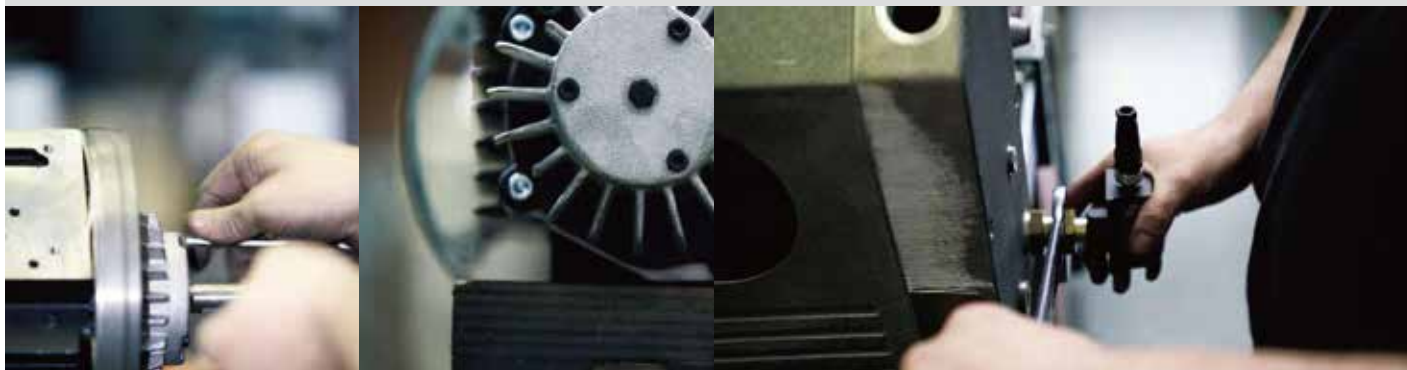


爪式泵

Claw





The globally renowned vacuum companies Elmo Technology and Rietschle have joined forces within Gardner Denver. Elmo Rietschle stands for superior product portfolio, application experience and expertise in all vacuum and pressure technology areas. We make your process faster, safer and more cost-efficient.

Best quality

- All machines designed and produced inhouse
- Shortest response time
- Perfect logistic

知名真空泵公司Elmo和Rietschle已与Gardner Denver共同携手。Elmo Rietschle代表着整个真空和压力技术领域的优异产品组合、应用经验和专业技术。拥有我们，您的生产过程将更快捷、更安全、更有效。

先进的品质

- 所有产品均在制造基地设计和生产
- 更短的响应时间
- 完善的物流系统

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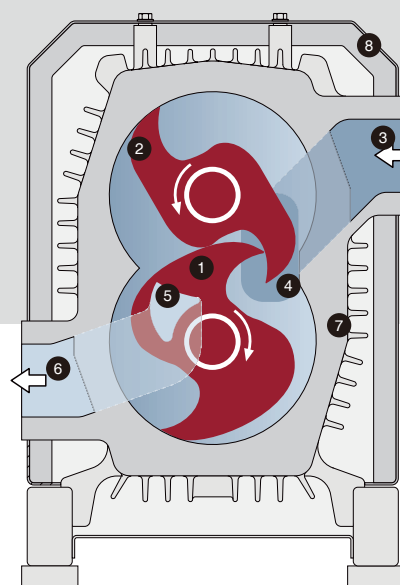
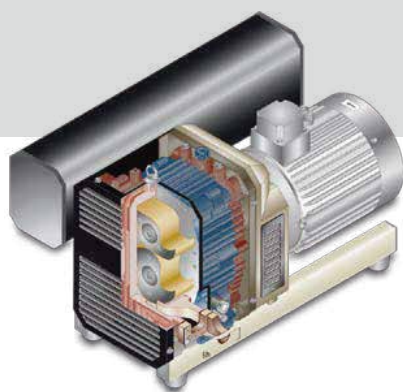


爪式泵
Claw

设计原理 Operating Principle

与旋片泵和罗茨风机一样，爪式真空和压力泵均采用静态空压设计，但与罗茨风机压缩设计之不同，其原理是通过内部的容积压缩后才产生压力。所有的应用中-压力、真空和两者的组合这种静态的设计原理，是一个极好的运行选择。根据规格，爪式泵的真空度最高可达100mbar(abs)，流量从60-600m³/hr，同样，流量从100-600m³/hr，压力最高可达2.2bar(g)，当同时应用于真空和压力时，可达到-0.6bar真空度和+1.0bar的压力。

The same as rotary vane pumps and roots blowers the ZEPHYR claw compressors and vacuum pumps have a static compression system as a principle of design. In contrast to roots blowers compression works by internal volume contraction. In all ranges of application - pressure, vacuum and both combined - this static principle of design gives extremely good operational possibilities. Depending on size, vacuum up to 100 mbar (abs.) and capacities between 60 and 600 m³/hr as well as pressure up to 2.2 bar (g) at flow rates between 100- 600 m³/hr can be achieved. In combined operation simultaneous vacuum up to -0.6 bar and pressure up to +1.0 bar can be obtained.



一台爪式泵由两个转子(1, 2)组成，在压缩腔内进行反方向运转，无摩擦、间隙非常的紧密。两爪轮靠同步齿轮带动，当爪轮移动至吸气连接口(3)和轴向吸气进口(4)时，气体被吸进压缩腔体。

通过转子的旋转，气体从吸气侧输送至压力侧。

通过转子间容积的减少进行压缩，直到下面的转子露出排气通道(5)。

这种“内部压缩”产生不同的压力，效率超过60%。随后，预压缩气体通过压力连接口(8)被排出。

被吸进的冷却空气通过压缩腔体和消音罩间进行散热，热气被最终排出。

A claw pump consists of two rotors (1,2). they turn in opposite directions in a compressor housing without friction and with very tight clearances. They are synchronized via a precision gear. As the claw moves over the suction connection (3) and the axial suction channel inlet (4) the gas is sucked into the compressing chamber.

Due to the revolution of the rotors the gas is conveyed from the suction side to the pressure side.

There it is compressed by the reduction of the volume between the rotors until the lower rotor uncovers the discharge channel (5).

This "internal compression" leads to high difference pressures at efficiencies of more than 60%. Afterwards the pre-compressed gas is discharged via the pressure connection (8).

To remove the compression heat, cooling air is sucked between the compressing housing and s silencing cover and then it is lateral exhausted.



C-VLR

C-VLR 62 | 122 passive cooling



干式，高效无接触爪式真空泵

- 流量从62至144m³/h
- 连续运行下的极限真空是400mbar (绝对值)
- 标配法兰电机
- 无附加风扇的空气冷却
- 标准配置细网过滤器、吸入侧真空止回阀和真空安全阀

High efficiency, dry and contact free compression claw vacuum pumps

- Capacities ranging from 62 to 144 m³/hr
- Ultimate vacuum at continuous operation: 400 mbar (abs)
- Fitted as standard with ange motor
- Air cooling without additional fan
- Fine mesh filter, vacuum non-return valve on suction side and vacuum relief valve are standard

技术参数 • Technical data

C-VLR			62	122
流量	m³/h	50 Hz	62	120
Nominal suction capacity		60 Hz	74	144
连续运行的极限真空	mbar (abs.)		400	
Ultimate vacuum at continuous operation				
平均噪音	dB(A)	50 Hz	72	78 (73)*
Average noise level	ENISO3744	60 Hz	72	79 (76)*
最大重量 (不算电机)	kg		47	71
max. weight without motor				
油量	l		0,43	0,43
Oil capacity				

* 带有额外的消音器ZGD，适用于开放式场合 • with additional Silencer ZGD for free blowing applications

m³/h * 与进气口联接的吸气状态有关。

- 工作曲线和数据表 (公差10%) 是按PNEUROP标准计算，其所示为真空泵在正常状态下运行。
- 噪音水平是根据EN ISO 3744标准测量的，测量时离真空泵1米距离，泵的吸气口真空度处于400 mbar(a)，同时在吸气口由管道连接至室外并配置真空安全阀，公差±3dB(A)。

m³/h * • refers to suction conditions at inlet connection

- Curves, tables content (tolerance ±10 %) according to PNEUROP standards and refer to vacuum pump at normal operating temperature (1 bar (abs.) and 20 °C).
- Measuring surface sound pressure level acc. to EN ISO 3744, measured with an equivalent unit at a distance of 1 m. The pump is throttled to 400 mbar (a) suction pressure, with suction side piping connected and vacuum relief valves fitted, tolerance ± 3 dB (A).

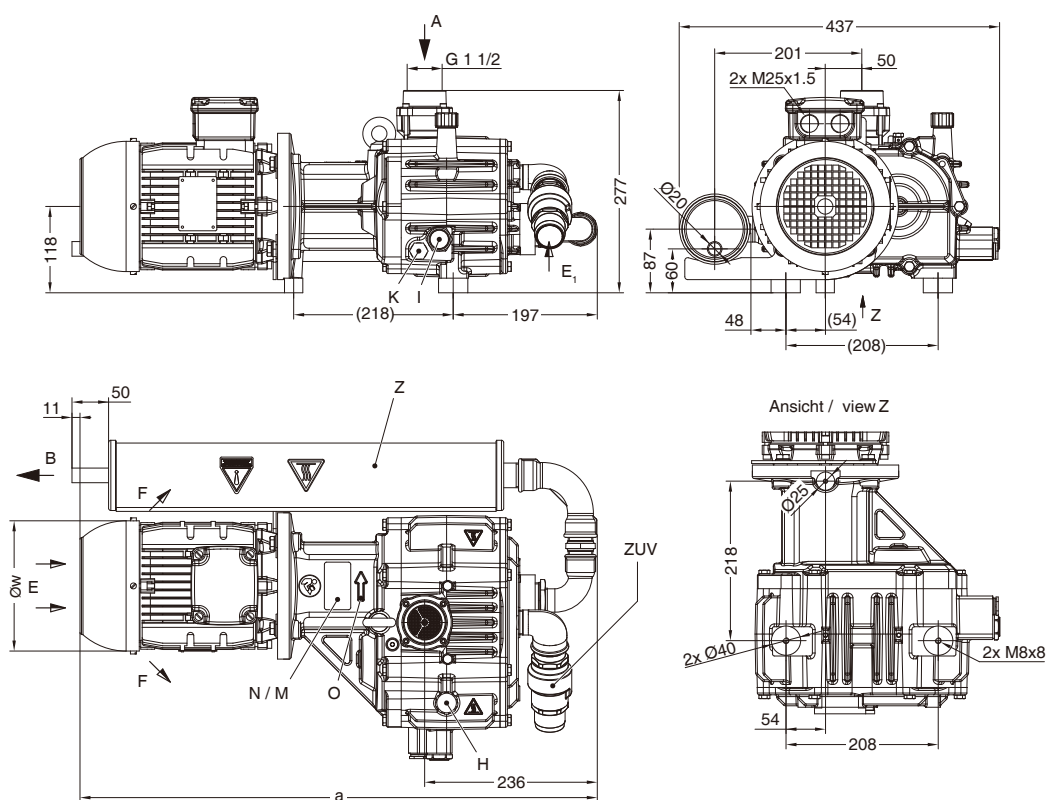
电机 • Motors

三相电机 • 3~ motors												
类型 Version	50 Hz				60 Hz				备注 Note	重量* Weight*	a** mm	ow** mm
	kW	V ± 10%	min ⁻¹	A	kW	V ± 10%	min ⁻¹	A				
C-VLR 62	GC	1,25 230/400	IE3	1450	4,89/2,81	1,5 265/460	IE3	1745	4,84/2,79	UL (US), CSA, CC-Nr.,EAC	23	707 178
	TC	1,25 200/400/690	IE3	1450	5,34/2,67/1,55	1,5 230/400/460	IE3	1750	5,44/3,13/2,72	UL (US), CSA, CC-Nr.,EAC	23	707 178
C-VLR 122	GG	2,7 230/400	IE3	2897	9,68/5,57	3,0 -/460	IE3	3475	-/5,19	UL (US), CSA, CC-Nr.,EAC	28	766 178
	TG	2,7 200/400/690	IE3	2924	10,6/5,29/3,07	3,0 230/400/460	IE3	3525	10,0/5,76/5,01	UL (US), CSA, CC-Nr.,EAC	34	805 196
	MG	2,7 230/400	IE4	2917	8,59/4,94	3,0 -/460	IE4	3518	-/4,73	UL (US), CSA, CC-Nr.,EAC	40	847 196

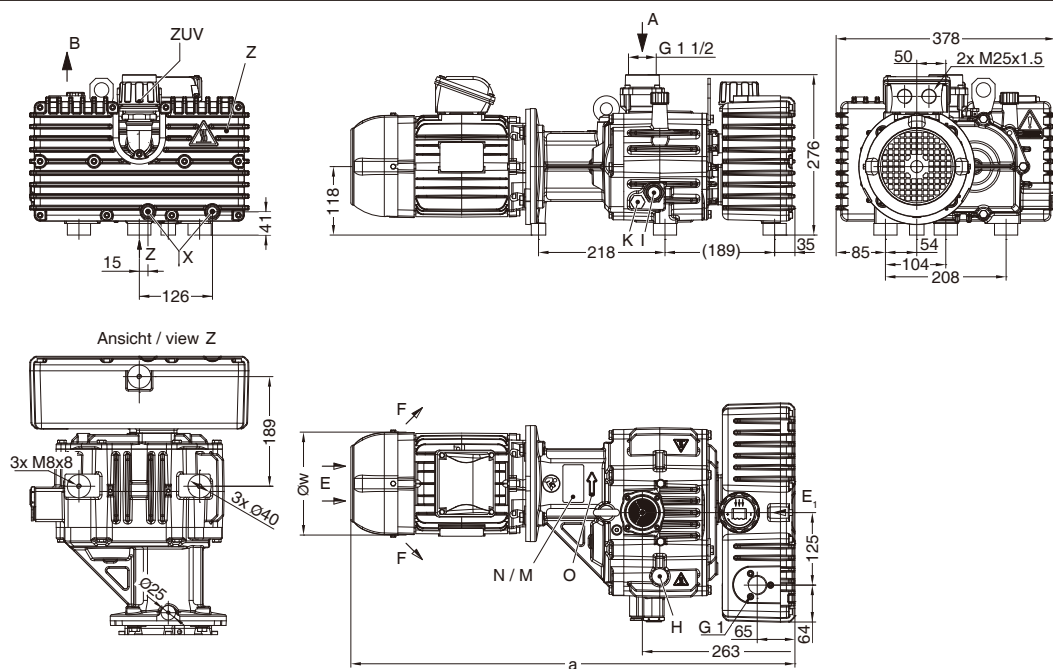
- 电机符合EN60034-1/-2/-3(IEC60034)和热等级F。
- 电机尺寸和电流值会因不同电机而与数据表不同。
- #根据需要。
- 图为可选配件。
- 我们保留更改技术信息的权利。

- The VLR match the 2006/42/EC (machinery) and 2014/35/EU (low voltage) directives and the EN 60034-1 norm "Rotating electrical machines".
- The motors comply with EN 60034-1 / -2 / -30 (IEC 60034) and thermal class F.
- ** • The motor dimensions and weight as well as the current drawn can differ depending on the motor type.
- # • on request
- The picture shows possibly optional accessories.
- We reserve the right to alter technical information!

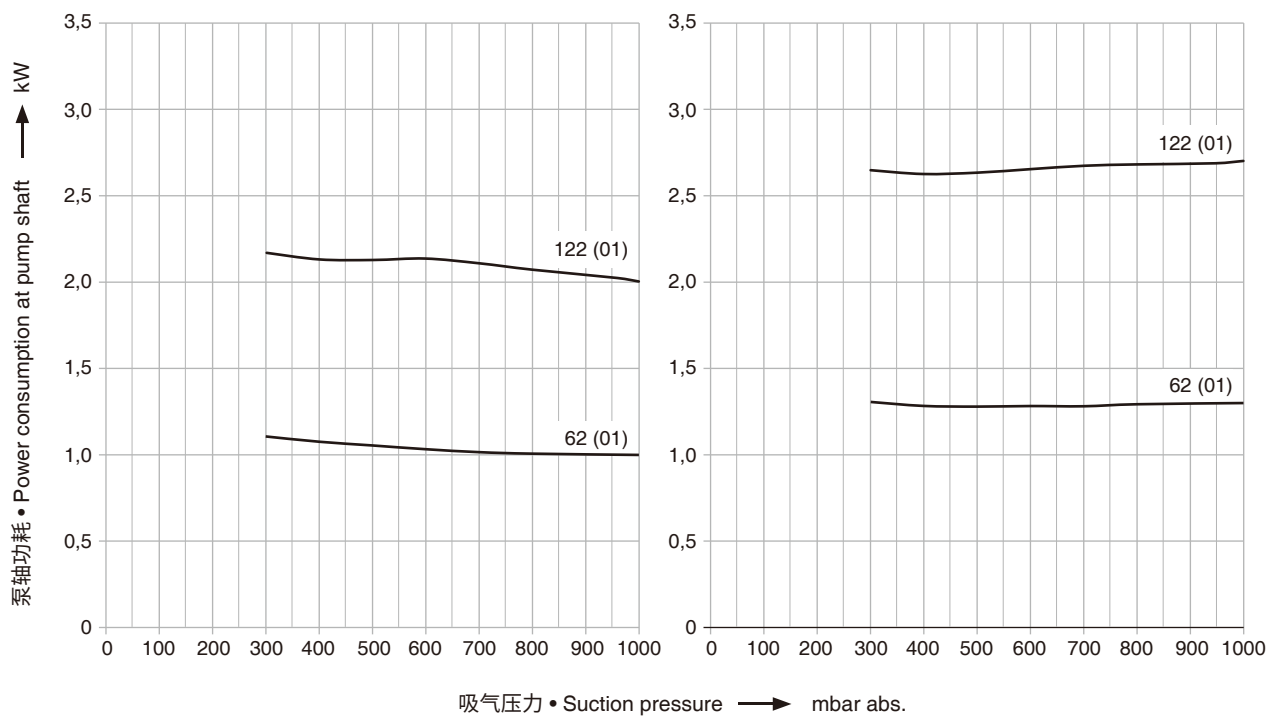
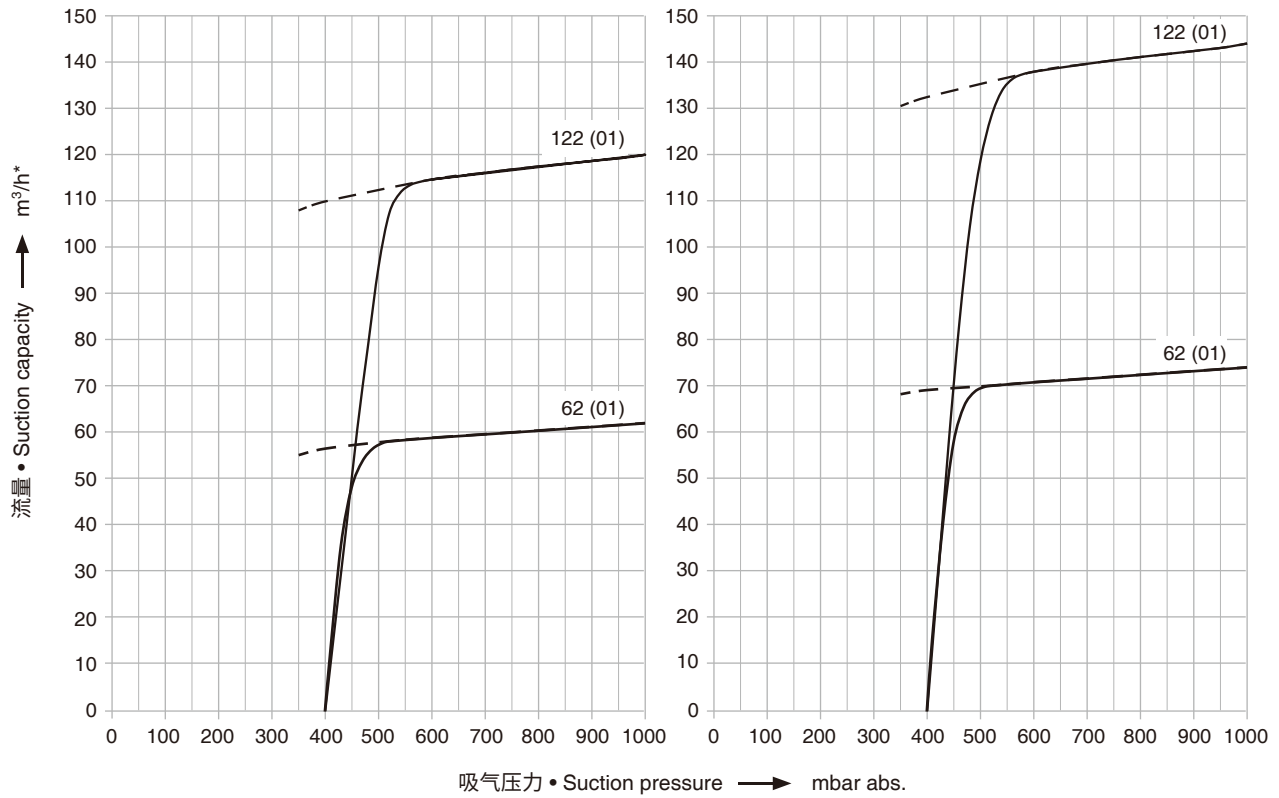
C-VLR 62



C-VLR 122



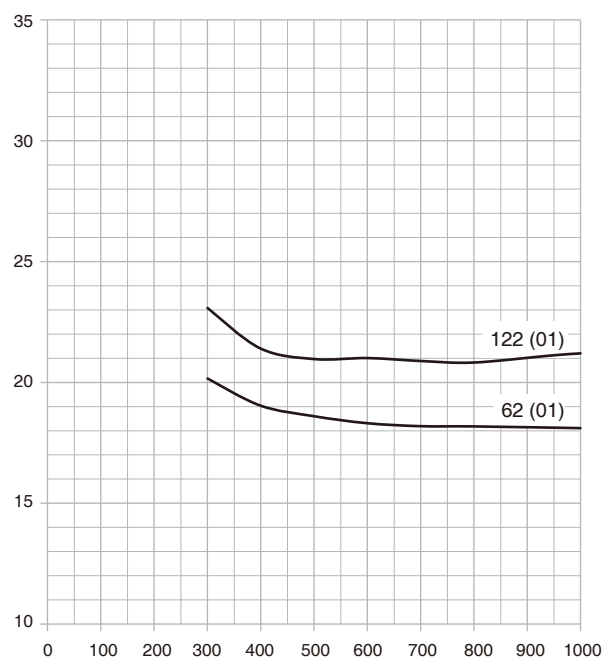
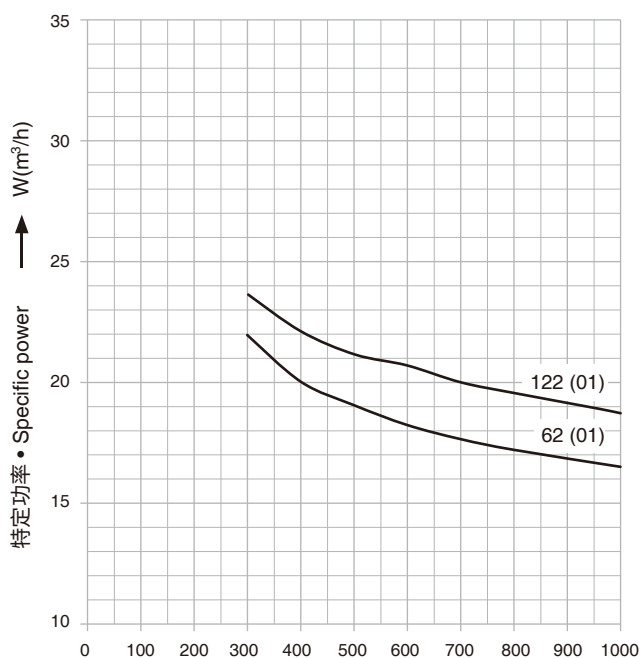
K	排油口 • Oil drain point
M	油推荐标牌 • Oil recommendation plate
N	数据牌 • Data plate
O	旋转方向箭头 • Direction of rotation
X	冷凝水排水管 G 1/4 • Condensate drain G 1/4
Z	排气口消音器 • Exhaust silencer
ZUV	真空安全阀 • Vacuum relief valve



特定功率 • Specific power

50 Hz

60 Hz



吸气压力 • Suction pressure → mbar abs.

可选配件 • Following accessories on request

一般配件 • General

真空密封过滤器 • Vacuum tight suction filter	ZVF
真空密封除尘器 • Vacuum tight dust separator	ZFP
真空离心分离器 • Vacuum centrifugal separator	ZAH
真空液体分离器 • Vacuum liquid separator	ZAL



C-VLR

C-VLR 62 | 122 active cooling



干式，高效无接触爪式真空泵

- 流量从62至144m³/h
- 连续运行下的极限真空是100 mbar (绝对值)
- 标配法兰电机
- 集成风扇空气冷却
- 标准配置消音罩、细网过滤器、吸入侧的真空止回阀和真空安全阀

High efficiency, dry and contact free compression claw vacuum pumps

- Capacities ranging from 62 to 144 m³/hr,
- Ultimate vacuum at continuous operation: 100 mbar (abs)
- Fitted as standard with flange motor
- Air cooling by integrated fan
- Silencing hood, fine mesh filter, vacuum non-return valve on suction side and vacuum relief valve are standard

技术参数 • Technical data

C-VLR			62	122
流量	m³/h	50 Hz	62	120
Nominal suction capacity		60 Hz	74	144
连续运行的极限真空	mbar (abs.)		100	
Ultimate vacuum at continuous operation				
平均噪音	dB(A)	50 Hz	63	70
Average noise level	ENISO3744	60 Hz	63	73
最大重量 (不算电机)	kg		94	95
max. weight without motor				
油量	l		0,43	0,43
Oil capacity				

m³/h * 与进气口联接的吸气状态有关。

- 工作曲线和数据表 (公差10%) 是按PNEUROP标准计算, 其所示为真空泵在正常状态下运行。
- 噪音水平是根据EN ISO 3744标准测量的, 测量时离真空泵1米距离, 泵的吸气口真空度处于400 mbar(a), 同时在吸气口由管道连接至室外并配置真空安全阀, 公差±3dB(A)。

m³/h * • refers to suction conditions at inlet connection

- Curves, tables content (tolerance ±10 %) according to PNEUROP standards and refer to vacuum pump at normal operating temperature (1 bar (abs.) and 20 °C).
- Measuring surface sound pressure level acc. to EN ISO 3744, measured with an equivalent unit at a distance of 1 m. The pump is throttled to 400 mbar (a) suction pressure, with suction side piping connected and vacuum relief valves fitted, tolerance ± 3 dB (A).

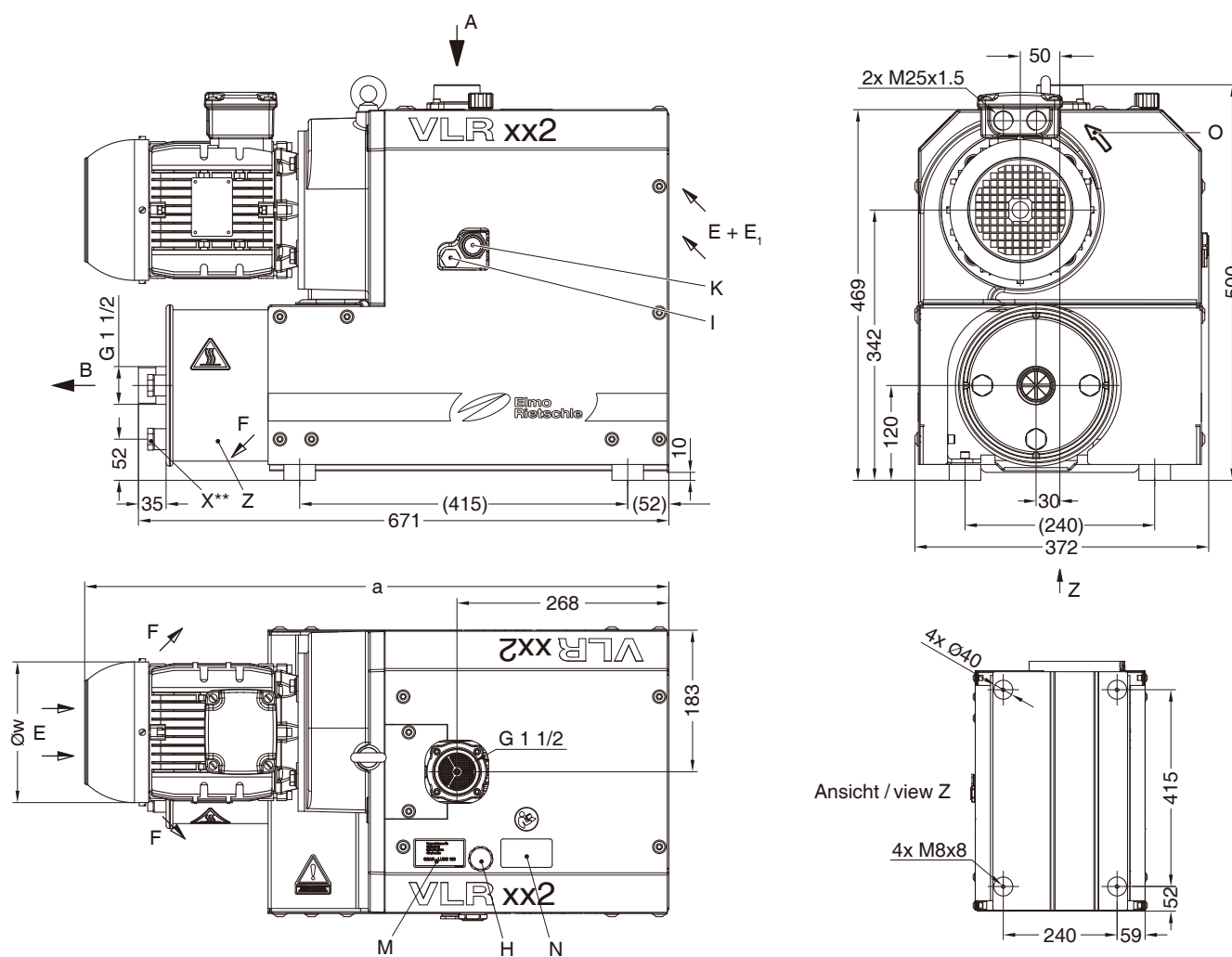
电机 • Motors

三相电机 • 3~ motors													
类型 Version		50 Hz				60 Hz				备注 Note	重量* Weight* kg	a* mm	øw* mm
		kW	V ±10%	min ⁻¹	A	kW	V ±10%	min ⁻¹	A				
62	GD IE3	1,5	230/400	1450	5,47/3,15	1,8	265/460	1745	5,56/3,21	UL (US), CSA, CC-Nr., EAC	21	739	178
	TD IE3	1,5	200/400/690	1450	6,41/3,21/1,86	1,8	230/400/460	1745	6,56/3,71/3,22	UL (US), CSA, CC-Nr., EAC	24	771	178
	ID IE3	1,5	230/380	1445	5,84/3,38	-	-	-	-	UL (US), CSA, CC-Nr., EAC	20	739	178
	WD IE3	1,5	415	1445	3,09	-	-	-	-	UL (US), CSA, CC-Nr., EAC	20	739	178
	LC IE3	-	-	-	-	1,5	575	1755	2,17	UL (US), CSA, CC-Nr., EAC	23	739	178
	MD IE4	1,5	230/400	1450	5,54/3,19	1,8	265/460	1750	5,68/3,27	UL (US), CSA, CC-Nr., EAC	39	839	178
122	GG IE3	2,7	230/400	2897	9,68/5,57	3,0	-/460	3475	-/5,19	UL (US), CSA, CC-Nr., EAC	28	771	178
	TG IE3	2,7	200/400/690	2924	10,6/5,29/3,07	3,0	230/400/460	3525	10,0/5,76/5,01	UL (US), CSA, CC-Nr., EAC	34	810	196
	IG IE3	2,7	230/380	2897	10,7/6,2	-	-	-	-	UL (US), CSA, EAC	29	771	178
	HG IE3	2,7	415	2897	5,67	-	-	-	-	UL (US), CSA, EAC	28	771	178
	LG IE3	-	-	-	-	3,0	575	3495	4,36	UL (US), CSA, CC-Nr., EAC	29	771	178
	MG IE4	2,7	230/400	2917	8,59/4,94	3,0	-/460	3518	-/4,73	UL (US), CSA, CC-Nr., EAC	40	852	196

- 电机符合EN60034-1/-2/-3(IEC60034)和热等级F。
- 电机尺寸和电流值会因不同电机而与数据表不同。
- # 根据需要。
- 图为可选配件。
- 我们保留更改技术信息的权利。

- The VLR match the 2006/42/EC (machinery) and 2014/35/EU (low voltage) directives and the EN 60034-1 norm "Rotating electrical machines".
- The motors comply with EN 60034-1 / -2 / -30 (IEC 60034) and thermal class F.
- ** • The motor dimensions and weight as well as the current drawn can differ depending on the motor type.
- # • on request
- The picture shows possibly optional accessories.
- We reserve the right to alter technical information!

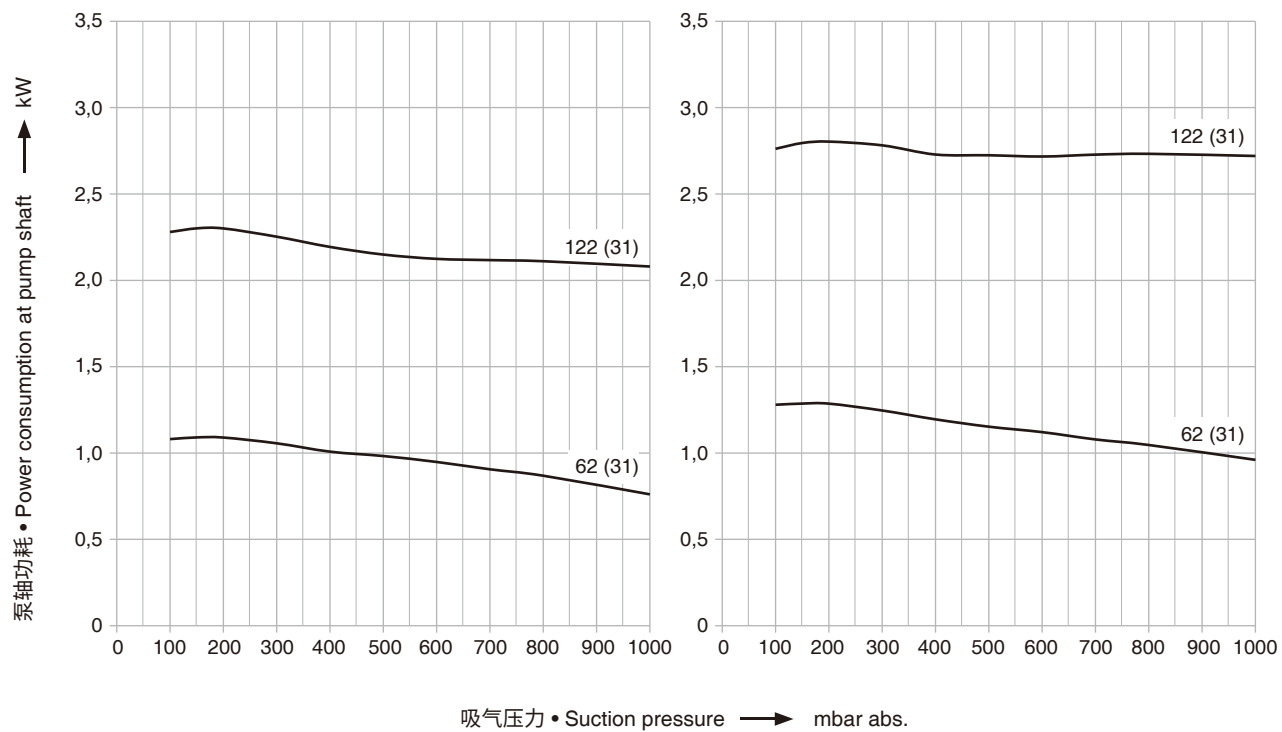
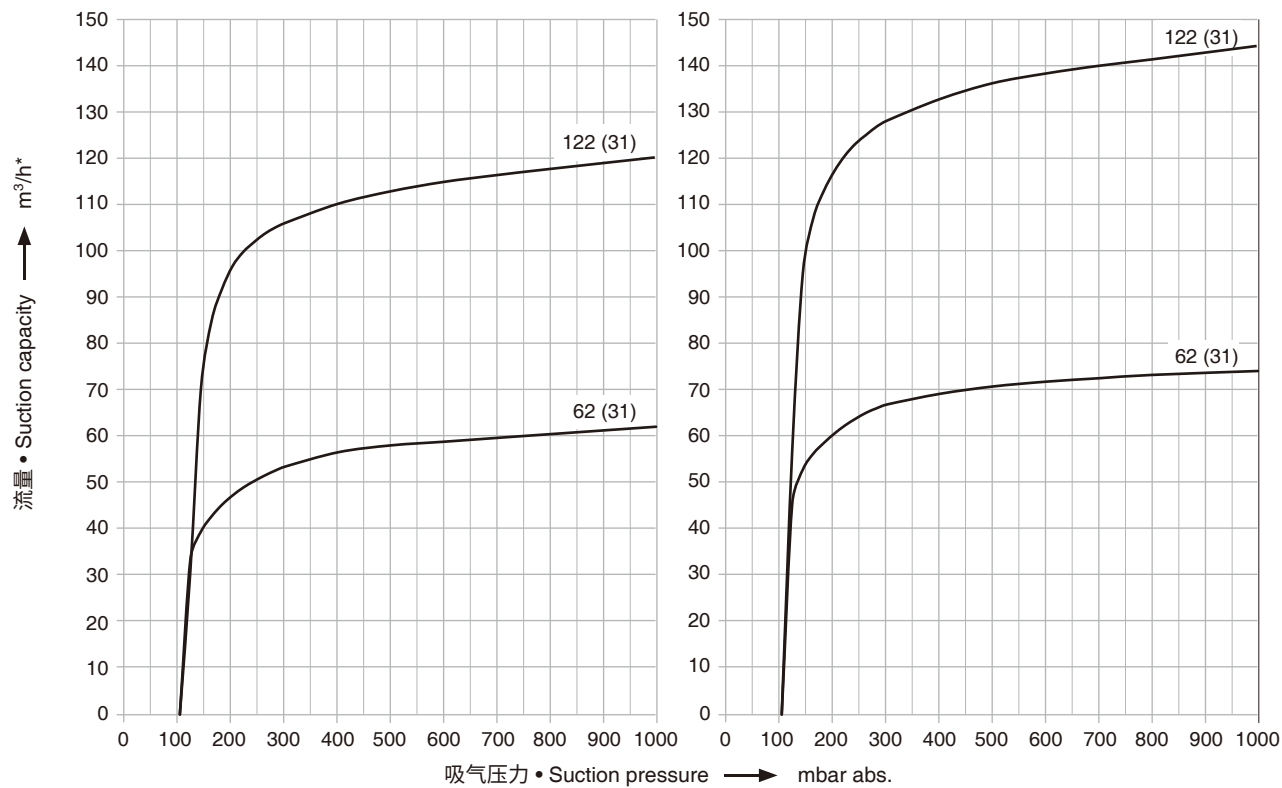
尺寸 • Dimensions [mm]



A	真空联接处 • Vacuum connection
B	排气口 • Exhaust
E	冷却空气入口 • Cooling air inlet
E ₁	冷却空气入口 ZUV • Cooling air inlet ZUV
F	冷却空气出口 • Cooling air outlet
H	注油点 • Oil filling point
I	油位镜 • Oil check

K	排油口
M	油推荐标牌 • Oil recommendation plate
N	数据牌 • Data plate
O	旋转方向箭头 • Direction of rotation
X**	冷凝水排水管 G 1/4 • Condensate drain G 1/4
Z	排气口消音器 • Exhaust silencer

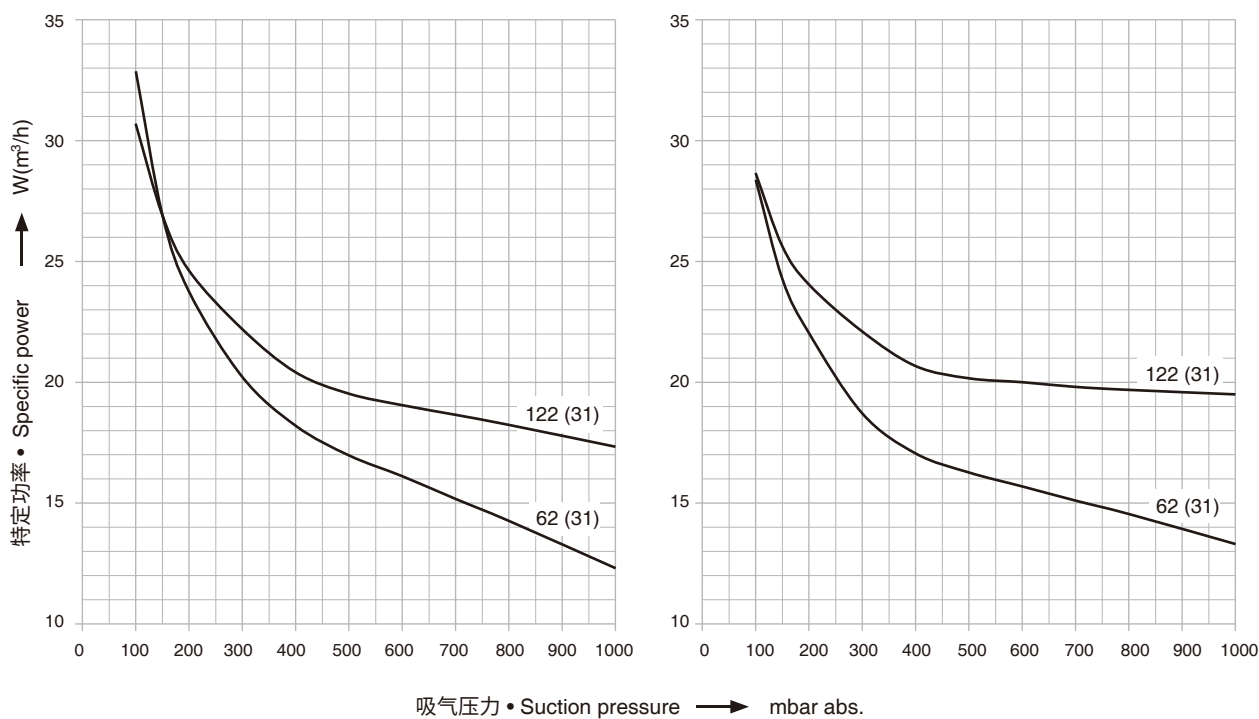
**仅适用于“XD”版本 • only for “XD” version



特定功率 • Specific power

50 Hz

60 Hz



可选配件 • Following accessories on request

一般配件 • General

真空密封过滤器 • Vacuum tight suction filter	ZVF
真空密封除尘器 • Vacuum tight dust separator	ZFP
真空离心分离器 • Vacuum centrifugal separator	ZAH
真空液体分离器 • Vacuum liquid separator	ZAL



C-VLR

C-VLR ZEPHYR 100 | 150 | 251



干式，高效无接触爪式真空泵，IE3电机
流量从100至260m³/h，极限真空(连续运行)可达100 . 150 . 200.mbar(abs). 无需经常维护，不附带冷却介质的空气冷却系统，适用于多种应用。
法兰式电机符合 DIN EN 60034，保护标准 IP 55，绝缘等级F。

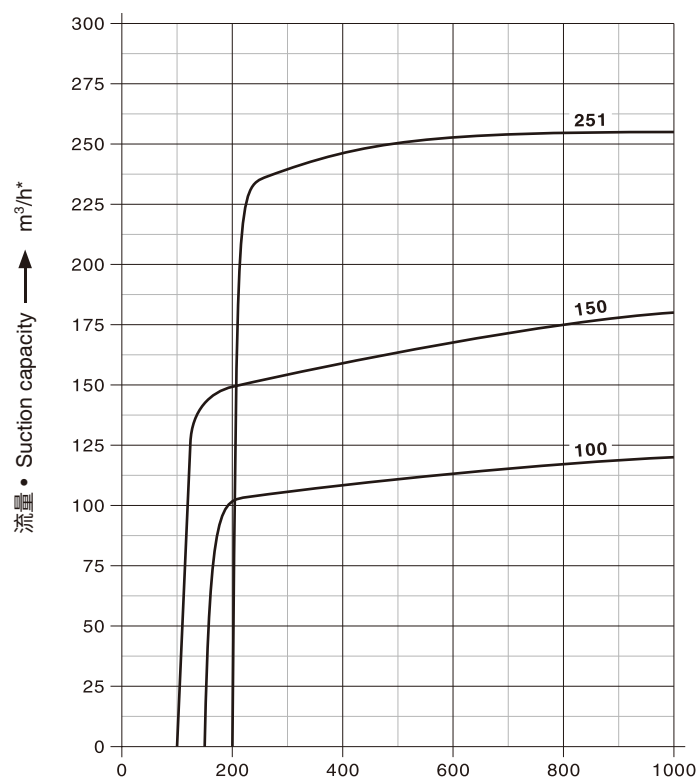
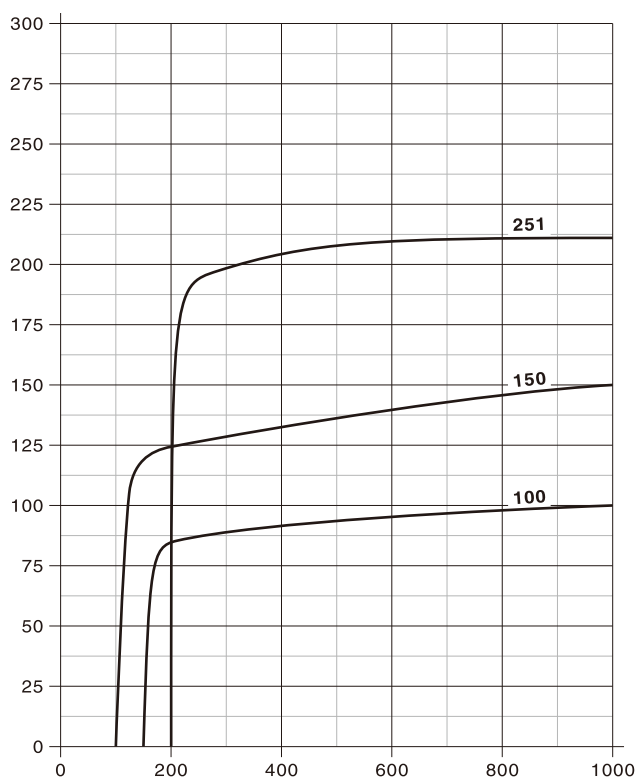
High efficiency, dry and contact free compression claw vacuum pumps with IE3 motors

Capacities ranging from 100 to 260 m³/hr
The ultimate vacuum at continuous operation is 100, 150 or 200 mbar (abs).
Low maintenance, integrated air cooling without additional cooling medium.
Flange mounted motors correspond to DIN EN 60034 and have IP 55 protection and insulation class F.

选型图 • Selection diagram

50 Hz

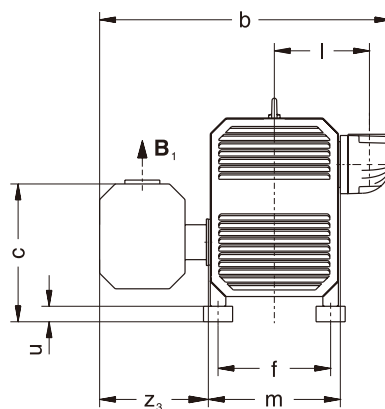
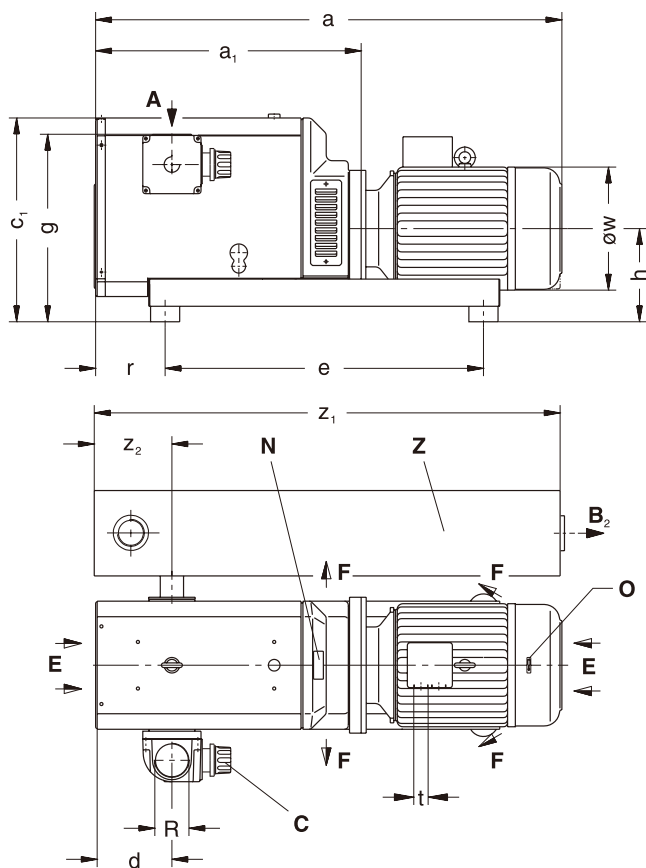
60 Hz



吸气压力 • Suction pressure → mbar abs.

C-VLR			100	150	251
流量	m³/h	50 Hz	100	150	215
Suction capacity		60 Hz	120	180	260
连续运行的极限真空	mbar (abs.)	50 Hz	150	100	200
Ultimate vacuum at continuous operation		60 Hz	150	100	200
电机类型	3~	50 Hz	230 / 400 V ± 10 %		
Rated voltage		60 Hz	230 / 460 V ± 10 %		
电机功率	kW	50 Hz	2,2	3,0	4,0
Motor rating		60 Hz	2,6	4,8	6,6
电流消耗	A	50 Hz	7,32 / 4,21	10,0 / 5,77	13,0 / 7,5
Current consumption		60 Hz	8,56 / 4,28	15,4 / 7,7	21,1 / 10,6
电机效率	η [%]	50 Hz	86,6	87,3	89,5
Motor efficiency		60 Hz	86,6	89,9	90,2
转速	min⁻¹	50 Hz	2900		
Speed		60 Hz	3500		
平均噪音	dB(A)	50 Hz	76	79	78
Average noise level		60 Hz	80	83	82
最大重量	kg	50 Hz	119	133	151
Max. weight		60 Hz	119	133	151
油量	l	50 Hz	0,55	0,6	0,6
Oil capacity		60 Hz	0,55	0,6	0,6

尺寸 • Dimensions [mm]



A	真空联接处 • Vacuum connection
B ₁	排气口 • Exhaust
B ₂	B ₁ →C-VLR 100, 150 • B ₂ →C-VLR 60, 251
C	真空限制阀 • Vacuum limitation valve*
E	冷却空气入口 • Cooling air inlet
F	冷却空气出口 • Cooling air outlet
N	数据牌 • Data plate
O	旋转方向 • Direction of rotation
Z	出口消音器 • Exhaust silencer

C-VLR	100	150	251
a	730	808	1135
a ₁	392	475	815
b	540	584	735
c	228	247	290
c ₁	360	373	404
d	92	58	65
e	440	382	382
f	220	160	160
g	335	355	404
h	150	165	165
l	182	182	245
m	260	250	250
r	77	116	173
u	15	30	30
t	M 25 x 1,5	M 25 x 1,5	M 25 x 1,5
Ø w	196	204	220
z ₁	626	649	1060
z ₂	110	55	/
z ₃	185	237	260
R	G 1½	G 1½	G 2

选装附件 • Accessories

C-VLR			100	150	251
逆止阀 Non-return valve	ZRK		40(03)	40(03)	50(03)
真空密封进气口过滤器 Vacuum tight suction filter	ZVF	50 Hz	32(54)	40(53)	50(53)
		60 Hz	40(53)	40(53)	50(53)
电机启动器 Motor starter	ZMS	50 Hz	100 / 63	100 / 63	160 / 100
		60 Hz	#	#	#

m³/h * 与进气口联接的吸气状态有关。

- 工作曲线和数据表 (公差10%) 是按PNEUROP标准计算, 其所示为真空泵在正常状态下运行。
- 噪音水平是根据EN ISO 3744标准测量的, 测量时离真空泵1米距离, 泵的吸气口真空度处于400 mbar(a), 同时在吸气口由管道连接至室外并配置真空安全阀, 公差±3dB(A)。
- 电机尺寸和电流值会因不同电机而与数据表不同。
- VLR 60, 100, 150和251匹配2006/42/EC (机器), 2006/95/EC (低电压)指令及EN60034-1标准旋转电机。
- 电机符合EN60034-1/-2/-3(IEC60034)和热等级F。
- # 根据需要。
- 图为可选配件。
- 我们保留更改技术信息的权利。

m³/h * refers to suction conditions at inlet connection

- Curves, tables content (tolerance ±10 %) according to PNEUROP standards and refer to vacuum pump at normal operating temperature (1 bar (abs.) and 20 °C).
- Measuring surface sound pressure level acc. to EN ISO 3744, measured with an equivalent unit at a distance of 1 m. The pump is throttled to 400 mbar (a) suction pressure, with suction side piping connected and vacuum relief valves fitted, tolerance ± 3 dB (A).
- The motor dimensions as well as the current drawn can differ depending on the motor type.
- The VLR 60, 100, 150 and 251 match the 2006/42/EC (machinery) and 2006/95/EC (low voltage) directives and the EN 60034-1 norm "Rotating electrical machines".
- The motors comply with EN 60 034-1 / -2 / -30 (IEC 60034) and thermal class F.
- # on request
- * The picture shows possibly optional accessories.
- We reserve the right to alter technical information!



C-VLR

C-VLR ZEPHYR 301 | 401 | 501

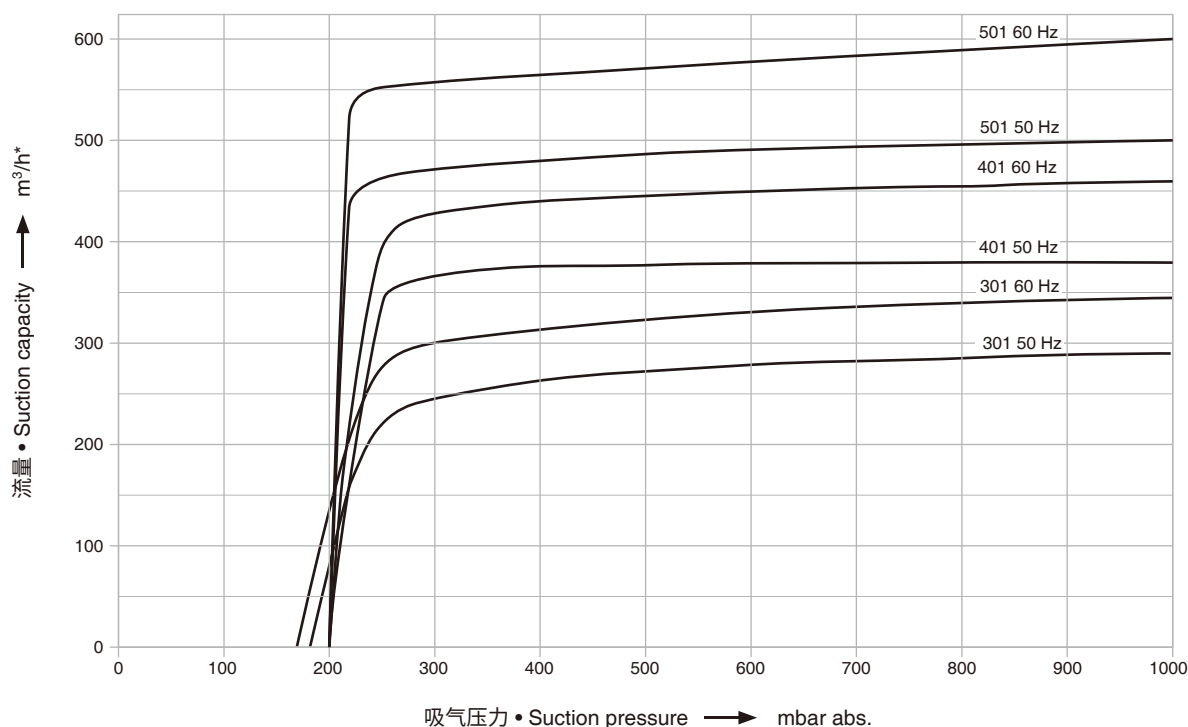


干式，高效无接触爪式真空泵，IE3电机
流量从290至600m³/h，极限真空（连续运行）150-200mbar(abs)。极限真空100mbar连续运行根据需要。
无需经常维护，不附带冷却介质的空气冷却系统，适用于多种应用。
法兰式电机符合 DIN EN 60034，保护标准 IP 55，绝缘等级F。

High efficiency, dry and frictionless compression claw vacuum pump with IE3 motors

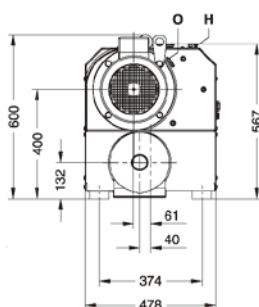
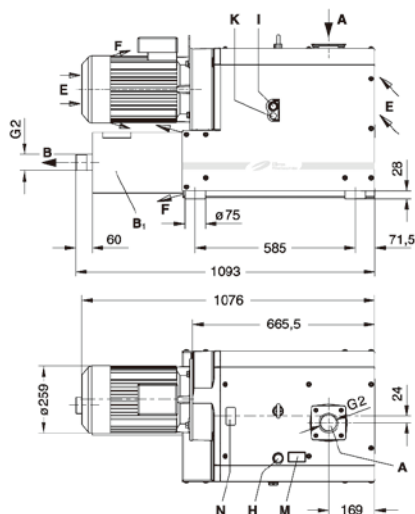
Suction capacity from 290 to 600 m³/hr, The ultimate vacuum at continuous operation is 150-200 mbar (abs). Ultimate vacuum 100 mbar (abs) at continuous operation on request. Low maintenance, integrated air cooling without additional cooling medium. Flange mounted motors correspond to DIN EN 60034 and have IP 55 protection and insulation class F.

选型图 • Selection diagram

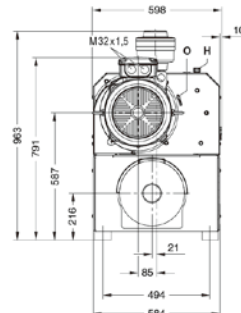
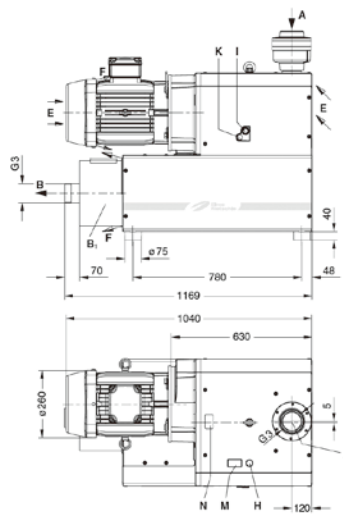


C-VLR			301	401	501
流量	m³/h	50 Hz	290	380	500
Suction capacity		60 Hz	345	460	600
连续运行的极限真空	mbar (abs.)		150	200	200
Ultimate vacuum at continuous operation					
电机类型	3~	50 Hz	400 / 690 V ± 10 %		
Rated voltage		60 Hz	380 / 660 V ± 10 %		
电机功率	kW	50 Hz	5,5	7,5	11,0
Motor rating		60 Hz	6,5	9,0	12,6
电流消耗	A	50 Hz	10,1 / 5,85	13,9 / 8,06	20,9 / 12,1
Current consumption		60 Hz			25,3 / 14,6
电机效率	η [%]	50 Hz	90,0	90,8	91,2
Motor efficiency		60 Hz			90,2
转速	min⁻¹	50 Hz	2900	2950	2950
Speed		60 Hz	3500	3550	3550
平均噪音	dB(A)	50 Hz	74	78	78
Average noise level		60 Hz	77	81	81
最大重量	kg		284,5	470	510
Max. weight					
油量	l		1,5	1,75	1,8
Oil capacity					

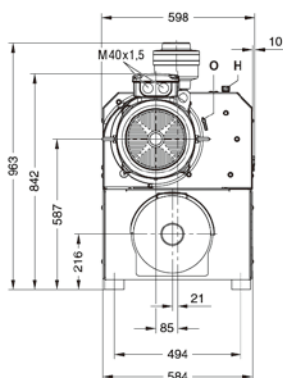
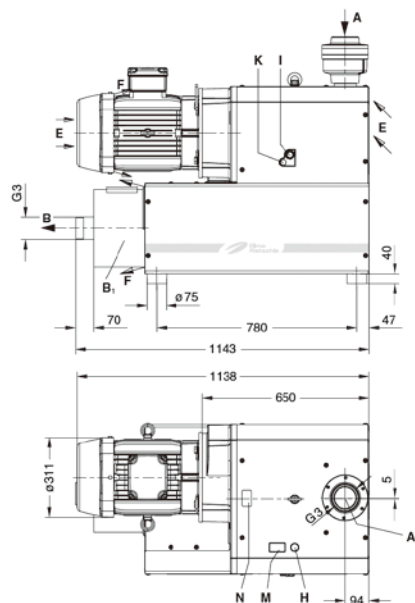
C-VLR ZEPHYR 301



C-VLR ZEPHYR 401



C-VLR ZEPHYR 501



A	真空联接处 • Vacuum connection
B	排气口 • Exhaust
B ₁	排气消声器 • Exhaust silencer
E	冷却空气入口 • Cooling air entry
F	冷却空气出口 • Cooling air exit
H	注油点 • Oil filling point
I	油位镜 • Oil check
K	排油口 • Oil drain point
M	油标牌 • Oil type plate
N	数据牌 • Data plate
O	旋转方向箭头 • Direction of rotation arrow

C-VLR			301	401	501
真空密封进气口过滤器 Vacuum tight suction filter	ZVF		50(03)	100(51)	100(51)
电机启动器 Motor starter	ZMS	50 Hz 60 Hz	160 / 63	160 / 100	260 / 160 - / 160
隔音柜 Acoustic enclosure	ZBZ		根据需要 • on request		

- 工作曲线和数据表（公差10%）是按PNEUROP标准计算，其所示为真空泵在正常状态下运行。
- 噪音水平是根据EN ISO 3744标准测量的，测量时离真空泵1米距离，泵的吸气口真空度处于400 mbar(a)，同时在吸气口由管道连接到室外并配置真空安全阀，公差±3dB(A)
- 电机尺寸和电流值会因不同电机而与数据表不同。
- VLR 301 匹配2006/42/EC(机器)，2006/95/EC (低电压)指令及EN60034-1标准旋转电机。
- 电机符合EN60034-1-2/-3(IEC60034) 和热等级F。
- 我们保留更改技术信息的权利。

- Curves, tables content (tolerance $\pm 10\%$) according to PNEUROP standards and refer to vacuum pump at normal operating temperature (1 bar (abs.) and 20 °C).
- Measuring surface sound pressure level acc. to EN ISO 3744, measured with an equivalent unit at a distance of 1 m. The pump is throttled to 400 mbar (a) suction pressure, with suction side piping connected and vacuum relief valves fitted, tolerance ± 3 dB (A).
- The motor dimensions as well as the current drawn can differ depending on the motor type.
- The VLR 301 match the 2006/42/EC (machinery) and 2006/95/EC (low voltage) directives and the EN 60034-1 norm "Rotating electrical machines".
- The motors comply with EN 60 034-1 / -2 / -30 (IEC 60034) and thermal class F.
- We reserve the right to alter technical information!



C-VLR

C-VLR ZEPHYR 1000

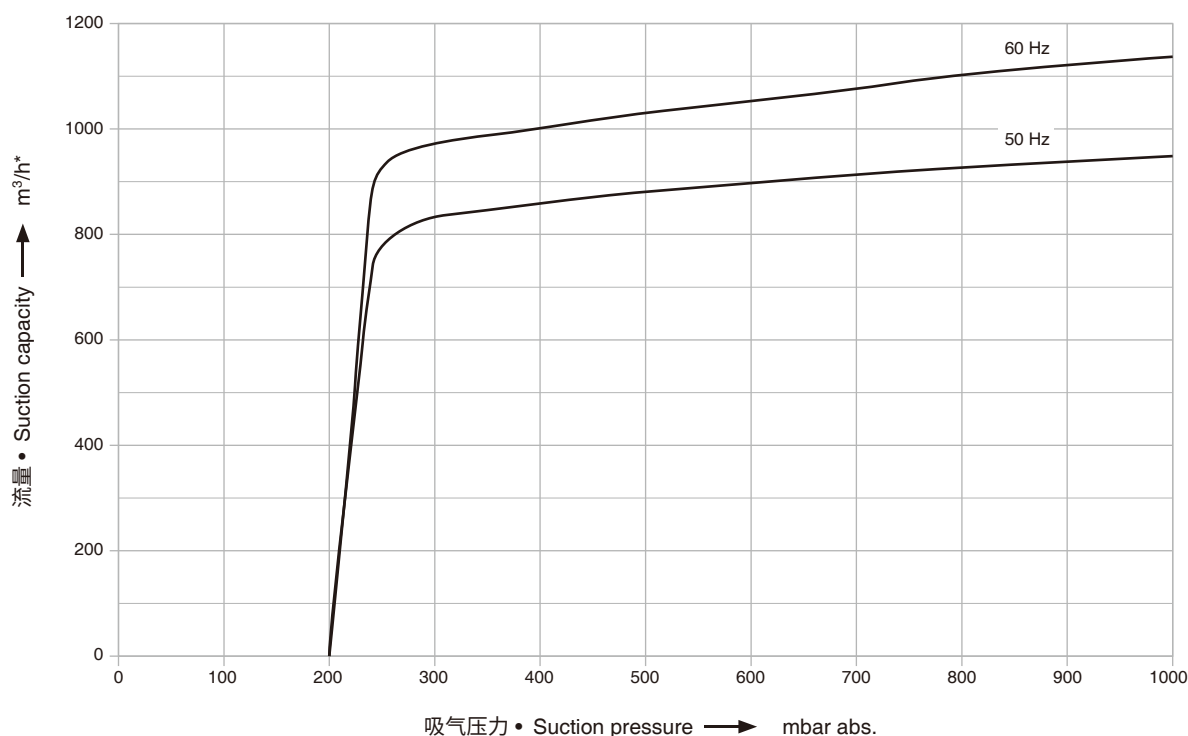


干式，高效无接触爪式真空泵，IE3电机
流量1140m³/h，极限真空（连续运行）
可达200mbar(abs)。无需经常维护，
不附带冷却介质的空气冷却系统，适用
于多种应用。
法兰式电机符合DIN EN 60034，保护
标准 IP 55，绝缘等级F。

High efficiency, dry and frictionless compression claw vacuum pump with IE3 motors

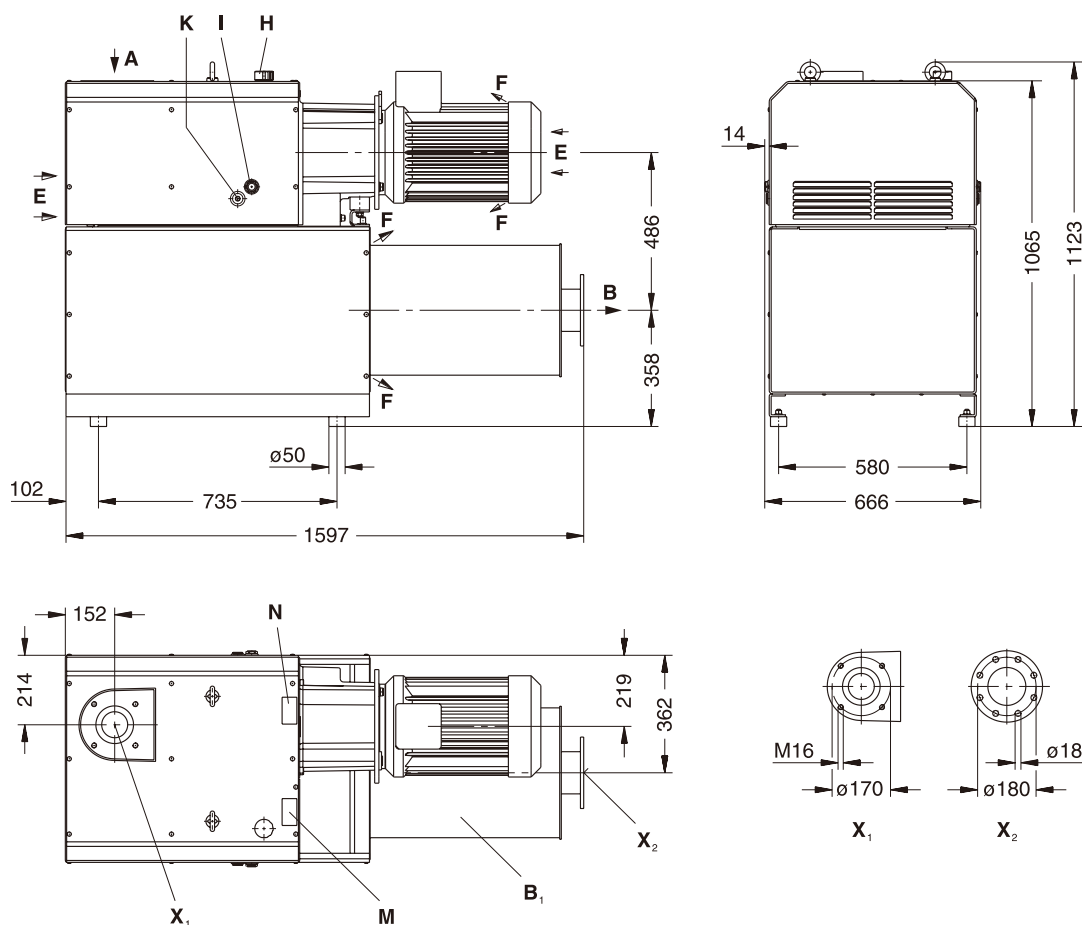
Suction capacity up to 1140 m³/hr
The ultimate vacuum at continuous
operation is 200 mbar (abs).
Low maintenance, integrated air cooling
without additional cooling medium.
Suitable for multiple applications.
Flange mounted motors correspond to DIN
EN 60034 and have IP 55 protection and
insulation class F.

选型图 • Selection diagram



C-VLR			1000
流量	m³/h	50 Hz	950
Suction capacity		60 Hz	1140
连续运行的极限真空	mbar (abs.)		200
Ultimate vacuum at continuous operation			
电机类型	3~	50 Hz	400 / 690 V $\pm$ 10 %
Rated voltage		60 Hz	380 / 660 V $\pm$ 10 %
电机功率	kW	50 Hz	18,5
Motor rating		60 Hz	22,0
电流消耗	A	50 Hz	34,0 / 19,7
Current consumption		60 Hz	34,0 / 19,7
电机效率	η [%]	50 Hz	92,4
Motor efficiency		60 Hz	92,0
转速	min ⁻¹	50 Hz	2940
Speed		60 Hz	3530
平均噪音	dB(A)	50 Hz	82
Average noise level		60 Hz	83
最大重量	kg		757
Max. weight			
油量	l		2,8
Oil capacity			

尺寸 • Dimensions [mm]



A	真空联接处 • Vacuum connection
B	排气口 • Exhaust
B ₁	排气消声器 • Exhaust silencer
E	冷却空气入口 • Cooling air entry
F	冷却空气出口 • Cooling air exit
H	注油点 • Oil filling point

I	油位镜 • Oil check
K	排油口 • Oil drain point
M	油标牌 • Oil type plate
N	数据牌 • Data plate
X ₁	法兰DN 100 PN 6 • Flange DN 100 PN 6
X ₂	法兰DN 100 PN 10 • Flange DN 100 PN 10

选装附件 • Accessories

C-VLR		1000
逆止阀 Non-return leaf	ZRZ	100
真空密封进气口过滤器 Vacuum tight suction filter	ZVF	100
电机启动器 Motor starter	ZMS	50 Hz 60 Hz
隔音柜 Acoustic enclosure	ZBZ	根据需要 • on request

m³/h * • 与进气口联接的吸气状态有关。

- 工作曲线和数据表 (公差10%) 是按PNEUROP标准计算, 其所示为真空泵在正常状态下运行。
- 噪音水平是根据EN ISO 3744标准测量的, 测量时离真空泵1米距离, 泵的吸气口真空度处于400 mbar(a), 同时在吸气口由管道连接至室外并配置真空安全阀, 公差±3dB(A)
- 电机尺寸和电流值会因不同电机而与数据表不同。
- VLR 1000匹配2006/42/EC(机器), 2006/95/EC (低电压)指令及EN60034-1标准旋转电机。
- 电机符合EN60034-1/-2/-3(IEC60034) 和热等级F。
- 我们保留更改技术信息的权利。

m³/h * • refers to suction conditions at inlet connection

- Curves, tables content (tolerance ±10 %) according to PNEUROP standards and refer to vacuum pump at normal operating temperature (1 bar (abs.) and 20 °C).
- Measuring surface sound pressure level acc. to EN ISO 3744, measured with an equivalent unit at a distance of 1 m. The pump is throttled to 400 mbar (a) suction pressure, with suction side piping connected and vacuum relief valves fitted, tolerance ± 3 dB (A).
- The motor dimensions as well as the current drawn can differ depending on the motor type.
- The VLR 1000 match the 2006/42/EC (machinery) and 2006/95/EC (low voltage) directives and the EN 60034-1 norm "Rotating electrical machines".
- The motors comply with EN 60 034-1 / -2 / -30 (IEC 60034) and thermal class F.
- We reserve the right to alter technical information!



干式，高效无接触爪式真空泵，用于
氧气用途

- 流量从62至144m³/h
- 连续运行下的极限真空是100 mbar (绝对值)
- 标配法兰电机
- 集成风扇空气冷却
- 消音罩、细网过滤器、吸入侧的真空止回阀

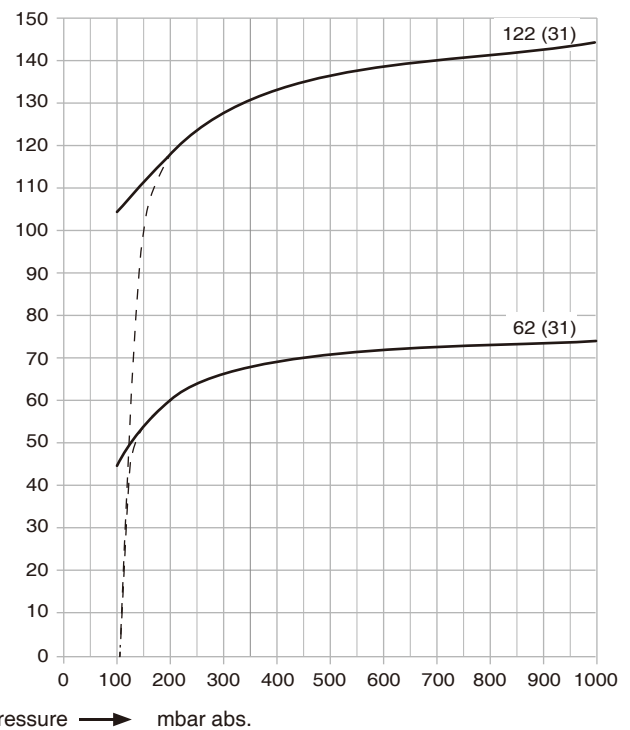
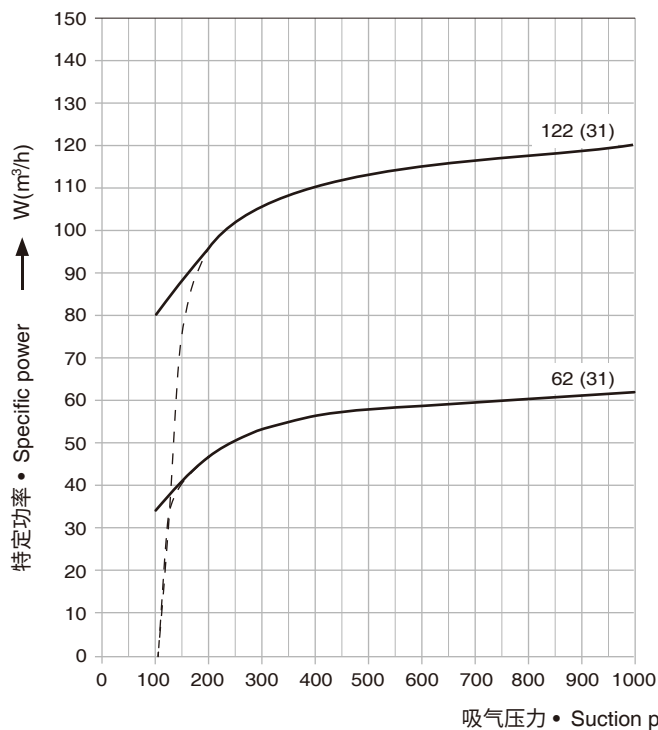
High efficiency, dry and contact free
compressing claw vacuum pumps for
oxygen use

- Capacities ranging from 62 to 144 m³/hr,
- Ultimate vacuum at continuous operation: 100 mbar (abs)
- Fitted as standard with flange motor
- Air cooling by integrated fan
- Silencing hood, fine mesh filter and vacuum non-return valve on suction side are standard

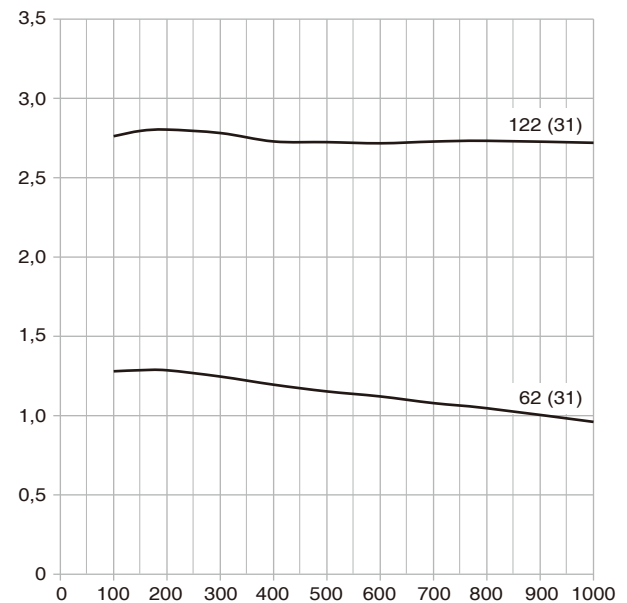
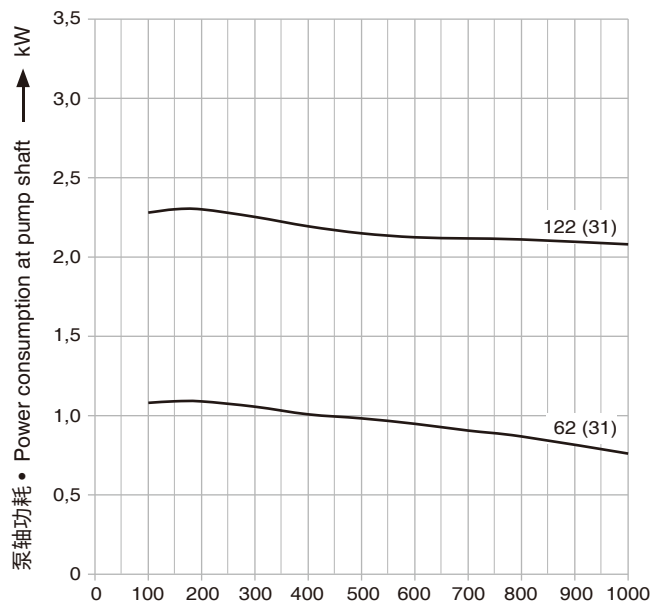
性能曲线 • Characteristic curves

50 Hz

60 Hz

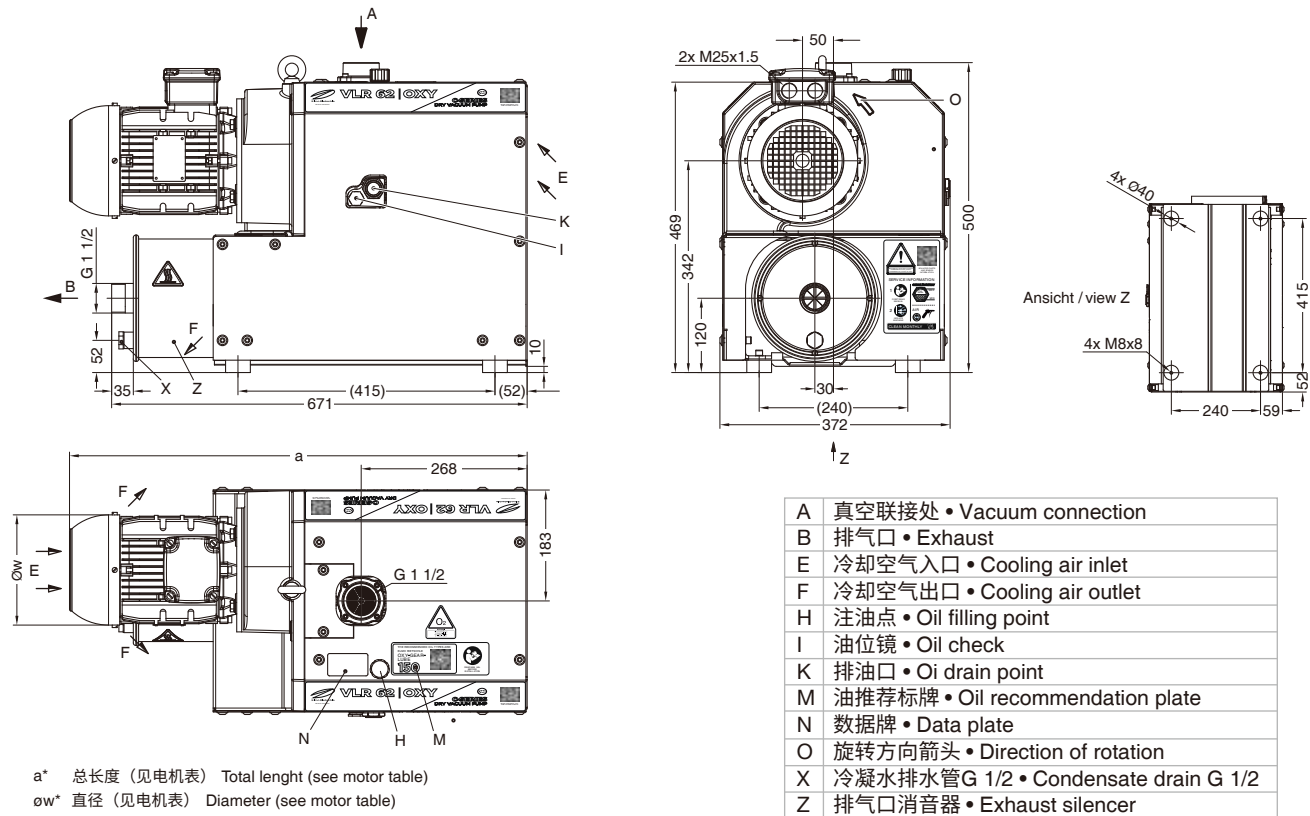


--- 带真空安全阀 (可根据要求提供) with vacuum relief valve (available on request)



吸气压力 • Suction pressure → mbar abs.

尺寸 • Dimensions [mm]



技术参数 • Technical data

C-VLR OXY			62	122
流量	m ³ /h	50 Hz	62	120
Nominal suction capacity		60 Hz	74	144
连续运行的极限真空	mbar (abs.)		100	
Ultimate vacuum at continuous operation				
平均噪音	dB(A)	50 Hz	63	70
Average noise level	EN ISO 3744	60 Hz	63	73
最大重量 (不包含电机)	kg		94	95
max. weight without motor				
油量	l		0,43	0,43
Oil capacity				

m³/h * 与进气口联接的吸气状态有关。

- 工作曲线和数据表 (公差10%) 是按PNEUROP标准计算, 其所示为真空泵在正常状态下运行。
- 噪音水平是根据EN ISO 3744标准测量的, 测量时离真空泵1米距离, 泵的吸气口真空度处于400 mbar(a), 同时在吸气口由管道连接至室外并配置真空安全阀, 公差±3dB(A)。

m³/h * refers to suction conditions at inlet connection

- Curves, tables content (tolerance ±10 %) according to PNEUROP standards and refer to vacuum pump at normal operating temperature (1 bar (abs.) and 20 °C).
- Measuring surface sound pressure level acc. to EN ISO 3744, measured with an equivalent unit at a distance of 1 m. The pump is throttled to 400 mbar (a) suction pressure, with suction side piping connected and vacuum relief valves fitted, tolerance ± 3 dB (A).

电机 • Motors

三相电机 • 3~ motors												
类型 Version	50 Hz				60 Hz				备注 Note	重量* Weight*	a*	øw*
	kW	V±10%	min ⁻¹	A	kW	V±10%	min ⁻¹	A				
62	GD IE3	1,5	230/400	1450	5,47/3,15	1,8	265/460	1745	5,56/3,21	UL (US), CSA, CC-Nr., EAC	21	739 178
	TD IE3	1,5	200/400/690	1450	6,41/3,21/1,86	1,8	230/400/460	1745	6,56/3,71/3,22	UL (US), CSA, CC-Nr., EAC	24	771 178
122	GG IE3	2,7	230/400	2897	9,68/5,57	3,0	-/460	3475	-/5,19	UL (US), CSA, CC-Nr., EAC	28	771 178
	TG IE3	2,7	200/400/690	2924	10,6/5,29/3,07	3,0	230/400/460	3525	10,0/5,76/5,01	UL (US), CSA, CC-Nr., EAC	34	810 196

• 电机符合EN60034-1/-2/-3(IEC60034) 和热等级F。

- # 根据需要。
- 图为可选配件。
- 我们保留更改技术信息的权利。

• The motors comply with EN 60034-1 / -2 / -30 (IEC 60034) and thermal class F.

- # on request
- The picture shows possibly optional accessories.
- We reserve the right to alter technical information!



干式，高效无接触爪式真空泵，用于
氧气用途

- 流量达350m³/h
- 连续运行下的极限真空是150 mbar (绝对值)
- 标配法兰电机
- 集成风扇空气冷却
- 消音罩、细网过滤器、吸入侧的真空止回阀

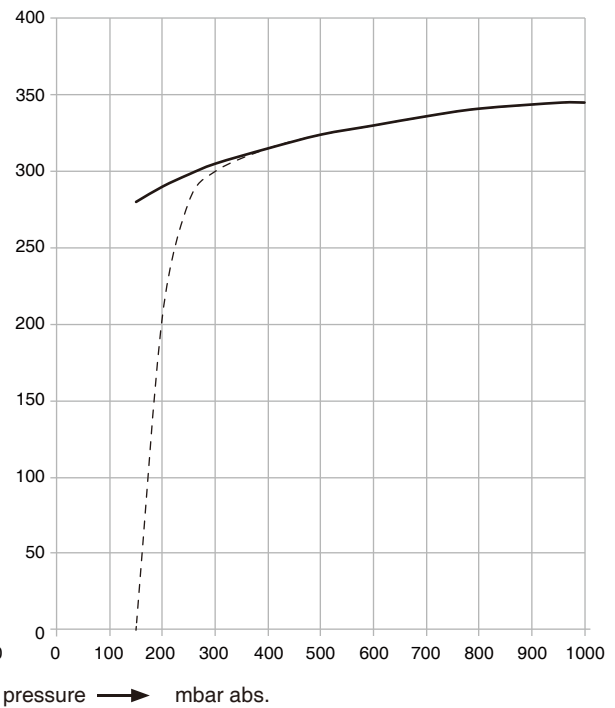
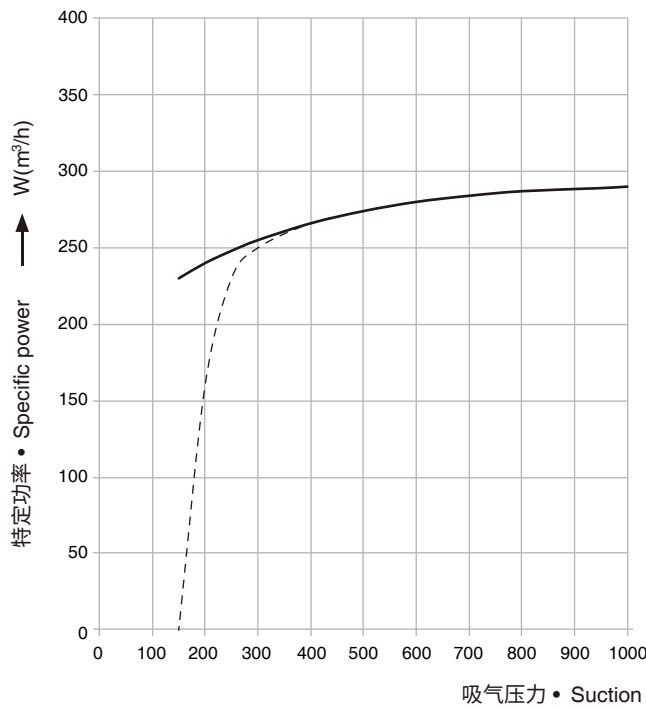
High efficiency, dry and contact free
compressing claw vacuum pumps for
oxygen use

- Capacities ranging from 350 m³/hr,
- Ultimate vacuum at continuous operation: 150 mbar (abs)
- Fitted as standard with ange motor
- Air cooling by integrated fan
- Silencing hood, fine mesh filter and vacuum non-return valve on suction side are standard

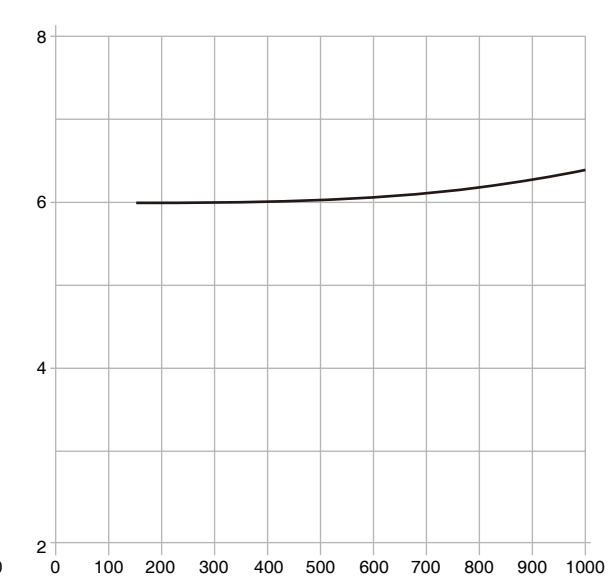
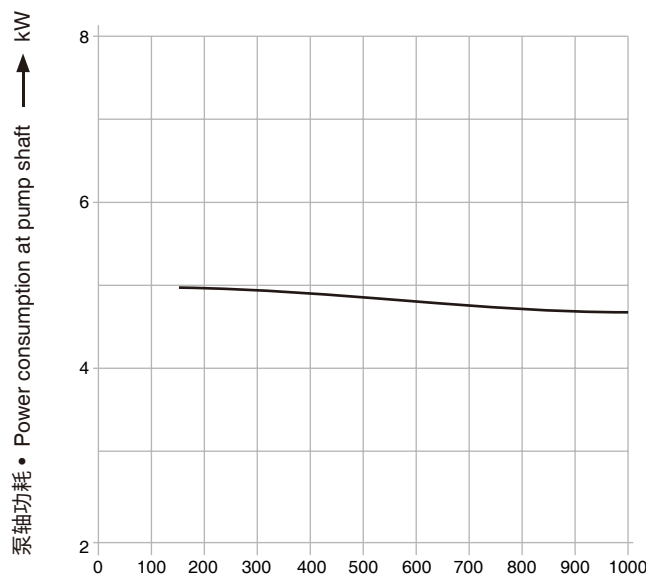
性能曲线 • Characteristic curves

50 Hz

60 Hz

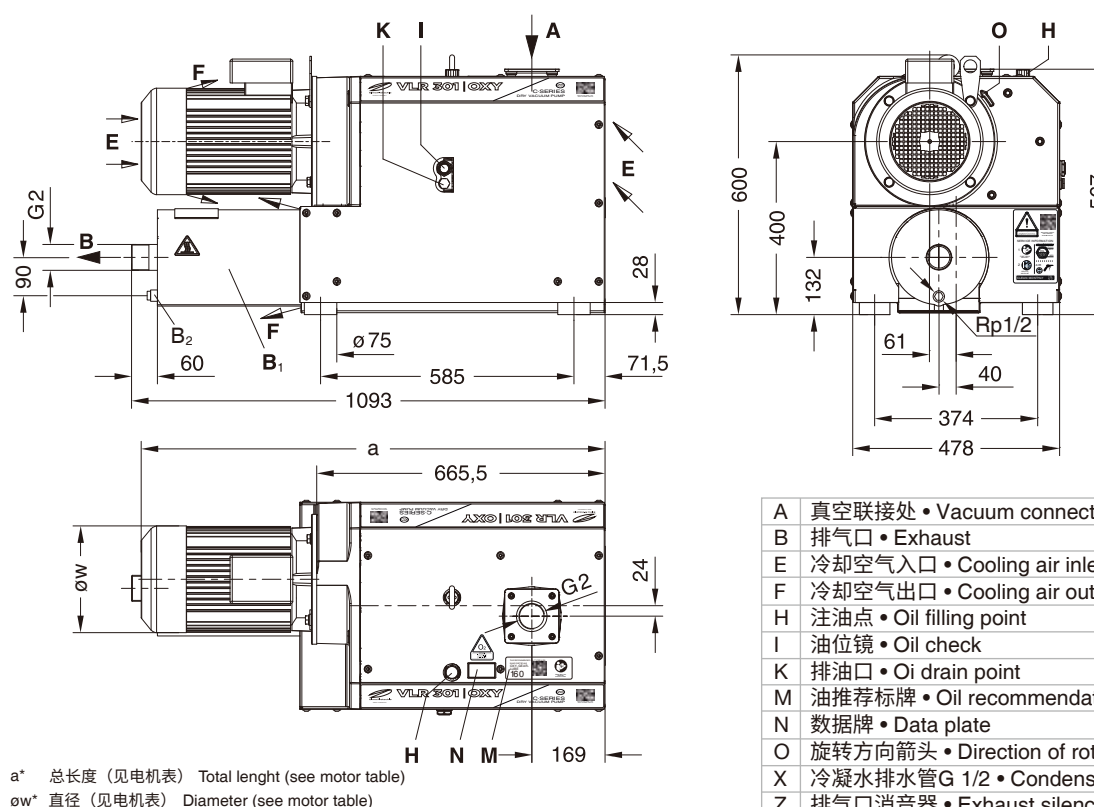


--- 带真空安全阀 (可根据要求提供) with vacuum relief valve (available on request)



吸气压力 • Suction pressure → mbar abs.

尺寸 • Dimensions [mm]



A	真空联接处 • Vacuum connection
B	排气口 • Exhaust
E	冷却空气入口 • Cooling air inlet
F	冷却空气出口 • Cooling air outlet
H	注油点 • Oil filling point
I	油位镜 • Oil check
K	排油口 • Oil drain point
M	油推荐标牌 • Oil recommendation plate
N	数据牌 • Data plate
O	旋转方向箭头 • Direction of rotation
X	冷凝水排水管 G 1/2 • Condensate drain G 1/2
Z	排气口消音器 • Exhaust silencer

技术参数 • Technical data

C-VLR OXY				301
流量	m ³ /h	50 Hz		290
Nominal suction capacity		60 Hz		350
连续运行的极限真空	mbar (abs.)			100
Ultimate vacuum at continuous operation				
平均噪音	dB(A)	50 Hz		74
Average noise level	EN ISO 3744	60 Hz		77
最大重量 (不包含电机)	kg			213
max. weight without motor				
油量	l			1,5
Oil capacity				

m³/h * 与进气口联接的吸气状态有关。

- 工作曲线和数据表 (公差10%) 是按PNEUROP标准计算, 其所示为真空泵在正常状态下运行。
- 噪音水平是根据EN ISO 3744标准测量的, 测量时离真空泵1米距离, 泵的吸气口真空度处于400 mbar(a), 同时在吸气口由管道连接至室外并配置真空安全阀, 公差±3dB(A)。

m³/h * refers to suction conditions at inlet connection

- Curves, tables content (tolerance ±10 %) according to PNEUROP standards and refer to vacuum pump at normal operating temperature (1 bar (abs.) and 20 °C).
- Measuring surface sound pressure level acc. to EN ISO 3744, measured with an equivalent unit at a distance of 1 m. The pump is throttled to 400 mbar (a) suction pressure, with suction side piping connected and vacuum relief valves fitted, tolerance ± 3 dB (A).

电机 • Motors

三相电机 • 3~ motors

类型 Version	50 Hz					60 Hz					备注 Note	重量* Weight* kg	a* mm	ow* mm
	kW	V±10%	min ⁻¹	A		kW	V±10%	min ⁻¹	A					
301	HL IE3	7,5	400/690	2935	14,0/8,10	9,0	-/460	3520	-/14,4		UL (US), CSA, CC-Nr., EAC	69	1076	260

- 电机符合EN60034-1/-2/-3(IEC60034) 和热等级F。
- # 根据需要。
- 图为可选配件。
- 我们保留更改技术信息的权利。

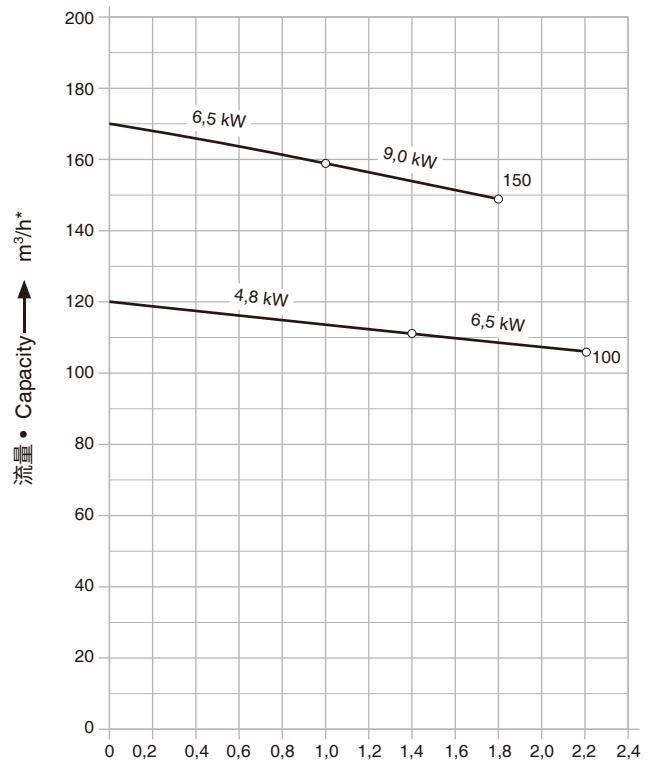
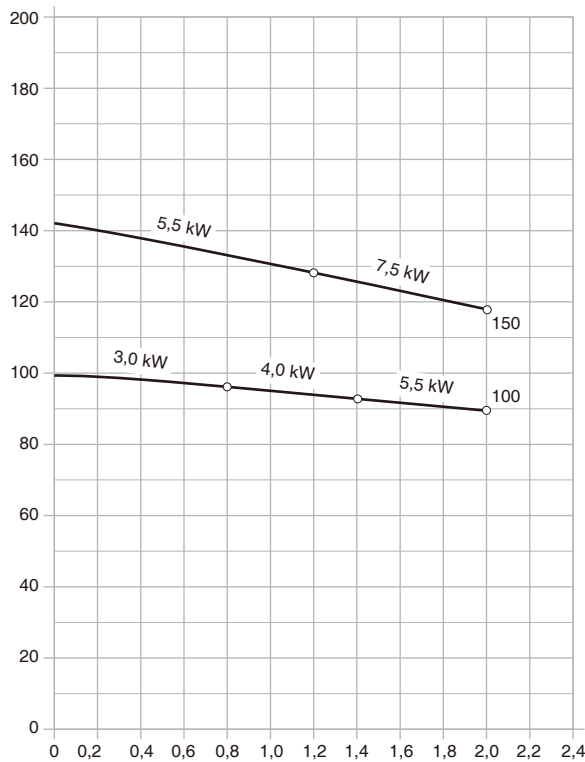
- The motors comply with EN 60034-1 / -2 / -30 (IEC 60034) and thermal class F.
- # on request
- The picture shows possibly optional accessories.
- We reserve the right to alter technical information!



干式，高效无接触爪式压力泵，IE3电机
流量从100至170m³/hr，正压力连续运行最大可达2.2 bar。无需经常维护，不附带冷却介质的空气冷却系统，适用于多种应用。
法兰式电机符合DIN EN 60034，保护标准 IP 55，绝缘等级F。

High efficiency, dry and contact free compression claw compressors with IE3 motors
Capacities ranging from 100 to 170 m³/hr
Overpressure at continuous operation goes up to max. 2.2 bar.
Low maintenance, integrated air cooling without additional cooling medium.
Flange mounted motors correspond to DIN EN 60034 and have IP 55 protection and insulation class F.

选型图 • Selection diagram



吸气压力 • Overpressure → mbar abs.

C-DLR			100			150		
流量	m³/h	50 Hz	100			142		
Suction capacity		60 Hz	120			170		
正压力	bar	50 Hz	0,8	1,4	2,0	1,2	2,0	
Overpressure		60 Hz	-	1,4	2,2	1,0	1,8	
电机类型	3~	50 Hz	230 / 400 V ± 10 %			400 / 690 V ± 10 %		
Rated voltage		60 Hz	220 / 380 V			380 / 660 V		
电机功率	kW	50 Hz	3,0	4,0	5,5	5,5	7,5	
Motor rating		60 Hz	-	4,8	6,5	6,5	9,0	
电流	A	50 Hz	10,0 / 5,75	12,8 / 4,4	10,0 / 5,75	10,0 / 5,75	13,4 / 7,7	
Current drawn		60 Hz	-	#	#	#	#	
电机效率	η [%]	50 Hz	84,6	85,8	89,2	89,2	88,1	
Motor efficiency		60 Hz	-	#	#	#	#	
转速	min⁻¹	50 Hz	2850					
Speed		60 Hz	3450					
平均噪音	dB(A)	50 Hz	79			80		
Average noise level		60 Hz	83			81		
最大重量	kg	50 Hz	104	107	130	150	151	
Max. weight		60 Hz						
油量	l	50 Hz	0,55			0,6		
Oil capacity		60 Hz						

[illegible]

A	压力联接处 • Pressure connection
B	排气口 • Exhaust
D	安全阀 • Safety valve
E	冷却空气入口 • Cooling air entry
F	冷却空气出口 • Cooling air exit
H	注油点 • Oil filling point
I	油位镜 • Oil check
K	排油口 • Oil drain point
M	油标牌 • Oil type plate
N	数据牌 • Data plate
O	旋转方向箭头 • Direction of rotation arrow
S	吸气过滤器 • Suction filter
Z	入口消音器 • Inlet silencer

C-DLR	100			150	
a	695	712	832	915	921
a1	392	392	412	495	495
c	360			375	
f	220			160	
g	175			205	
d	99			86	
t	M 32 x 1,5			M 32 x 1,5	
ø v	30			50	
ø w	196	220	246	246	246

C-DLR			100			150	
逆止阀 Non-return leaf	ZRZ		40			40	
压力调节阀 Pressure regulating valve	ZDR		40			40	
稳流器 Pulsation silencer	ZPD		#			#	
电机启动器 Motor starter	ZMS	50 Hz	160 / 63	160 / 100	160 / 63	160 / 63	160 / 100
		60 Hz	#	#	#	#	#

- 流量测度于大气标准1巴（绝对压）和20摄氏度。
- 工作曲线和数据表（公差 $\pm 10\%$ ）所示为压力泵在正常温度下运行。
- 电机尺寸和电流值会因不同电机而与数据表不同。
- # 根据需要
- 我们保留调整技术数据的权利。

- The capacity refers to free atmospheric air at 1 bar (abs.) and 20°C.
- Curves, tables content (tolerance $\pm 10\%$) refer to compressor at normal operating temperature.
- The motor dimensions as well as the current drawn can differ depending on the motor type.
- # on request
- We reserve the right to alter technical information!



C-DLR

C-DLR ZEPHYR 250

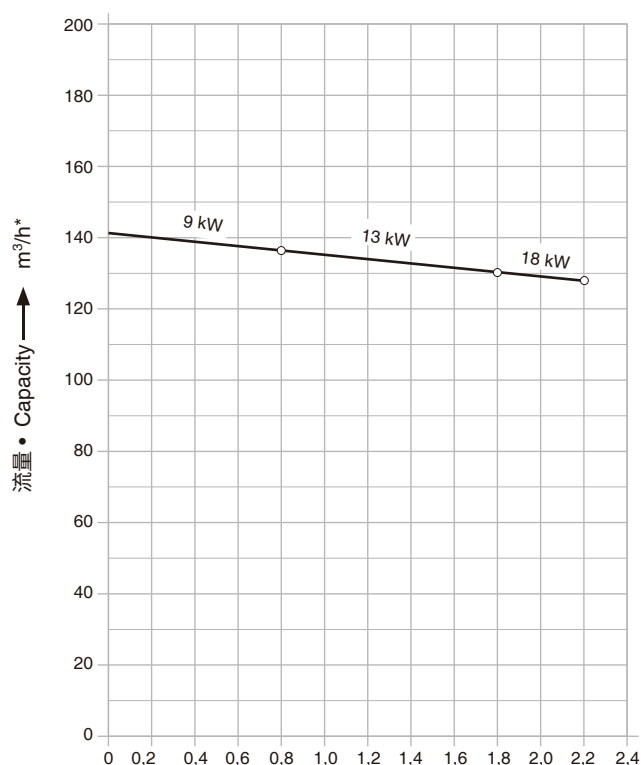
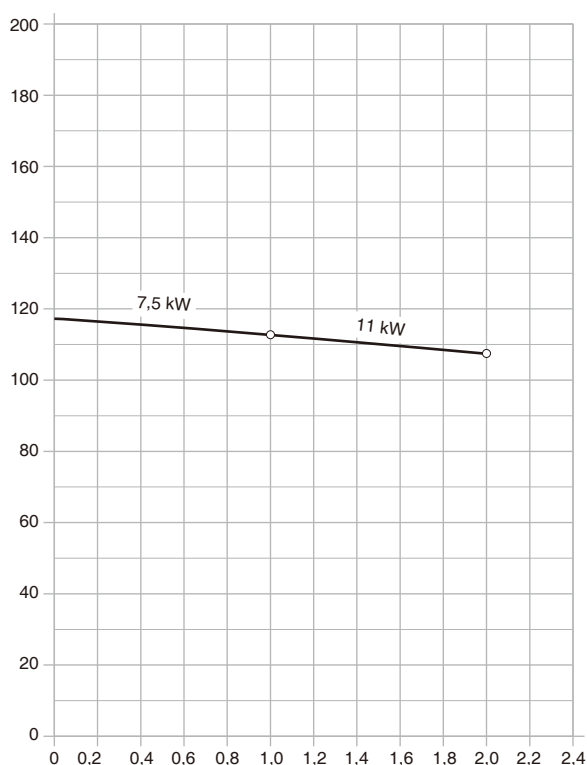


干式，高效无接触爪式压力泵，IE3电机
 流量282m³/hr，正压力连续运行最大可达2.2 bar。无需经常维护，不附带冷却介质的空气冷却系统，适用于多种应用。
 法兰式电机符合DIN EN 60034，保护标准 IP 55，绝缘等级F。

High efficiency, dry and contact free compression claw compressors with IE3 motors

Capacities ranging 282 m³/hr, Overpressure at continuous operation goes up to max. 2.2 bar.
 Low maintenance, integrated air cooling without additional cooling medium.
 Flange mounted motors correspond to DIN EN 60034 and have IP 55 protection and insulation class F.

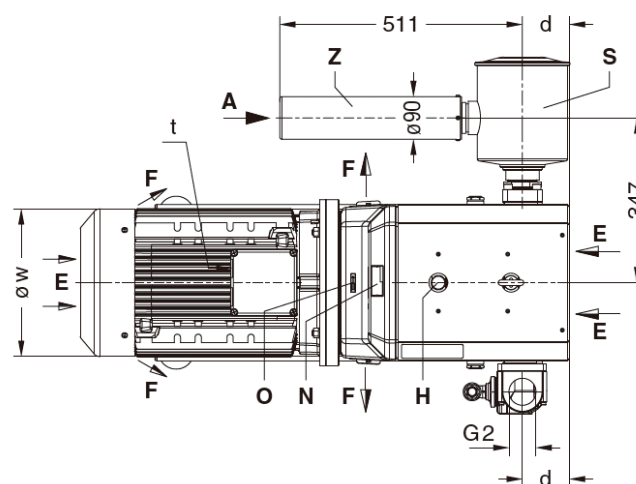
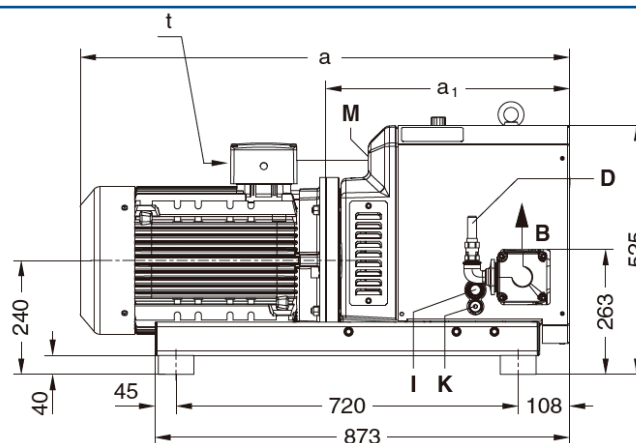
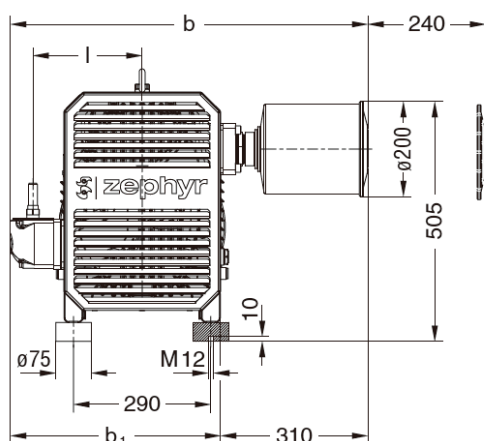
选型图 • Selection diagram



吸气压力 • Overpressure → mbar abs.

C-DLR			250		
流量	m³/h	50 Hz	235		
Suction capacity		60 Hz	282		
正压力	bar	50 Hz	1,5	2,0	-
Overpressure		60 Hz	0,8	1,8	2,2
电机类型	3~	50 Hz	400 / 690 V ± 10 %		
Rated voltage		60 Hz	380 / 660 V		
电机功率	kW	50 Hz	7,5	11	-
Motor rating		60 Hz	9,0	13	18
电流	A	50 Hz	13,8 / 8,0	22,0 / 12,7	-
Current drawn		60 Hz	#	#	#
电机效率	η [%]	50 Hz	88,1	89,4	-
Motor efficiency		60 Hz	#	#	#
转速	min⁻¹	50 Hz	2850		
Speed		60 Hz	3450		
平均噪音	dB(A)	50 Hz	81		
Average noise level		60 Hz	85		
最大重量	kg	50 Hz	251	280	300
Max. weight		60 Hz	251	280	300
油量	l	50 Hz	0,75		
Oil capacity		60 Hz	0,75		

尺寸 • Dimensions [mm]



A	压力联接处 • Pressure connection
B	排气口 • Exhaust
D	安全阀 • Safety valve
E	冷却空气入口 • Cooling air entry
F	冷却空气出口 • Cooling air exit
H	注油点 • Oil filling point
I	油位镜 • Oil check
K	排油口 • Oil drain point
M	油标牌 • Oil type plate
N	数据牌 • Data plate
O	旋转方向箭头 • Direction of rotation arrow
S	吸气过滤器 • Suction filter
Z	入口消音器 • Inlet silencer

C-DLR	250		
a	939	1033	1030
a ₁	513	513	513
b	752		
b ₁	442		
d	99		
t	M 32 x 1,5	M 40 x 1,5	
ø w	246	312	

选装附件 • Accessories

C-DLR	250				
逆止阀 Non-return leaf	ZRZ	50			
压力调节阀 Pressure regulating valve	ZDR	40			
稳流器 Pulsation silencer	ZPD	300			
电机启动器 Motor starter	ZMS	50 Hz	160 / 100	250 / 160	-
		60 Hz	#	#	#

- 流量测度于大气标准1巴（绝对压）和20摄氏度。
- 工作曲线和数据表（公差±10%）所示为压力泵在正常温度下运行。
- 电机尺寸和电流值会因不同电机而与数据表不同。
- # 根据需要
- 我们保留调整技术数据的权利。

- The capacity refers to free atmospheric air at 1 bar (abs.) and 20°C.
- Curves, tables content (tolerance ±10%) refer to compressor at normal operating temperature.
- The motor dimensions as well as the current drawn can differ depending on the motor type.
- # on request
- We reserve the right to alter technical information!



C-DLR

C-DLR ZEPHYR 301 | 401 | 501

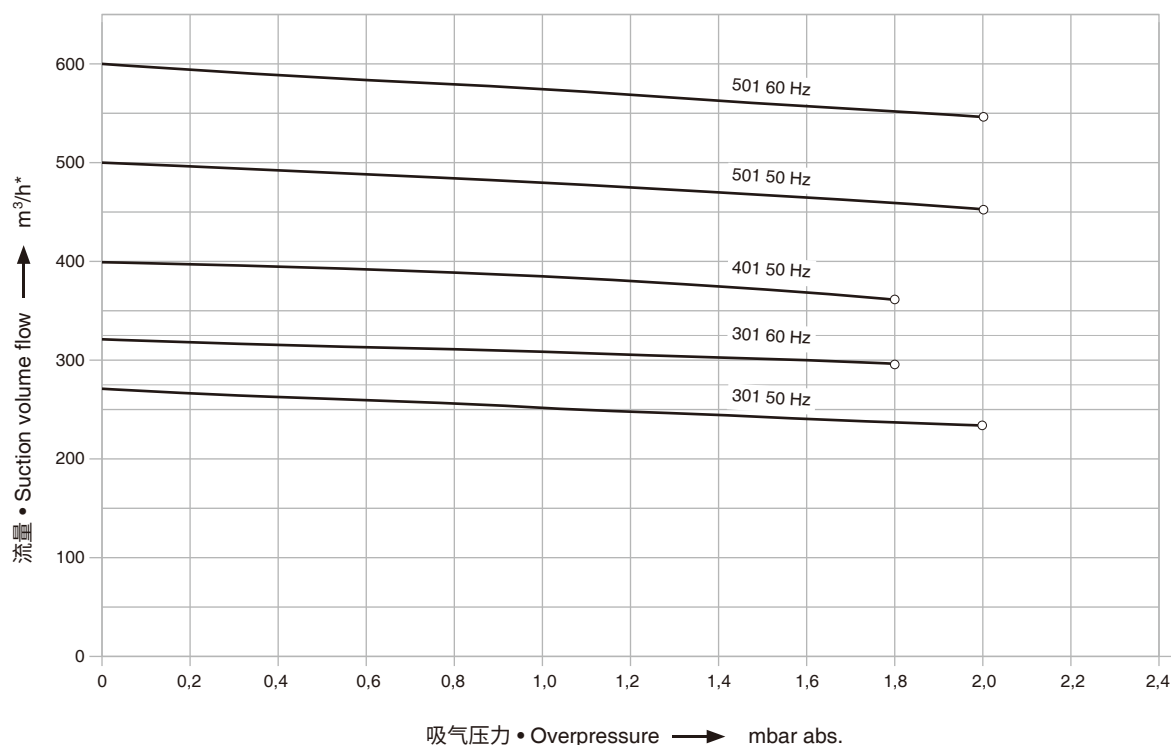


干式，高效无接触爪式压力泵，IE3电机
流量从270至600m³/hr，正压力连续运行最大可达1.8-2.0bar。无需经常维护，不附带冷却介质的空气冷却系统，适用于多种应用。
法兰式电机符合DIN EN 60034，保护标准 IP 55，绝缘等级F。

High efficiency, dry and contact free compression claw compressors with IE3 motors

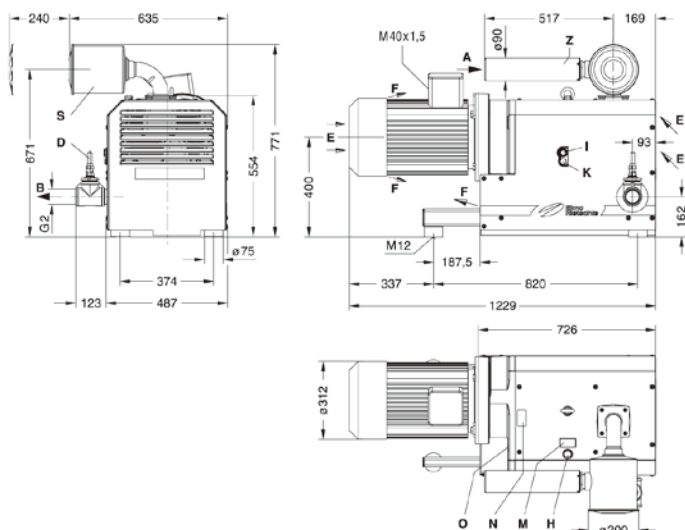
Capacity ranging from 270 to 600 m³/h, Overpressure at continuous operation goes up to max. 1.8-2.0 bar. Low maintenance, integrated air cooling without additional cooling medium. Flange mounted motors correspond to DIN EN 60034 and have IP 55 protection and insulation class F.

选型图 • Selection diagram

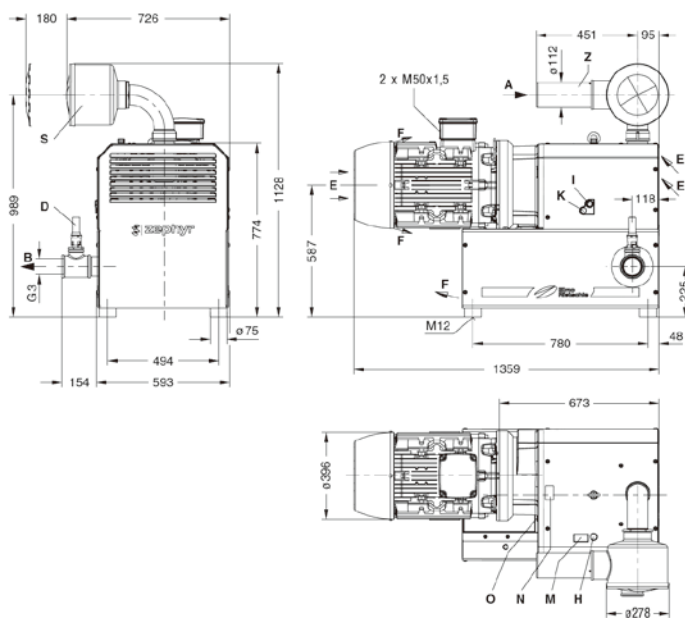


C-DLR			301		401	501
流量 Suction capacity	m ³ /h	50 Hz	270		400	500
		60 Hz	320			600
正压力 Overpressure	bar	50 Hz	2,0	-	1,8	2,0
		60 Hz	-	1,8		2,0
电机类型 Rated voltage	3~	50 Hz	400 / 690 V ± 10 %			
		60 Hz	380 / 660 V ± 10 %			
电机功率 Motor rating	kW	50 Hz	15	-	22	30
		60 Hz	-	18		36
电流 Current drawn	A	50 Hz	28,0 / 16,2	-	39,2 / 22,8	53,9 / 31,2
		60 Hz	-	34,6 / 19,9		69,1 / 39,8
电机效率 Motor efficiency	η [%]	50 Hz	92	-	93,0	93,5
		60 Hz	-	92		93,3
转速 Speed	min ⁻¹	50 Hz	2950	-	2960	2960
		60 Hz	-	3540	3565	3565
平均噪音 Average noise level	dB(A) EN ISO 3744	50 Hz	80		82	83
		60 Hz	82			85
最大重量 Max. weight	kg		332		510	576
油量 Oil capacity	l		1,5		1,85	1,85

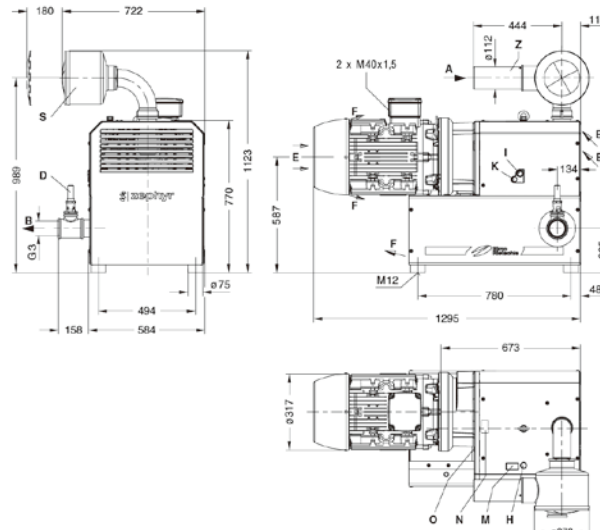
C-DLR ZEPHYR 301



C-DLR ZEPHYR 501



C-DLR ZEPHYR 401



A	压力联接处 • Pressure connection
B	排气口 • Exhaust
D	安全阀 • Safety valve
E	冷却空气入口 • Cooling air entry
F	冷却空气出口 • Cooling air exit
H	注油点 • Oil filling point
I	油位镜 • Oil check
K	排油口 • Oil drain point
M	油标牌 • Oil type plate
N	数据牌 • Data plate
O	旋转方向箭头 • Direction of rotation arrow
S	吸气过滤器 • Suction filter
Z	入口消音器 • Inlet silencer

选装附件 • Accessories

C-DLR			301	401	501
逆止阀 Non-return leaf	ZRZ		50	80	80
压力调节阀 Pressure regulating valve	ZDR		40	#	#
稳流器 Pulsation silencer	ZPD		300	400	500
电机启动器 Motor starter	ZMS	50 Hz	- / 200	- / -	- / -
		60 Hz	- / 200	- / -	- / -

- 我们保留更改技术数据的权利。

- We reserve the right to alter technical information!



C-KLR

C-KLR ZEPHYR 80 | 140



干式，高效无接触爪式真空压力复合泵，IE3电机

流量从80至140m³/hr，真空可达-0.6 bar，压力可达+1.0 bar。无需经常维护，不附带冷却介质的空气冷却系统，适用于多种应用。
法兰式电机符合 DIN EN 60034，保护标准 IP 55，绝缘等级F。

High efficiency, dry and contact free compression claw pressure-vacuum pumps with IE3 motors

Capacities ranging from 80 to 140 m³/hr, Vacuum upto - 0.6 bar and pressure up to + 1.0 bar.

Low maintenance, integrated air cooling without additional cooling medium.
Flange mounted motors correspond to DIN EN 60034 and have IP 55 protection and insulation class F.

C-KLR			80	140
电机类型	3~	50 Hz	230 / 400 V ± 10%	400 / 690 V ± 10%
Rated voltage		60 Hz	220 / 380 V	380 / 660 V
电机功率	kW	50 Hz	4,0	5,5
Motor rating		60 Hz	4,8	6,5
电流	A	50 Hz	15,2 / 8,8	11,0 / 6,4
Current drawn		60 Hz	#	14,0 / 8,0
转速	min ⁻¹	50 Hz	2850	
Speed		60 Hz	3450	
平均噪音	dB(A)	50 Hz	80	82
Average noise level	EN ISO 3744	60 Hz	83	84
最大重量	kg		120	160
Max. weight				

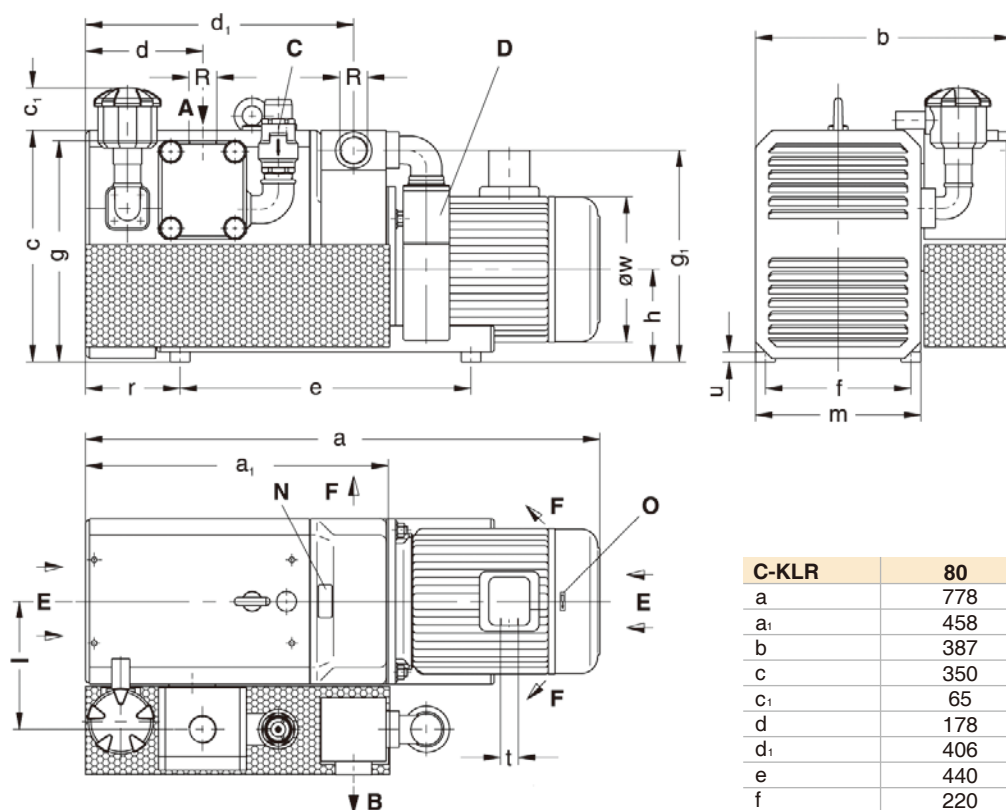
C-KLR 80																				
真空/压力	bar	S ¹⁾	0	0	-0,4	-0,5	-0,6	0	-0,4	-0,5	-0,6	0	-0,4	-0,5	-0,6	0	-0,4	-0,5	-0,6	
Vacuum/Overpressure		D ²⁾	0	+0,4				+0,5				+0,6				+0,7				
流量 Capacity	m³/h	50 Hz	S*	94	92	75	66	55	88	72	63	53	85	71	61	51	84	70	60	50
			D	95	80	61	59	57	75	60	58	54	70	58	55	52	65	57	55	52
		60 Hz	S*	120	112	89	78	66	111	86	76	64	110	85	73	62	108	82	71	60
			D	97	92	76	71	68	90	74	70	67	88	72	68	64	87	70	67	62
电机功率	kW	50 Hz	4,0																	
Motor rating		60 Hz	4,8																	

C-KLR 140																				
真空/压力	bar	S ¹⁾	0	0	-0,4	-0,5	-0,6	0	-0,4	-0,5	-0,6	0	-0,4	-0,5	-0,6	0	-0,4	-0,5	-0,6	
Vacuum/Overpressure		D ²⁾	0	+0,4				+0,5				+0,6				+0,7				
流量 Capacity	m³/h	50 Hz	S*	117,8	113,7	92,5	82,8	69,5	113,1	91,7	81,6	67,7	111	90,8	80,8	65,4	110	90,3	78,9	64,9
		D	120	109,7	94,6	90,8	86,8	108,1	93,4	89,2	85,4	105,9	92,1	88	83,9	103,5	90,5	86,2	82,7	
		60 Hz	S*	139,5	136,2	114,1	103,1	85,6	134,8	113,2	101,7	83,8	133,9	112,4	100,9	80,5	133,4	109	99,6	77,3
		D	138,1	131,4	116,9	111,5	105,7	129,1	115,6	110,3	104,6	126,9	113,8	109,3	100,2	125,5	111,8	107,2	98	
电机功率	kW	50 Hz	5,5																	
Motor rating		60 Hz	6,5																	

S → 吸气 • Suction air

D → 压力 • Compressed air

尺寸 • Dimensions [mm]



A	真空联接处 • Vacuum connection
B	压力联接处 • Pressure connection
C	真空调节阀 • Vacuum limitation valve
D	压力调节阀 • Pressure limitation valve
E	冷却空气入口 • Cooling air entry
F	冷却空气出口 • Cooling air exit
N	数据牌 • Data plate
O	旋转方向 • Direction of rotation

C-KLR	80	140
a	778	1016
a ₁	458	590
b	387	355
c	350	375
c ₁	65	125
d	178	153
d ₁	406	544
e	440	382
f	220	160
g	335	355
g ₁	320	295
h	140	165
l	193	180
m	250	250
r	143	211
t	M 25 x 1,5	M 32 x 1,5
u	15	30
ø w	220	246
R	G 1¼	G 1½

选装附件 • Accessories

C-KLR		80	140
逆止阀 Non-return leaf	ZRZ	40	40
压力调节阀 Pressure regulating valve	ZFP	145 (06)	216 (06)
电机启动器 Motor starter	ZMS	50 Hz 60 Hz	160 / 100 160 / 100

更高的压力和真空要求!

m³/h * • 与进气口连接的吸气状态有关。

• 工作曲线和数据表是按PNEUROP标准计算, 其所示为真空压力泵在正常状态下运行。

• 电机尺寸和电流值会因不同电机而与数据表不同。

• # 根据需要。

• 我们保留调整技术数据的权利。

Higher pressures and vacua upon request!

m³/h * • refers to suction conditions at inlet connection

• Tables content (tolerance ±10%) according to PNEUROP standards and refer to pressure/vacuum pump at normal operating temperature.

• The motor dimensions as well as the current drawn can differ depending on the motor type.

• # on request

• We reserve the right to alter technical information!

换算表 Conversion Tables

压力, 真空 / Pressure, Vacuum

	mbar (hPa)	bar	Pa (N/m ²)	kPa	atm	kp/cm ² (at)
1 mbar (hPa)	1	1 x 10 ⁻³	10 ²	0,1	9,869 x 10 ⁻⁴	1,02 x 10 ⁻³
1 bar	10 ³	1	1 x 10 ⁵	100	0,987	1,02
1 Pa (N/m ²)	0,01	1 x 10 ⁻⁵	1	0,001	9,869 x 10 ⁻⁶	1,02 x 10 ⁻⁵
1 kPa	10	0,01	10 ³	1	9,869 x 10 ⁻³	1,02 x 10 ⁻²
1 atm	1,013 x 10 ³	1,013	1,013 x 10 ⁵	1,013 x 10 ²	1	1,033
1 kp/cm ² (at)	9,807 x 10 ²	0,981	9,807 x 10 ⁴	98,07	0,968	1
1 mm H ₂ O	9,807 x 10 ⁻²	9,807 x 10 ⁻⁵	9,807	9,807 x 10 ⁻³	9,677 x 10 ⁻⁵	10 ⁻⁴
1 Torr (mm Hg)	1,333	1,333 x 10 ⁻³	1,333 x 10 ²	1,333 x 10 ⁻¹	1,316 x 10 ⁻³	1,36 x 10 ⁻³
1 micron	1,333 x 10 ⁻³	1,333 x 10 ⁻⁶	1,333 x 10 ⁻¹	1,333 x 10 ⁻⁴	1,316 x 10 ⁻⁶	1,36 x 10 ⁻⁶
1 in. Hg	33,86	3,386 x 10 ⁻²	3,386 x 10 ³	3,386	3,342 x 10 ⁻²	3,453 x 10 ⁻²
1 in. H ₂ O	2,491	2,491 x 10 ⁻³	2,491 x 10 ²	0,249	2,458 x 10 ⁻³	2,54 x 10 ⁻³
1 lb/in ² (psi)	68,95	6,895 x 10 ⁻²	6,895 x 10 ³	6,895	6,805 x 10 ⁻²	7,03 x 10 ⁻²

	mm H ₂ O	Torr (mm Hg)	micron	in. Hg	in. H ₂ O	lb/in ² (psi)
1 mbar (hPa)	10,197	0,75	750	2,953 x 10 ⁻²	0,402	1,45 x 10 ⁻²
1 bar	1,02 x 10 ⁴	7,5 x 10 ²	7,5 x 10 ⁵	29,53	4,015 x 10 ²	14,5
1 Pa (N/m ²)	0,102	7,5 x 10 ⁻³	7,5	2,953 x 10 ⁻⁴	4,015 x 10 ⁻³	1,45 x 10 ⁻⁴
1 kPa	1,02 x 10 ²	7,5	7,5 x 10 ³	0,295	4,015	0,145
1 atm	1,033 x 10 ⁴	7,6 x 10 ²	7,6 x 10 ⁵	29,92	4,068 x 10 ²	14,7
1 kp/cm ² (at)	10 ⁴	7,356 x 10 ²	7,356 x 10 ⁵	28,96	3,973 x 10 ²	14,22
1 mm H ₂ O	1	7,354 x 10 ⁻²	73,54	2,896 x 10 ⁻³	3,394 x 10 ⁻²	1,42 x 10 ⁻³
1 Torr (mm Hg)	13,59	1	10 ³	3,937 x 10 ⁻²	0,535	1,934 x 10 ⁻²
1 micron	1,359 x 10 ⁻²	10 ⁻³	1	3,937 x 10 ⁻⁵	5,35 x 10 ⁻⁴	1,934 x 10 ⁻⁵
1 in. Hg	3,45 x 10 ²	25,4	2,54 x 10 ⁴	1	13,6	0,491
1 in. H ₂ O	25,4	1,868	1,868 x 10 ³	7,356 x 10 ⁻²	1	3,613 x 10 ⁻²
1 lb/in ² (psi)	7,03 x 10 ²	51,71	5,171 x 10 ⁴	2,036	27,68	1

Vacuum Conversion

Absolute pressure p (mbar abs.) can be converted to and from pressure difference Δp (inches Hg) based on atmospheric pressure of 1013 mbar abs. (= 760 Torr = 29.92 inches Hg abs.) using the following formulae:

$$29.92 - 2.953 \times 10^{-2} \times p \text{ (mbar abs.)} = \Delta p \text{ (inches Hg)}$$

$$1013 - 33.86 \times \Delta p \text{ (inches Hg)} = p \text{ (mbar abs.)}$$

真空换算

极限压力p (mbar 绝对压)能换算成为压力差Δ p(inches Hg) 基于大气压力为1013mbar绝对压 (=760 Torr = 29.92 in Hg 绝对压)

可用以下方程式:

$$29.92 - 2.953 \times 10^{-2} \times p \text{ (mbar绝对压)} = \Delta p \text{ (inches Hg)}$$

$$1013 - 33.86 \times \Delta p \text{ (inches Hg)} = p \text{ (mbar 绝对压)}$$

流量 / Capacity

	m ³ /h	m ³ /min	m ³ /s	l/min	cfm (ft ³ /min)	gal/min
1 m ³ /h	1	1,667 x 10 ⁻²	2,778 x 10 ⁻⁴	16,67	0,588	4,403
1 m ³ /min	60	1	1,667 x 10 ⁻²	10 ³	35,28	2,642 x 10 ²
1 m ³ /s	3600	60	1	6 x 10 ⁴	2,117 x 10 ³	1,585 x 10 ⁴
1 l/min	6 x 10 ⁻²	10 ³	1,667 x 10 ⁻⁵	1	3,528 x 10 ⁻²	0,264
1 cfm (ft ³ /min)	1,699	2,832 x 10 ⁻²	4,72 x 10 ⁻⁴	28,32	1	7,481
1 gal/min	0,227	0,378	6,306 x 10 ⁻⁵	3,784	0,133	1

功率 / Efficiency

	kW	W (J/s)	PS	hp	kcal/h	Btu/h
1 kW	1	10 ³	1,36	1,341	860	3,412 x 10 ³
1 W (J/s)	10 ⁻³	1	1,36 x 10 ⁻³	1,341 x 10 ⁻³	0,860	3,412
1 PS	0,736	736	1	0,986	6,329 x 10 ²	2,509 x 10 ³
1 hp	0,746	7,46	1,014	1	6,413 x 10 ²	2,545 x 10 ³
1 kcal/h	1,163 x 10 ⁻³	1,163	1,58 x 10 ⁻³	1,559 x 10 ⁻³	1	3,968
1 Btu/h	2,931 x 10 ⁻⁴	0,2931	3,985 x 10 ⁻⁴	3,93 x 10 ⁻⁴	0,252	1

Temperature Conversion tC (°C) ↔ tF (°F):

$$1.8 \times tC \text{ (°C)} + 32 = tF \text{ (°F)}$$

$$0.556 \times tF \text{ (°F)} - 17.78 = tC \text{ (°C)}$$

温度换算 tC (°C) ↔ tF (°F):

$$1.8 \times tC \text{ (°C)} + 32 = tF \text{ (°F)}$$

$$0.556 \times tF \text{ (°F)} - 17.78 = tC \text{ (°C)}$$

长度 / Length						
	m	cm	m	in	ft	yd
1 mm	1	0,1	10^3	$3,94 \times 10^{-2}$	$3,28 \times 10^{-3}$	$1,093 \times 10^{-3}$
1 cm	10	1	10^2	0,394	$3,28 \times 10^{-2}$	$1,093 \times 10^{-2}$
1 m	10^3	10^2	1	39,4	3,28	1,093
1 in	25,4	2,54	$2,54 \times 10^2$	1	$8,33 \times 10^{-2}$	$2,78 \times 10^{-2}$
1 ft	$3,084 \times 10^2$	30,48	0,305	12	1	0,333
1 yd	9,144	$0,914 \times 10^2$	0,914	36	3	1

体积 / Volume						
	ml (cm ³)	l (dm ³)	in ³	ft ³	Imp. gal	U.S. gal
1 ml (cm ³)	1	10^{-3}	0,061	$3,53 \times 10^{-5}$	$2,20 \times 10^{-4}$	$2,64 \times 10^{-4}$
1 l (dm ³)	10^3	1	$0,610 \times 10^2$	$3,53 \times 10^{-2}$	0,220	0,264
1 in ³	16,39	$1,639 \times 10^{-2}$	1	$5,79 \times 10^{-4}$	$3,606 \times 10^{-3}$	$4,327 \times 10^{-3}$
1 ft ³	$2,83 \times 10^4$	28,3	$1,728 \times 10^3$	1	6,25	7,46
1 Imp. gal	$4,55 \times 10^3$	4,55	$2,773 \times 10^2$	0,160	1	1,20
1 U.S. gal	$3,785 \times 10^3$	3,785	$2,311 \times 10^2$	0,134	0,833	1

重量 / Weight						
	g	kg	oz	lb	Brit. ton	U.S. ton
1 g	1	10^{-3}	$3,53 \times 10^{-2}$	$2,205 \times 10^{-3}$	$0,984 \times 10^{-6}$	$1,103 \times 10^{-6}$
1 kg	103	1	35,3	2,205	$0,984 \times 10^{-3}$	$1,103 \times 10^{-3}$
1 oz	28,35	$2,835 \times 10^{-2}$	1	$6,246 \times 10^{-2}$	$2,788 \times 10^{-5}$	$3,125 \times 10^{-5}$
1 lb	454	0,454	16,01	1	$4,463 \times 10^{-4}$	$5,00 \times 10^{-4}$
1 Brit. ton	$1,016 \times 10^6$	$1,016 \times 10^3$	$3,587 \times 10^4$	$2,24 \times 10^3$	1	1,120
1 U.S. ton	$0,907 \times 10^6$	$0,907 \times 10^3$	$3,20 \times 10^4$	$2,00 \times 10^3$	0,893	1

应用 Application

爪式泵 Claw

VLR/DLR

一般工业应用

- 吸尘系统
- 干燥系统
- 工业炉

Industrial applications

- Dust extraction systems
- Drying systems
- Industrial furnaces

包装工业

- 中央系统

Packaging

- Centralized vacuum

木工工业

- 吸尘
- 握持
- 固定

Wood industry

- Dust extraction
- Holding
- Clamping

环境技术

- 吸尘
- 曝气
- 压缩空气干燥

Environmental technology

- Dust extraction
- Aeration
- Drying gas compression

印刷工业

- 中央真空系统
- 中央压缩系统

Printing industry

- Centralized vacuum supply
- Centralized pressure supply

气体输送

- 真空输送

Pneumatic conveying

- Vacuum conveying

KLR

印刷工业

- 单张胶印印刷机
- 轮转印刷机
- 丝网印刷机
- 柔性印刷机
- 印铁机
- 中央风柜

Printing industry

- Sheet offset machines
- Rotary offset machines
- Screen printing machines
- Flexo printing machines
- Tin printing machines
- Air-supply cabinets

印后机械

- 书籍装订机
- 收集
- 切割机
- 折叠机
- 中央风柜

Post-press applications

- Book-binding machines
- Collecting machines
- Cutting machines
- Folding machines
- Air-supply cabinets

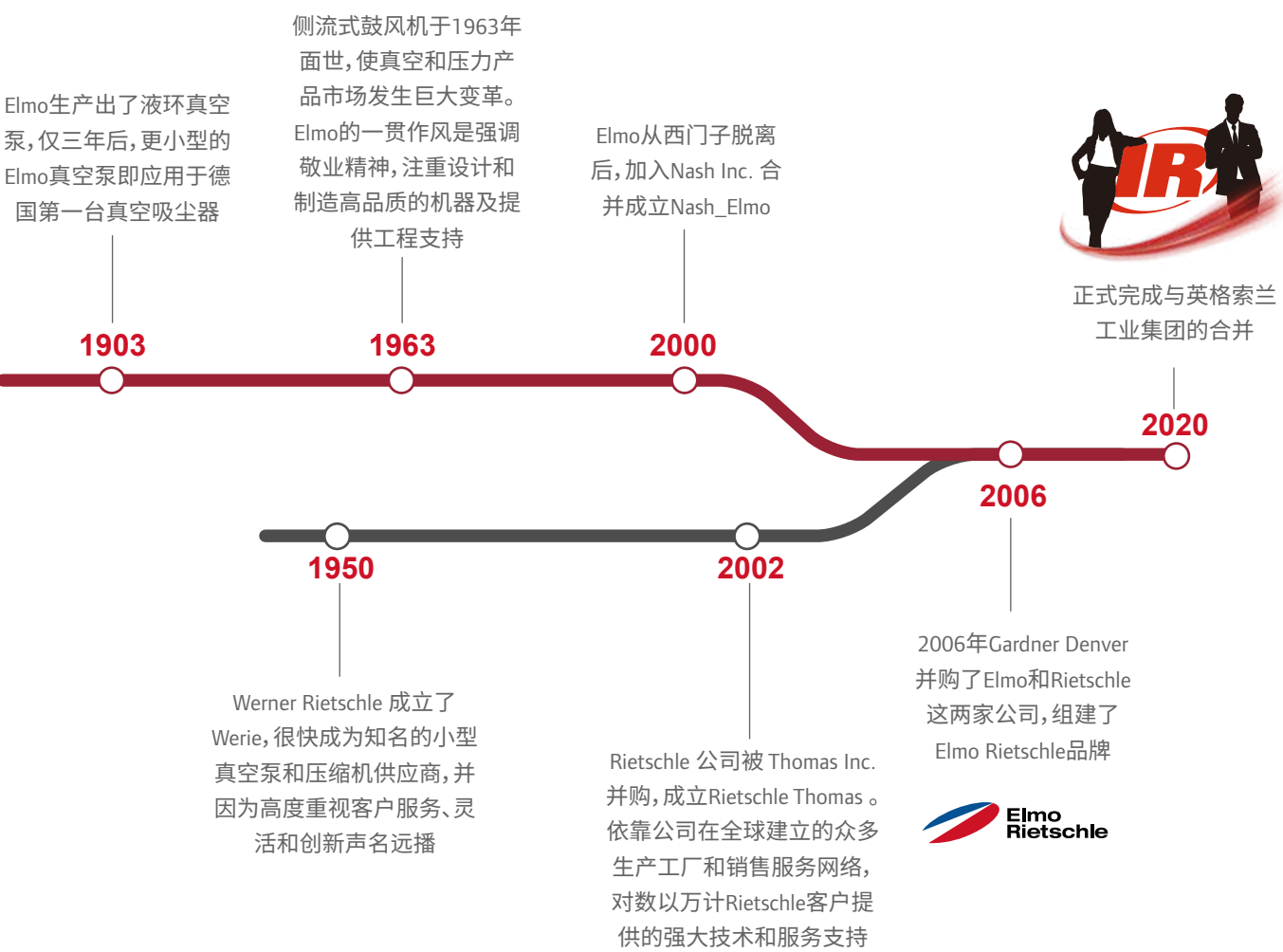


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