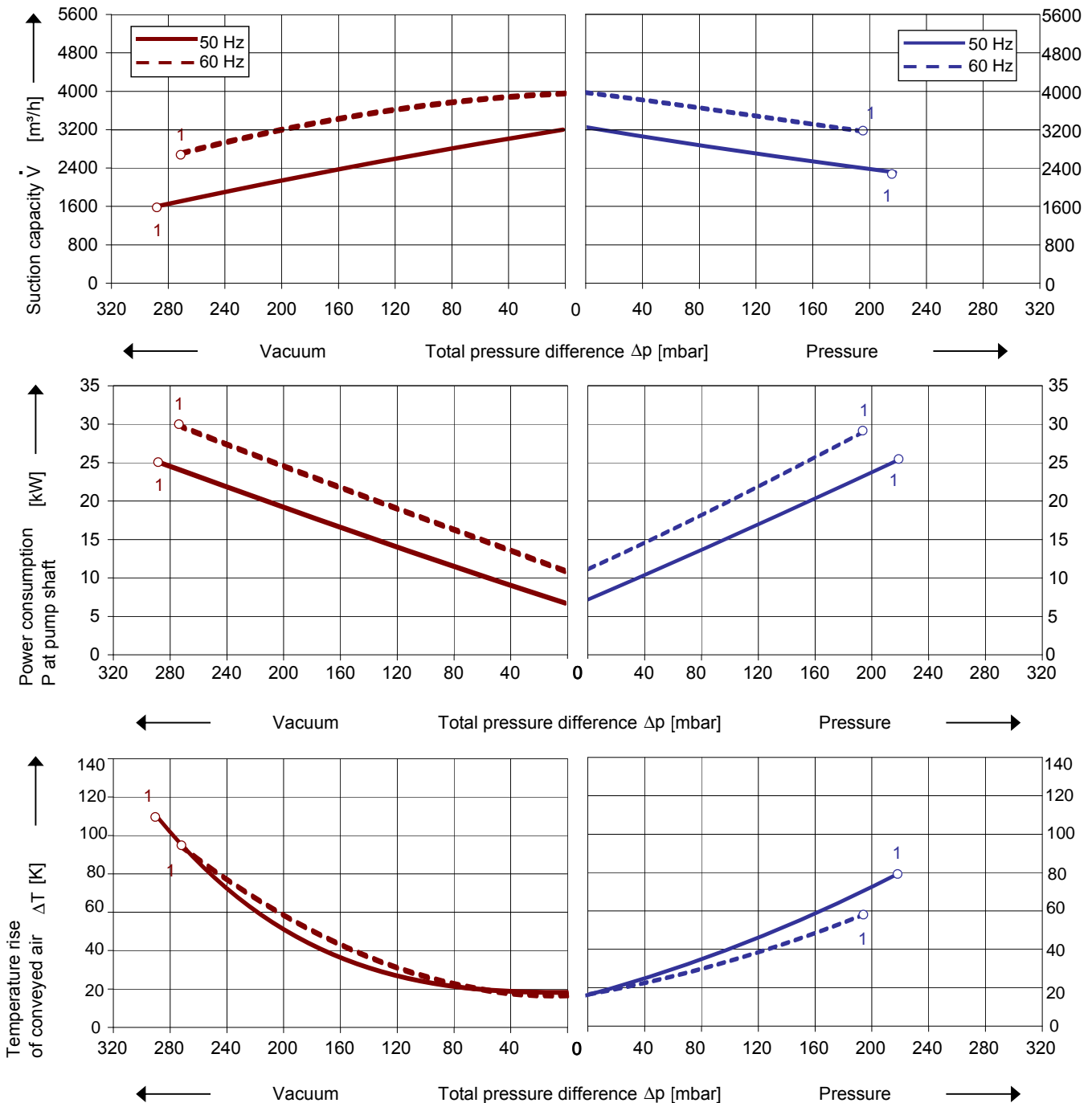


Performance curves

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 ± 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.

The performance curves are based on frequency converter operation and a pulse frequency of 4 kHz minimum. Rated voltage/frequency set point is 380 V / 87 Hz and delta connection of motor. Frequency converters must be connected to a mains voltage of 380 V minimum.

Selection and ordering data

Type 2RB 963

No.	Fre- quency Hz	Rated			Max. differential pressure ²⁾		Sound pres. ³⁾ Level dB(A)	Efficiency class ⁴⁾	Weight approx. kg	Order No.
		Voltage ¹⁾	Current	Power	Vacuum	Pressure				
		V	A	kW	mbar					
IE3 3~ 50/60 Hz, IP55, Insulation material class F										
1	50	190-210△	92,5△	25,3	-290	220	76	IE3	286	2RB 963-1BP11
	60	190-210 YY/380-420Y	107 YY/ 53,5Y	29,0	-270	190	82	IE3		
IE3 3~ 50/60 Hz, IP55, Insulation material class F										
1	50	220-240△ / 380-420 Y	80,5 △ / 46,5 Y	25,3	-290	220	76	IE3	286	2RB 963-1BP16
	60	220-240 YY / 440-480 Y	93,0 YY / 46,5Y	29,0	-270	190	82	IE3		
IE3 3~ 50/60 Hz, IP55, Insulation material class F										
1	50	380-420△ / 660-725 Y	46,5 △ / 26,8 Y	25,3	-290	220	76	IE3	286	2RB 963-1BQ17
	60	440-480△	46,5△	29,0	-270	190	82	IE3		
IE3 3~ 50/60 Hz, IP55, Insulation material class F										
1	50	220-240△ / 380-420 Y	80,5 △ / 46,5 Y	25,3	-290	220	76	IE3	286	2RB 963-1BQ16
	60	440-480 Y	46,5Y	29,0	-270	190	82	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

		Efficiency ⁴⁾	60 Hz	2RB ...-1. □ . □	
50 Hz	60Hz				
3~ ¹⁾		²⁾		³⁾	
200 V△	200 V YY / 230 V△ / 400 VY		•	P	1
190-210 V△	190-210 VYY / 220-240 V△ / 380-420VY	IE3	•		
200 V YY / 230 V△ / 400 VY	230 V YY / 460 VY		•	P	6
190-210 VYY / 220-240 V△ / 380-420VY	220-240 VYY / 440-480VY	IE3	•		
475-525 V Y	550-600 V Y		•	Q	3
475-525 V△	550-600 V△		•	Q	5
220-240 VD / 380-420VY	440-480VY	IE3	•	Q	6
400 V△ / 690 V Y	460 V△		•	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.