

G-BH 1 N Data sheet 2BH1 590

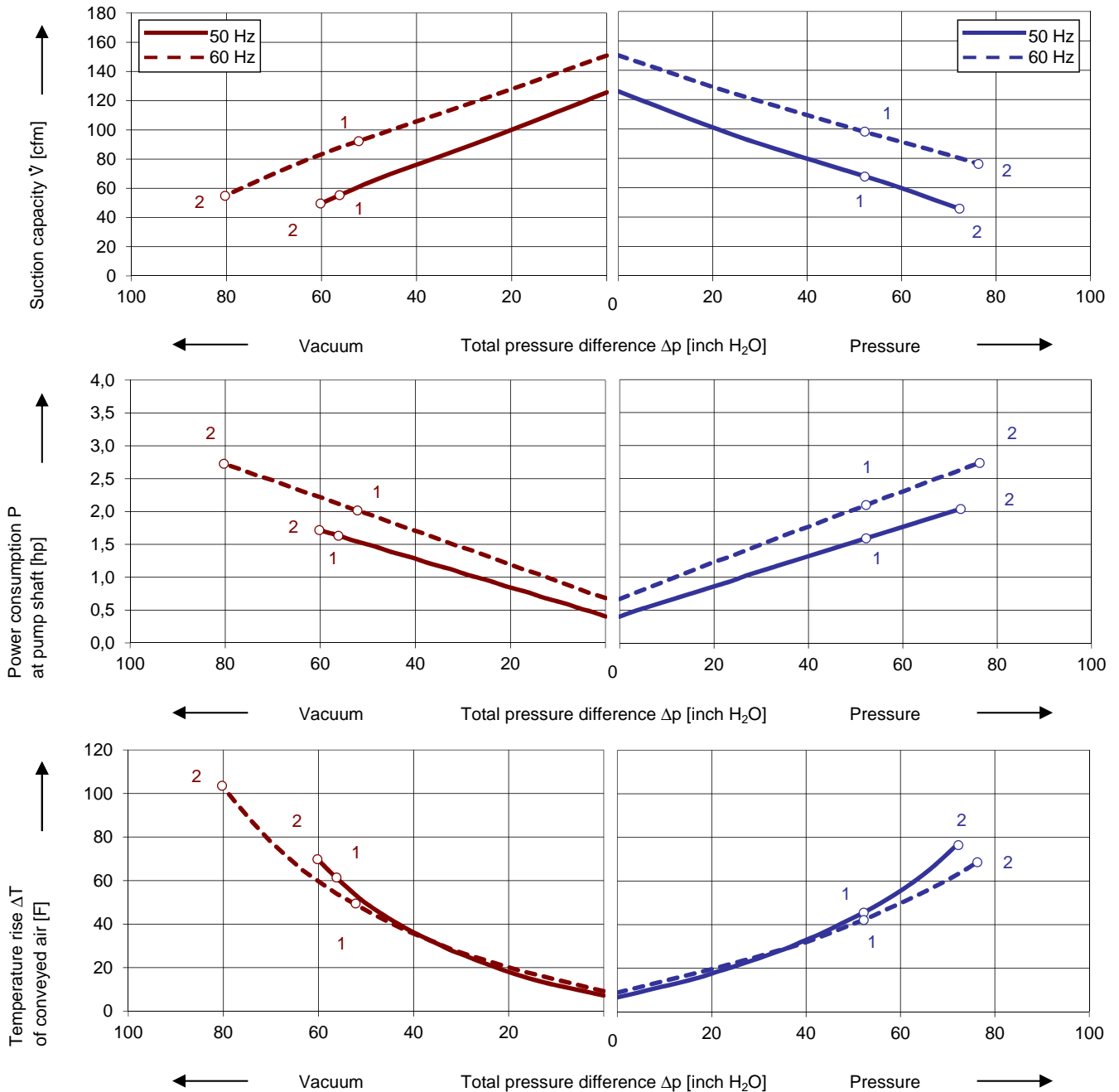
Side channel blower with NEMA Premium motor



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 Hz	Rated			Max. differential ²⁾ pressure		sound press. level ³⁾ dB(A)	Efficiency class ⁴⁾	Weight approx. lbs	Order No.
		Voltage ¹⁾	Current	Power	Vacuum	Pressure				
		V	A	hp	inch H ₂ O					
IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 (certificate number E225239)										
1	50	190-210 Δ	5,6 Δ	1,7	-56	52	60	IE3	57	2BH1590-1AK11
	60	190-210 YY / 380-420 Y	6,3 YY / 3,16 Y	2,1	-52	52	69	IE3		
	60	200 YY	6,3 YY	2,1	-52	52	69	NP		
2	50	190-210 Δ	6,9 Δ	2,3	-60	72	64	IE3	66	2BH1590-1AK21
	60	190-210 YY / 380-420 Y	7,8 YY / 3,9 Y	2,7	-80	76	72	IE3		
	60	200 YY	7,8 YY	2,7	-80	76	72	NP		
IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 (certificate number E225239)										
1	50	220-240 Δ / 380-420 Y	4,9 Δ / 2,85 Y	1,7	-56	52	60	IE3	57	2BH1590-1AK16
	60	220-240 YY / 440-480 Y	5,5 YY / 2,75 Y	2,1	-52	52	69	IE3		
	60	230 YY / 460 Y	5,5 YY / 2,75 Y	2,1	-52	52	69	NP		
2	50	220-240 Δ / 380-420 Y	6,0 Δ / 3,45 Y	2,3	-60	72	64	IE3	66	2BH1590-1AK26
	60	220-240 YY / 440-480 Y	6,8 YY / 3,4 Y	2,7	-80	76	72	IE3		
	60	230 YY / 460 Y	6,8 YY / 3,4 Y	2,7	-80	76	72	NP		
IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 (certificate number E225239)										
1	50	475-525 Y	2,28 Y	1,7	-56	52	60	IE3	64	2BH1590-1AQ13
	60	550-600 Y	2,20 Y	2,1	-52	52	69	NP		
2	50	475-525 Δ	2,76 Δ	2,3	-60	72	64	IE3	71	2BH1590-1AQ23
	60	550-600 Y	2,72 Y	2,7	-80	76	72	NP		
IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 (certificate number E225239)										
1	50	380-420 Δ / 660-725 Y	2,85 Δ / 1,65 Y	1,7	-56	52	60	IE3	64	2BH1590-1AQ17
	60	440-480 Δ	2,75 Δ	2,1	-52	52	69	IE3		
	60	460 Δ	2,75 Δ	2,1	-60	56	69	NP		
2	50	380-420 Δ / 660-725 Y	3,45 Δ / 2,00 Y	2,3	-60	72	64	IE3	71	2BH1590-1AQ27
	60	440-480 Δ	3,4 Δ	2,7	-80	76	72	IE3		
	60	460 Δ	3,4 Δ	2,7	-84	80	72	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⁾	c  us	2BH1...-1. □ . □	
50 Hz	60Hz			60 Hz	
3~					
200 V Δ 190-210 V Δ	200 V YY / 230 V Δ / 400 VY 190-210 VYY / 220-240 V Δ / 380-420VY	 IE3	•	K	1
200 V YY / 230 V Δ / 400 VY 190-210 VYY / 220-240 V Δ / 380-420VY	230 V YY / 460 VY 220-240 VYY / 440-480VY	 IE3	•	K	6
475-525 V Y 475-525 V Δ	550-600 V Y 550-600 V Δ	 IE3	•	Q	3
400 V Δ / 690 V Y	460 V Δ	 IE3	•	Q	5
		 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

**Gardner
Denver**

Your Ultimate Source for Vacuum and Pressure

Gardner Denver Deutschland GmbH
Industriestraße 26
97616 Bad Neustadt - Germany
Tel.: +49 9771 6888-0
Fax: +49 9771 6888-4000
www.elmorietschle.com

Gardner Denver, Inc.
1800 Gardner Expressway
Quincy, IL 62305
Tel: 866-249-2275
Fax: 217-221-8780
www.elmorietschle.com