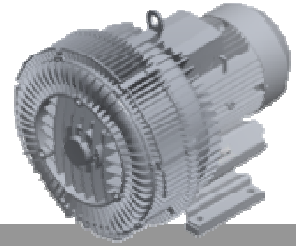


G-BH 1 N Data sheet 2BH1 640

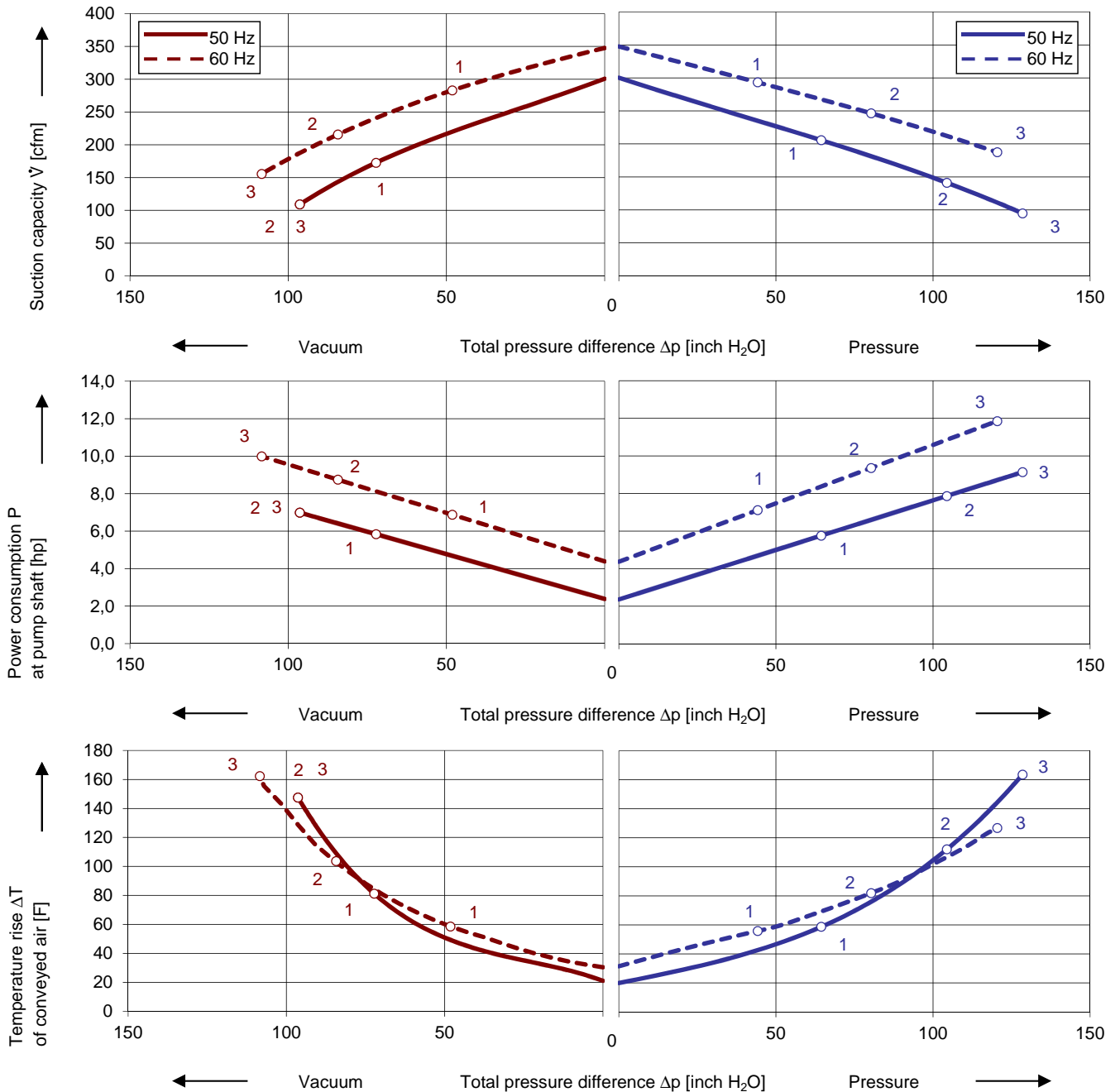
Side channel blower with NEMA Premium motor



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				
IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 (certificate number E225239)										
1	50	190-210 Δ	17,1 Δ	6,2	-72	64	74	IE3	119	2BH1640-1GK31
	60	190-210 YY / 380-420 Y	19,6 YY / 9,8 Y	7,1	-48	44	78	IE3		
	60	200 YY	19,6 YY	7,1	-48	44	78	NP		
2	50	190-210 Δ	23,5 Δ	8,4	-96	104	74	IE3	185	2BH1640-1GK41
	60	190-210 YY / 380-420 Y	27,6 YY / 13,8 Y	9,8	-84	80	78	IE3		
	60	200 YY	27,6 YY	9,8	-84	80	78	NP		
3	50	190-210 Δ	30,8 Δ	11,5	-96	128	74	IE3	231	2BH1640-1GK51
	60	190-210 YY / 380-420 Y	35,2 YY / 17,6 Y	13,3	-108	120	78	IE3		
	60	200 YY	35,2 YY	13,3	-108	120	78	NP		
IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 (certificate number E225239)										
1	50	220-240 Δ / 380-420 Y	14,9 Δ / 8,6 Y	6,2	-72	64	74	IE3	119	2BH1640-1GK36
	60	220-240 YY / 440-480 Y	17,0 YY / 8,5 Y	7,1	-48	44	78	IE3		
	60	230 YY / 460 Y	17,0 YY / 8,5 Y	7,1	-48	44	78	NP		
2	50	220-240 Δ / 380-420 Y	20,4 Δ / 11,8 Y	8,4	-96	104	74	IE3	185	2BH1640-1GK46
	60	220-240 YY / 440-480 Y	24,0 YY / 12,0 Y	9,8	-84	80	78	IE3		
	60	230 YY / 460 Y	24,0 YY / 12,0 Y	9,8	-84	80	78	NP		
3	50	220-240 Δ / 380-420 Y	26,8 Δ / 15,5 Y	11,5	-96	128	74	IE3	231	2BH1640-1GK56
	60	220-240 YY / 440-480 Y	30,6 YY / 15,3 Y	13,3	-108	120	78	IE3		
	60	230 YY / 460 Y	30,6 YY / 15,3 Y	13,3	-108	120	78	NP		
IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 (certificate number E225239)										
1	50	475-525 Y	11,8 Y	6,2	-72	64	74	IE3	119	2BH1640-1GQ33
	60	550-600 Y	11,8 Y	7,1	-48	44	78	NP		
2	50	475-525 Y	16,4 Y	8,4	-96	104	74	IE3	185	2BH1640-1GQ43
	60	550-600 Y	16,6 Y	9,8	-84	80	78	NP		
3	50	475-525 Y	21,4 Y	11,5	-96	128	74	IE3	231	2BH1640-1GQ53
	60	550-600 Y	21,1 Y	13,3	-108	120	78	NP		
IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 (certificate number E225239)										
1	50	380-420 Δ / 660-725 Y	8,6 Δ / 5,0 Y	6,2	-72	64	74	IE3	119	2BH1640-1GQ37
	60	440-480 Δ	8,5 Δ	7,1	-48	44	78	IE3		
	60	460 Δ	8,5 Δ	7,1	-48	44	78	NP		
2	50	380-420 Δ / 660-725 Y	11,8 Δ / 6,8 Y	8,4	-96	104	74	IE3	185	2BH1640-1GQ47
	60	440-480 Δ	12,0 Δ	9,8	-84	80	78	IE3		
	60	460 Δ	12,0 Δ	9,8	-84	80	78	NP		
3	50	380-420 Δ / 660-725 Y	15,5 Δ / 8,9 Y	11,5	-96	128	74	IE3	231	2BH1640-1GQ57
	60	440-480 Δ	15,3 Δ	13,3	-108	120	78	IE3		
	60	460 Δ	15,3 Δ	13,3	-108	120	78	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	200 V YY / 230 V Δ / 400 VY		•	K	1
190-210 V Δ	190-210 VYY / 220-240 V Δ / 380-420VY		•	K	6
200 V YY / 230 V Δ / 400 VY	230 V YY / 460 VY		•	K	6
190-210 VYY / 220-240 V Δ / 380-420VY	220-240 VYY / 440-480VY		•	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

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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