

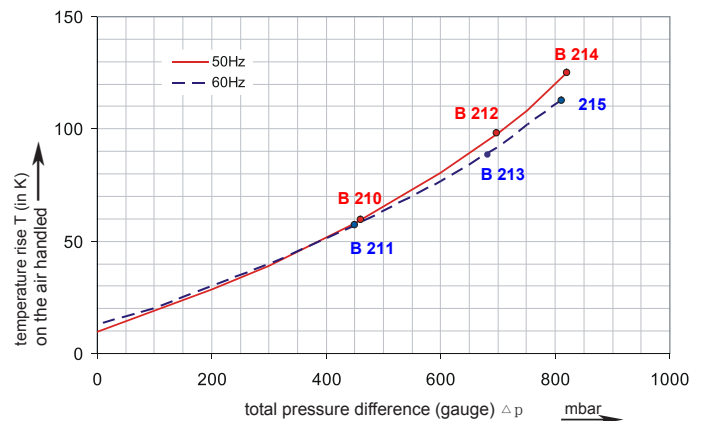
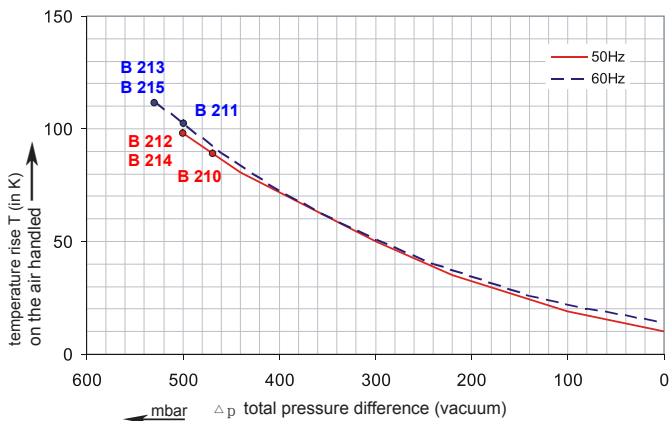
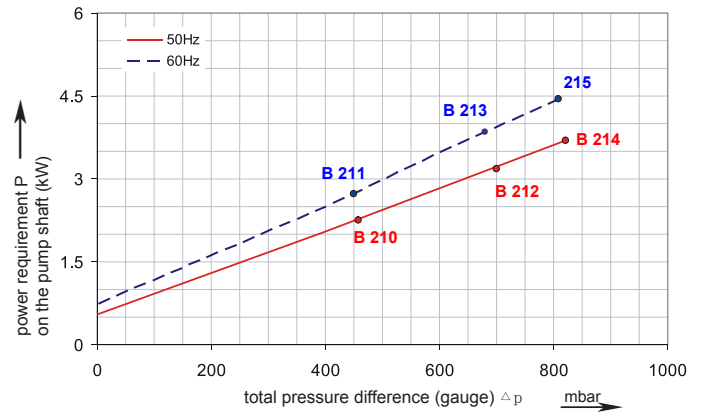
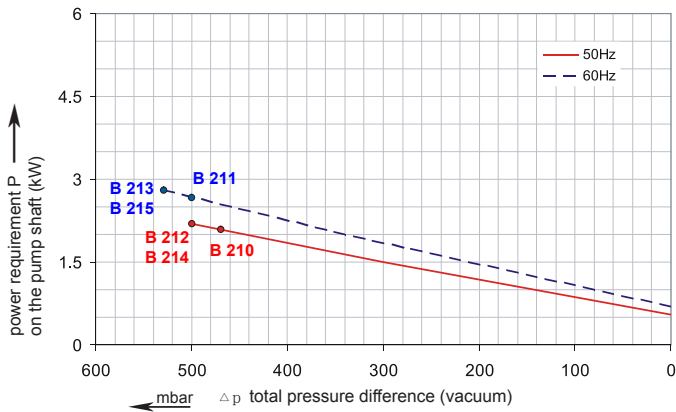
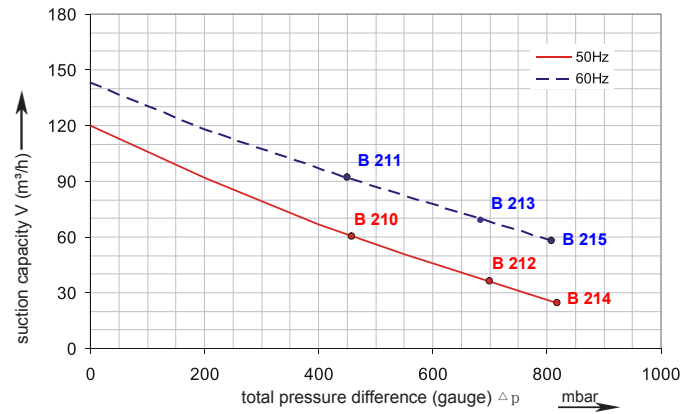
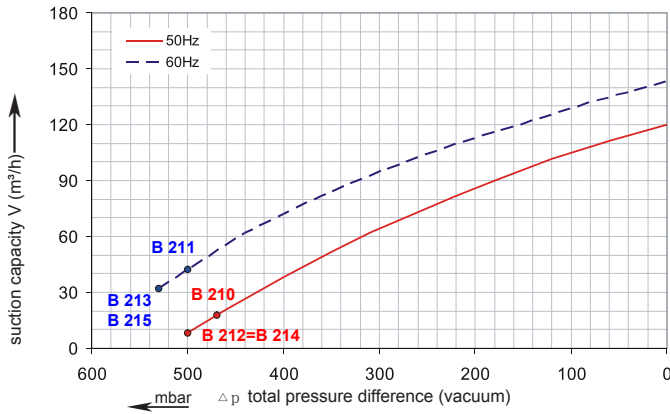


# Data sheet 4HB 520

## 4HB

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 4HB 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.

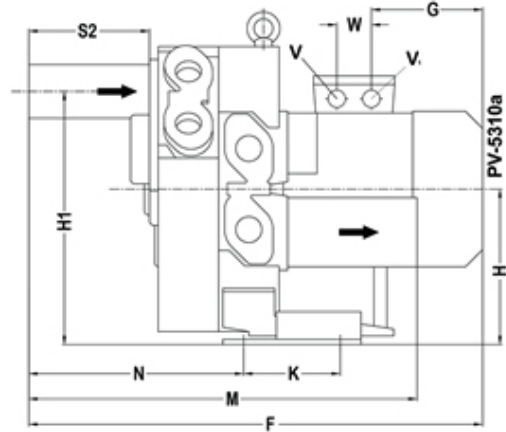
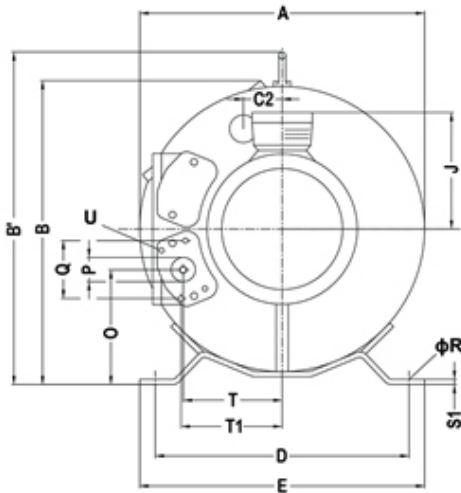


## Data sheet 4HB 520

### Selection and ordering data

#### Type 4HB 520

Curve No.	Order No.	Fre- quency	Rated power	Input voltage		Input current		Permissible total differential pressure <sup>2)</sup>		Sound pressure level <sup>3)</sup>	Weight ca.
				V		A		Vacuum mbar	Compressor mbar		
3~ 50/60 Hz IP55 insulation material class F )											
B 210	4HB 520-220T	50	2.2	200D ... 240D	345Y...415Y	11.4D	6.6Y	-470	460	64	40
B 211	4HB 520-220T	60	2.55	220D ... 275D	380Y...480Y	11.2D	6.5Y	-500	450	70	40
B 212	4HB 520-330T	50	3.3	200D ... 240D	345Y...415Y	13.0D	7.5Y	-500	700	65	45
B 213	4HB 520-330T	60	3.8	220D ... 275D	380Y...480Y	14.2D	8.2Y	-530	680	71	45
B 214	4HB 520-400T	50	4.0	345D ... 415D		9.0D		-500	820	65	51
B 215	4HB 520-400T	60	4.6	380D ... 480D		9.5D		-530	810	71	51



<b>A</b>	<b>B</b>	<b>C''</b>	<b>D</b>	<b>E</b>	<b>F</b>		
387	402	57	328	363	549		
<b>G</b>	<b>H</b>	<b>H'</b>	<b>J</b>	<b>K</b>	<b>M</b>	<b>N</b>	
185	206	343	128	152	453	256	
<b>O</b>	<b>P</b>	<b>Q</b>	<b>phi R</b>	<b>S1</b>	<b>S2</b>	<b>T</b>	<b>T1</b>
148	G 1 ¼	64	14	5	140	137	138
<b>U</b>	<b>V</b>	<b>V1</b>	<b>W</b>				
M6x17	M25x1.5	M16x1.5	42				

All 4HB 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 %.