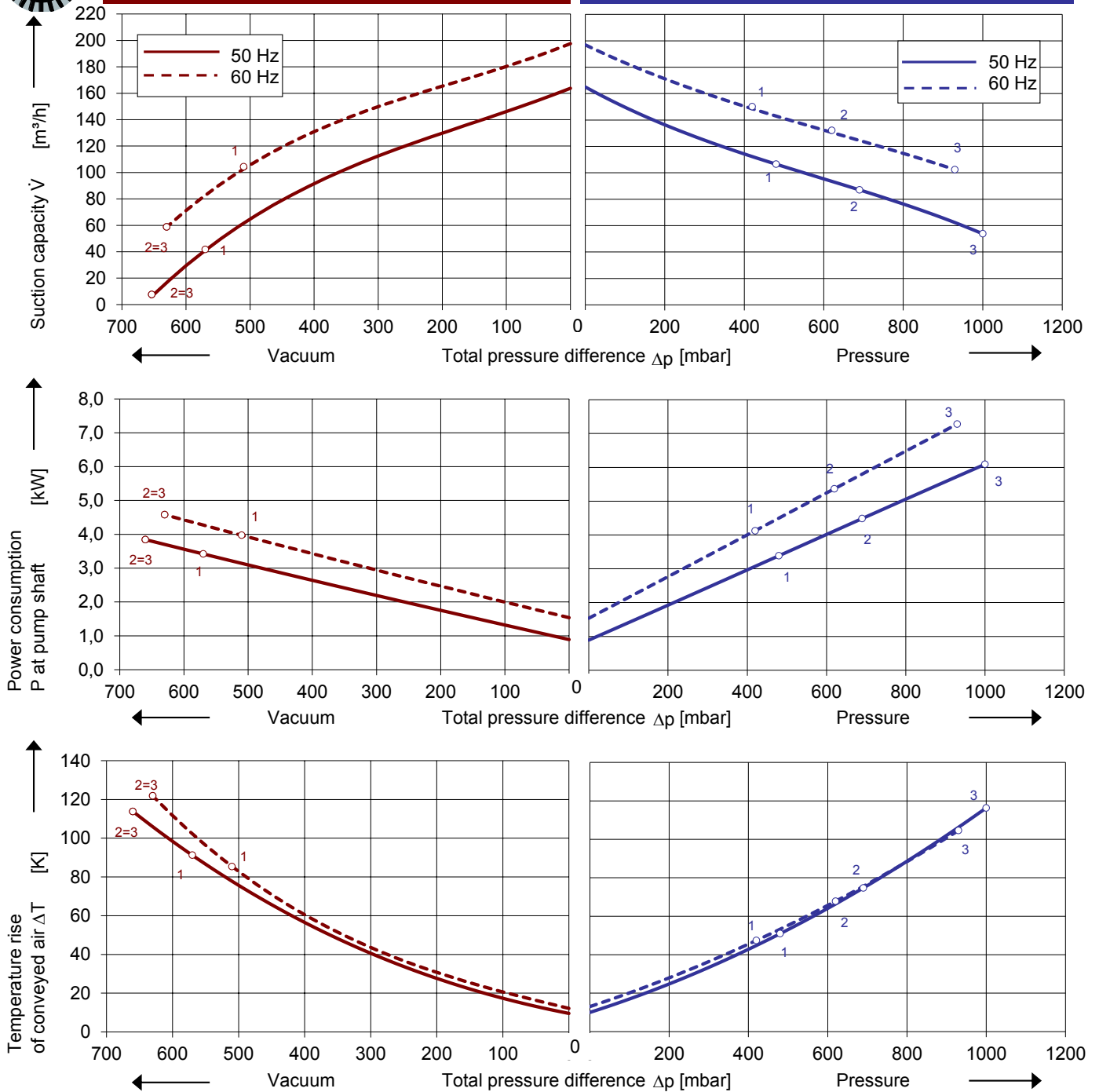


### Performance curves

#### Vacuum operation

#### Compressor operation



The performance curves are based on air at a temperature of 15 °C and an atmospheric pressure of 1013 mbar with a tolerance of  $\pm 10\%$ . The total pressure differences are valid for suction and ambient temperature up to 25 °C. For other conditions please get in touch with us.

Every pump can be used both as vacuum pump and compressor in continuous operation over the total performance curve range. The motors are available as standard in protection category IP 55 and insulation class F. The vacuum pumps / compressors are UL and CSA approved.

Selection and ordering data										
Type 4RB 620										
No.	Fre- quency Hz	Rated			Max. differential pressure <sup>2)</sup>		Sound pressure level <sup>3)</sup> dB(A)	Efficiency <sup>4)</sup>	Weight Approx. kg	Order No.
		Voltage <sup>1)</sup> V	Current A	Power kW	Vacuum mbar	Pressure				
<b>IE3 3~ 50/60 Hz, IP55, Insulation material class F (UL certificate number E481218)</b>										
1	50	190-210 Δ	13,3 Δ	3,45	-570	480	68	IE3	59	4RB 620-0AP21-1
	60	190-210 YY / 380-420 Y	15,2 YY / 7,6 Y	4,0	-510	420	72	IE3		
2	50	190-210 Δ	17,1 Δ	4,6	-660	690	66	IE3	66	4RB 620-0AP41-1
	60	190-210 YY / 380-420 Y	19,6 YY / 9,8 Y	5,3	-630	620	69	IE3		
3	50	190-210 Δ	23,5 Δ	6,3	-660	1000	70	IE3	74	4RB 620-0AP71-1
	60	190-210 YY / 380-420 Y	27,6 YY / 13,8 Y	7,3	-630	930	75	IE3		
<b>IE3 3~ 50/60 Hz, IP55, Insulation material class F (UL certificate number E481218)</b>										
1	50	220-240 Δ / 380-420 Y	11,6 Δ / 6,7 Y	3,45	-570	480	68	IE3	59	4RB 620-0AP26-1
	60	220-240 YY / 440-480 Y	13,2 YY / 6,6 Y	4,0	-510	420	72	IE3		
2	50	220-240 Δ / 380-420 Y	14,9 Δ / 8,6 Y	4,6	-660	690	66	IE3	66	4RB 620-0AP46-1
	60	220-240 YY / 440-480 Y	17,0 YY / 8,5 Y	5,3	-630	620	69	IE3		
3	50	220-240 Δ / 380-420 Y	20,4 Δ / 11,8 Y	6,3	-660	1000	70	IE3	74	4RB 620-0AP76-1
	60	220-240 YY / 440-480 Y	24,0 YY / 12,0 Y	7,3	-630	930	75	IE3		
<b>IE3 3~ 50/60 Hz, IP55, Insulation material class F (UL certificate number E481218)</b>										
1	50	380-420 Δ / 660-725 Y	6,7 Δ / 3,9 Y	3,45	-570	480	68	IE3	59	4RB 620-0AQ27-1
	60	440-480 Δ	6,6 Δ	4,0	-510	420	72	IE3		
2	50	380-420 Δ / 660-725 Y	8,6 Δ / 5,0 Y	4,6	-660	690	66	IE3	66	4RB 620-0AQ47-1
	60	440-480 Δ	8,5 Δ	5,3	-630	620	69	IE3		
3	50	380-420 Δ / 660-725 Y	11,8 Δ / 6,8 Y	6,3	-520	900	70	IE3	74	4RB 620-0AQ77-1
	60	440-480 Δ	12,0 Δ	7,3	-570	950	75	IE3		
<b>IE3 3~ 50/60 Hz, IP55, Insulation material class F (UL certificate number E481218)</b>										
1	50	220-240 Δ / 380-420 Y	11,6 Δ / 6,7 Y	3,45	-570	480	68	IE3	59	4RB 620-0AQ26-1
	60	440-480 Y	6,6 Y	4,0	-510	420	72	IE3		
2	50	220-240 Δ / 380-420 Y	14,9 Δ / 8,6 Y	4,6	-660	690	66	IE3	66	4RB 620-0AQ46-1
	60	440-480 Y	8,5 Y	5,3	-630	620	69	IE3		
3	50	220-240 Δ / 380-420 Y	20,4 Δ / 11,8 Y	6,3	-660	1000	70	IE3	74	4RB 620-0AQ76-1
	60	440-480 Y	12,0 Y	7,3	-630	930	75	IE3		

1) In case of frequency converter operation the standard motor insulation system is suitable for converter input voltages up to 500 V.

2) Relief valves available for limiting differential pressure.

3) 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 an average suction pressure, with piping connected, but no relief valves fitted, tolerance ±3 dB (A).

4) The motors according to NEMA MG1-12. NP=NEMA Premium; NEMA Premium includes IE3.

All pumps match the 2006/42/EC (machinery) and 2014/35/EU (low voltage) directives and the EN 60034 norm "Rotating electrical machines".

Service factor (SF) and motor efficiency according NEMA MG1-12.

Voltage tolerances for three phase motors are +/-10%.

The frequency tolerance is +/- 2 % maximum.

Motor for alternate voltages						
50 Hz		60Hz		Efficiency <sup>4)</sup>	60 Hz	4RB ... - ... □ . □ -1
3~ <sup>1)</sup>		2)				
200 VΔ	190-210 VΔ	200 V YY / 230 VΔ / 400 VY	190-210 VYY / 220-240 VΔ / 380-420VY	NEMA Premium IE3	•	P 1
200 V YY / 230 VΔ / 400 VY	190-210 VYY / 220-240 VΔ / 380-420VY	230 V YY / 460 VY	220-240 VYY / 440-480VY	NEMA Premium IE3	•	P 6
475-525 V Y	475-525 VΔ	550-600 V Y	550-600 VΔ	NEMA Premium IE3	•	Q 3
				NEMA Premium IE3	•	Q 5
220-240 VD / 380-420VY	400 VΔ / 690 V Y	440-480VY	460 VΔ	NEMA Premium IE3	•	Q 6
				NEMA Premium IE3	•	Q 7

Changes in particular of the quoted performance curve, data and weights may occur without prior notice. The data given do not constitute an obligation from our side to deliver as shown.