

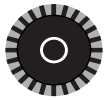
G-BH 1 N

Data sheet 2BH1 510

Side channel blower with IE3-motors

IE3

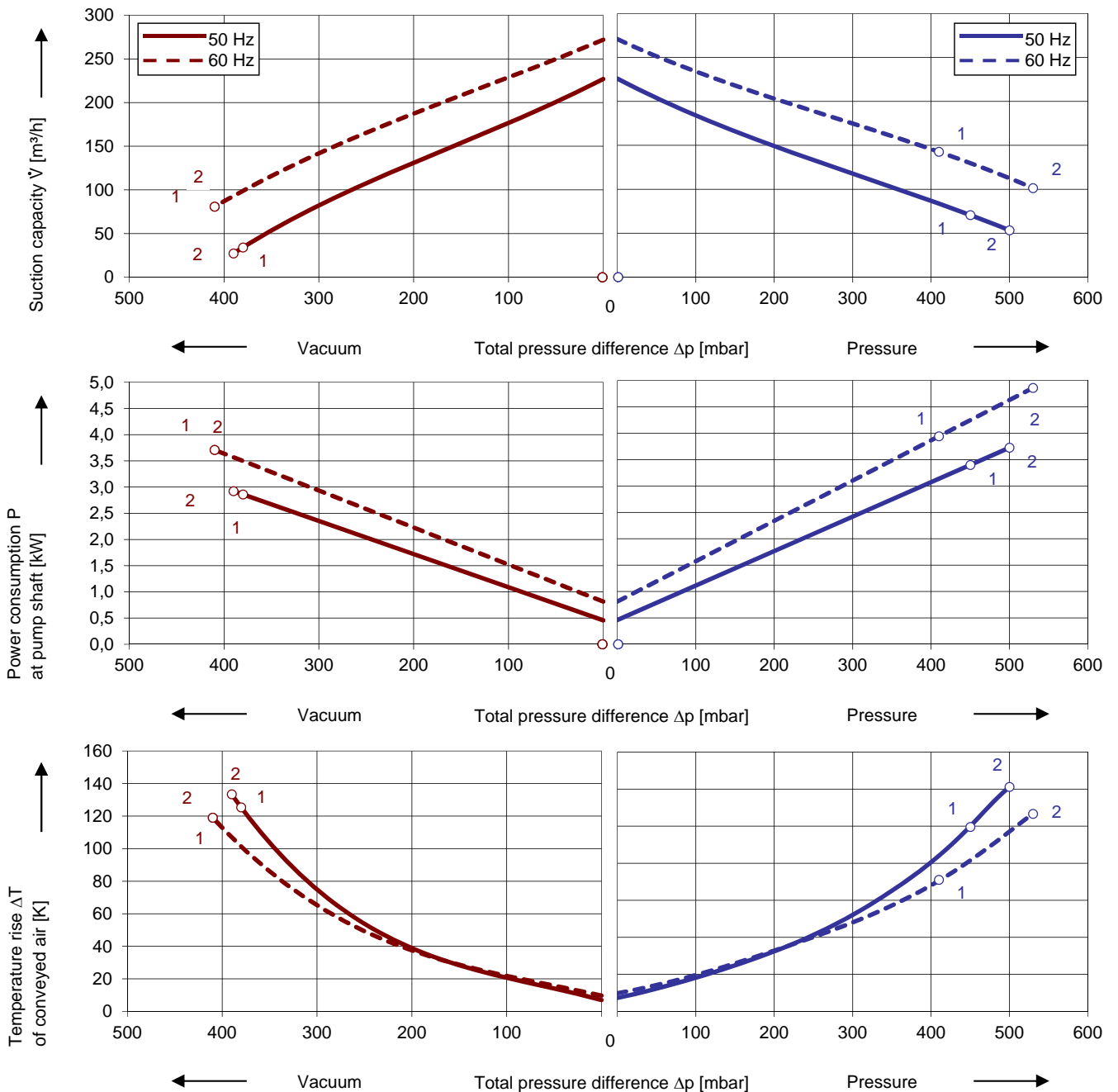
UL [®] **US**



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										
No.	Fre- quency	Rated			Max. differential pressure ²⁾		Sound pres. Level ³⁾	Efficiency class ⁴⁾	Weight approx.	Order No.
		Voltage ¹⁾	Current	Power	Vacuum	Pressure				
		Hz	V	A	kW	mbar				
IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1004 and CNA/CSA 22.2 No 68-09 (certificate number E225239)										
1	50	190-210 Δ	13,3 Δ	3,45	-380	450	72	IE3	53	2BH1510-1HK41
	60	190-210 YY / 380-420 Y	15,0 YY / 7,5 Y	4,0	-410	410	74	IE3		
	60	200 YY	15,0 YY	4,0	-410	410	74	NP		
2	50	190-210 Δ	17,1 Δ	4,6	-390	550	72	IE3	63	2BH1510-1HK61
	60	190-210 YY / 380-420 Y	19,4 YY / 9,7 Y	5,3	-420	530	74	IE3		
	60	200 YY	19,4 YY	5,3	-420	530	74	NP		
IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1004 and CNA/CSA 22.2 No 68-09 (certificate number E225239)										
1	50	220-240 Δ / 380-420 Y	11,6 Δ / 6,7 Y	3,45	-380	450	72	IE3	53	2BH1510-1HK46
	60	220-240 YY / 440-480 Y	13,0 YY / 6,5 Y	4,0	-410	410	74	IE3		
	60	230 YY / 460 Y	13,0 YY / 6,5 Y	4,0	-410	410	74	NP		
2	50	220-240 Δ / 380-420 Y	14,9 Δ / 8,6 Y	4,6	-390	550	72	IE3	63	2BH1510-1HK66
	60	220-240 YY / 440-480 Y	16,8 YY / 8,4 Y	5,3	-420	530	74	IE3		
	60	230 YY / 460 Y	16,8 YY / 8,4 Y	5,3	-420	530	74	NP		
IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1004 and CNA/CSA 22.2 No 68-09 (certificate number E225239)										
1	50	500 Y	5,4 Y	3,45	-380	450	72	IE3	53	2BH1510-1HQ43
	60	575 Y	5,2 Y	4,00	-410	410	74	NP		
2	50	500 Y	6,8 Y	4,6	-390	550	72	IE3	63	2BH1510-1HQ63
	60	575 Y	6,7 Y	5,3	-420	530	74	NP		
IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1004 and CNA/CSA 22.2 No 68-09 (certificate number E225239)										
1	50	380-420 Δ / 660-725 Y	6,7 Δ / 3,85 Y	3,45	-380	450	72	IE3	53	2BH1510-1HQ47
	60	440-480 Δ	6,5 Δ	4,0	-410	410	74	IE3		
	60	460 Δ	6,5 Δ	4,0	-410	410	74	NP		
2	50	380-420 Δ / 660-725 Y	8,6 Δ / 5,0 Y	4,6	-390	550	72	IE3	63	2BH1510-1HQ67
	60	440-480 Δ	8,4 Δ	5,3	-420	530	74	IE3		
	60	460 Δ	8,4 Δ	5,3	-420	530	74	NP		

- 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 G-BH match the 2006/42/EC (machinery) and 2006/95/EC (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.

Voltage range		Efficiency ⁴⁾	c US	60 Hz	
50 Hz	60Hz			2BH1...-1.	<input type="checkbox"/>
3~					
200 VΔ	200 V YY / 230 VΔ / 400 VY		•	K	1
190-210 VΔ	190-210 VYY / 220-240 VΔ / 380-420VY		•	K	6
200 VΔ / 230 VΔ / 400 VY	230 V YY / 460 VY		•	K	6
190-210 VYY / 220-240 VΔ / 380-420VY	220-240 VYY / 440-480VY		•	K	6
475-525 V Y	550-600 V Y		•	Q	3
475-525 VΔ	550-600 VΔ		•	Q	5
400 VΔ / 690 V Y	460 VΔ		•	Q	7

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.

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