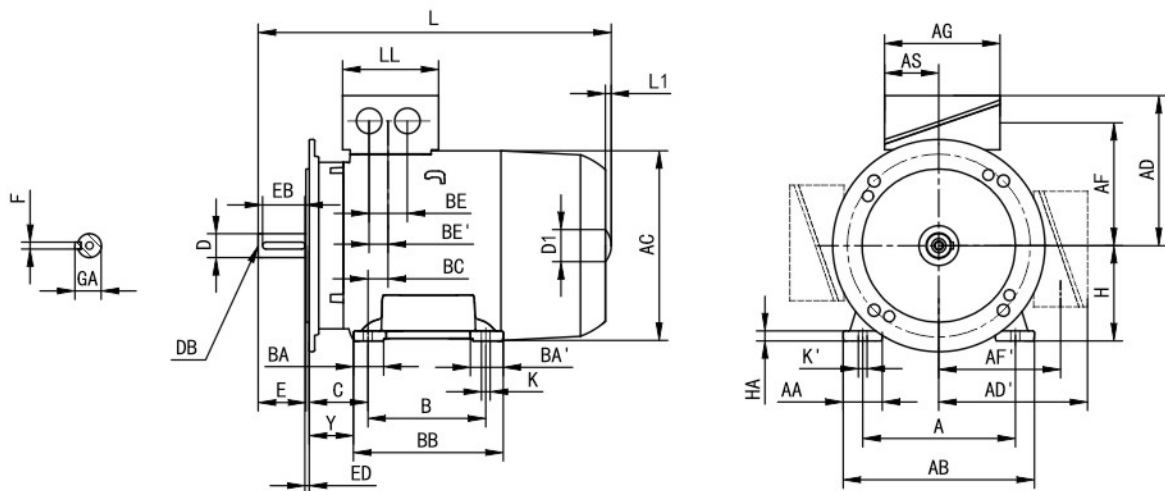
- 8) Second standard shaft extension on NDE is shown in the dimension Drawings.
- 9) Unable to be used with the option L72.
- 10) Only applicable to the vertical mounting motors. For the construction type of IM B5 and IM B14, when choose this option, it is necessary to ensure the connection box is on top of the frame. For other Construction types, please specially consult with GREENCO.

➤ Dimension drawings

Type of construction IMB3

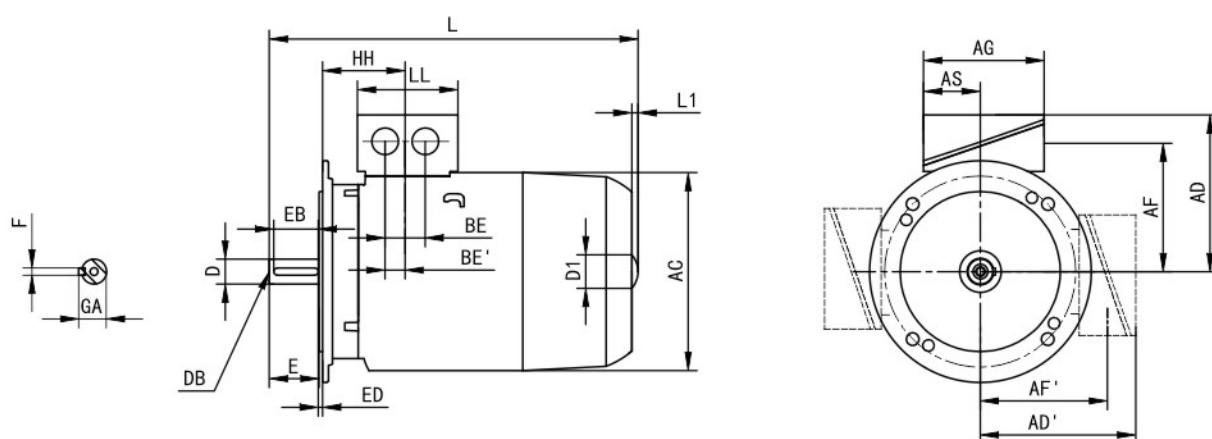


Type of construction IMB35

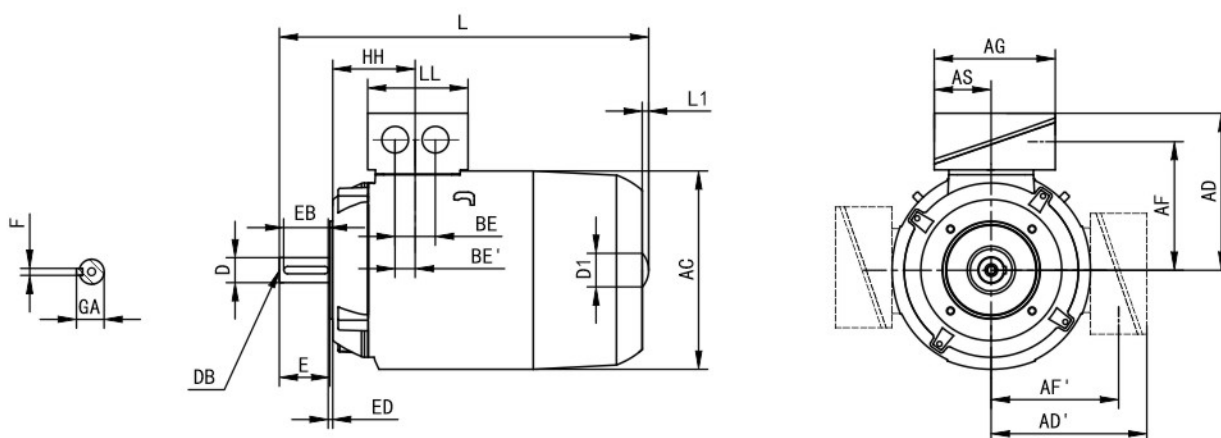


➤ Dimension drawings

Type of construction IMB5 and IMV1



Type of construction IMB14



➤ Dimension drawings

Frame size	Poles	Type	Dimension designation according to IEC standards														
			A	AA	AB	AC	AD	AD'	AF	AF'	AG	AS	B*	BA	BA'	BB	BC
63M	2,4	1AV3062A	100	27.3	120	118	101	101	77.5	77.5	75	37.5	80	28.5	28.5	97	26.5
		1AV3063A															
		1AV3062B															
		1AV3063B															
71M	2,4	1AV3072A	112	30.4	132	141	111	111	87.5	87.5	75	37.5	90	29.5	29.5	107.5	15.5
		1AV3073A															
		1AV3072B															
		1AV3073B															
80M	2,4	1AV3082A	125	30.5	150	159	149.5	149.5	113	113	119.5	61.5	100	32	32	118	23
		1AV3083A															
		1AV3082B															
		1AV3083B															
90S	2,4	1AV3090A	140	30.5	165	177.4	155	155	119	119	119.5	61.5	100	33.5	33.5	143	22.5
		1AV3090B															
90L	2,4	1AV3094A	140	30.5	165	177.4	155	155	118	118	119.5	61.5	125	33.5	33.5	143	22.5
		1AV3094B															

Frame size	Poles	Dimension designation according to IEC standards																			
		BE	BE'	C ¹⁾	H	HA	Y ¹⁾	HH	K	K'	L ¹⁾	L1	D1	LL	D	DB	E	EB	ED	F	GA
63M	2,4	29	14.5	40	63	6.6	31.5	66.5	7	10	228.3			75	11	M4	23	16	4	4	14.5
71M	2,4	29	14.5	45	71	7	36.3	60.5	7	10	240			75	14	M4	30	22	4	5	17
80M	2,4	50	25	49.6	80	8	40.6	67.5	9.5	13.2	289.5			123	19	M6	40	32	4	6	21.5
90S	2,4	50	25	55.5	90	10	46.5	78	10	14.3	348.5			123	24	M8	50.5	40	5.5	8	27
90L	2,4	50	25	57.5	90	10	46.5	72.5	10	14.3	388			123	24	M8	50	40	5.5	8	27

➤ Dimension drawings

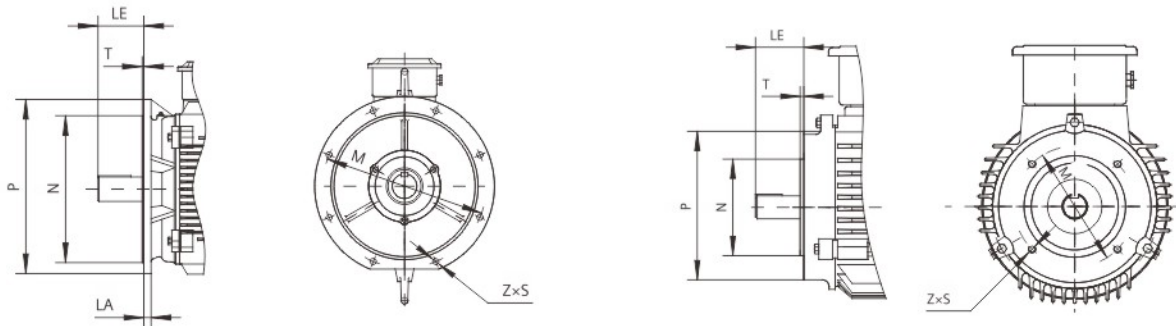
Frame size	Poles	Type	Dimension designation according to IEC standards														
			A	AA	AB	AC	AD	AD'	AF	AF'	AG	AS	B*	BA	BA'	BB	BC
100L	2,4	1AV3104A	160	42	195	198.5	166	166	125.5	125.5	136	64	140	38.5	38.5	176	33.4
		1AV3104B															
		1AV3105B															
112M	2,4	1AV3112A	190	46.5	225	223	177	177	136.7	136.7	136	64	140	35.4	35.4	176	25.7
		1AV3112B															
132S	2,4	1AV3130A	216	53	256	265	202	202	160	160	156	70.5	140	37.5	77	218	27
		1AV3130B											178				
132M	2,4	1AV3132A	216	53	256	265	202	202	160	160	156	70.5	178	37.5	77	218	27
		1AV3132B															
160M	2,4	1AV3162A	255	59.5	299	316	239	239	191	191	176	78	210	43.5	89	299	47
		1AV3163A															
		1AV3162B															
160L	2,4	1AV3164A	252	59.5	300	316	238	238	190	190	176	78	254	43.5	77.2	300	47
		1AV3164B															
180M	2,4	1AV3182A	279	65	339	355.6	261	261	213	213	176	78	240	57	89.5	327	29.8
		1AV3182B															
180L	2,4	1AV3184B	279	65	339	355.6	261	261	213	213	176	78	240	57	89.5	327	29.8

Frame size	Poles	Dimension designation according to IEC standards																			
		BE	BE'	C ¹⁾	H	HA	Y ¹⁾	HH	K	K'	L ¹⁾	L1	D1	LL	D	DB	E	EB	ED	F	GA
100L	2,4	50	25	63	100	13	45	89.8	12	16	431	7	32	112	28	M10	60	50	5	8	31
112M	2,4	50	25	70	112	11.7	52	89.7	12	16	415	7	32	112	28	M10	60	50	5	8	31
132S	2,4	48	24	86.3	132	15	66.3	108	12	16	465	8	39	130	38	M12	82.7	70	7.7	10	41
132M	2,4	48	24	85.3	133	15	66.3	108	12	16	515	8	39	130	38	M12	82.7	70	7.7	10	41
160M	2,4	57	28.5	102.4	160	16.7	80.4	138	15	19	603	9	45	145	42	M14	114.6	90	9	12	45
160L	2,4	57	28.5	104	160	18	81	138	15	19	663			145	42	M14	113.6	90	13.6	12	45
180M	2,4	57	28.5	121	180	20	92.5	179.5	14.5	19	698			180	48	M14	113	100	8	14	51.5
180L	2,4	57	28.5	121	180	20	92.5	179.5	14.5	19	698			180	48	M14	113	100	8	14	51.5

➤ Dimension drawings

Flange dimension

Type of construction IM B5, IM B35, IM V1, IM V3, IM B14, IM V18, IM V19



Frame size	Type of construction	Flange with through holes (FF/A) / tapped holes (FT/C)
		According to DIN EN 50347
80	IM B5, IM B35, IMV1, IM V3 IM B14, IM V18, IM V19	FF 165
		FT 100
90	IM B5, IM B35, IMV1, IM V3 IM B14, IM V18, IM V19	FF 165
		FT 115
100	IM B5, IM B35, IMV1, IM V3 IM B14, IM V18, IM V19	FF 215
		FT 130
112	IM B5, IM B35, IMV1, IM V3 IM B14, IM V18, IM V19	FF 215
		FT 130
132	IM B5, IM B35, IMV1, IM V3	FF 265
160	IM B5, IM B35, IMV1, IM V3	FF 300

Frame size	Dimension designation according to IEC standards							
	LA	LE	M	N	P	S	T	Z
80	12	40	165	130	200	12	3.5	4
	—	40	100	80	120	M 6	3	4
90	12	50	165	130	200	12	3.5	4
	—	50	115	95	140	M 8	3	4
100	13	60	215	180	250	14.5	4	4
	—	60	130	110	160	M 8	3.5	4
112	14	60	215	180	250	14.5	4	4
	—	60	130	110	160	M 8	3.5	4
132	14	80	265	230	300	14.5	4	4
160	14	110	300	250	350	18.5	5	4

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