



## 2HB 410

### Selection and ordering data

#### Type 2HB 410

Curve No.	Type	Fre- quency	Rated power	Input voltage		Input current		Permissible total differential pressure <sup>2)</sup>		Sound pressure level <sup>3)</sup>	Weight ca.
				Hz	kW	V	A	Vacuum mbar	Compressor mbar		

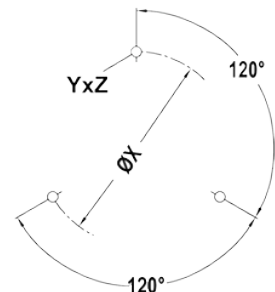
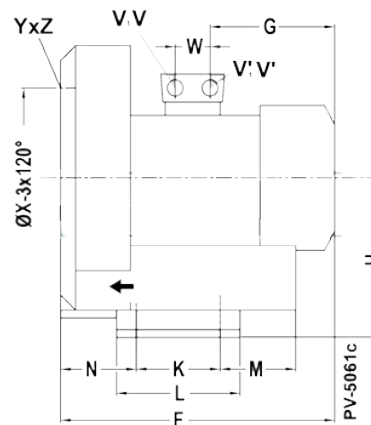
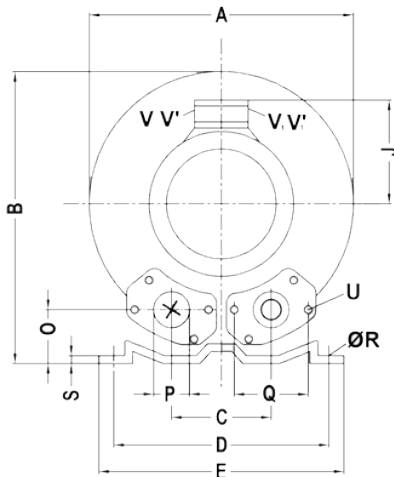
#### 3~ 50/60 Hz IP55 isulation material class F 1)

A 190	2HB 2410-070T	50	0.7	200D ... 240D	345Y...415Y	3.8D	2.2Y	-120	120	63	13
A 191	2HB 410-070T	60	0.83	220D ... 275D	380Y...480Y	3.75D	2.15Y	-130	130	64	13
A 192	2HB 410-085T	50	0.85	200D ... 240D	345Y...415Y	4.0D	2.3Y	-160	160	63	16
A 193	2HB 410-085T	60	0.95	220D ... 275D	380Y...480Y	3.85D	2.25Y	-160	160	64	16
A 194	2HB 410-130T	50	1.3	200D ... 240D	345Y...415Y	5.7D	3.3Y	-170	200	63	17
A 195	2HB 410-130T	60	1.5	220D ... 275D	380Y...480Y	6.0D	3.5Y	-210	220	64	17

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

A 190s	2HB 410-080S	50	0.8	230		5.2		-150	160	63	15
A 191s	2HB 410-080S	60	0.9	230		5.8		-160	140	64	15
A 192s	2HB 410-110S	50	1.1	230		7.3		-150	190	63	16
A 193s	2HB 410-110S	60	1.3	230		8.3		-180	190	64	16
A 194s	2HB 410-110S1	50	1.1	115	230	14.6	7.3	-150	190	63	16
A 195s	2HB 410-110S1	60	1.3	115	230	16.6	8.3	-180	190	64	16

Type	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	ØR	U	V	V'	ØX	YxZ	W
2HB 410-070T	286	302	115	225	225	269	135	154	111	95	130	70	75	46	1 ¼	72	12	M6x19	M16x1.5	M25x1.5	174	M6x15	29
2HB 410-085T	286	302	115	225	225	292	160	154	120	95	130	70	75	46	1 ¼	72	12	M6x19	M16x1.5	M25x1.5	174	M6x15	29
2HB 410-130T	286	302	115	225	225	192	160	154	120	95	130	70	75	46	1 ¼	72	12	M6x19	M16x1.5	M25x1.5	174	M6x15	29
2HB 410-080S	286	302	115	225	225	294	160	154	120	95	130	70	75	46	12	72	12	M6x19	M16x1.5	M25x1.5	174	M6x15	29
2HB 410-110S	286	302	115	225	225	294	160	154	120	95	130	70	75	46	1 ¼	72	12	M6x19	M16x1.5	M25x1.5	174	M6x15	29
2HB 410-110S	286	302	115	225	225	294	160	154	120	95	130	70	75	46	1 ¼	72	12	M6x19	M16x1.5	M25x1.5	174	M6x15	29



All blowers 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.

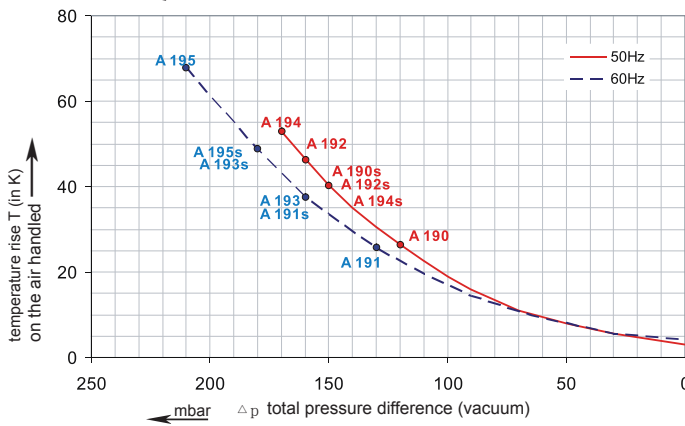
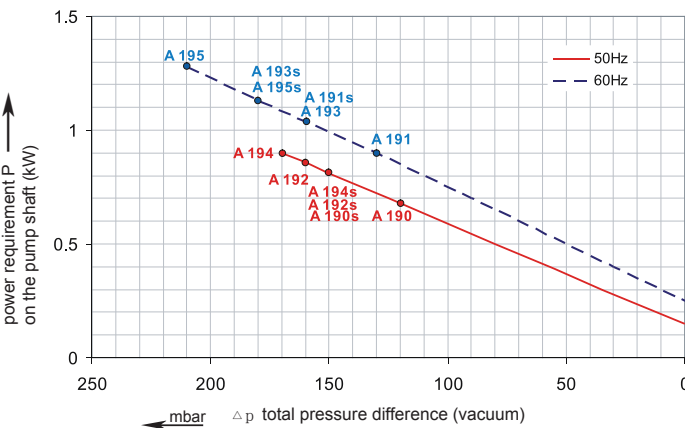
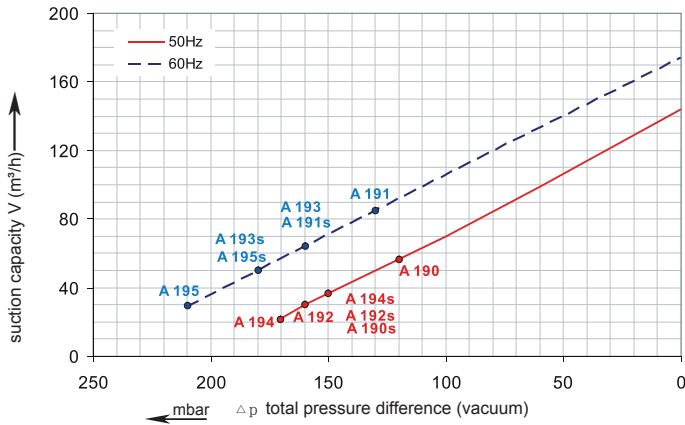
The single phase machines are designed with a +/- 5 % tolerances. If only 90 % of the maximum allowed pressure will be used for the continuous operating then the allowed voltage range add to +/- 10 %.

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 %.

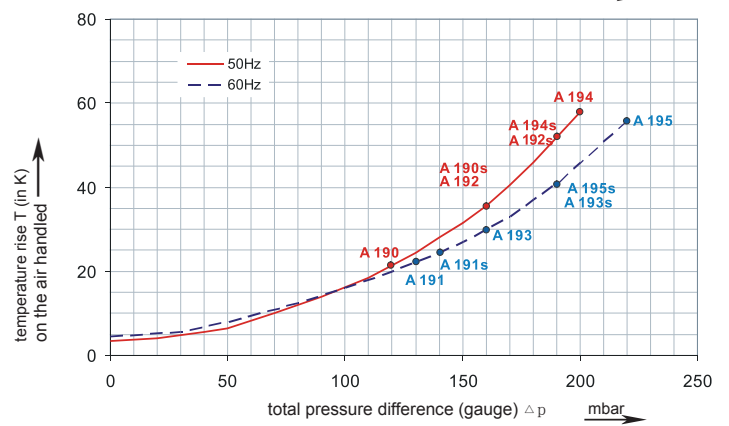
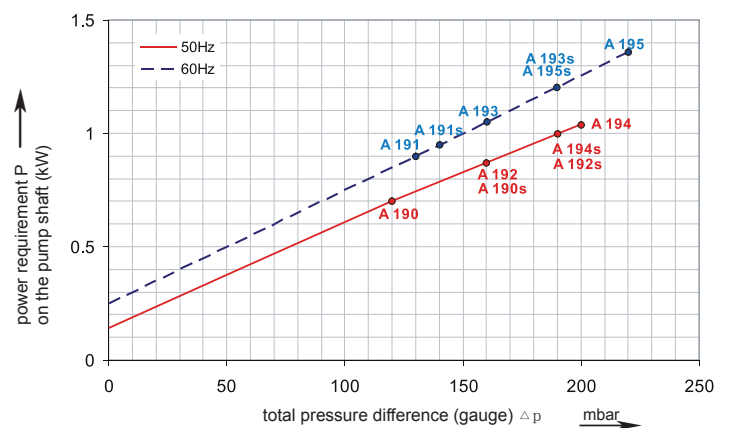
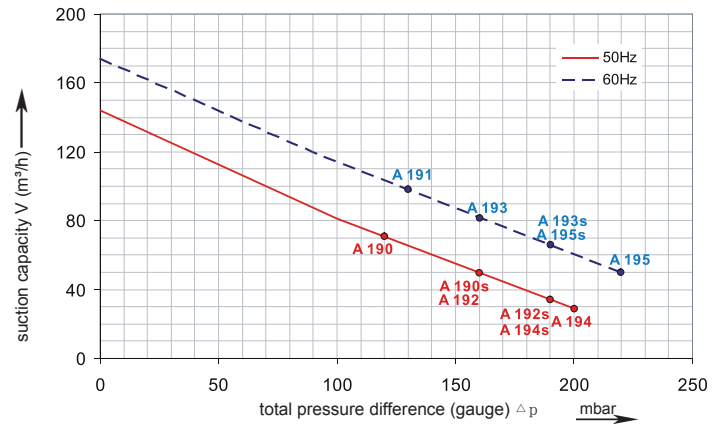
## 2HB

Performance curve for Vacuum pump



## 2HB 410

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 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.