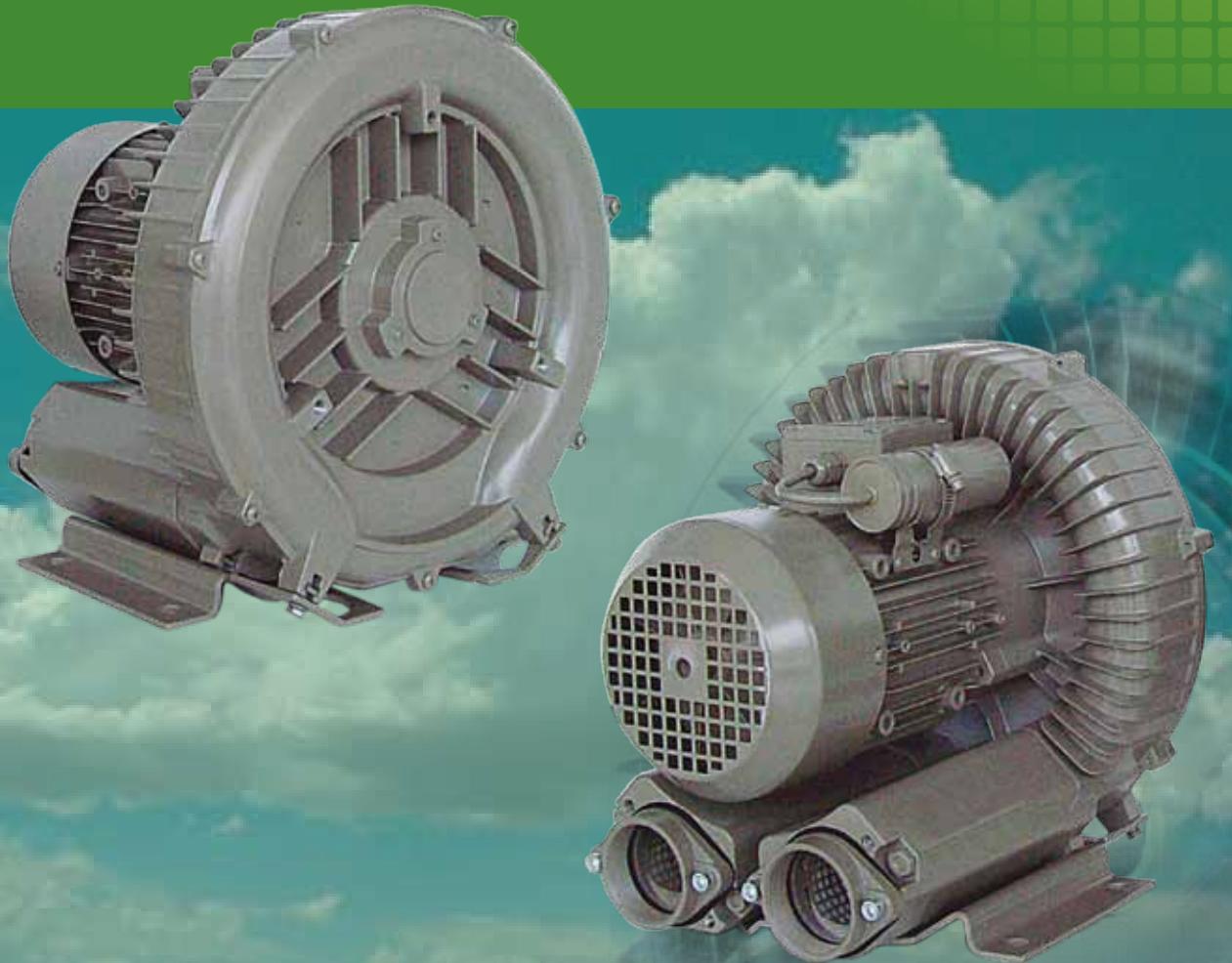


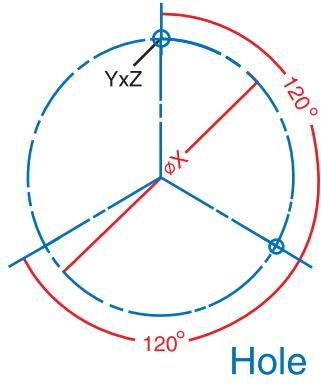
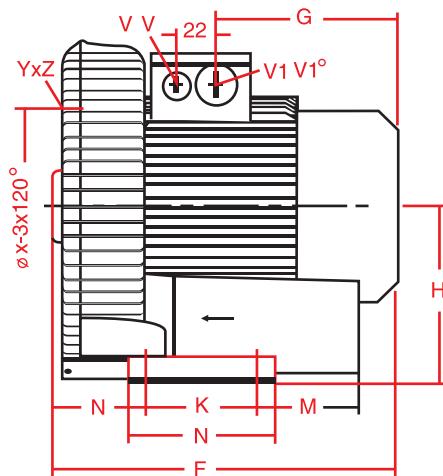
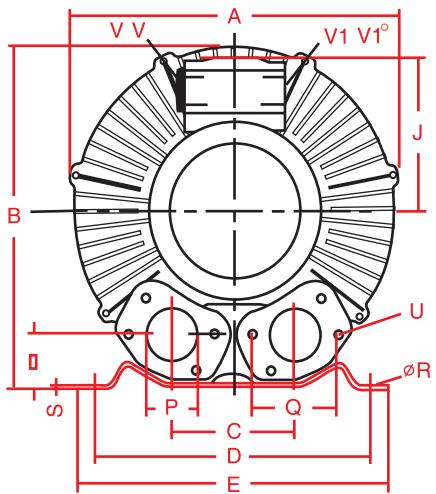
Norvax



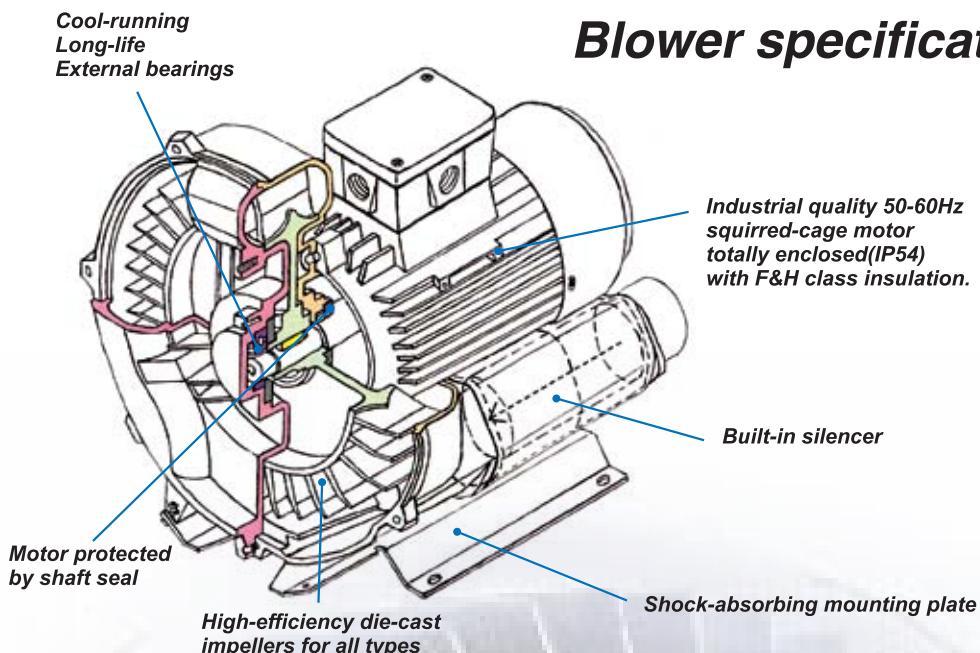
SIDE CHANNEL BLOWERS & VACUUM PUMPS

Compact
Low Noise
No Oily Odors
High Air Pressure
Dual Uses for blow/Suction





Blower specification



High Reliability

Norvax blowers offer a unique design resulting in a blower with one moving part - which means more-up time and lower maintenance. Long-life shielded bearings are mounted on both sides of the impeller and outside of the pumping chamber, providing

- Higher pressure ratios
- Cooler running bearings
- Longer grease life
- Simple maintenance
- 100% Oil-free air
- No vibration and therefore complete dynamic stability

Oil Free Air

The impeller rotates with absolutely no contact between it and the housing. This means no lubrication is required for the pump, guaranteeing 100% oil-free air and operation.

High Quality

Norvax products. Small features like TEFC DIN EN 60034/IEC 34-1 Class F IP54 insulated motors with a 1.15 SF are standard for the three phase tolerances +/- 10% for fixed voltage and single phase +/- 5%. Maintenance-free seal between the blower chamber and the motor demonstrates the overall quality of the full line of Vacuum blower from Norvax.

Low Noise

Norvax is well below OSHA (Occupational Health and Safety Administration) noise standards because the impeller is direct connected to a low-noise two pole ac motor and the blower includes integral silencers on the inlet and outlet as standard.

Single & Two Stage* Design

A complete offering, Norvax blowers include single and two stage* units through 7.5 Kw. Other models include motorless blowers* and as a motor manufacturer, Norvax products can design and build application-specific motor horsepower ratings for any blower model.

Application

Norvax Side Channel Blower is a complete unit, ready for installation as either a vacuum or compressor.

They are designed for handling air or non-explosive gasses or gas-air mixtures in ambient temperatures to 40 degrees C where an oil-free air pressure or vacuum source is required.

Design Requirements

All blowers require pressure relief valves to avoid overloading the motor when operated in the high pressure ranges of the pump curve. Pressure relief valves can be mounted directly on the outlet, vacuum relief valves can be mounted directly on the inlet of the blower. If you need this option please contact your supplier.

* Optional



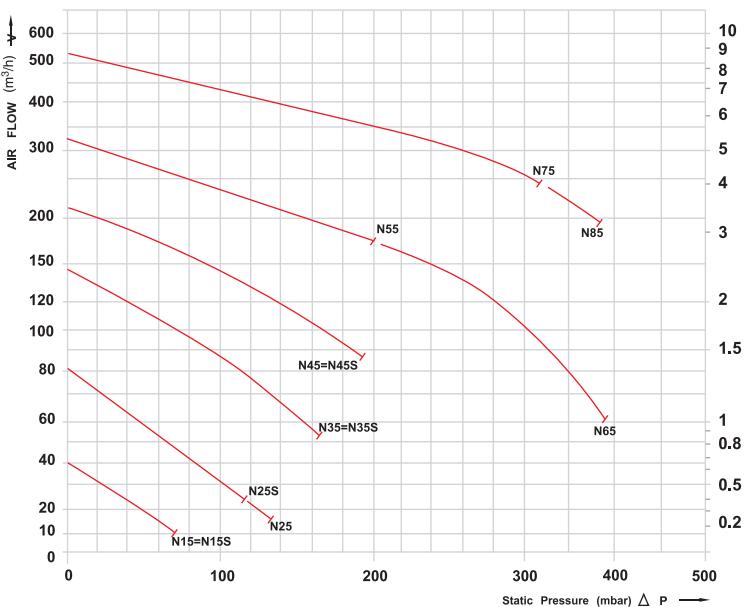
Single stage blower models and performance(IP54 50/60HZ three phase)

curve No	MODEL	Freq Hz	Output power Kw	voltage V	Rated current A	Max airflow m3/h	Max static suction mbar	Max static pressure mbar	Noise dB(A)	Net Weight Kg
N15	NVT-020	50	0.2	220-240 △ 380-415Y	1.0 △/0.6Y	40	-60	70	50	6
N16		60	0.23	220-240 △ 380-415Y	1.0 △/0.6Y	55	-60	70	51	6
N25	NVT-040	50	0.4	220-240 △ 380-415Y	2.5 △/1.3Y	80	-120	130	53	10
N26		60	0.5	220-240 △ 380-415Y	3.4 △/2.0Y	98	-150	160	56	10
N35	NVT-085	50	0.85	220-240 △ 380-415Y	4.2 △/2.4Y	145	160	160	63	15
N36		60	0.95	220-240 △ 380-415Y	4.0 △/2.3Y	175	160	160	64	15
N45	NVT-160	50	1.6	220-240 △ 380-415Y	7.5 △/4.3Y	210	-200	190	64	21
N46		60	2.1	220-240 △ 380-415Y	7.6 △/4.4Y	255	-220	210	70	21
N55	NVT-220	50	2.2	220-240 △ 380-415Y	10 △/5.6Y	318	-210	200	69	29
N56		60	2.55	220-240 △ 380-415Y	10.3△/6.5Y	376	-210	220	72	29
N65	NVT-400	50	4	380-415 △	9.5 △	318	-290	330	69	42
N66		60	4.6	380-415 △	9.5 △	376	-330	330	72	42
N75	NVT-550	50	5.5	380-415 △	13.3 △	450	-300	320	80	65
N76		60	6.3	380-415 △	13.3 △	500	-320	340	82	65
N85	NVT-750	50	7.5	380-415 △	16.7 △	450	-320	380	80	68
N86		60	8.6	380-415 △	17.3 △	500	-340	400	82	68

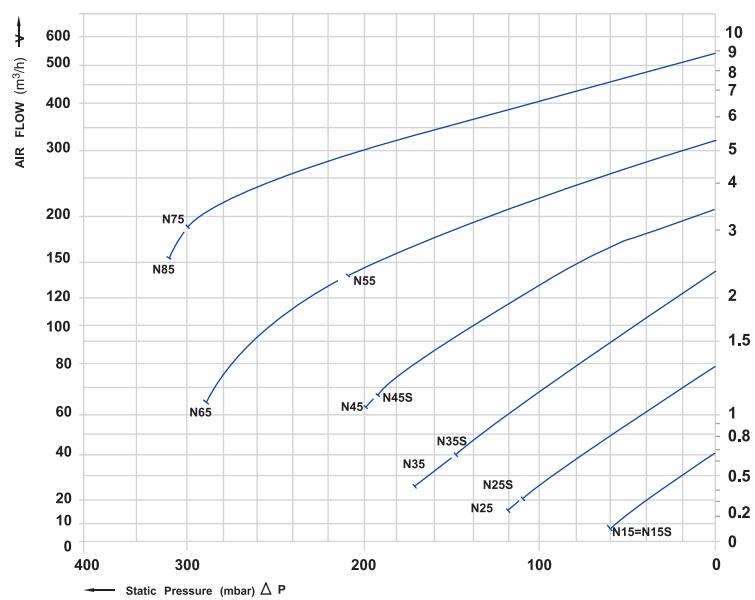
Single stage blower models and performance(IP54 50/60HZ single phase)

curve No	MODEL	Freq Hz	Output power Kw	voltage V	Rated current A	Max airflow m3/h	Max static suction mbar	Max static pressure mbar	Noise dB(A)	Net Weight Kg
N15S	NVS-020	50	0.2	200-240V	1.43	40	-60	70	50	6
N16S		60	0.23	200-240V	1.3	55	-60	70	51	6
N25S	NVS-040	50	0.4	200-240V	2.7	80	-120	130	53	9
N26S		60	0.5	200-240V	3.2	98	-150	160	56	9
N35S	NVS-085	50	0.85	200-240V	5	145	160	160	63	16
N36S		60	0.95	200-240V	5.8	175	160	160	64	16
N45S	NVS-150	50	1.5	200-240V	9.8	210	-200	190	64	24
N46S		60	1.75	200-240V	10.5	255	-220	210	70	24

Performance Curve (50 Hz)

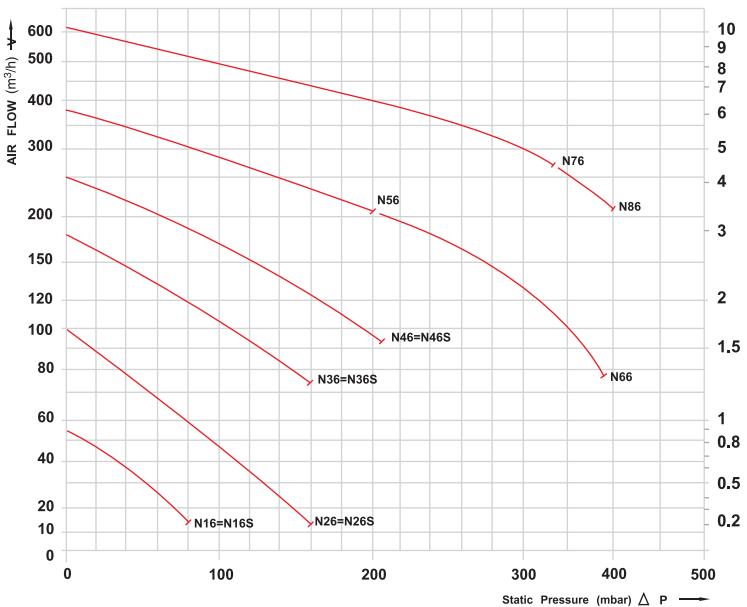


Compressor

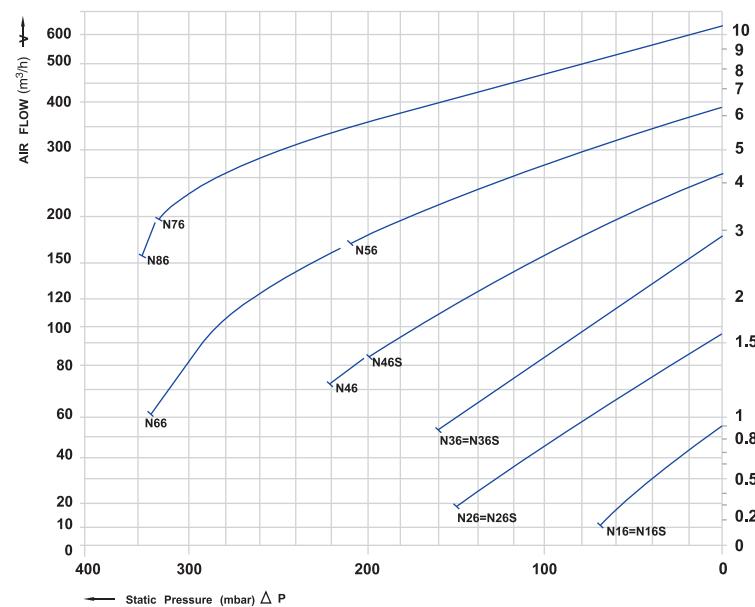


Vacuum

Performance Curve (60 Hz)



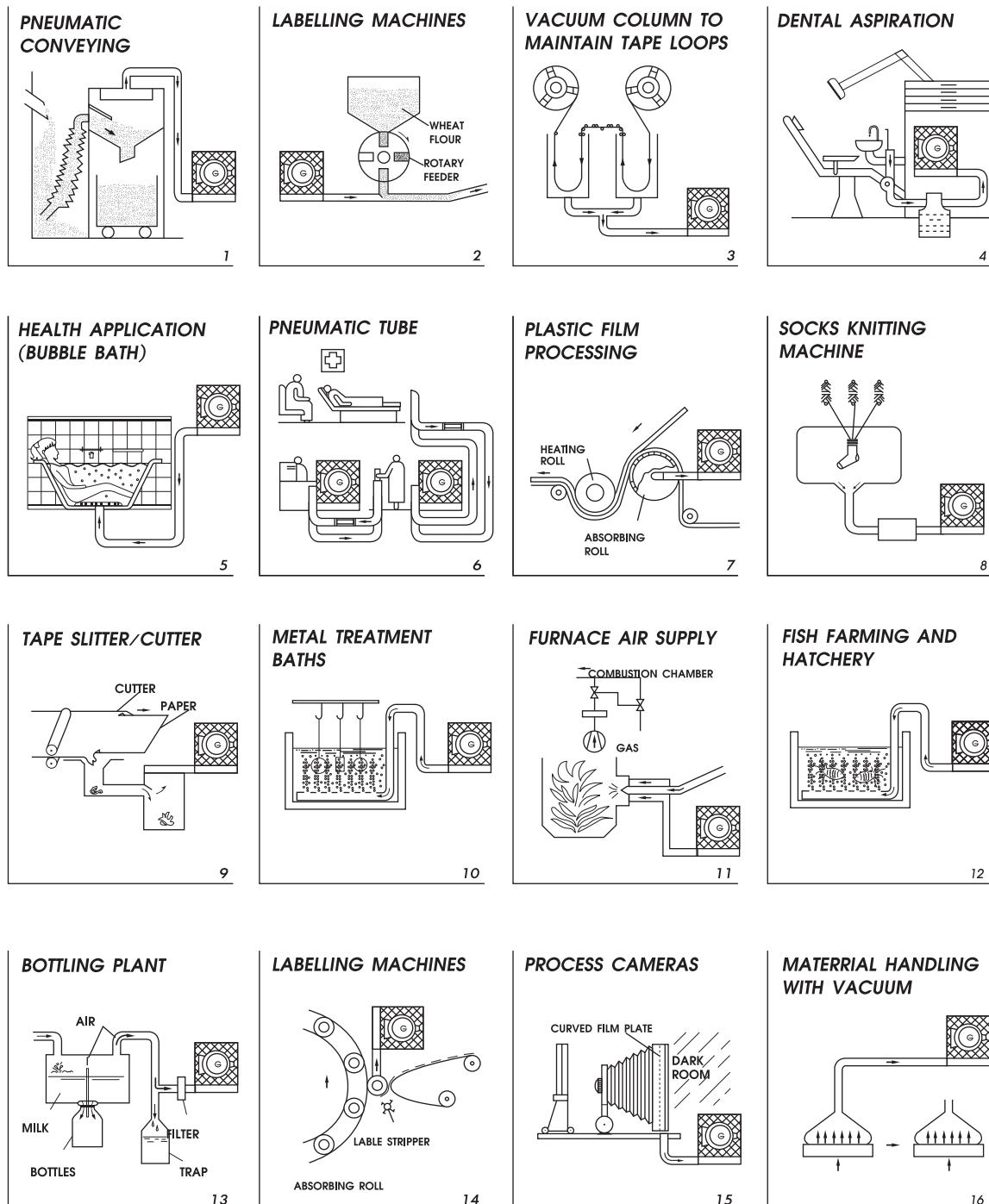
Compressor



Vacuum

APPLICATION:

- PNEUMATIC CONVEYING SYSTEM
- INDUSTRIAL VACUUM CLEANERS
- DUST COLLECTORS
- LIFTING AND HOLDING OF PARTS
- AERATION OF FLUIDS THROUH BUBBLING
- PRINTING AND PAPER HANDLING
- PACKAGING MACHINES
- FOOD PROCESSING
- DENTAL SUCTION EQUIPMENT
- TEXTILE MACHINES

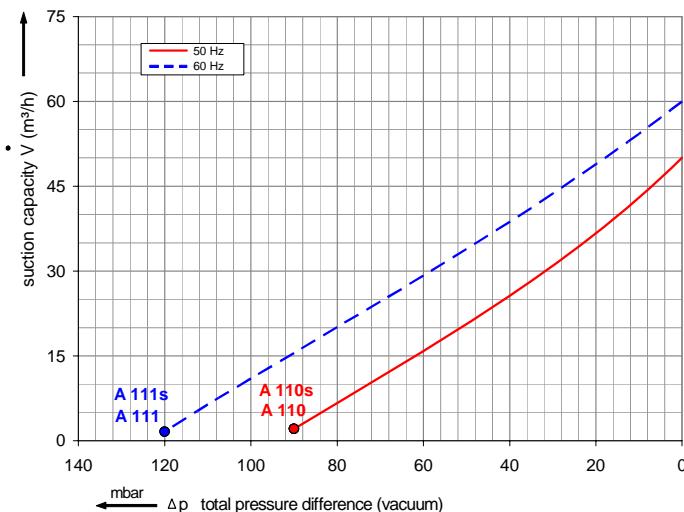


Eurovent Co., Ltd.

18/5 Moo 13 Soi Watmainong Pa-Ong, Petchkasem rd., Omnoi, Krathumban, Samutsakorn 74130
 TEL : 02-810-2000, FAX : 02-810-2299, 02-811-0808

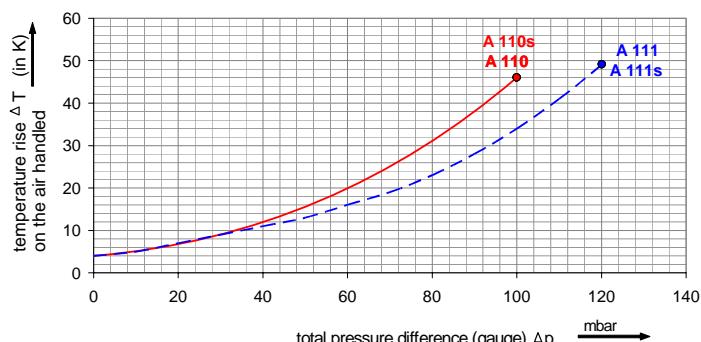
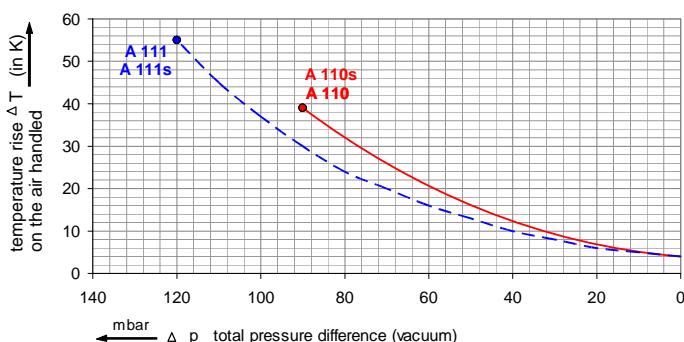
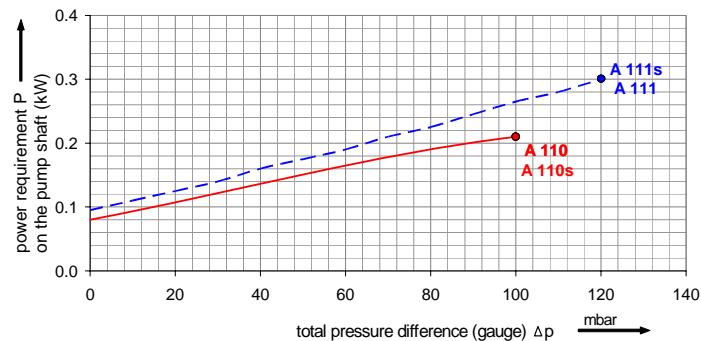
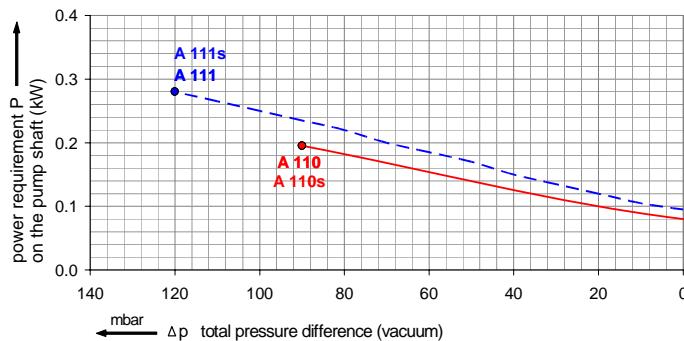
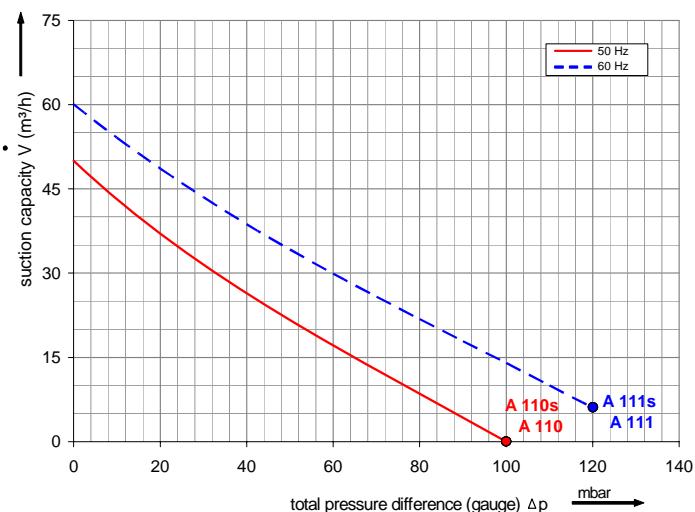
NVT-020 NVS-020

Performance curve for Vacuum pump



Single Stage

Performance curve for Compressor



The performance curves are based on air at a temperature of 15 °C and an atmospheric pressure of 1013 mbar with a tolerance of +/- 10 %.
The total pressure differences are valid for suction and ambient temperatures up to 25 °C.
For other conditions please confer with us.

Each all type can be applied both as vacuum pump and compressor in continuous operation over the total stated performance curve range. The motors are available as standard for the input voltage range of 50 and 60 Hz and for protection category IP 55 as well as approved for UL and CSA.

Selection and ordering data

Curve No.	Order No.	Fre-quency Hz	Rated power kW	Input voltage V	Input current A	Permissible total differential pressure ²⁾ Vacuum mbar	Sound pressure level ³⁾ Compressor mbar	Weight ca. dB(A)	kg
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3~ 50/60 Hz IP55 insulation material class F 1)

N 15	NVT-020	50	0.2	200D ... 240D	345Y ... 415Y	1.26D	0.72Y	-90	100	50	7
N 16	NVT-020	60	0.23	220D ... 275D	380Y ... 480Y	1.55D	0.9Y	-120	120	53	7

1~ 50/60 Hz IP55 with attached condenser for continuous operation

N 15s	NVS-020	50	0.2	115	230	3.1	1.6	-90	100	50	7
N 16s	NVS-020	60	0.23	115	230	4.6	2.3	-120	120	53	7



Other voltage ranges

50Hz	60Hz
3~	
185...225 V D/320...390 V Y	200...240 V D/345...415 V Y
200...240 V D/345...415 V Y	200...275 V D/380...480 V Y
345...415 V D	380...480 V D
500 V D	575V D

Machines according to the ATEX norm 94/4 EG are available for the whole performance range.

1~
100 / 200 V 115 / 230 V
230V

Further voltage range on request; please quote in plain text.

All Norvax achieve the standards and norms of the low voltage directive (LVD)2006/95/EC, rotating electrotechnical motor EN 60034-1-2004, electromagnetic compatibility(EMC)EN55014-1/2,EN61000-2/-3/-4/-6.

- 1) For standard UL for ELECTRIC MOTOR UL 1004-1.
- 2) Relief-valve are available for limiting differential pressure.
- 3) Measuring-surface sound-pressure level acc. to DIN EN 21680, measured at a distance of 1 m. The pump is throttled to an average suction pressure, a hose is connected to the discharge side (compressor) / suction side (vacuum pump), but is not fitted with relief valves.

The motors are designed according to the DIN EN 60 034 / DIN IEC 34-1 and temperature class F.

For the three phase machines the tolerances are +/- 10 % for fixed voltage and +/- 5 % for voltage range.

The single phase machines are designed with a +/- 5 % tolerances. If only 90 % of the maximum allowed pressure will be used for the continuous operating then the allowed voltage range add to +/- 10 %.

For all single and three phase machines which designed according to the UL and CSA norm (UL 1004-1) the maximum allowed voltage tolerances are - 10 % resp. + 6 %.

The frequency tolerance is maximum +/- 2 %.

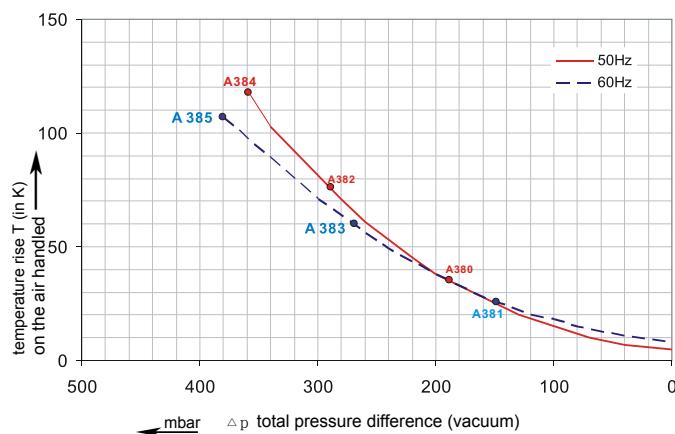
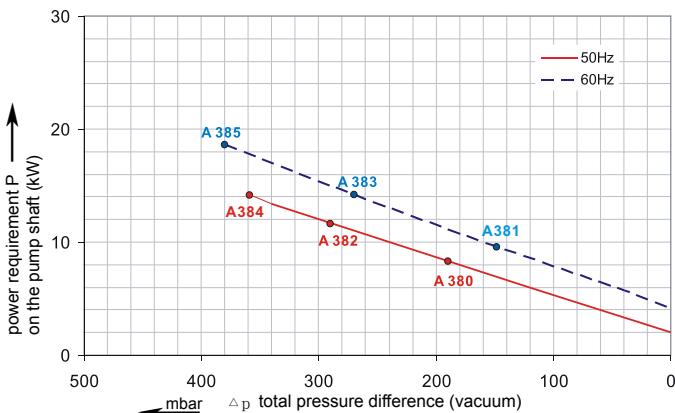
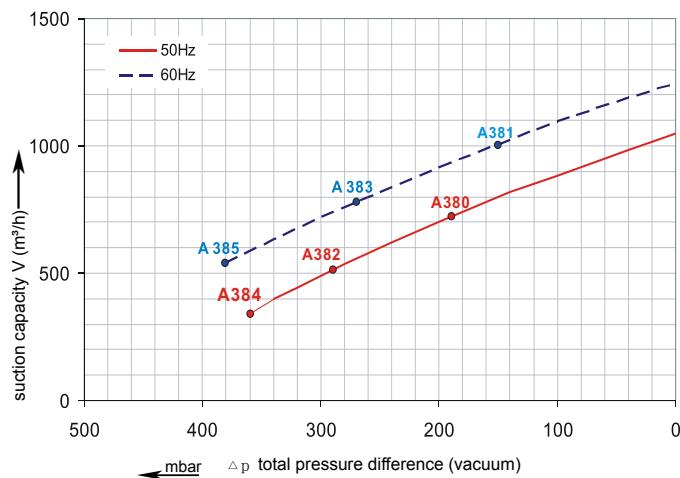
Changes in particular the quoted performance curve, datas and weights without prior notice. The figures are without obligations.

EUROVENT CO.,LTD.

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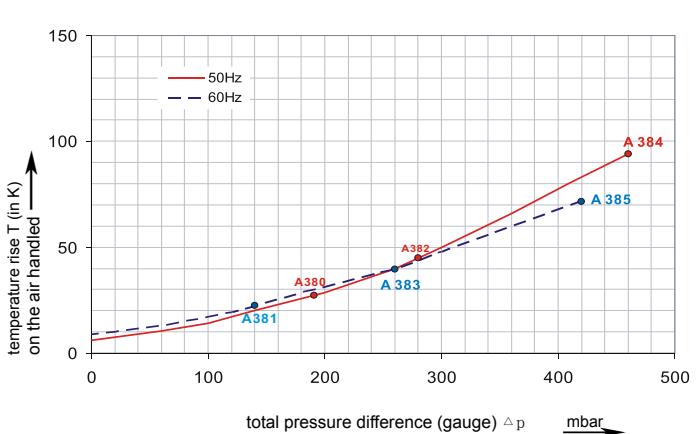
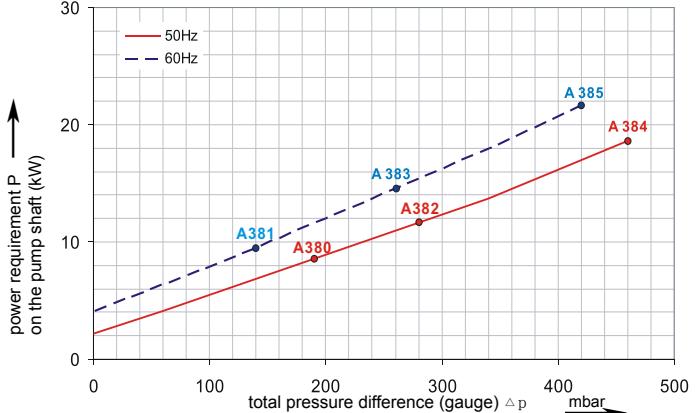
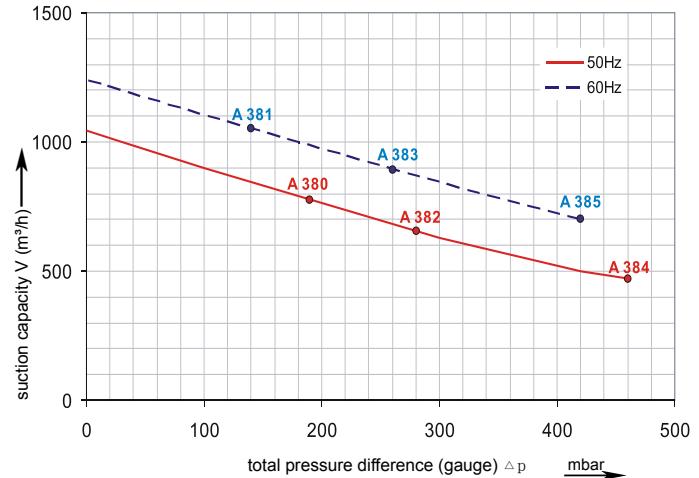
850-1250-1850

Performance curve for Vacuum pump



Single Stage

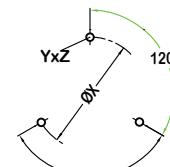
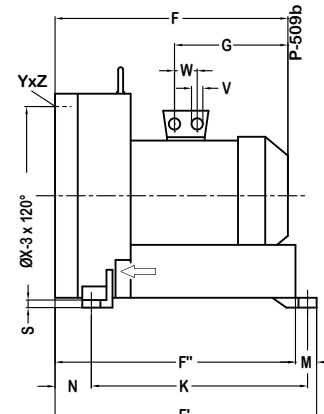
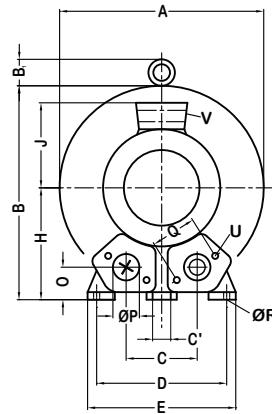
Performance curve for Compressor



The performance curves are based on air at a temperature of 15 °C and an atmospheric pressure of 1013 mbar with a tolerance of +/- 10 %.
The total pressure differences are valid for suction and ambient temperatures up to 25 °C.
For other conditions please confer with us.

Each all type can be applied both as vacuum pump and compressor in continuous operation over the total stated performance curve range. The motors are available as standard for the input voltage range of 50 and 60 Hz and for protection category IP 55 as well as apporobated for UL and CSA.

Dimensions for side channel blowers



Type	Phases																										X-Bohrungen X-Holes	
		A	B	B'	C	C'	D	E	F	F'	F''	G	H	J	K	M	N	O	ØP	Q	ØR	S	U	V	W	ØX	YxZ	
NVT-850	3~	550	569	55	207	15	360	415	525	644	605	268	300	167	533	39	89	92	100	150	15	21	M12x30	4xM32x1.5	42	490	M12x30	0°/120°/240°
NVT-1250	3~	550	569	55	207	15	360	415	611	644	605	345	300	197	533	39	89	92	100	150	15	21	M12x30	4xM40x1.5	54	490	M12x30	0°/120°/240°
NVT-1850	3~	550	569	55	207	15	360	415	611	644	605	345	300	197	533	39	89	92	100	150	15	21	M12x30	4xM40x1.5	54	490	M12x30	0°/120°/240°

Curve No.	Order No.	Frequency Hz	Rated power kW	Input voltage V	Input current A	Permissible total differential pressure ²⁾ Vacuum mbar	Compressor mbar	Sound pressure level ³⁾ dB(A)	Weight ca. kg
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3~ 50/60 Hz IP55 insulation material class F 1)

A 380	NVT-850	50	8.5	345D ... 415D 380D ... 480D	600Y...720Y 660Y...720Y	18.2D 18.2D	10.5Y 10.5Y	-190 -150	190 140	74 79	93 93
A 381	NVT-850	60	9.8								
A 382	NVT-1250	50	12.5	345D ... 415D 380D ... 480D	600Y...720Y 660Y...720Y	28.0D 29.0D	16.2Y 16.7Y	-290 -270	280 260	74 79	116 116
A 383	NVT-1250	60	14.5								
A 384	NVT-1850	50	18.5	345D ... 415D 380D ... 480D	600Y...720Y 660Y...720Y	37.0D 39.0D	21.0Y 22.5Y	-360 -380	460 420	74 79	126 126
A 385	NVT-1850	60	21.3								



50Hz	60Hz	
3~		
185...225 V D/320...390 V Y 200...240 V D/345...415 V Y 345...415 V D	200...240 V D/345...415 V Y 200...275 V D/380...480 V Y 380...480 V D	
500 V D	575 V D	

Machines according to the ATEX norm 94/4 EG are available for the whole performance range.

Further voltage range on request; please quote in plain text.

All Norvax achieve the standards and norms of the low voltage directive (LVD)2006/95/EC, rotating electrotechnical motor EN 60034-1-2004, electromagnetic compatibility(EMC)EN55014-1/2,EN61000-2/-3/-4/-6.

- 1) For standard UL for ELECTRIC MOTOR UL 1004-1.
- 2) Relief-valve are available for limiting differential pressure.
- 3) Measuring-surface sound-pressure level acc. to DIN EN 21680, measured at a distance of 1 m. The pump is throttled to an average suction pressure, a hose is connected to the discharge side (compressor) / suction side (vacuum pump), but is not fitted with relief valves.

The motors are designed according to the DIN EN 60 034 / DIN IEC 34-1 and temperature class F.

For the three phase machines the tolerances are +/- 10 % for fixed voltage and +/- 5 % for voltage range.

The single phase machines are designed with a +/- 5 % tolerances. If only 90 % of the maximum allowed pressure will be used for the continuous operating then the allowed voltage range add to +/- 10 %.

For all single and three phase machines which designed according to the UL and CSA norm (UL 1004-1) the maximum allowed voltage tolerances are - 10 % resp. + 6 %.

The frequency tolerance is maximum +/- 2 %.

Changes in particular the quoted performance curve, datas and weights without prior notice. The figures are without obligations.

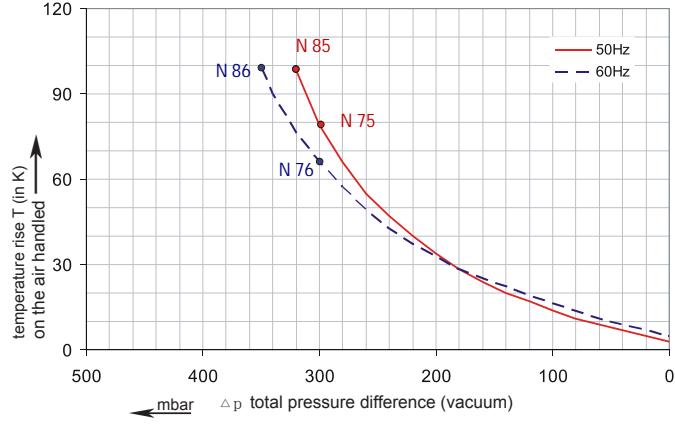
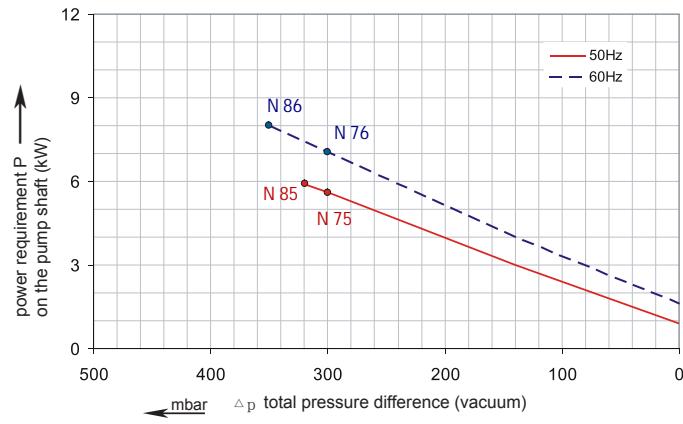
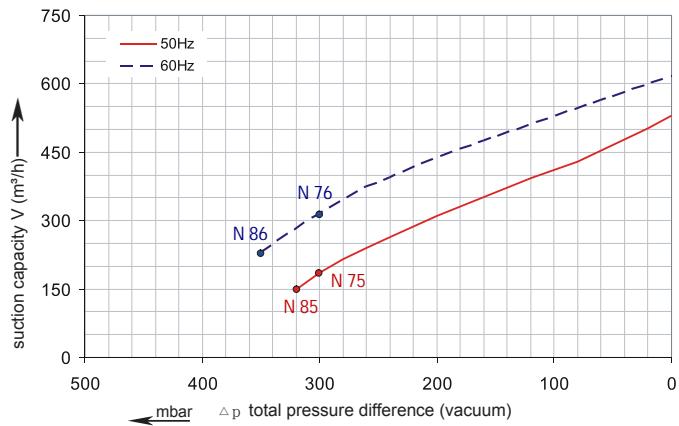


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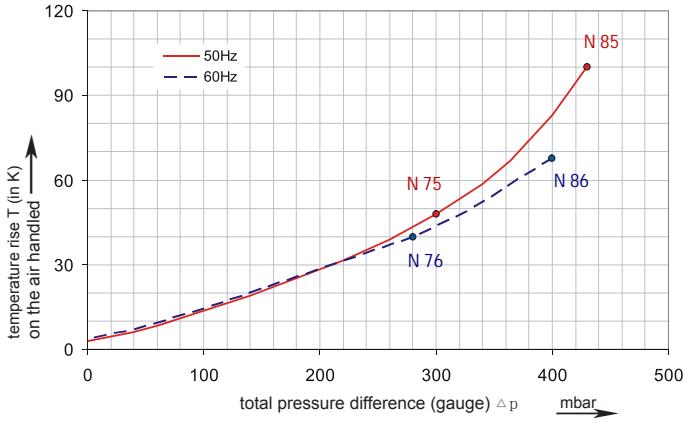
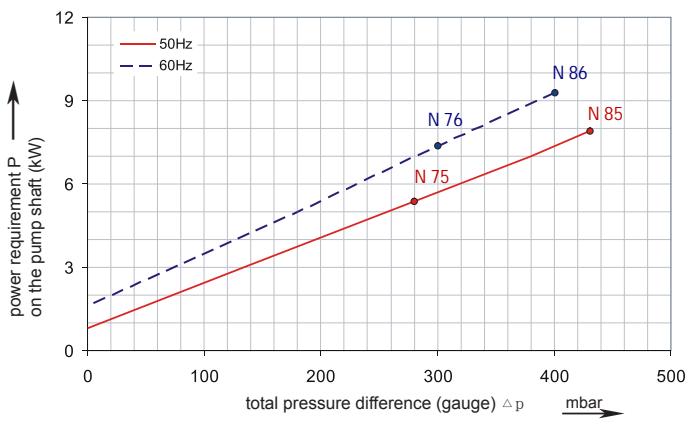
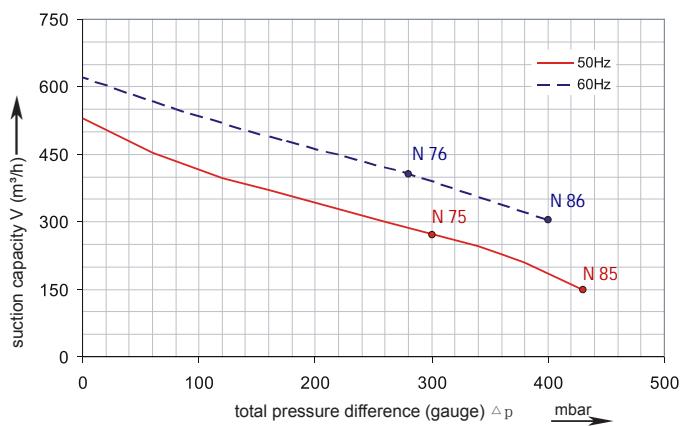
NVT-550 NVT-750

Performance curve for Vacuum pump



Single Stage

Performance curve for Compressor



The performance curves are based on air at a temperature of 15 °C and an atmospheric pressure of 1013 mbar with a tolerance of +/- 10 %.
The total pressure differences are valid for suction and ambient temperatures up to 25 °C.
For other conditions please confer with us.

Each all type can be applied both as vacuum pump and compressor in continuous operation over the total stated performance curve range. The motors are available as standard for the input voltage range of 50 and 60 Hz and for protection category IP 55 as well as apporobated for UL and CSA.

Selection and ordering data

Type Single Stage

Curve No.	Order No.	Fre-quency	Rated power	Input voltage	Input current	Permissible total differential pressure ²⁾	Sound pressure level ³⁾	Weight ca.	
		Hz	kW	V	A	Vacuum mbar	Compressor mbar	dB(A)	kg

3~ 50/60 Hz IP55 insulation material class F 1)

N 75	NVT-550	50	5.5	345D ... 415D	600Y...720Y	13.3D	7.4Y	-300	320	70	63
N 76	NVT-550	60	6.3	380D ... 480D	660Y...720Y	13.3D	7.45Y	-320	340	74	63
N 85	NVT-750	50	7.5	345D ... 415D	600Y...720Y	16.7D	9.6Y	-320	430	70	66
N 86	NVT-750	60	8.6	380D ... 480D	660Y...720Y	17.3D	10.0Y	-350	400	74	66



Other voltage ranges

50Hz	60Hz	
3~		
185...225 V D/320...390 V Y	200...240 V D/345...415 V Y	
200...240 V D/345...415 V Y	200...275 V D/380...480 V Y	
345...415 V D	380...480 V D	
500 V D	575 V D	

Machines according to the ATEX norm 94/4 EG are available for the whole performance range.

Further voltage range on request; please quote in plain text.

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- 1) For standard UL for ELECTRIC MOTOR UL 1004-1.
 - 2) Relief-valve are available for limiting differential pressure.
 - 3) Measuring-surface sound-pressure level acc. to DIN EN 21680, measured at a distance of 1 m. The pump is throttled to an average suction pressure, a hose is connected to the discharge side (compressor) / suction side (vacuum pump), but is not fitted with relief valves.

The motors are designed according to the DIN EN 60 034 / DIN IEC 34-1 and temperature class F.
For the three phase machines the tolerances are +/- 10 % for fixed voltage and +/- 5 % for voltage range.

The single phase machines are designed with a $\pm 5\%$ tolerances. If only 90 % of the maximum allowed pressure will be used for the continuous operating then the allowed voltage range add to $\pm 10\%$.

For all single and three phase machines which designed according to the UL and CSA norm (UL 1004-1) the maximum allowed voltage tolerances are - 10 % resp.

The frequency tolerance is maximum $\pm 2\%$.

The frequency tolerance is maximum +/- 2 %.

Changes in particular the quoted performance curve, datas and weights without prior notice. The figures are without obligations.

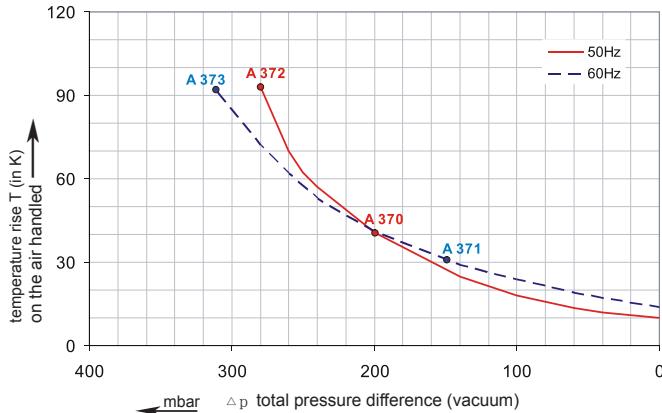
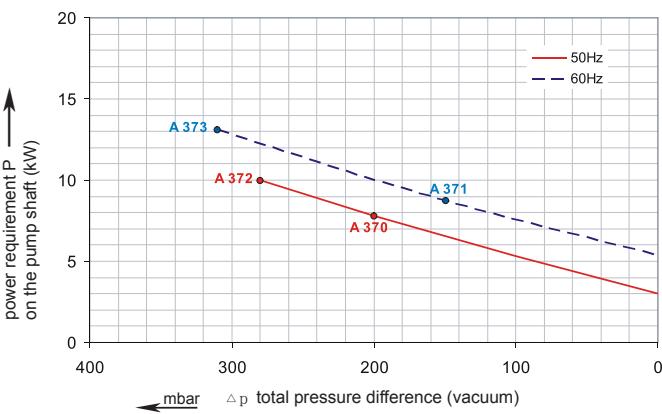
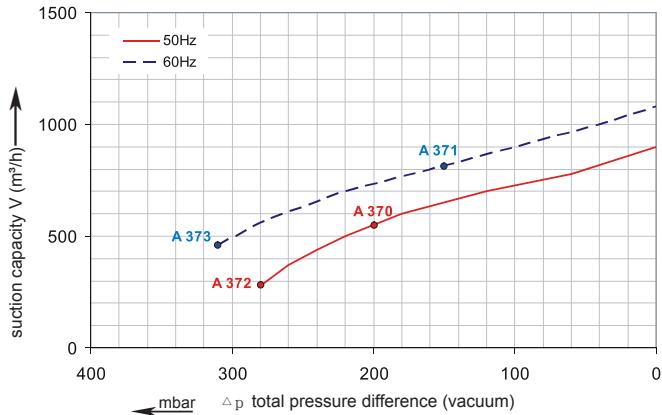


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E-mail: Puneat@tnmetalworks.com
<http://www.tnmetalworks.com>

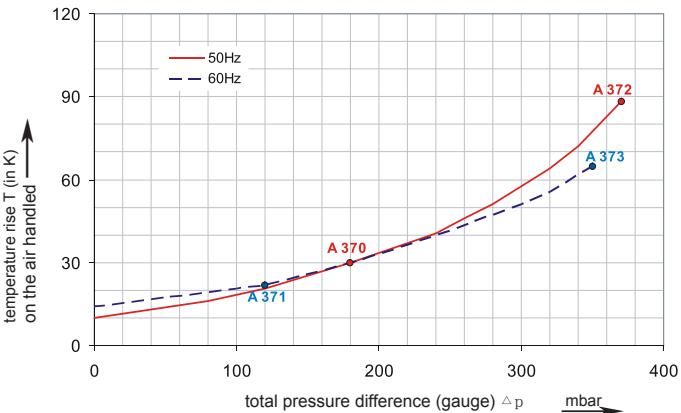
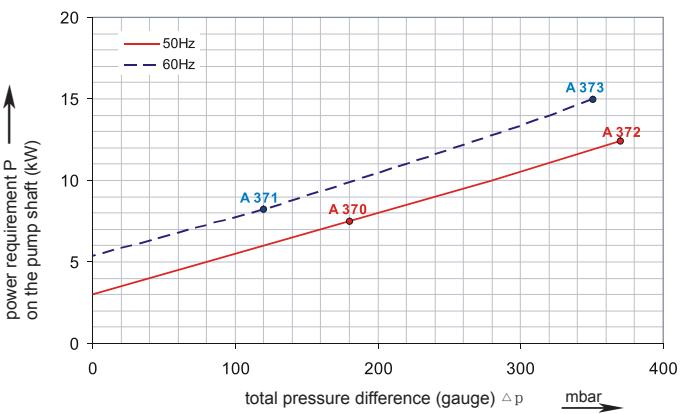
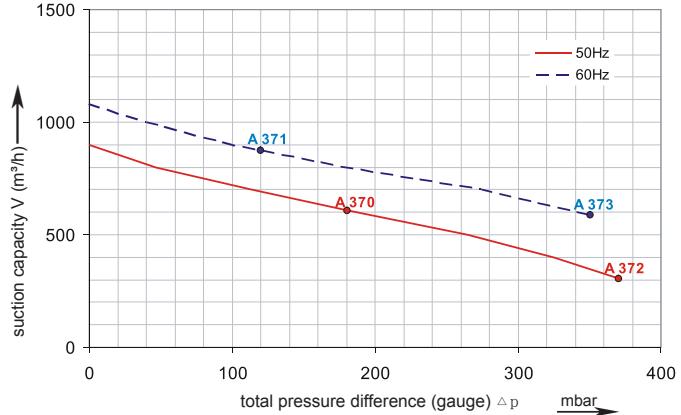
NVT 84 750-1100

Performance curve for Vacuum pump



Double Stage

Performance curve for Compressor

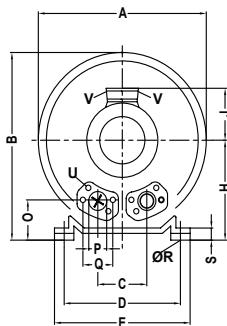


The performance curves are based on air at a temperature of 15 °C and an atmospheric pressure of 1013 mbar with a tolerance of +/- 10 %.
The total pressure differences are valid for suction and ambient temperatures up to 25 °C.
For other conditions please confer with us.

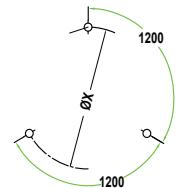
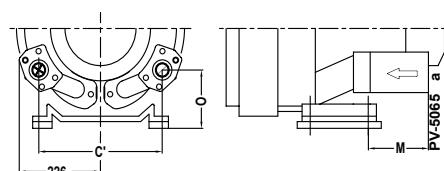
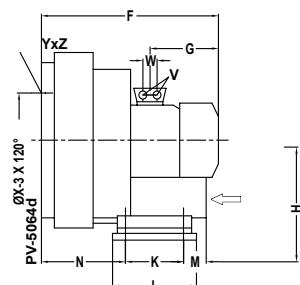
Each all type can be applied both as vacuum pump and compressor in continuous operation over the total stated performance curve range. The motors are available as standard for the input voltage range of 50 and 60 Hz and for protection category IP 55 as well as approved for UL and CSA.

Dimension

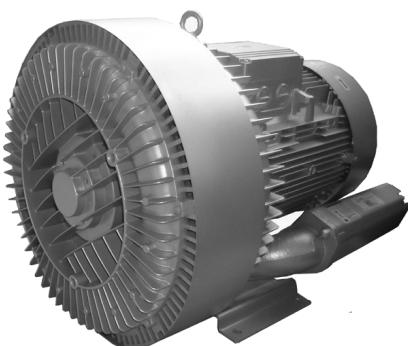
NVT 84 750



NVT 84 1100



Type	Phasen	A	B	C	C'	D	E	F	G	H	J	K	L	M	N	O	ØP	ØR	S	V	W	ØX	YxZ	X-BohrungenX- Holes
NVT 84 750	3~	500	550	152	-	356	394	589	247	300	167	170	217	-	236	125	G2½	15	66	4x M32x1.5	42	286	M12x20	0°/120°/240°
NVT 84 1100	3~	500	550	-	336	356	394	694	318	300	197	170	217	312	212	165	G2½	15	66	4x M40x1.5	54	286	M12x20	0°/120°/240°



50Hz	60Hz	
3~		
185...225 V D/320...390 V Y 200...240 V D/345...415 V Y 345...415 V D	200...240 V D/345...415 V Y 200...275 V D/380...480 V Y 380...480 V D	
500 V D	575 V D	

Machines according to the ATEX norm 94/4 EG are available for the whole performance range.

Further voltage range on request; please quote in plain text.

All Norvax achieve the standards and norms of the low voltage directive (LVD)2006/95/EC, rotating electrotechnical motor EN 60034-1-2004, electromagnetic compatibility(EMC)EN55014-1/2,EN61000-2/-3/-4/-6.

- 1) For standard UL for ELECTRIC MOTOR UL 1004-1.
- 2) Relief-valve are available for limiting differential pressure.
- 3) Measuring-surface sound-pressure level acc. to DIN EN 21680, measured at a distance of 1 m. The pump is throttled to an average suction pressure, a hose is connected to the discharge side (compressor) / suction side (vacuum pump), but is not fitted with relief valves.

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The frequency tolerance is maximum +/- 2 %.

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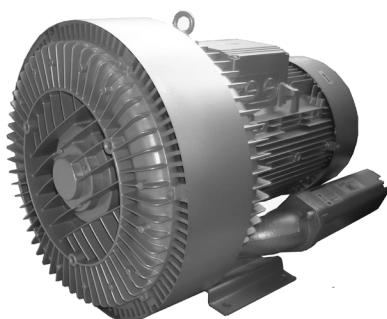
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<http://www.tnmetalworks.com>

Type NVT 84

Curve No.	Order No.	Frequency Hz	Rated power kW	Input voltage V	Input current A	Permissible total differential pressure ²⁾ Vacuum mbar	Compressor mbar	Sound pressure level ³⁾ dB(A)	Weight ca. kg
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3~ 50/60 Hz IP55 insulation material class F 1)

A 370	NVT 84 750	50	7.5	345D ... 415D	600Y...720Y	16.7D	9.6Y	-200	180	74	91
A 371	NVT 84 750	60	8.6	380D ... 480D	660Y...720Y	17.3D	10.0Y	-150	120	78	91
A 372	NVT 84 1100	50	11.0	345D ... 415D	600Y...720Y	28.0D	16.2Y	-280	370	74	110
A 373	NVT 84 1100	60	12.6	380D ... 480D	660Y...720Y	29.0D	16.7Y	-310	350	78	110



50Hz	60Hz	
3~		
185...225 V D/320...390 V Y	200...240 V D/345...415 V Y	
200...240 V D/345...415 V Y	200...275 V D/380...480 V Y	
345...415 V D	380...480 V D	
500 V D	575 V D	

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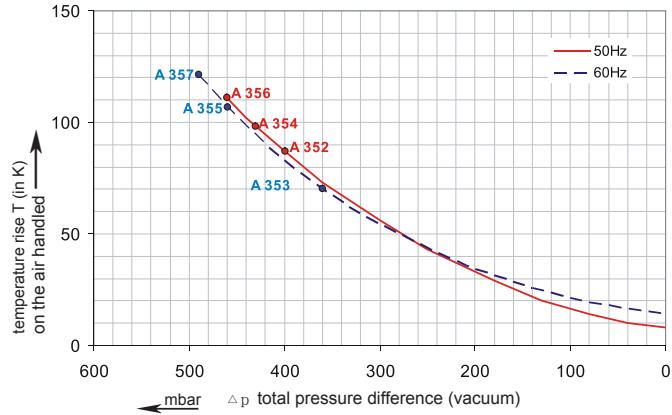
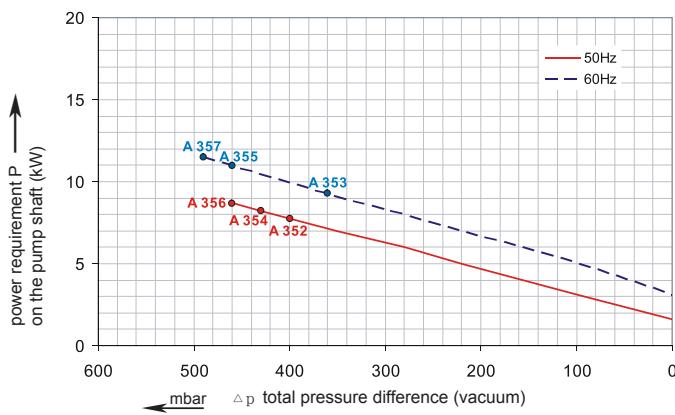
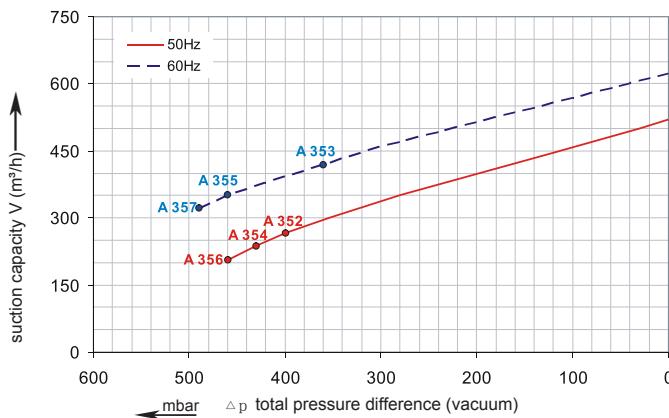


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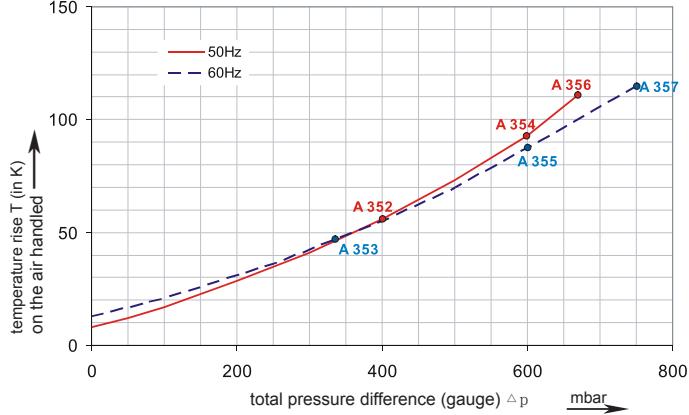
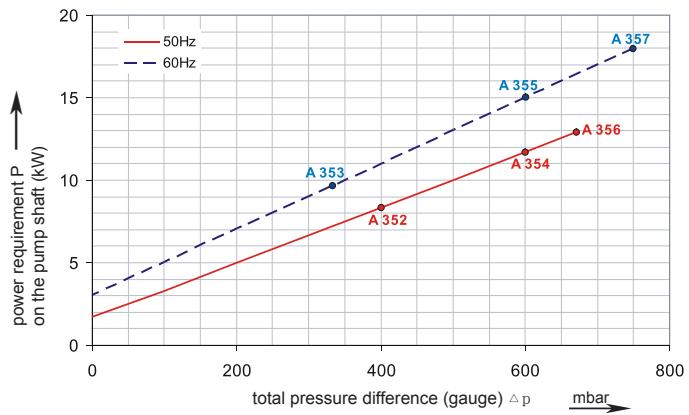
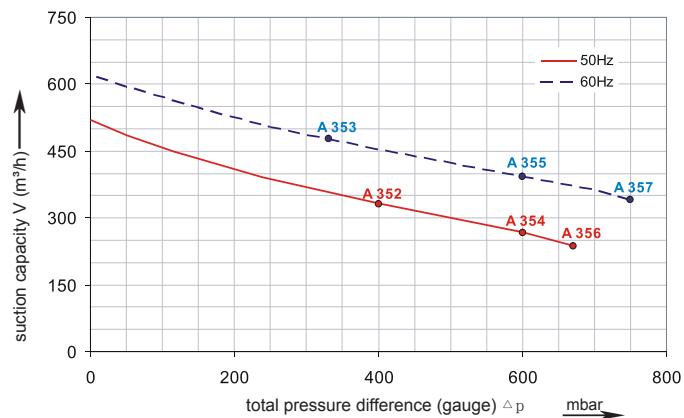
NVT 82 750-1100-1500

Performance curve for Vacuum pump



Double Stage

Performance curve for Compressor



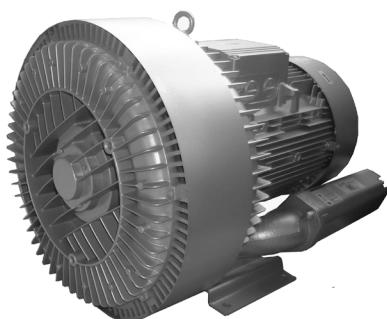
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Curve No.	Order No.	Frequency Hz	Rated power kW	Input voltage V	Input current A	Permissible total differential pressure ²⁾ Vacuum mbar	Compressor mbar	Sound pressure level ³⁾ dB(A)	Weight ca. kg
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3~ 50/60 Hz IP55 insulation material class F 1)

A 352	NVT 82 750	50	7.5	345D ... 415D	600Y...720Y	16.7D	9.6	-400	400
A 353	NVT 82 750	60	8.6	380D ... 480D	660Y...720Y	17.3D	10.0	-360	330
A 354	NVT 82 1100	50	11.0	345D ... 415D	600Y...720Y	28.0D	16.2	-430	600
A 355	NVT 82 1100	60	12.6	380D ... 480D	660Y...720Y	29.0D	16.7	-460	600
A 356	NVT 82 1500	50	15.0	345D ... 415D	600Y...720Y	32.5D	18.8	-460	670
A 357	NVT 82 1500	60	17.3	380D ... 480D	660Y...720Y	34.5D	19.9	-490	750



50Hz	60Hz	
<hr/>		
3~		
185...225 V D/320...390 V Y	200...240 V D/345...415 V Y	
200...240 V D/345...415 V Y	200...275 V D/380...480 V Y	
345...415 V D	380...480 V D	
500 V D	575 V D	

Machines according to the ATEX norm 94/4 EG are available for the whole performance range.

Further voltage range on request; please quote in plain text.

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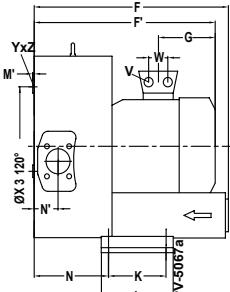
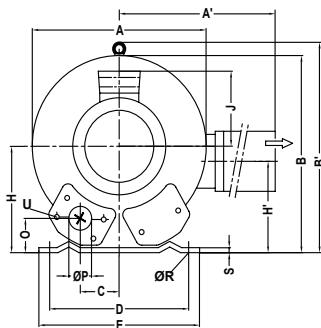
Changes in particular the quoted performance curve, datas and weights without prior notice. The figures are without obligations.

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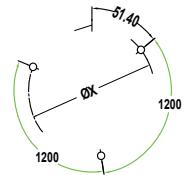
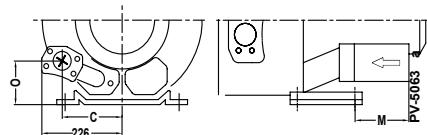
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<http://www.euroventblower.com>

Dimension

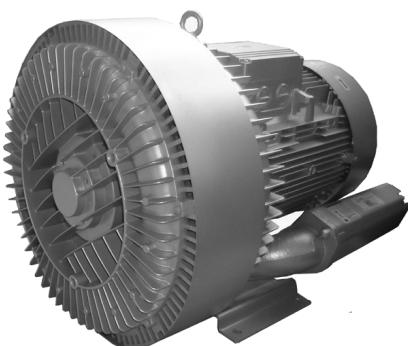
NVT 82 750



NVT 82 1100-1500



Type	Phases																					X-Bohrungen X-Holes						
		A	A'	B	B'	C	D	E	F	F'	G	H	H'	J	K	L	M	N	N'	O	ØP	ØR	S	V	W	ØX	YxZ	
NVT 82 750	3 ~	500	549	490	509	76	356	394	545	589	226	240	199	167	170	217	-	236	84	65	G2½	15	6	4xM32x1,5	42	286	M12x20	51,4°/120°/240°
NVT 82 1100	3 ~	500	549	490	509	76	356	394	545	694	318	240	199	197	170	217	-	212	84	105	G2½	15	6	4xM40x1,5	54	286	M12x20	51,4°/120°/240°
NVT 82 1500	3 ~	500	549	490	509	76	356	394	545	694	318	240	199	197	170	217	-	212	84	105	G2½	15	6	4xM40x1,5	54	286	M12x20	51,4°/120°/240°



50Hz	60Hz	
3~		
185...225 V D/320...390 V Y 200...240 V D/345...415 V Y 345...415 V D	200...240 V D/345...415 V Y 200...275 V D/380...480 V Y 380...480 V D	
500 V D	575 V D	

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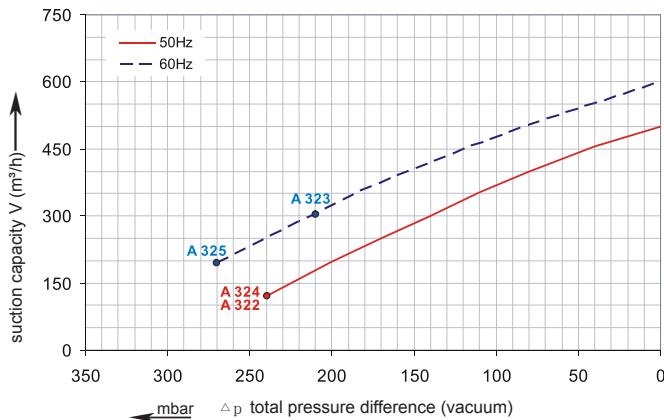
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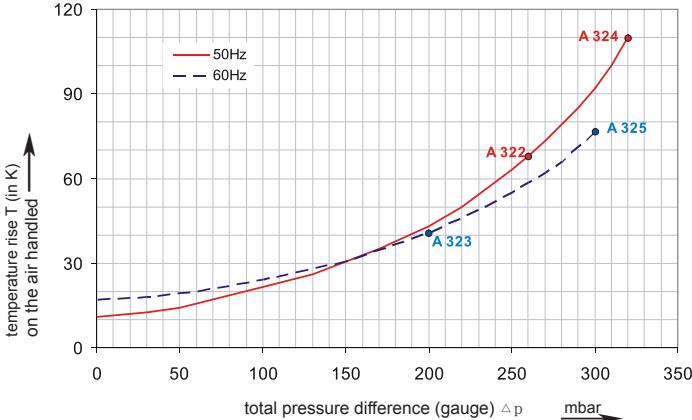
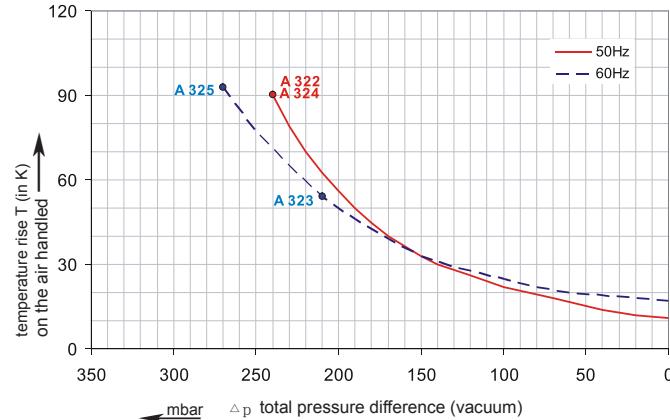
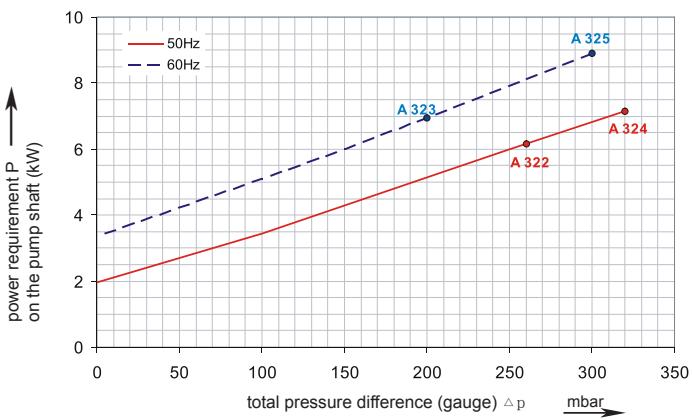
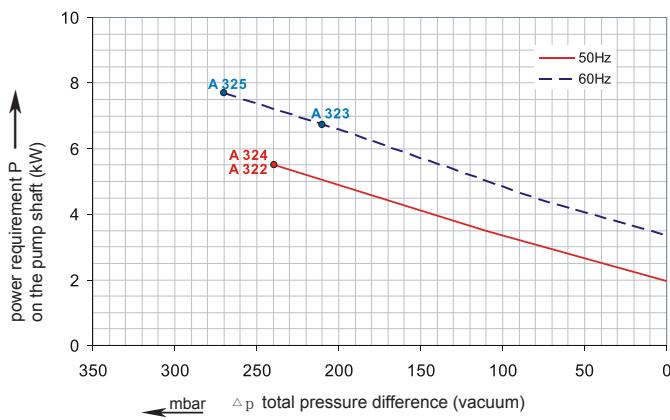
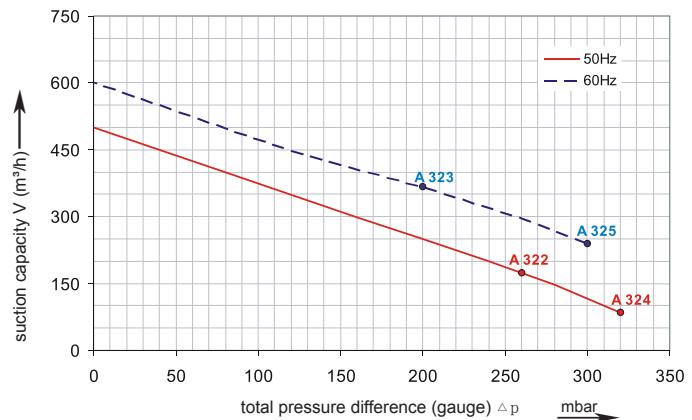
NVT 74 550-750

Performance curve for Vacuum pump



Double Stage

Performance curve for Compressor



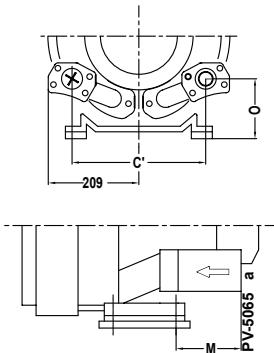
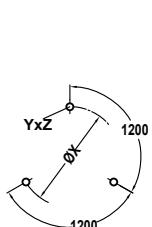
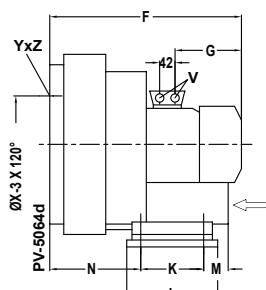
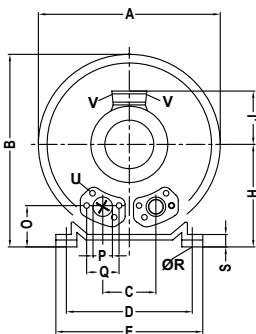
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Curve No.	Order No.	Fre-quency Hz	Rated power kW	Input voltage V	Input current A	Permissible total differential pressure ²⁾ Vacuum mbar	Sound pressure level ³⁾ dB(A)	Weight ca. kg
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3~ 50/60 Hz IP55 insulation material class F 1)

A 322	NVT-74550	50	5.5	345D ... 415D	660Y...720Y	13.3D	7.7Y	-240	260	74	69
A 323	NVT-74550	60	6.3	380D ... 480D	660Y...720Y	13.3D	7.7Y	-210	200	78	69
A 324	NVT-74750	50	7.5	345D ... 415D	660Y...720Y	16.7D	9.6Y	-240	320	74	75
A 325	NVT-74750	60	8.6	380D ... 480D	660Y...720Y	17.3D	10.0Y	-270	300	78	75



Type	Phases	X-BohrungenX-Holes																			
NVT 74 550	3~	420	410	-	308	290	325	571	226	257	167	140	180	200	205	153	55	83	15	64.5	M8x17
NVT 74 750	3~	420	410	-	308	290	325	571	226	257	167	140	180	200	205	153	55	83	15	64.5	M8x17



50Hz	60Hz
3~	
185...225 V D/320...390 V Y	200...240 V D/345...415 V Y
200...240 V D/345...415 V Y	200...275 V D/380...480 V Y
345...415 V D	380...480 V D
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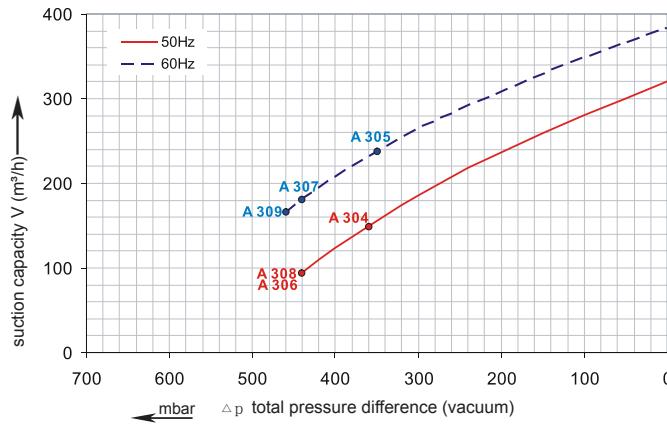
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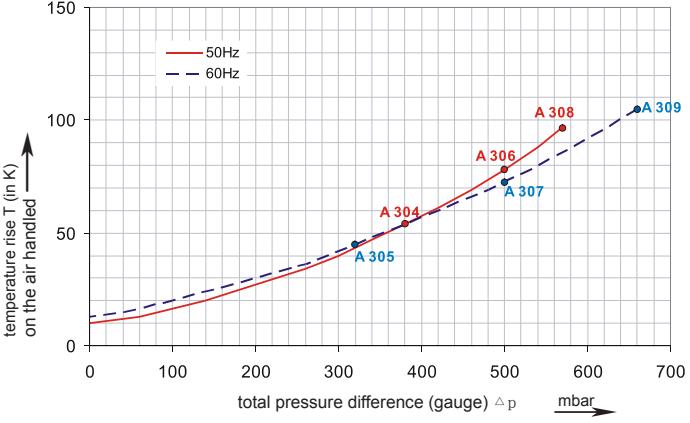
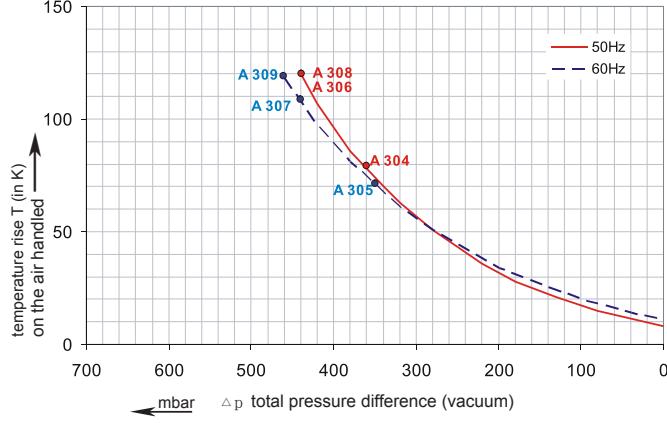
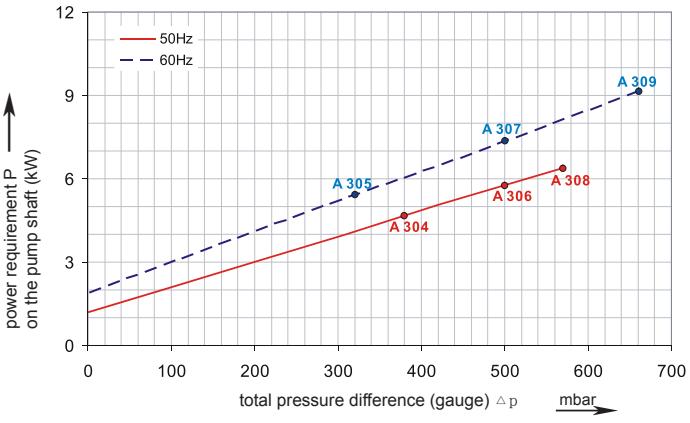
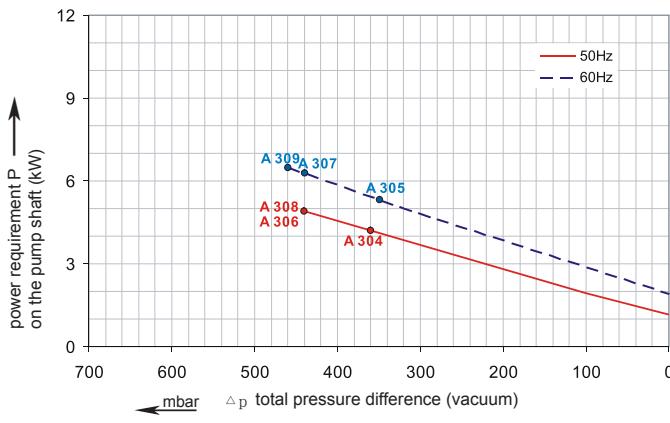
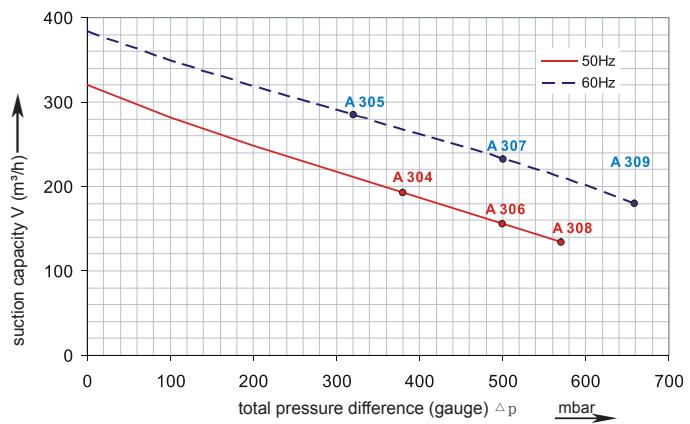
NVT 72430 72550 72750

Double Stage

Performance curve for Vacuum pump



Performance curve for Compressor



The performance curves are based on air at a temperature of 15 °C and an atmospheric pressure of 1013 mbar with a tolerance of +/- 10 %.
The total pressure differences are valid for suction and ambient temperatures up to 25 °C.
For other conditions please confer with us.

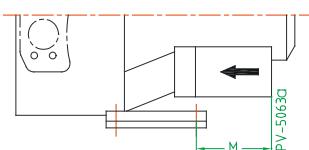
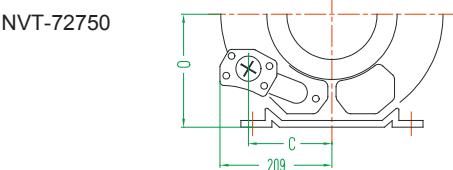
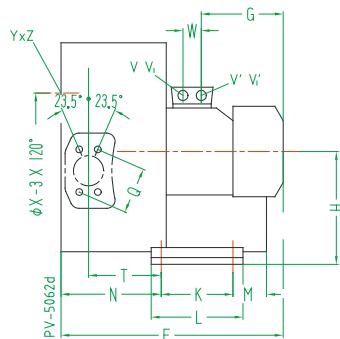
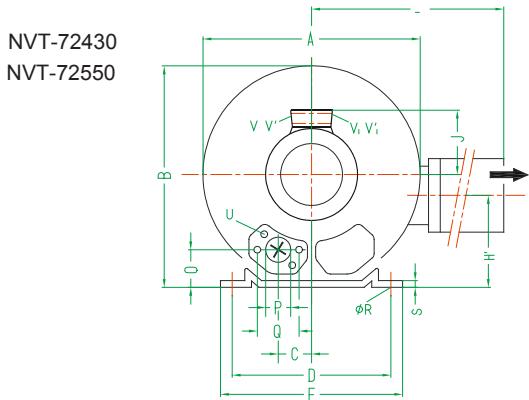
Each all type can be applied both as vacuum pump and compressor in continuous operation over the total stated performance curve range. The motors are available as standard for the input voltage range of 50 and 60 Hz and for protection category IP 55 as well as approved for UL and CSA.

Type double stage

Curve No.	Order No.	Frequency Hz	Rated power kW	Input voltage V				Input current A		Permissible total differential pressure ²⁾ Vacuum mbar	Compressor mbar	Sound pressure level ³⁾ dB(A)	Weight ca. kg

3~ 50/60 Hz IP55 insulation material class F 1)

A 304	NVT-72430	50	4.3	345D ... 415D	600Y...720Y	10.0D	5.2Y	-360	380	73	54
A 305	NVT-72430	60	4.8	380D ... 480D	660Y...720Y	10.4D	6.0Y	-350	320	76	54
A 306	NVT-72550	50	5.5	345D ... 415D	600Y...720Y	13.3D	7.7Y	-440	500	73	66
A 307	NVT-72550	60	6.3	380D ... 480D	660Y...720Y	13.3D	7.7Y	-440	500	76	66
A 308	NVT-72750	50	7.5	345D ... 415D	600Y...720Y	16.7D	9.6Y	-440	570	73	73
A 309	NVT-72750	60	8.6	380D ... 480D	660Y...720Y	17.3D	10.0Y	-460	660	76	73



Type	Phases	A	A'	B	C	D	E	F	G	H	H'	J	K	L	M	N	O	P	Q	R	S	T	U	V	V'	V1	V1'	X	Y	Z	W	X-Holes
NVT-72430	3~	426	426	410	63	290	325	526	209	197	162	148	140	180	84	205	53	55	83	15	4,5	130	M8x17	M32x1,5	M32x1,5	M32x1,5	240	M10x20	51,5°/171,5°/291,5°	42		
NVT-72550	3~				154			571	226		167			200																		
NVT-72750	3~																															

All Norvax achieve the standards and norms of the low voltage directive (LVD)2006/95/EC, rotating electrotechnical motor EN 60034-1-2004, electromagnetic compatibility(EMC)EN55014-1/2,EN61000-2-3/-4/-6.

- 1) For standard UL for ELECTRIC MOTOR UL 1004-1.
- 2) Relief-valve are available for limiting differential pressure.
- 3) Measuring-surface sound-pressure level acc. to DIN EN 21680, measured at a distance of 1 m. The pump is throttled to an average suction pressure, a hose is connected to the discharge side (compressor) / suction side (vacuum pump), but is not fitted with relief valves.

The motors are designed according to the DIN EN 60 034 / DIN IEC 34-1 and temperature class F.

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The single phase machines are designed with a +/- 5 % tolerances. If only 90 % of the maximum allowed pressure will be used for the continuousoperating then the allowed voltage range add to +/- 10 %.

For all single and three phase machines which designed according to the UL and CSA norm (UL 1004-1) the maximum allowed voltage tolerances are - 10 % resp. + 6 %.

The frequency tolerance is maximum +/- 2 %.

Changes in particular the quoted performance curve, datas and weights without prior notice. The figures are without obligations.



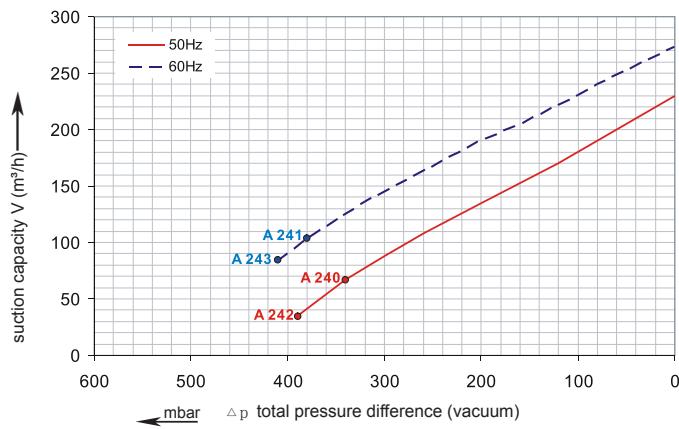
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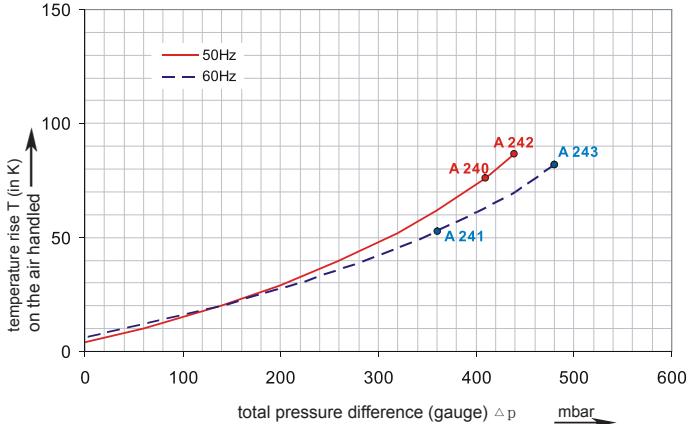
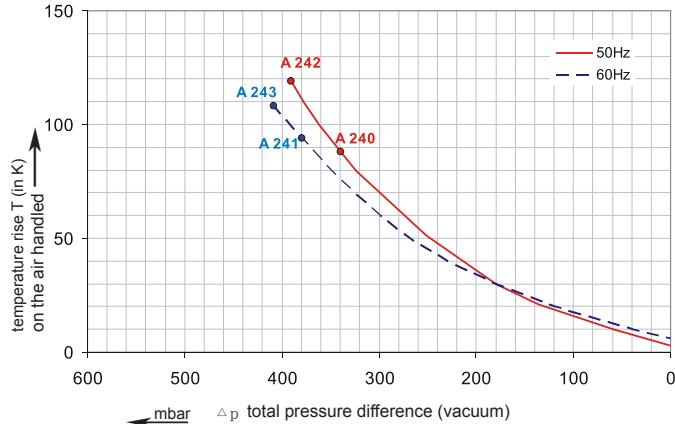
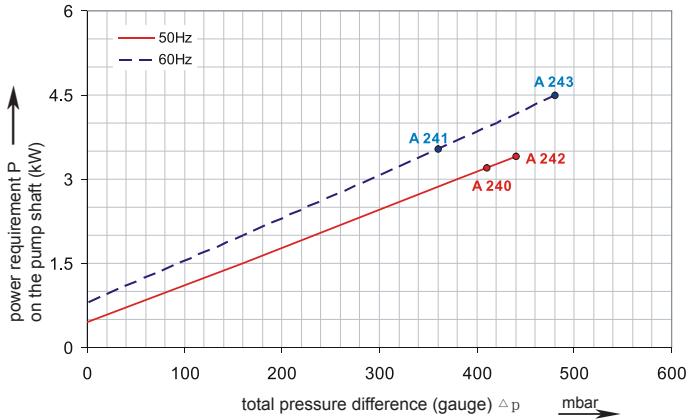
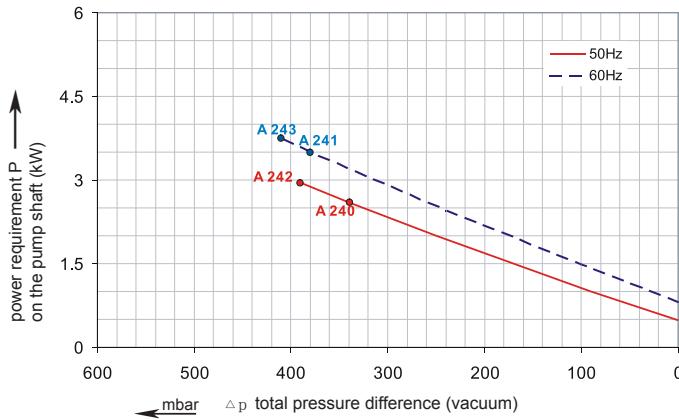
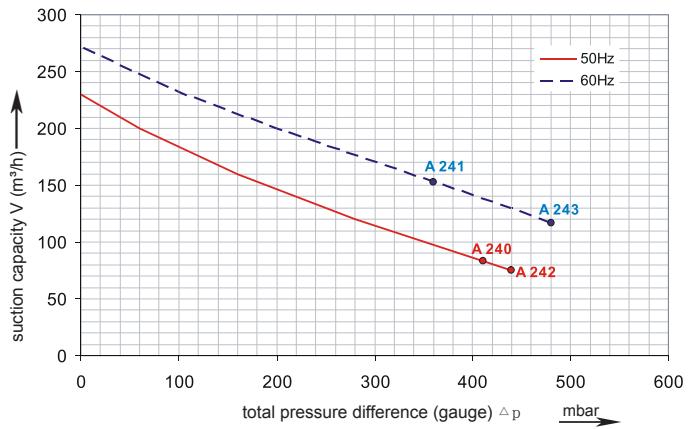
NVT 52300 52400

Double Stage

Performance curve for Vacuum pump



Performance curve for Compressor



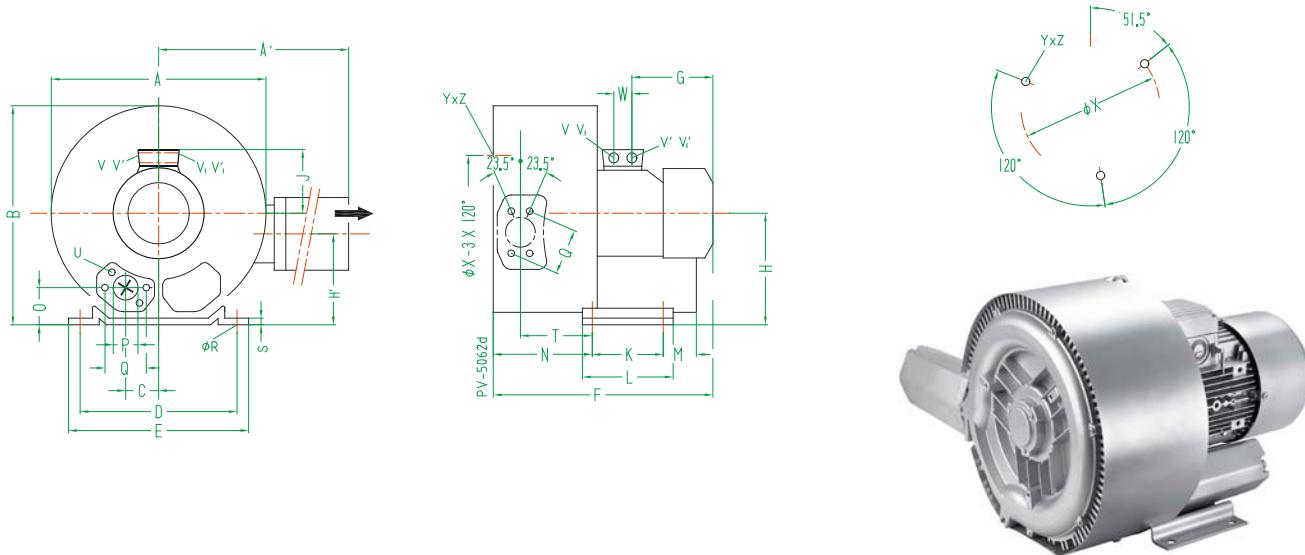
The performance curves are based on air at a temperature of 15 °C and an atmospheric pressure of 1013 mbar with a tolerance of +/- 10 %. The total pressure differences are valid for suction and ambient temperatures up to 25 °C. For other conditions please confer with us.

Each all type can be applied both as vacuum pump and compressor in continuous operation over the total stated performance curve range. The motors are available as standard for the input voltage range of 50 and 60 Hz and for protection category IP 55 as well as approved for UL and CSA.

Curve No.	Order No.	Frequency Hz	Rated power kW	Input voltage V	Input current A	Permissible total differential pressure ²⁾	Sound pressure level ³⁾ dB(A)	Weight ca. kg
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3~ 50/60 Hz IP55 insulation material class F 1)

A 240	NVT-52300	50	3.0	200D ... 240D	345Y...415Y	12.5D	7.2Y	-340	410	72	40
A 241	NVT-52300	60	3.45	220D ... 275D	380Y...480Y	12.6D	7.3Y	-380	360	74	40
A 242	NVT-52400	50	4.0	345D ... 415D	600Y...720Y	10.0D	5.8Y	-390	440	72	44
A 243	NVT-52400	60	4.6	380D ... 480D	600Y...720Y	9.9D	5.71Y	-410	480	74	44



Type	Phases	A	A'	B	C	D	E	F	G	H	H'	J	K	L	M	N	O	P	Q	R	S	T	U	V	V'	V1	V1'	X	YxZ	W
NVT-52300	3~	372	411	371	60	260	295	465	190	175	144	135	115	155	98	171	48	55	83	14	4	116	M6x17	M32x1.5	M32x1.5	M32x1.5	200	M6x20	51.5°/171.5°/291.5°	42
NVT-52400	3~																													

All Norvax achieve the standards and norms of the low voltage directive (LVD)2006/95/EC, rotating electrotechnical motor EN 60034-1-2004, electromagnetic compatibility(EMC)EN55014-1/2,EN61000-2/-3/-4/-6.

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- 2) Relief-valve are available for limiting differential pressure.
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Changes in particular the quoted performance curve, datas and weights without prior notice. The figures are without obligations.



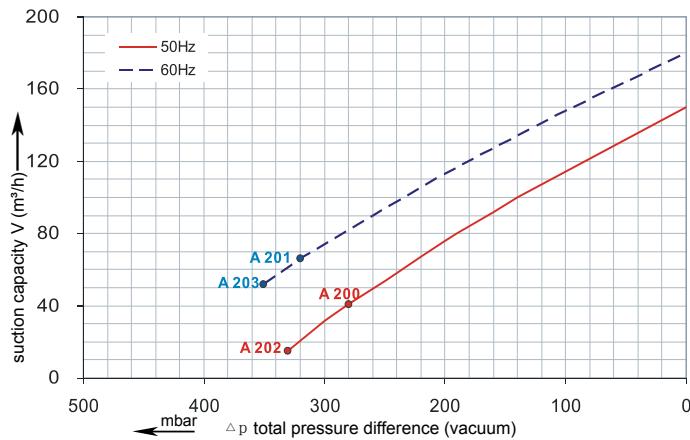
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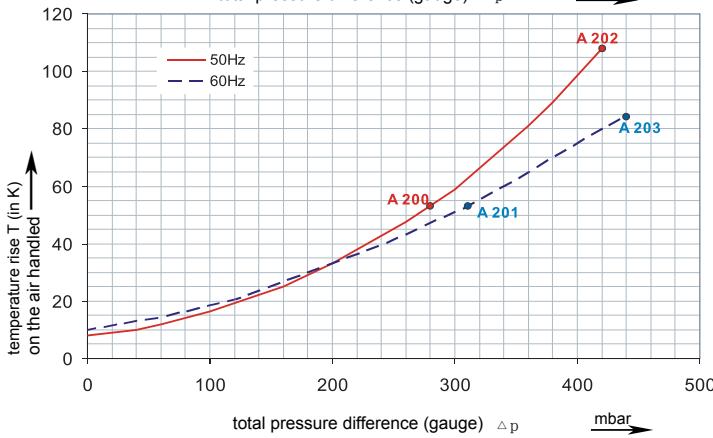
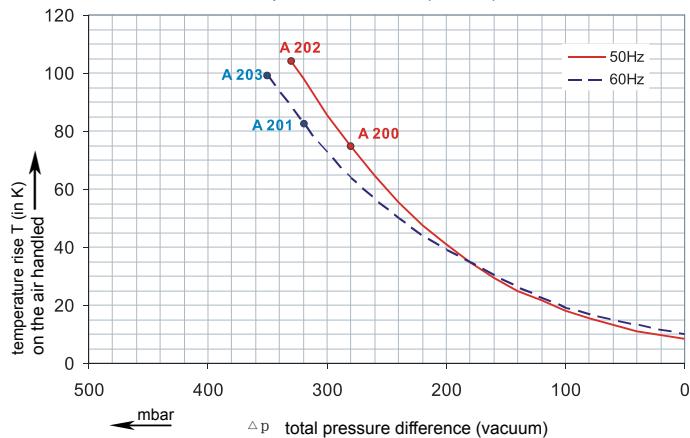
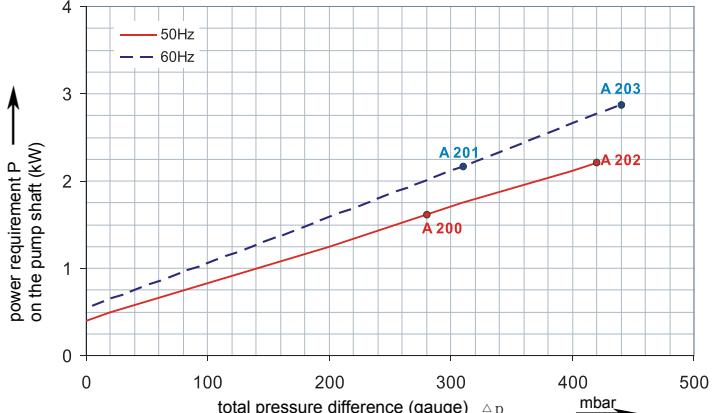
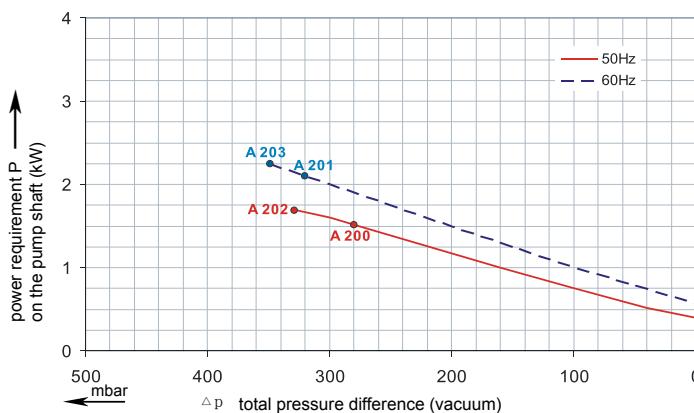
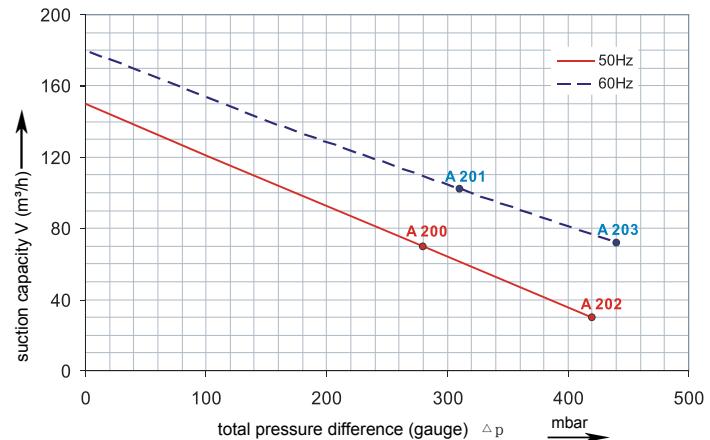
NVT 42160 42220

Double Stage

Performance curve for Vacuum pump



Performance curve for Compressor



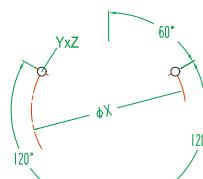
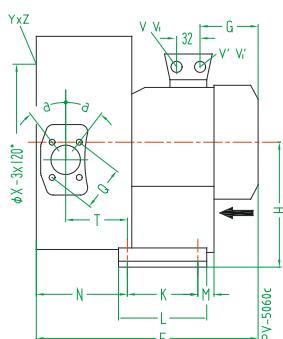
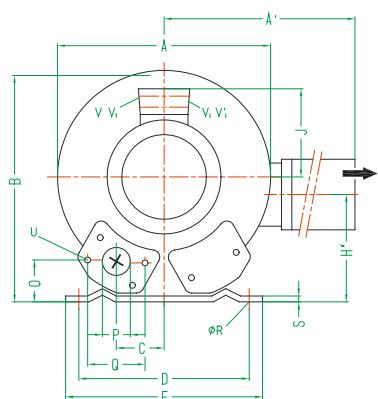
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Each all type can be applied both as vacuum pump and compressor in continuous operation over the total stated performance curve range. The motors are available as standard for the input voltage range of 50 and 60 Hz and for protection category IP 55 as well as approved for UL and CSA.

Curve No.	Order No.	Frequency Hz	Rated power kW	Input voltage V	Input current A	Permissible total differential pressure ²⁾	Sound pressure level ³⁾	Weight ca.
		Hz	kW	V	A	Vacuum mbar	Compressor mbar	dB(A) kg

3~ 50/60 Hz IP55 insulation material class F 1)

A 200	NVT-42160	50	1.6	200D ... 240D	345Y..415Y	7.5D	4.3Y	-280	280	66	25
A 201	NVT-42160	60	2.05	220D ... 275D	380Y..480Y	7.6D	4.4Y	-320	310	69	25
A 202	NVT-42220	50	2.2	200D ... 240D	345Y..415Y	9.7D	5.6Y	-330	420	66	27
A 203	NVT-42220	60	2.55	220D ... 275D	380Y..480Y	10.0D	5.8Y	-350	440	69	27



Type	Phases	A	A'	B	C	D	E	F	G	H	H'	J	K	L	M	N	O	P	Q	R	S	T	U	V(1-)	V'(1-)	V(3-)	V'(3-)	a	φX	YxZ	X-Holes
NVT-42160	3~	322	324	315	58	225	255	401	191	154	153	128	95	130	73	151	4/5	G1½(15fldeep)	72	12	3	104	M6x19	-	-	M25x1,5	M16x1,5	28°	174	M6x15	51°/171°/291°
NVT-42220	3~																														

All Norvax achieve the standards and norms of the low voltage directive (LVD)2006/95/EC, rotating electrotechnical motor EN 60034-1-2004, electromagnetic compatibility(EMC)EN55014-1/2,EN61000-2-3/-4/-6.

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Changes in particular the quoted performance curve, datas and weights without prior notice. The figures are without obligations.



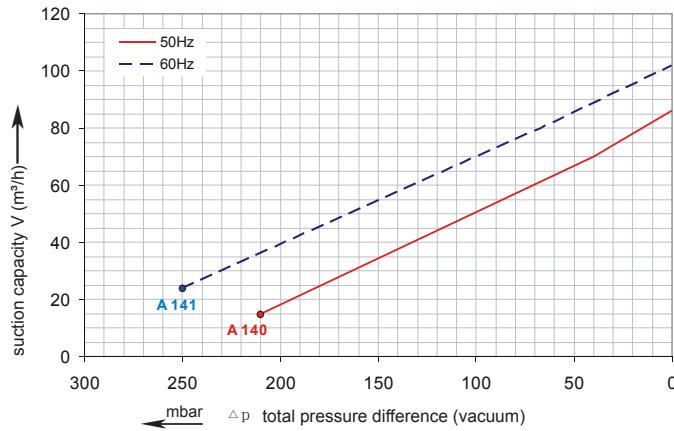
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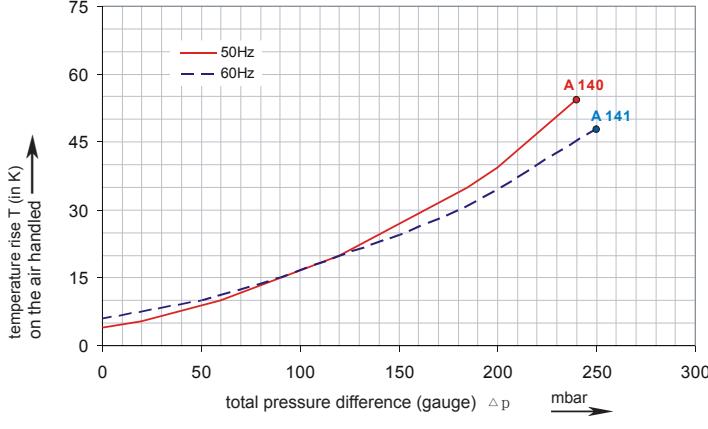
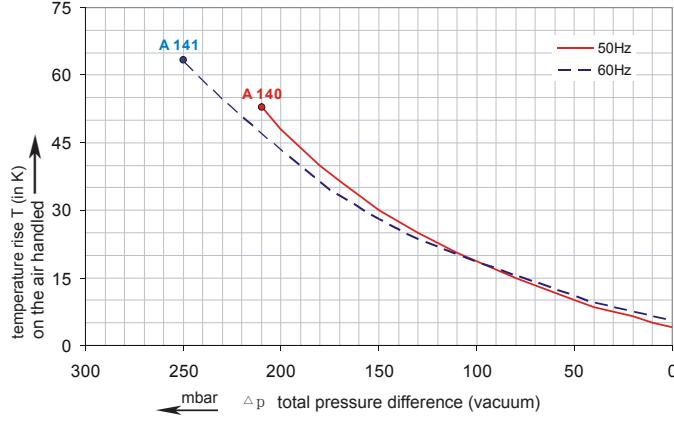
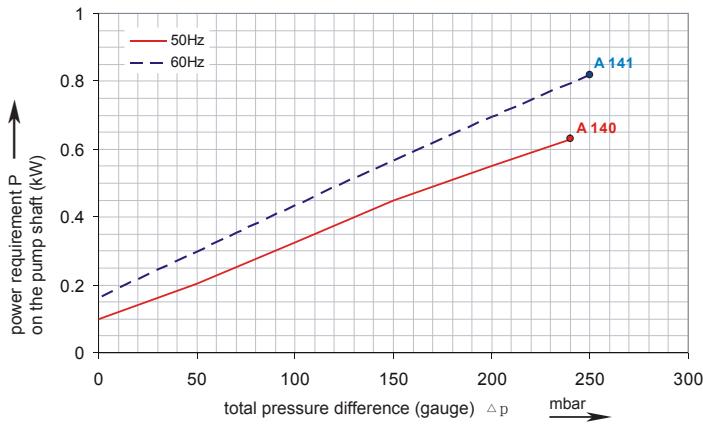
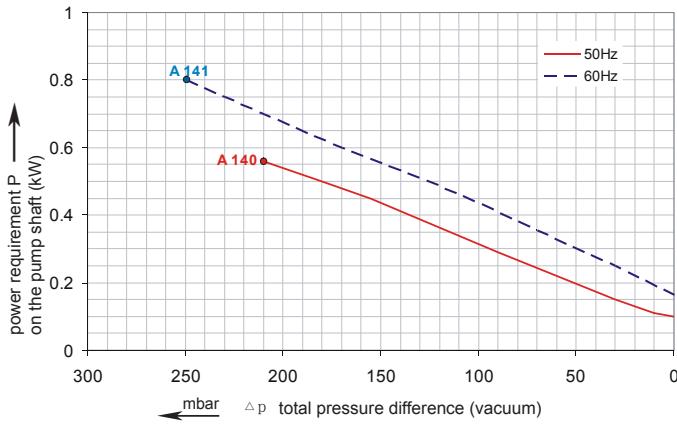
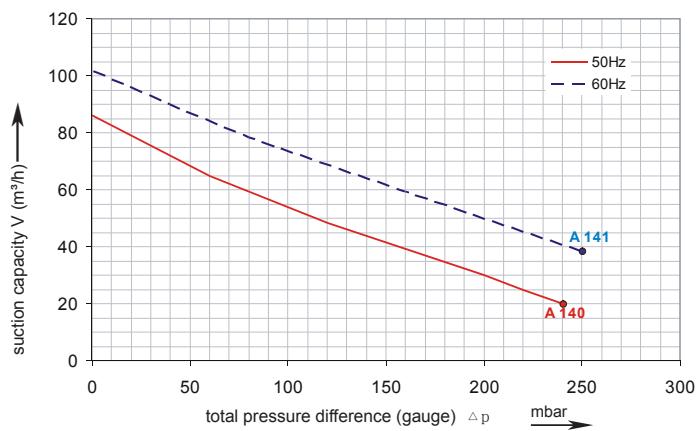
NVT 22 075

Double Stage

Performance curve for Vacuum pump



Performance curve for Compressor

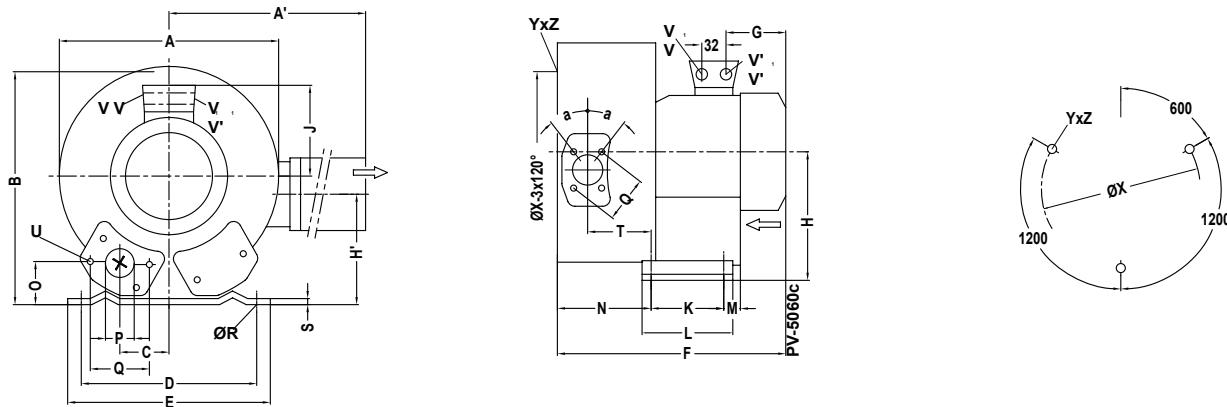


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Curve No.	Order No.	Frequency Hz	Rated power kW	Input voltage V	Input current A	Permissible total differential pressure ²⁾ Vacuum mbar	Compressor mbar	Sound pressure level ³⁾ dB(A)	Weight ca. kg
3~ 50/60 Hz IP55 insulation material class F 1)									
A 140	NVT 22 075	50	0.7	200D ... 240D	345Y...415Y	3.8D	2.2Y	-210	240
A 141	NVT 22 075	60	0.83	220D ... 275D	380Y...480Y	3.75D	2.15Y	-250	250
						55	61	15	15

NVT-22 075 Dimensions



Type	Phases	A	A'	B	C	D	E	F	G	H	H'	J	K	L	M	N	O	P	Q	ØR	S	T	U	V ₍₁₋₁₎	V ₍₂₋₂₎	V ₍₃₋₃₎	α	ØX	YxZ	X-Borhungen X-Holes	
NVT-22 075	3~	284	316	270	45	205	230	316	135	128	106	111	83	108	75	130	39	G1in(5lef-deep)	64	10	2.5	88	M6x17	-	-	M25x1.5	M16x1.5	27°	140	M6x15	51°/71°/29°



All Norvax achieve the standards and norms of the low voltage directive (LVD)2006/95/EC, rotating electrotechnical motor EN 60034-1-2004, electromagnetic compatibility(EMC)EN55014-1/2,EN61000-2-3/-4/-6.

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The frequency tolerance is maximum +/- 2 %.

Changes in particular the quoted performance curve, datas and weights without prior notice. The figures are without obligations.

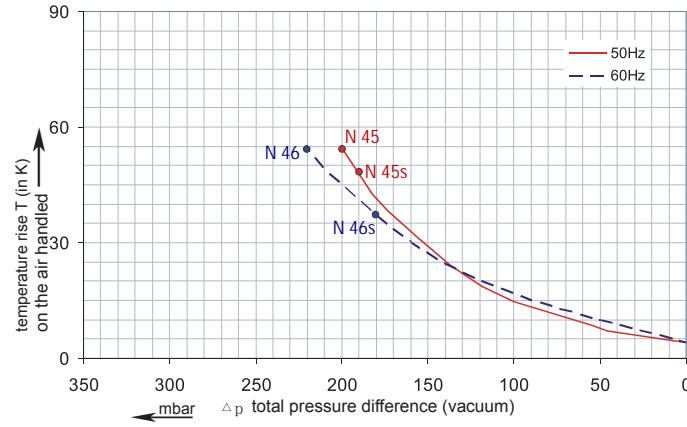
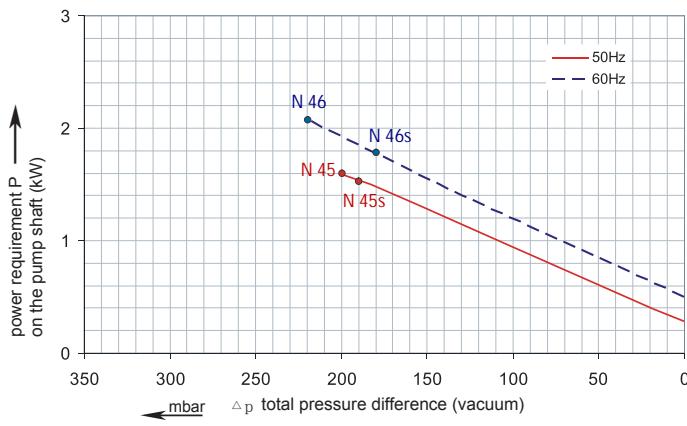
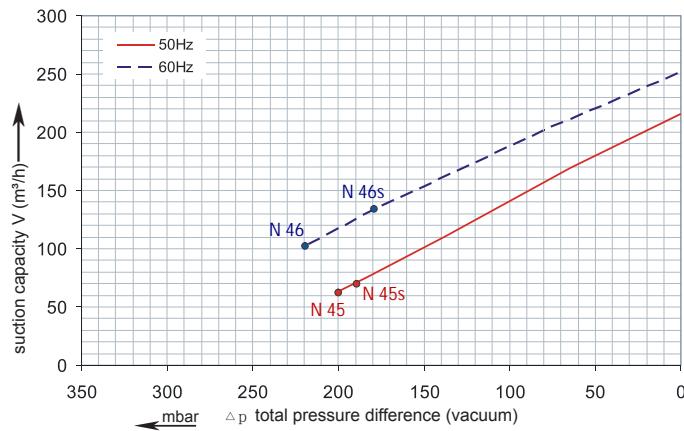


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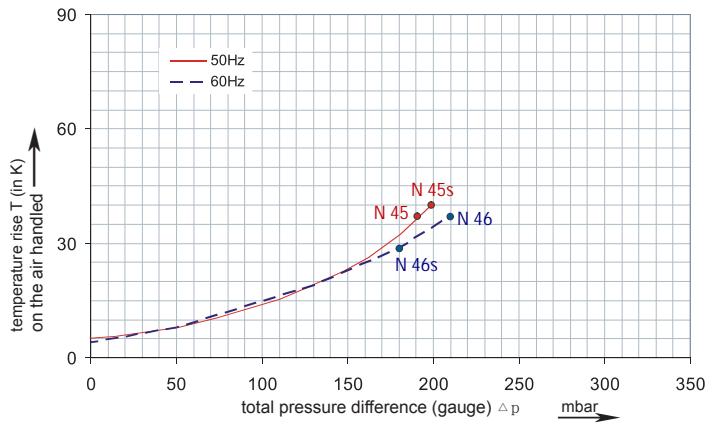
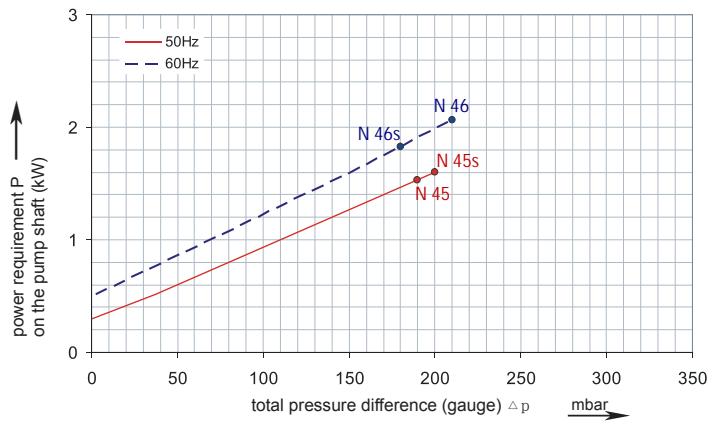
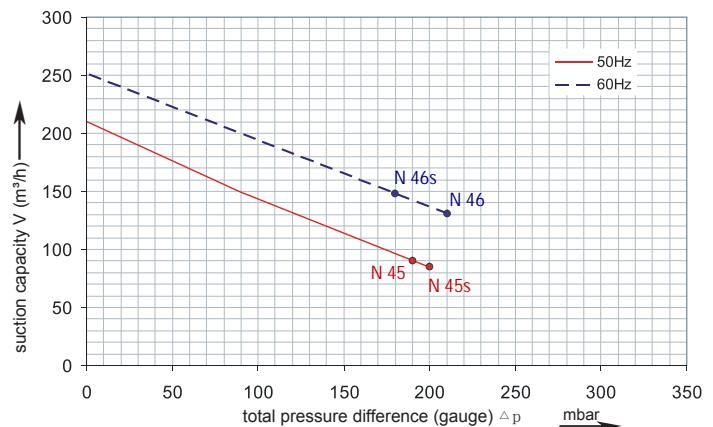
NVS-150 NVT-160

Performance curve for Vacuum pump



Single Stage

Performance curve for Compressor



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Selection and ordering data

Type Single Stage

Curve No.	Order No.	Frequency	Rated power	Input voltage	Input current	Permissible total differential pressure ²⁾	Sound pressure level ³⁾	Weight ca.
		Hz	kW	V	A	Vacuum mbar	Compressor mbar	dB(A) kg

3~ 50/60 Hz IP55 insulation material class F 1)

N 45	NVT-160	50	1.6	200D ... 240D	345Y...415Y	7.5D	4.3Y	-200	190	64	23
N 46	NVT-160	60	2.05	220D ... 275D	380Y...480Y	7.6D	4.4Y	-220	210	70	23

1~ 50/60 Hz IP55 with attached condenser for continuous operation

N 45s	NVS-150	50	1.5	230		9		-190	200	64	24
N 46s	NVS-150	60	1.75	230		10		-180	180	70	24



Other voltage ranges

50Hz	60Hz	
3~		
185...225 V D/320...390 V Y	200...240 V D/345...415 V Y	
200...240 V D/345...415 V Y	200...275 V D/380...480 V Y	
345...415 V D	380...480 V D	
500 V D	575VD	

Machines according to the ATEX norm 94/4 EG are available for the whole performance range.

1~		
100 / 200 V	100 / 200 V	
115 / 230 V	115 / 230 V	
230V	230V	

Further voltage range on request; please quote in plain text.

All Norvax achieve the standards and norms of the low voltage directive (LVD)2006/95/EC, rotating electrotechnical motor EN 60034-1-2004, electromagnetic compatibility(EMC)EN55014-1/2,EN61000-2/-3/-4/-6.

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The motors are designed according to the DIN EN 60 034 / DIN IEC 34-1 and temperature class F.

For the three phase machines the tolerances are +/- 10 % for fixed voltage and +/- 5 % for voltage range.

The single phase machines are designed with a +/- 5 % tolerances. If only 90 % of the maximum allowed pressure will be used for the continuous operating then the allowed voltage range add to +/- 10 %.

For all single and three phase machines which designed according to the UL and CSA norm (UL 1004-1) the maximum allowed voltage tolerances are - 10 % resp. + 6 %.

The frequency tolerance is maximum +/- 2 %.

Changes in particular the quoted performance curve, datas and weights without prior notice. The figures are without obligations.

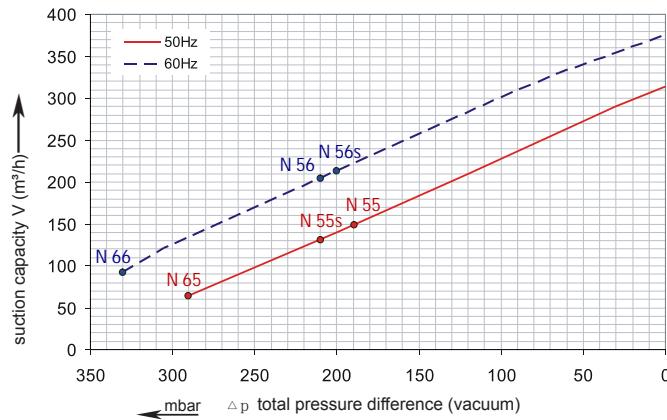


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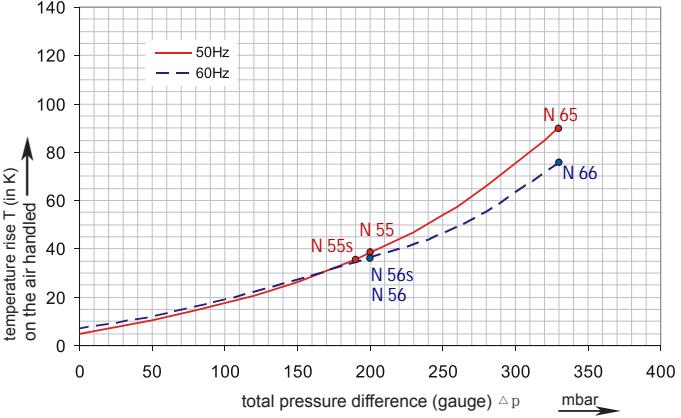
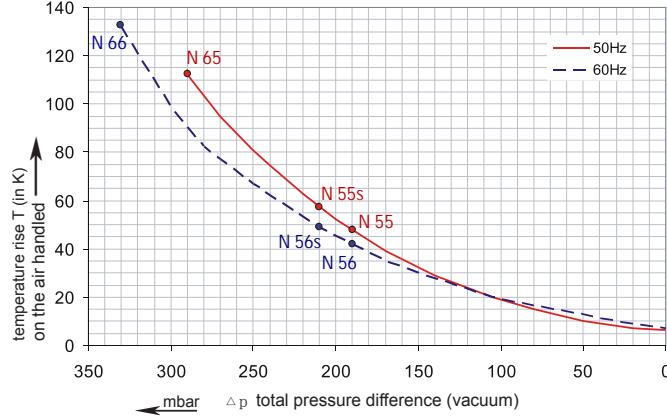
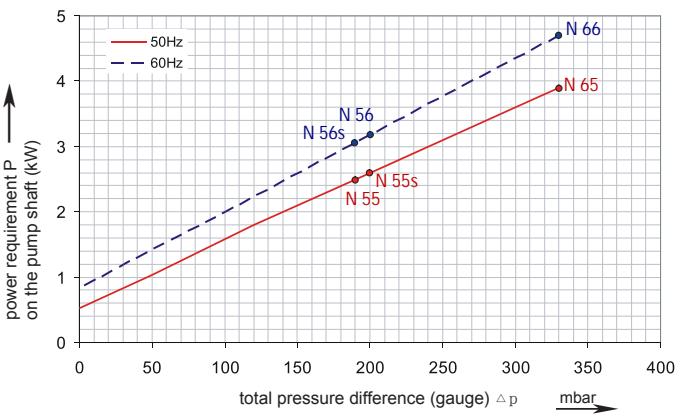
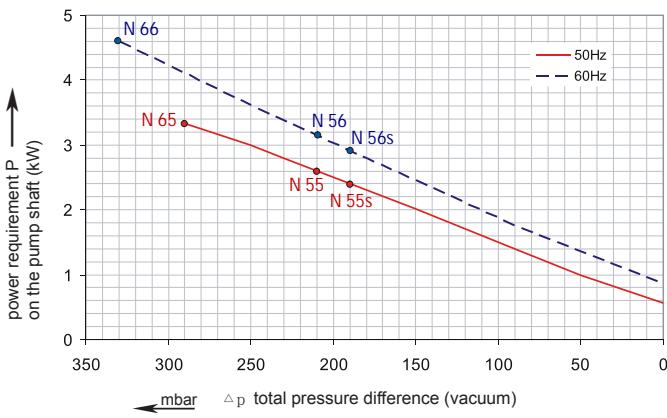
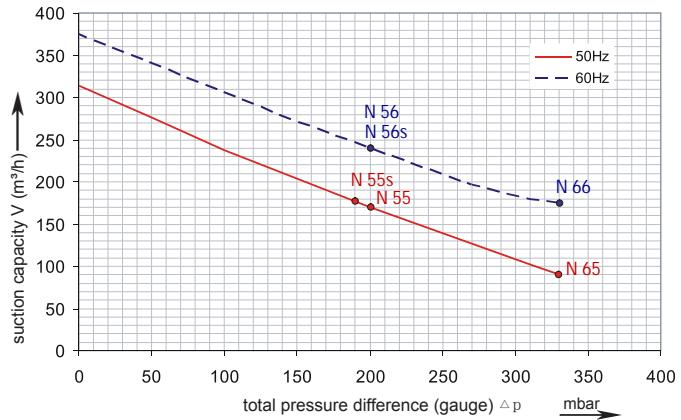
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NVS-220 NVS-400 NVT-220 NVT-400

Performance curve for Vacuum pump



Performance curve for Compressor



The performance curves are based on air at a temperature of 15 °C and an atmospheric pressure of 1013 mbar with a tolerance of +/- 10 %.
The total pressure differences are valid for suction and ambient temperatures up to 25 °C.
For other conditions please confer with us.

Each all type can be applied both as vacuum pump and compressor in continuous operation over the total stated performance curve range. The motors are available as standard for the input voltage range of 50 and 60 Hz and for protection category IP 55 as well as apporobated for UL and CSA.

Selection and ordering data											
Type Single Stage											
Curve No.	Order No.	Fre-quency Hz	Rated power kW	Input voltage V		Input current A		Permissible total differential pressure ²⁾ Vacuum mbar		Sound pressure level ³⁾ dB(A)	Weight ca. kg
3~ 50/60 Hz IP55 insulation material class F 1)											
N 55	NVT-220	50	2.2	200D ... 240D	345Y...415Y	9.7D	5.6Y	-210	200	69	30
N 56	NVT-220	60	2.55	220D ... 275D	380Y...480Y	10.3D	6.0Y	-210	200	72	30
N 65	NVT-400	50	4.0	345D ... 415D	600Y...720Y	9.0D	5.2Y	-290	330	69	40
N 66	NVT-400	60	4.6	380D ... 480D	660Y...720Y	9.0D	5.2Y	-330	330	72	40
1~ 50/60 Hz IP55 insulation material class F 1)											
N 55s	NVS-220	50	2.2	230D		12.8D		-190	190	72	30
N 56s	NVS-220	60	2.55	230D		12.8D		-190	200	74	30



Other voltage ranges		
50Hz	60Hz	
3~		
185...225 V D/320...390 V Y 200...240 V D/345...415 V Y 345...415 V D	200...240 V D/345...415 V Y 200...275 V D/380...480 V Y 380...480 V D	
500 V D	575 V D	
Machines according to the ATEX norm 94/4 EG are available for the whole performance range.		
1~		
230V	230V	

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 - 2) Relief-valve are available for limiting differential pressure.
 - 3) Measuring-surface sound-pressure level acc. to DIN EN 21680, measured at a distance of 1 m. The pump is throttled to an average suction pressure, a hose is connected to the discharge side (compressor) / suction side (vacuum pump), but is not fitted with relief valves.

The motors are designed according to the DIN EN 60 034 / DIN IEC 34-1 and temperature class F.

For the three phase machines the tolerances are $\pm 10\%$ for fixed voltage and $\pm 5\%$ for voltage range.

The single phase machines are designed with a +/- 5 % tolerances. If only 90 % of the maximum allowed pressure will be used for the continuous operating then the allowed voltage range add to +/- 10 %.

For all single and three phase machines which designed according to the UL and CSA norm (UL 1004-1) the maximum allowed voltage tolerances are - 10 % resp. + 6 %.
The frequency tolerance is maximum +/- 2 %.

The frequency tolerance is maximum +/- 2 %.

Changes in particular the quoted performance curve, datas and weights without prior notice. The figures are without obligations.

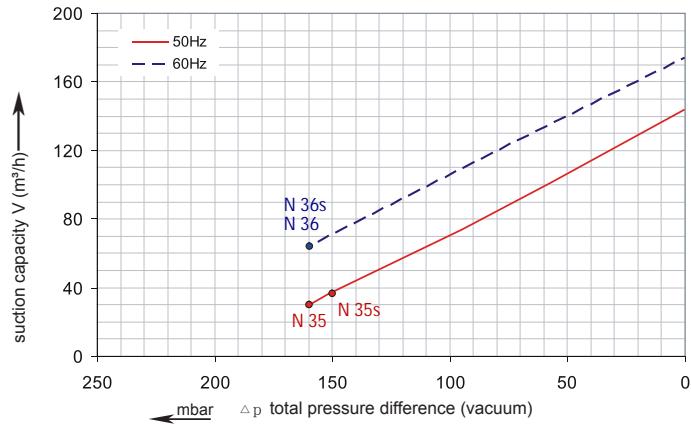


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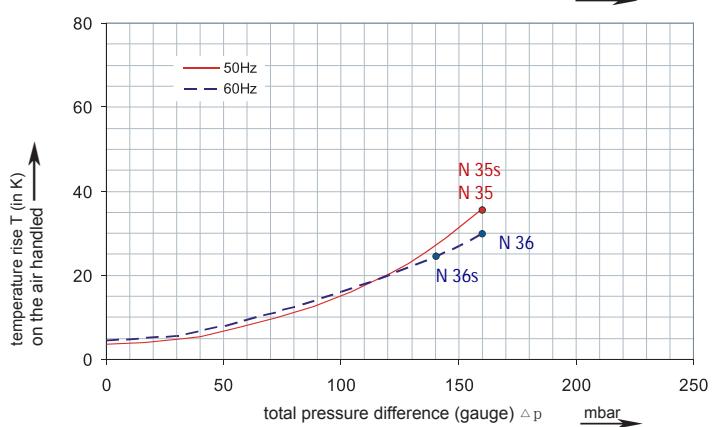
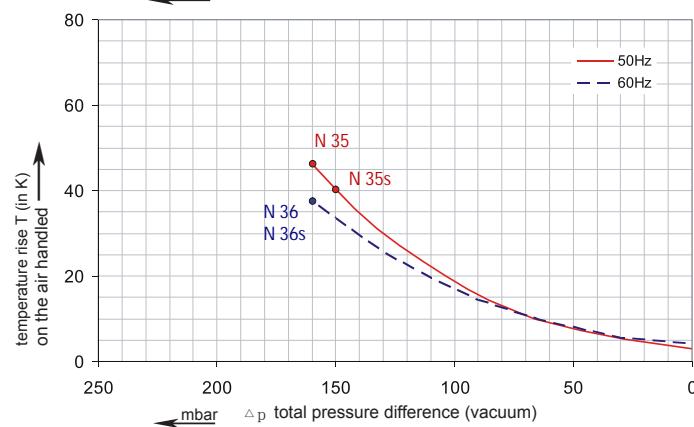
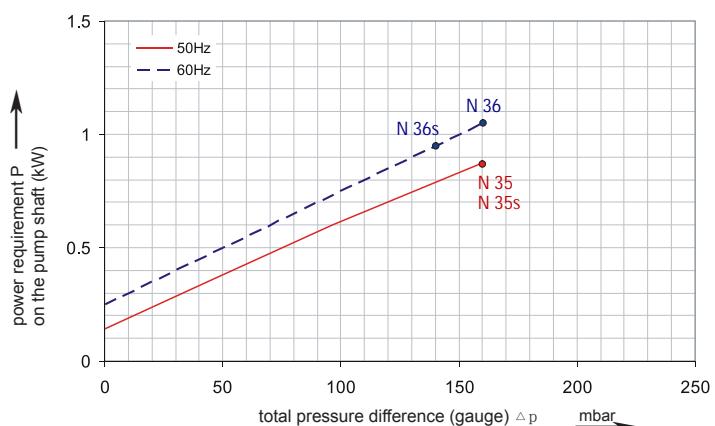
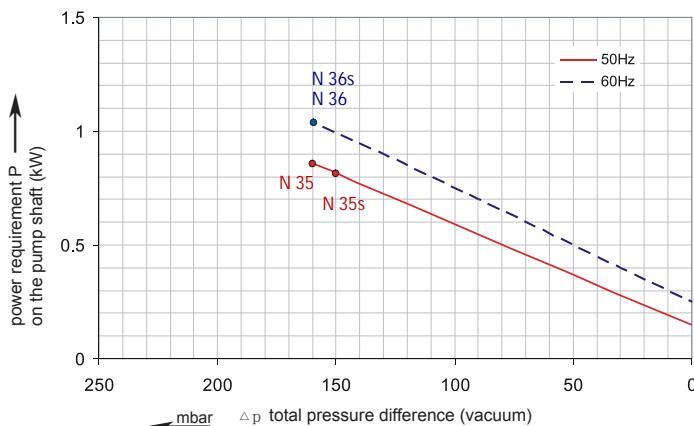
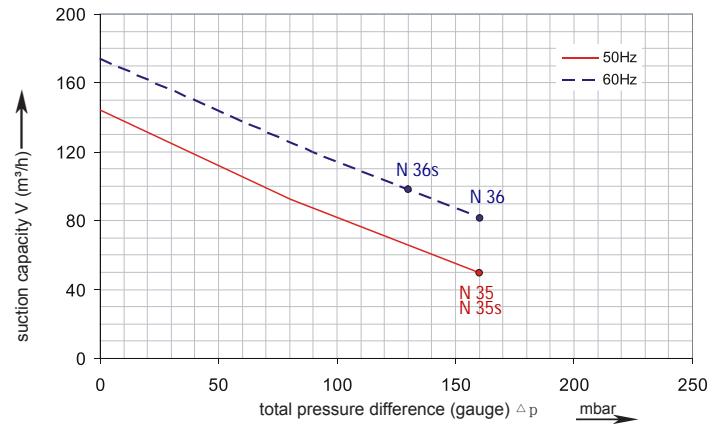
NVS-085 NVT-085

Performance curve for Vacuum pump



Single Stage

Performance curve for Compressor



The performance curves are based on air at a temperature of 15 °C and an atmospheric pressure of 1013 mbar with a tolerance of +/- 10 %.
The total pressure differences are valid for suction and ambient temperatures up to 25 °C.
For other conditions please confer with us.

Each all type can be applied both as vacuum pump and compressor in continuous operation over the total stated performance curve range. The motors are available as standard for the input voltage range of 50 and 60 Hz and for protection category IP 55 as well as apporobated for UL and CSA.

Selection and ordering data

Type Single Stage

Curve No.	Order No.	Frequency Hz	Rated power kW	Input voltage V	Input current A	Permissible total differential pressure ²⁾ Vacuum mbar	Compressor mbar	Sound pressure level ³⁾ dB(A)	Weight ca. kg
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3~ 50/60 Hz IP55 insulation material class F 1)

N 35	NVT-085	50	0.85	200D ... 240D	345Y...415Y	4.0D	2.3Y	-160	160	63	16
N 36	NVT-085	60	0.95	220D ... 275D	380Y...480Y	3.85D	2.25Y	-160	160	64	16

1~ 50/60 Hz IP55 with attached condenser for continuous operation

N 35s	NVS-085	50	0.8	230		5.2		-150	160	63	15
N 36s	NVS-085	60	0.9	230		5.8		-160	140	64	15



Other voltage ranges

50Hz	60Hz	
3~		
185...225 V D/320...390 V Y 200...240 V D/345...415 V Y 345...415 V D	200...240 V D/345...415 V Y 200...275 V D/380...480 V Y 380...480 V D	
500 V D	575VD	
Machines according to the ATEX norm 94/4 EG are available for the whole performance range.		
1~		
100 / 200 V 115 / 230 V	100 / 200 V 115 / 230 V	
230V	230V	

Further voltage range on request; please quote in plain text.

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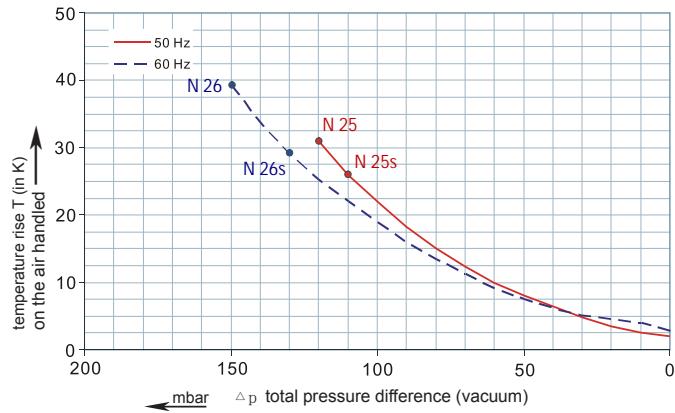
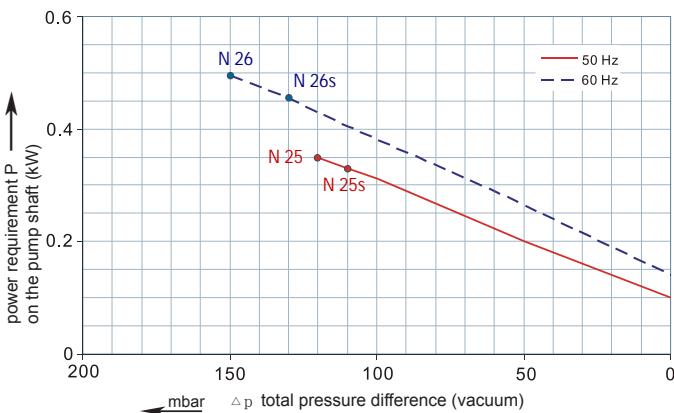
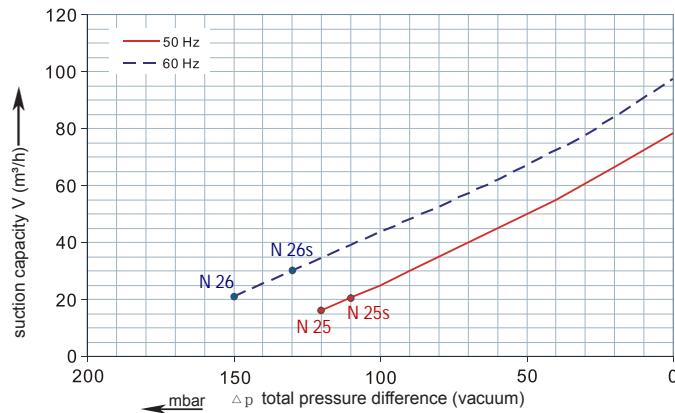


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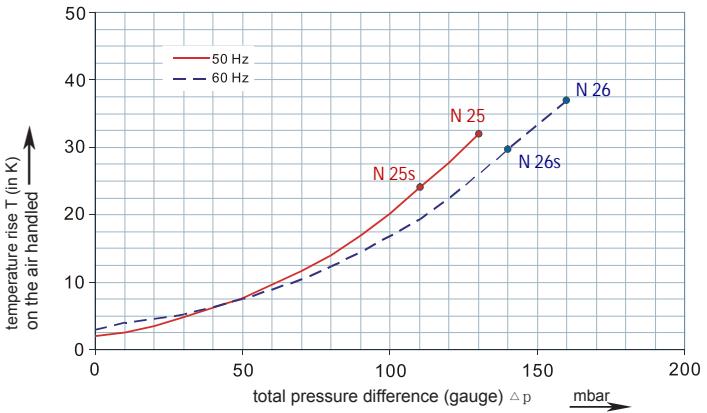
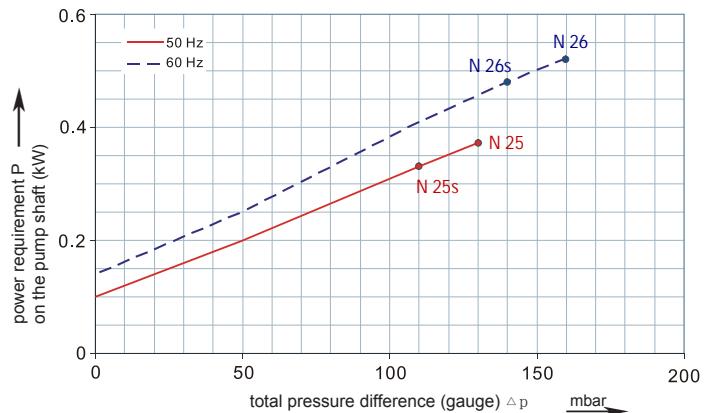
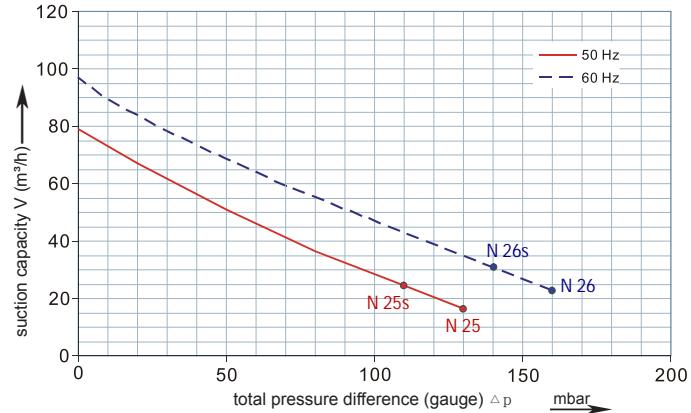
NVS-040 NVT-040

Performance curve for Vacuum pump



Single Stage

Performance curve for Compressor



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Selection and ordering data

Type Single Stage

Curve No.	Order No.	Frequency	Rated power	Input voltage	Input current	Permissible total differential pressure ²⁾	Sound pressure level ³⁾	Weight ca.	
		Hz	kW	V	A	Vacuum mbar	Compressor mbar	dB(A)	kg

3~ 50/60 Hz IP55 insulation material class F 1)

N 25	NVT-040	50	0.4	200D ... 240D	345Y...415Y	2.6D	1.5Y	-120	130	53	10
N 26	NVT-040	60	0.5	220D ... 275D	380Y...480Y	2.6D	1.5Y	-150	160	56	10

1~ 50/60 Hz IP55 with attached condenser for continuous operation

N25s	NVS-040	50	0.37	230		2.7		-110	110	53	11
N26s	NVS-040	60	0.45	230		3.0		-130	140	56	11



Other voltage ranges

50Hz	60Hz	
3~		
185...225 V D/320...390 V Y 200...240 V D/345...415 V Y 345...415 V D	200...240 V D/345...415 V Y 200...275 V D/380...480 V Y 380...480 V D	
500 V D	575VD	
Machines according to the ATEX norm 94/4 EG are available for the whole performance range.		
1~		
100 / 200 V 115 / 230 V	100 / 200 V 115 / 230 V	
230V	230V	

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