

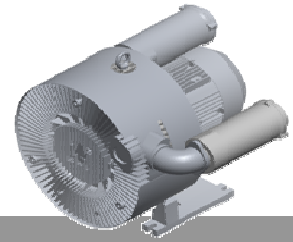


Elmo Rietschle

G-BH1

Data sheet 2BH1 810

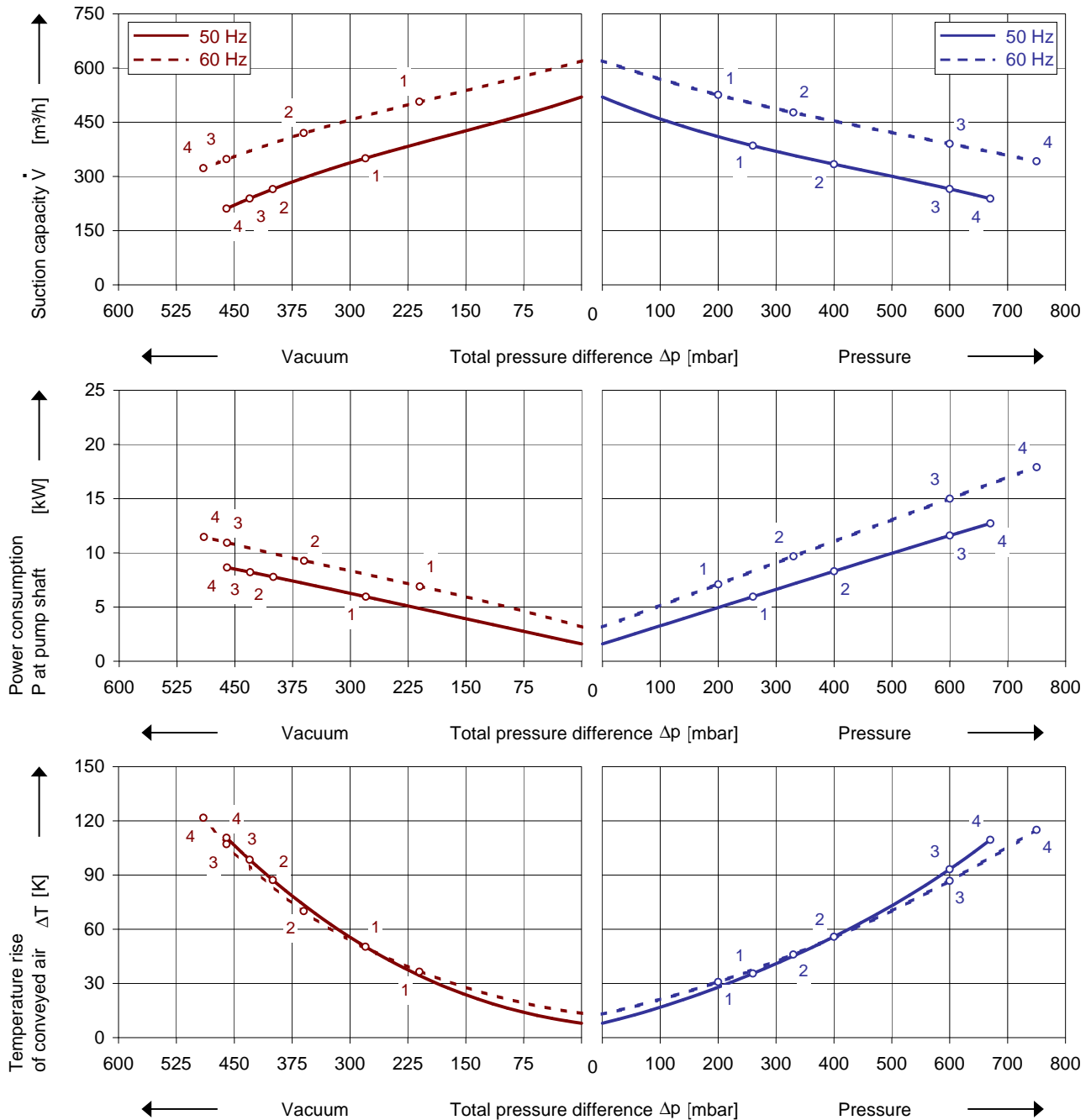
Side channel blower



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.

Every G-BH 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 2BH1 810

No.	Fre- quency Hz	Rated			Max. differential pressure ²⁾		Sound pressure level ³⁾ dB(A)	Weight Approx. kg	Order No.
		Voltage ¹⁾ V	Current A	Power kW	Vacuum	Pressure			
					mbar				
3~ 50/60 Hz, IP55, Insulation material class F, UL 507 and CSA 22.2 No 113 (certificate number E225239)									
1	50	345-415 Δ / 600-720 Y	13.3 Δ / 7.7 Y	5.5	-280	260	74	171	2BH1810-7HH17
	60	380-480 Δ	13.3 Δ	6.3	-210	200	78		
2	50	345-415 Δ / 600-720 Y	16.7 Δ / 9.6 Y	7.5	-400	400	74	177	2BH1810-7HH27
	60	380-480 Δ	17.3 Δ	8.6	-360	330	78		
3	50	345-415 Δ / 600-720 Y	28.0 Δ / 16.2 Y	11.0	-430	600	74	203	2BH1810-7HH37
	60	380-480 Δ	29.0 Δ	12.6	-460	600	78		
4	50	345-415 Δ / 600-720 Y	32.5 Δ / 18.8 Y	15.0	-460	670	74	215	2BH1810-7HH47
	60	380-480 Δ	34.5 Δ	17.3	-490	750	78		
3~ 50/60 Hz, IP55, Insulation material class F, UL 507 and CSA 22.2 No 113 (certificate number E225239)									
1	50	500 Δ	10.5 Δ	5.5	-280	260	74	171	2BH1810-7HC15
	60	575 Δ	10.4 Δ	6.3	-210	200	78		
2	50	500 Δ	13.0 Δ	7.5	-400	400	74	177	2BH1810-7HC25
	60	575 Δ	13.6 Δ	8.6	-360	330	78		
3	50	500 Δ	20.4 Δ	11.0	-430	600	74	203	2BH1810-7HC35
	60	575 Δ	20.4 Δ	12.6	-460	600	78		
4	50	500 Δ	24.0 Δ	15.0	-460	670	74	215	2BH1810-7HC45
	60	575 Δ	24.5 Δ	17.3	-490	750	78		

1) In case of frequency converter operation the standard motor insulation system is suitable for converter input voltages up to 460 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).


All G-BH match the 2006/42/EC (machinery) and 2006/95/EC (low voltage) directives and the EN 60034-1 norm "Rotating electrical machines".

The motors comply with EN 60 034-1 / -2 / -30 (IEC 60034) and thermal class F.

For three phase motors tolerances are +/-10% for fixed voltage motors and +/-5% for voltage range motors. Single phase machines are designed with a +/- 5% tolerance.

The frequency tolerance is +/- 2 % maximum.

Motors for other mains

Voltage range		Fixed voltage		VFD			
50 Hz	60 Hz	50 Hz	60 Hz	87 Hz	60 Hz	2BH1810-7. □ . □	
					Δ	Y	
3~							
185 - 225 V Δ / 320 - 390 V Y	200 - 240 V Δ / 345 - 415 V Y			380 V Δ	•	•	H H H C C
200 - 240 V Δ / 345 - 415 V Y	220 - 275 V Δ / 380 - 480 V Y				•	•	
345 - 415 V Δ / 600 - 720 V Y	380 - 480 V Δ / 660 - 720 V Y				•	•	
		500 V Δ	575 V Δ		•	•	
3~							
		IE2 3~ ⁵⁾					
180 - 240 V Δ / 310 - 415 V Y	200 - 275 V Δ / 345 - 480 V Y	200 V Δ / 345 V Y	230 V Δ / 400 V Y	400 V Δ	•	•	P P P P
450 - 550 V Y	520 - 600 V Y	500 V Y	575 V Y		•	•	
450 - 550 V Δ	520 - 600 V Δ	500 V Δ	575 V Δ		•	•	
200 - 260 V Δ / 350 - 450 V Y	230 - 290 V Δ / 400 - 500 V Y	230 V Δ / 400 V Y	265 V Δ / 460 V Y		•	•	
350 - 450 V Δ / 610 - 725 V Y	400 - 500 V Δ / 690 - 725 V Y	400 V Δ / 690 V Y	460 V Δ	•	•		

5) Performance can differ if IE2 motors are used. Please refer to corresponding data sheets.

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.

Elmo Rietschle is a brand of Gardner Denver

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