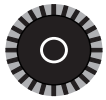


G-BH 1 N

Data sheet 2BH1 900

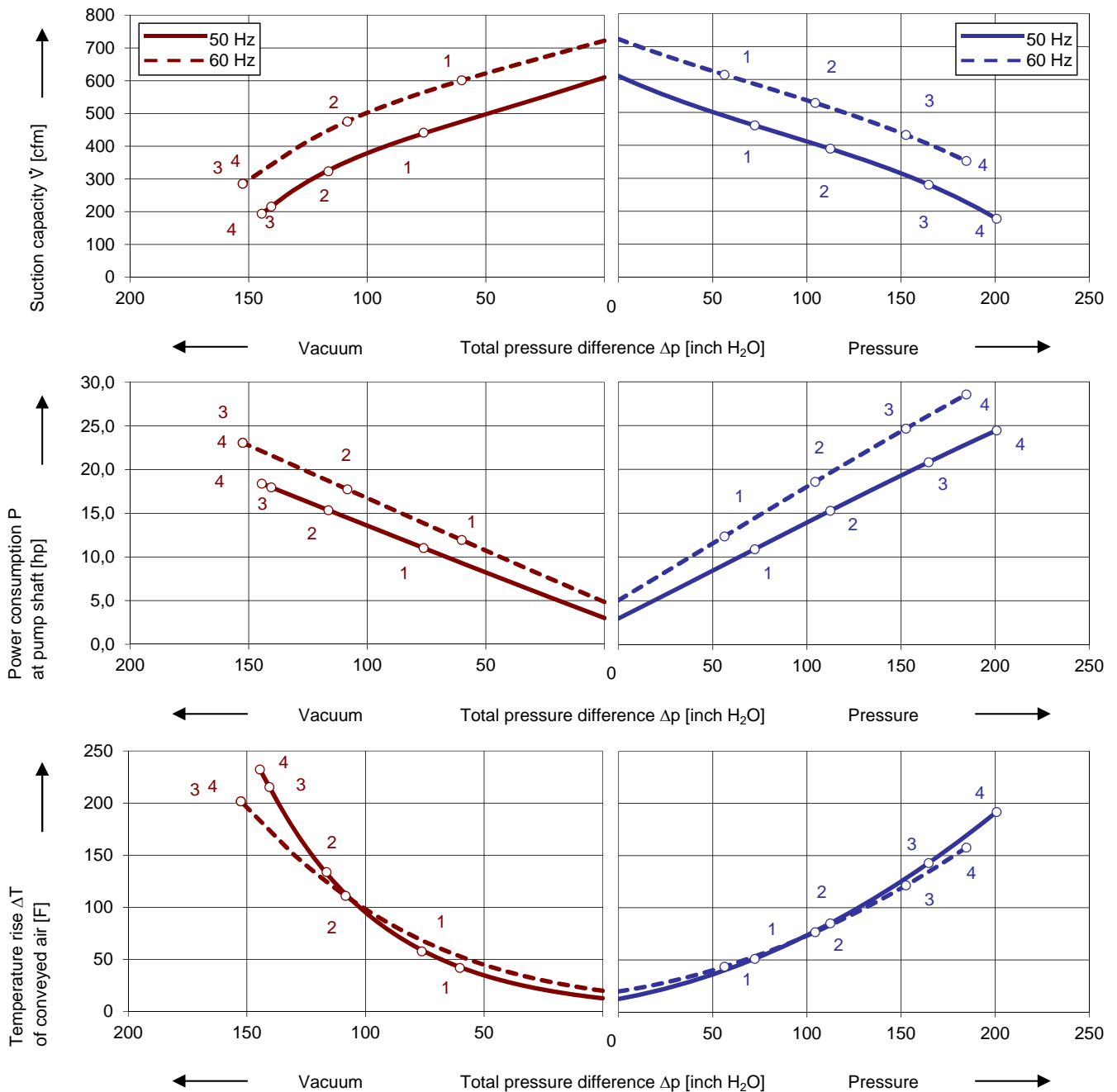
Side channel blower with NEMA Premium motor



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.	Frequency Hz	Rated			Max. differential ²⁾ pressure		sound press. level ³⁾ dB(A)	Efficiency class ⁴⁾	Weight approx. lbs	Order No.	
		Voltage ¹⁾ V	Current A	Power hp	Vacuum	Pressure					
					inch H ₂ O						
IE3 3- 50/60 Hz, IP55, Insulation material class F, UL 1450 (certificate number E225239)											
1	50	190-210 Δ	30,8 Δ	11,5	-76	72	74	IE3	397	2BH1900-1AK01	
	60	190-210 YY / 380-420 Y	35,2 YY / 17,6 Y	13,3	-60	56	79	IE3			
	60	200 YY	35,2 YY	13,3	-60	56	79	NP			
2	50	190-210 Δ	46,4 Δ	16,9	-116	112	74	IE3	441	2BH1900-1AK11	
	60	190-210 YY / 380-420 Y	52,8 YY / 26,4 Y	19,4	-108	104	79	IE3			
	60	200 YY	52,8 YY	19,4	-108	104	79	NP			
3	50	190-210 Δ	63,1 Δ	23,2	-141	165	74	IE3	463	2BH1900-1AK21	
	60	190-210 YY / 380-420 Y	72,2 YY / 36,1 Y	26,7	-153	153	79	IE3			
	60	200 YY	72,2 YY	26,7	-153	153	79	NP			
4	50	190-210 Δ	76,2 Δ	28,6	-145	201	74	IE3	489	2BH1900-1AK31	
	60	190-210 YY / 380-420 Y	87,4 YY / 43,7 Y	32,9	-153	185	79	IE3			
	60	200 YY	87,4 YY	32,9	-153	185	79	NP			
IE3 3- 50/60 Hz, IP55, Insulation material class F, UL 1450 (certificate number E225239)											
1	50	220-240 Δ / 380-420 Y	26,8 Δ / 15,5 Y	11,5	-76	72	74	IE3	397	2BH1900-1AK06	
	60	220-240 YY / 440-480 Y	30,6 YY / 15,3 Y	13,3	-60	56	79	IE3			
	60	230 YY / 460 Y	30,6 YY / 15,3 Y	13,3	-60	56	79	NP			
2	50	220-240 Δ / 380-420 Y	40,3 Δ / 23,3 Y	16,9	-116	112	74	IE3	441	2BH1900-1AK16	
	60	220-240 YY / 440-480 Y	46,0 YY / 23,0 Y	19,4	-108	104	79	IE3			
	60	230 YY / 460 Y	46,0 YY / 23,0 Y	19,4	-108	104	79	NP			
3	50	220-240 Δ / 380-420 Y	54,9 Δ / 31,7 Y	23,2	-141	165	74	IE3	463	2BH1900-1AK26	
	60	220-240 YY / 380-420 Y	62,8 YY / 31,4 Y	26,7	-153	153	79	IE3			
	60	230 YY / 460 Y	62,8 YY / 31,4 Y	26,7	-153	153	79	NP			
4	50	220-240 Δ / 380-420 Y	66,3 Δ / 38,3 Y	28,6	-145	201	74	IE3	489	2BH1900-1AK36	
	60	220-240 YY / 440-480 Y	76,0 YY / 38,0 Y	32,9	-153	185	79	IE3			
	60	230 YY / 460 Y	76,0 YY / 38,0 Y	32,9	-153	185	79	NP			
IE3 3- 50/60 Hz, IP55, Insulation material class F, UL 1450 (certificate number E225239)											
1	50	475-525 Y	12,4 Y	11,5	-76	72	74	IE3	397	2BH1900-1AQ03	
	60	550-600 Y	12,2 Y	13,3	-60	56	79	NP			
	50	475-525 Y	18,6 Y	16,9	-116	112	74	IE3			
2	60	550-600 Y	18,4 Y	19,4	-108	104	79	NP	441	2BH1900-1AQ13	
	50	475-525 Y	25,4 Y	23,2	-141	165	74	IE3			
	60	550-600 Y	25,1 Y	26,7	-153	153	79	NP			
3	50	475-525 Y	30,6 Y	28,6	-145	201	74	IE3	463	2BH1900-1AQ23	
	60	550-600 Y	30,4 Y	32,9	-153	185	79	NP			
	50	475-525 Y	30,4 Y	32,9	-153	185	79	NP			
IE3 3- 50/60 Hz, IP55, Insulation material class F, UL 1450 (certificate number E225239)											
1	50	380-420 Δ / 660-725 Y	15,5 Δ / 8,9 Y	11,5	-76	72	74	IE3	397	2BH1900-1AQ07	
	60	440-480 Δ	15,3 Δ	13,3	-60	56	79	IE3			
	60	460 Δ	15,3 Δ	13,3	-60	56	79	NP			
2	50	380-420 Δ / 660-725 Y	23,3 Δ / 13,4 Y	16,9	-116	112	74	IE3	441	2BH1900-1AQ17	
	60	440-480 Δ	23,0 Δ	19,4	-108	104	79	IE3			
	60	460 Δ	23,0 Δ	19,4	-108	104	79	NP			
3	50	380-420 Δ / 660-725 Y	31,7 Δ / 18,3 Y	23,2	-141	165	74	IE3	463	2BH1900-1AQ27	
	60	440-480 Δ	31,4 Δ	26,7	-153	153	79	IE3			
	60	460 Δ	31,4 Δ	26,7	-153	153	79	NP			
4	50	380-420 Δ / 660-725 Y	38,3 Δ / 22,1 Y	28,6	-145	201	74	IE3	489	2BH1900-1AQ37	
	60	440-480 Δ	38,0 Δ	32,9	-153	185	79	IE3			
	60	460 Δ	38,0 Δ	32,9	-153	185	79	NP			

- In case of variable frequency drive operation the standard motor insulation system is suitable for VFD input voltages up to 500 V.
- Relief valves available for limiting differential pressure.
- 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).
- 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⁾	UL	
50 Hz	60Hz		60 Hz	2BH1...-1
3~				
200 VΔ	200 V YY / 230 VΔ / 400 VY	NEMA Premium IE3	•	K 1
190-210 VΔ	190-210 VYY / 220-240 VΔ / 380-420VY			
200 V YY / 230 VΔ / 400 VY	230 V YY / 460 VY	NEMA Premium IE3	•	K 6
190-210 VYY / 220-240 VΔ / 380-420VY	220-240 VYY / 440-480VY			
475-525 V Y	550-600 V Y	NEMA Premium IE3	•	Q 3
475-525 VΔ	550-600 VΔ			
400 VΔ / 690 V Y	460 VΔ	NEMA Premium IE3	•	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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