

G-BH 1 N Data sheet 2BH1 500

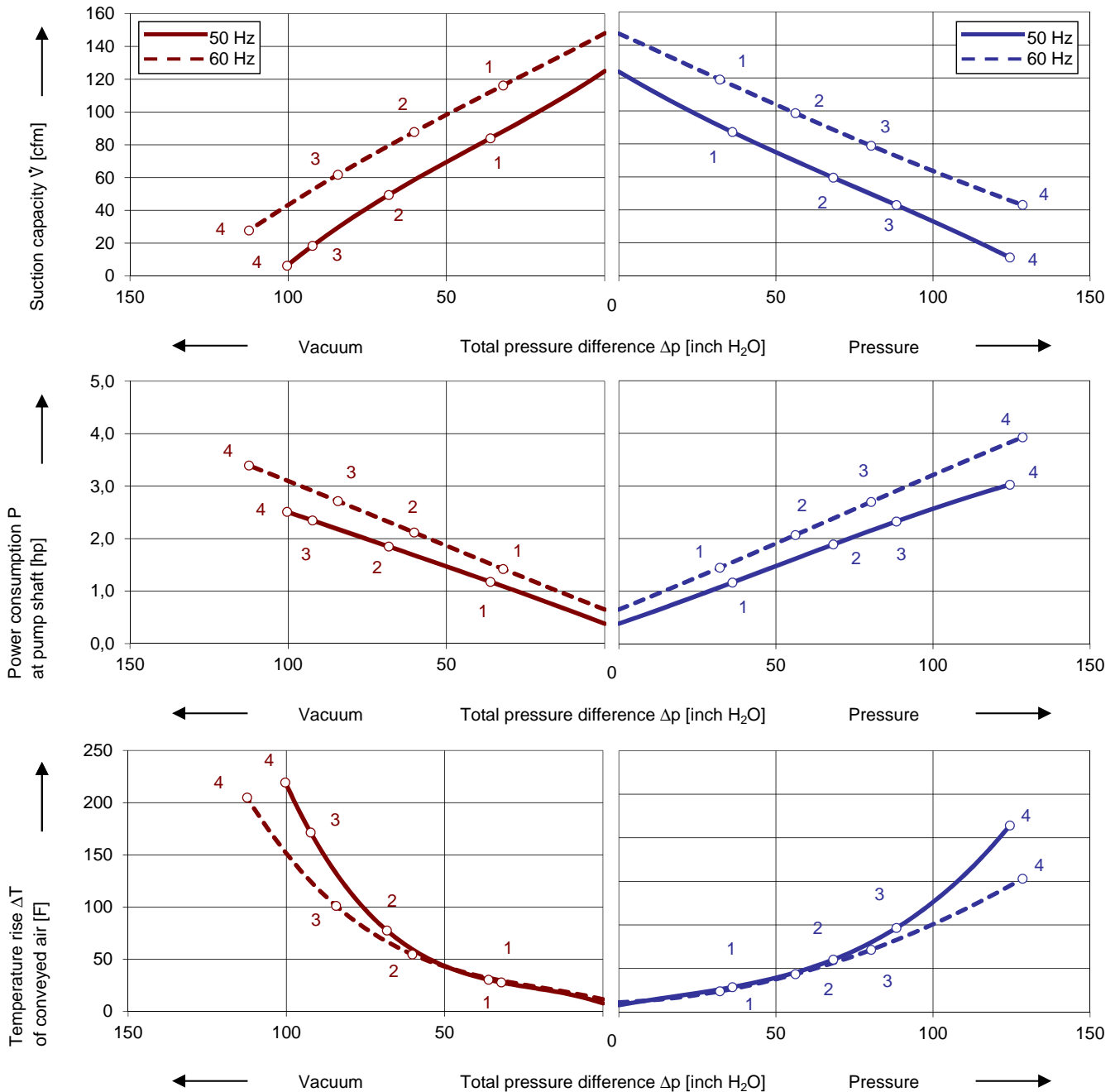
Side channel blower with NEMA Premium motor



Performance curves

Vacuum operation (acfm)

Pressure operation (scfm)



The performance curves are based on air at a temperature of 59 F and an atmospheric pressure of 29.92 inch Hg with a tolerance of $\pm 10\%$. The total Suction capacity relates to inlet conditions. Pressure capacity relates to atmospheric conditions. For other conditions please contact Elmo Rietschle.

Every G-BH blower can be used either for vacuum or pressure in continuous operation over the total performance curve range. The standard motors have a protection category of IP 55 and insulation class F. These blowers are UL and CSA approved.

Selection and ordering data

Type											
No.	Fre- quency	Rated			Max. differential ²⁾ pressure		sound press. level ³⁾	Efficiency class ⁴⁾	Weight approx.	Order No.	
		Voltage ¹⁾	Current	Power	Vacuum	Pressure					
		Hz	V	A	hp	inch H ₂ O					dB(A)
IE3 3- 50/60 Hz, IP55, Insulation material class F, UL 1450 (certificate number E225239)											
1	50	190-210 Δ	4,15 Δ	1,3	-36	36		IE3	53	2BH1500-1AK01	
	60	190-210 YY / 380-420 Y	4,8 YY / 2,4 Y	1,5	-32	32		IE3			
	60	200 YY	4,8 YY	1,5	-32	32		NP			
2	50	190-210 Δ	5,6 Δ	1,7	-68	68	60	IE3	57	2BH1500-1AK11	
	60	190-210 YY / 380-420 Y	6,3 YY / 3,16 Y	2,1	-60	56	69	IE3			
	60	200 YY	6,3 YY	2,1	-60	56	69	NP			
3	50	190-210 Δ	6,9 Δ	2,3	-92	88	64	IE3	66	2BH1500-1AK21	
	60	190-210 YY / 380-420 Y	7,8 YY / 3,9 Y	2,7	-84	80	72	IE3			
	60	200 YY	7,8 YY	2,7	-84	80	72	NP			
4	50	190-210 Δ	9,9 Δ	3,4	-100	124	69	IE3	75	2BH1500-1AK31	
	60	190-210 YY / 380-420 Y	12,0 YY / 6,0 Y	4,0	-112	128	70	IE3			
	60	200 YY	12,0 YY	4,0	-112	128	70	NP			
IE3 3- 50/60 Hz, IP55, Insulation material class F, UL 1450 (certificate number E225239)											
1	50	220-240 Δ / 380-420 Y	3,65 Δ / 2,10 Y	1,3	-36	36		IE3	53	2BH1500-1AK06	
	60	220-240 YY / 440-480 Y	4,2 YY / 2,1 Y	1,5	-32	32		IE3			
	60	230 YY / 460 Y	4,2 YY / 2,1 Y	1,5	-32	32		NP			
2	50	220-240 Δ / 380-420 Y	4,9 Δ / 2,85 Y	1,7	-68	68	60	IE3	57	2BH1500-1AK16	
	60	220-240 YY / 440-480 Y	5,5 YY / 2,75 Y	2,1	-60	56	69	IE3			
	60	230 YY / 460 Y	5,5 YY / 2,75 Y	2,1	-60	56	69	NP			
3	50	220-240 Δ / 380-420 Y	6,0 Δ / 3,45 Y	2,3	-92	88	64	IE3	66	2BH1500-1AK26	
	60	220-240 YY / 440-480 Y	6,8 YY / 3,4 Y	2,7	-84	80	72	IE3			
	60	230 YY / 460 Y	6,8 YY / 3,4 Y	2,7	-84	80	72	NP			
4	50	220-240 Δ / 380-420 Y	8,6 Δ / 5,0 Y	3,4	-100	124	69	IE3	75	2BH1500-1AK36	
	60	220-240 YY / 440-480 Y	10,4 YY / 5,2 Y	4,0	-112	128	70	IE3			
	60	230 YY / 460 Y	10,4 YY / 5,2 Y	4,0	-112	128	70	NP			
IE3 3- 50/60 Hz, IP55, Insulation material class F, UL 1450 (certificate number E225239)											
1	50	475-525 Y	1,68 Y	1,3	-36	36		IE3	57	2BH1500-1AQ03	
	60	550-600 Y	1,68 Y	1,5	-32	32		NP			
2	50	475-525 Y	2,28 Y	1,7	-68	68	60	IE3	64	2BH1500-1AQ13	
	60	550-600 Y	2,20 Y	2,1	-60	56	69	NP			
3	50	475-525 Y	2,76 Y	2,3	-92	88	64	IE3	71	2BH1500-1AQ23	
	60	550-600 Y	2,72 Y	2,7	-84	80	72	NP			
4	50	475-525 Y	4,00 Y	3,4	-100	124	69	IE3	87	2BH1500-1AQ33	
	60	550-600 Y	4,1 Y	4,0	-112	128	70	NP			
IE3 3- 50/60 Hz, IP55, Insulation material class F, UL 1450 (certificate number E225239)											
1	50	380-420 Δ / 660-725 Y	2,10 Δ / 1,21 Y	1,3	-36	36		IE3	57	2BH1500-1AQ07	
	60	440-480 Δ	2,10 Δ	1,5	-32	32		IE3			
	60	460 Δ	2,10 Δ	1,5	-32	32		NP			
2	50	380-420 Δ / 660-725 Y	2,85 Δ / 1,65 Y	1,7	-68	68	60	IE3	64	2BH1500-1AQ17	
	60	440-480 Δ	2,75 Δ	2,1	-60	56	69	IE3			
	60	460 Δ	2,75 Δ	2,1	-60	56	69	NP			
3	50	380-420 Δ / 660-725 Y	3,45 Δ / 2,00 Y	2,3	-92	88	64	IE3	71	2BH1500-1AQ27	
	60	440-480 Δ	3,4 Δ	2,7	-84	80	72	IE3			
	60	460 Δ	3,4 Δ	2,7	-84	80	72	NP			
4	50	380-420 Δ / 660-725 Y	5,0 Δ / 2,90 Y	3,4	-100	124	69	IE3	87	2BH1500-1AQ37	
	60	440-480 Δ	5,2 Δ	4,0	-112	128	70	IE3			
	60	460 Δ	5,2 Δ	4,0	-112	128	70	NP			

- 1) In case of variable frequency drive operation the standard motor insulation system is suitable for VFD input voltages up to 500 V.
- 2) Relief valves available for limiting differential pressure.
- 3) Surface sound pressure levels are according 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 blowers conform to 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.

Motor for alternate voltages

Voltage range		Efficiency ⁴⁾	c us		
50 Hz	60Hz			60 Hz	2BH1...-1. <input type="checkbox"/> . <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	IE3	•		K 1
200 V YY / 230 VΔ / 400 VY	230 V YY / 460 VY		•		K 6
190-210 VYY / 220-240 VΔ / 380-420VY	220-240 VYY / 440-480VY	IE3	•		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.

Elmo Rietschle is a brand of Gardner Denver

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