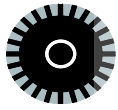
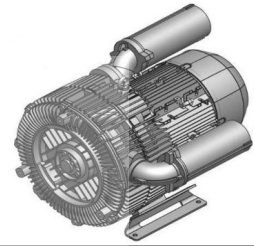


G-BH1

Data sheet 2BH1 810

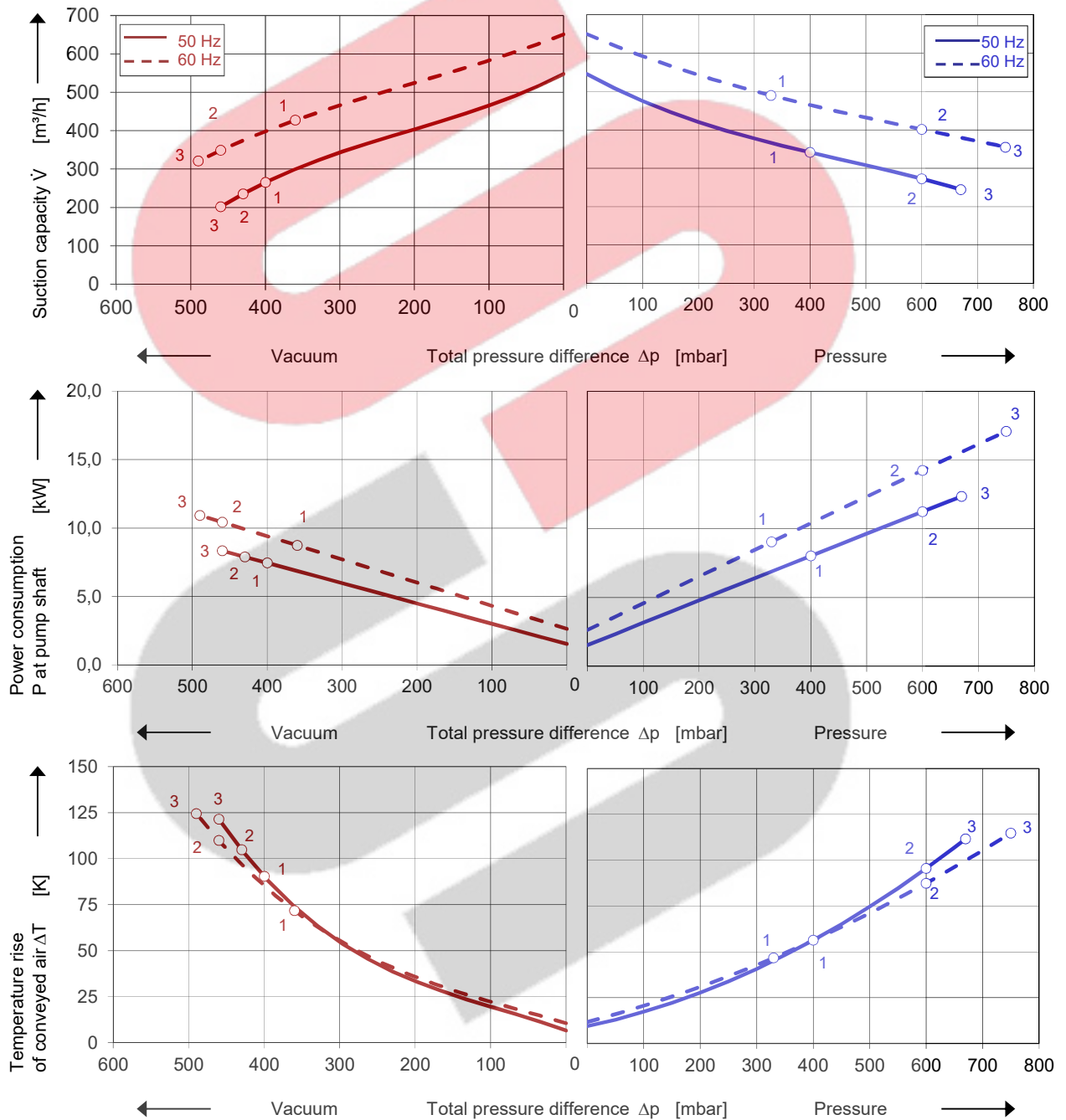
Side channel blower



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 $\pm 10\%$. 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 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		Sound pressure level dB(A) ³⁾	Weight Approx. kg	Order No.
		Voltage V ¹⁾	Current A	Power kW	Vacuum mbar ²⁾	Pressure			
3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 and CNA/CSA 22.2 No 68-09 (certificate number E225239)									
1	50	345-415 Δ / 600-720 Y	16,7 Δ / 9,6 Y	7,5	-400	400	71	157	2BH1810-1HH27
	60	380-480 Δ	17,3 Δ	8,6	-360	330	76		
2	50	345-415 Δ / 600-720 Y	28 Δ / 16,2 Y	11,0	-430	600	71	172	2BH1810-1HH37
	60	380-480 Δ	29 Δ	12,6	-460	600	76		
3	50	345-415 Δ / 600-720 Y	32,5 Δ / 18,8 Y	15,0	-460	670	71	181	2BH1810-1HH47
	60	380-480 Δ	34,5 Δ	17,3	-490	750	76		
3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 and CNA/CSA 22.2 No 68-09 (certificate number E225239)									
1	50	500 Y	13,0 Y	7,5	-400	400	71	157	2BH1810-1HC23
	60	575 Y	13,6 Y	8,6	-360	330	76		
2	50	500 Y	20,3 Y	11,0	-430	600	71	172	2BH1810-1HC33
	60	575 Y	20,4 Y	12,6	-460	600	76		
3	50	500 Y	24,0 Y	15,0	-460	670	71	181	2BH1810-1HC43
	60	575 Y	24,5 Y	17,3	-490	750	76		

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 2014/35/EU (low voltage) directives and the EN 60034 norm "Rotating electrical machines".

The motors comply with EN 60 034 (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.

Motor for alternate voltages [V]

Voltage range		Fixed voltage		VFD	c 		
50 Hz	60 Hz	50 Hz	60 Hz	87 Hz	60 Hz	2BH1810.. □ . □	
					Δ Y		
3~							
185 - 225 Δ / 320 - 390 Y	200 - 240 Δ / 345 - 415 Y			380 Δ	•	H	1
200 - 240 Δ / 345 - 415 Y	220 - 275 Δ / 380 - 480 Y				•	H	6
345 - 415 Δ / 600 - 720 Y	380 - 480 Δ / 660 - 720 Y				•	H	7
		500 Y	575 Y		•	C	3
		500 Δ	575 Δ		•	C	5
Voltage range				efficiency degree ⁴⁾	c 		
50 Hz	60 Hz			60 Hz	2BH1810..	□ . □	
3~ IE3  ⁵⁾							
200 Δ	200 YY / 230 Δ / 400 Y				•	K	1
190-210 Δ	190-210 YY / 220-240 Δ / 380-420 Y			IE3	•	K	6
200 YY / 230 Δ / 400 Y	230 YY / 460 Y				•	K	6
190-210 YY / 220-240 Δ / 380-420 Y	220-240 YY / 440-480 Y			IE3	•	K	6
475-525 V Y	550-600 V Y				•	Q	3
475-525 V Δ	550-600 V Δ				•	Q	5
400 V Δ / 690 V Y	460 V Δ				•	Q	7

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

5) Performance can differ if IE3/NP 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 does not constitute an obligation from our side to deliver as shown.

Gardner Denver Deutschland GmbH

Gardner Denver Schopfheim GmbH

