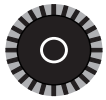
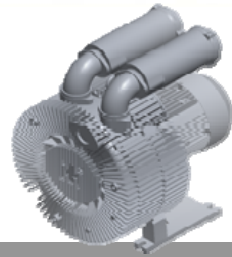


## G-BH 1 N Data sheet 2BH1 840-0

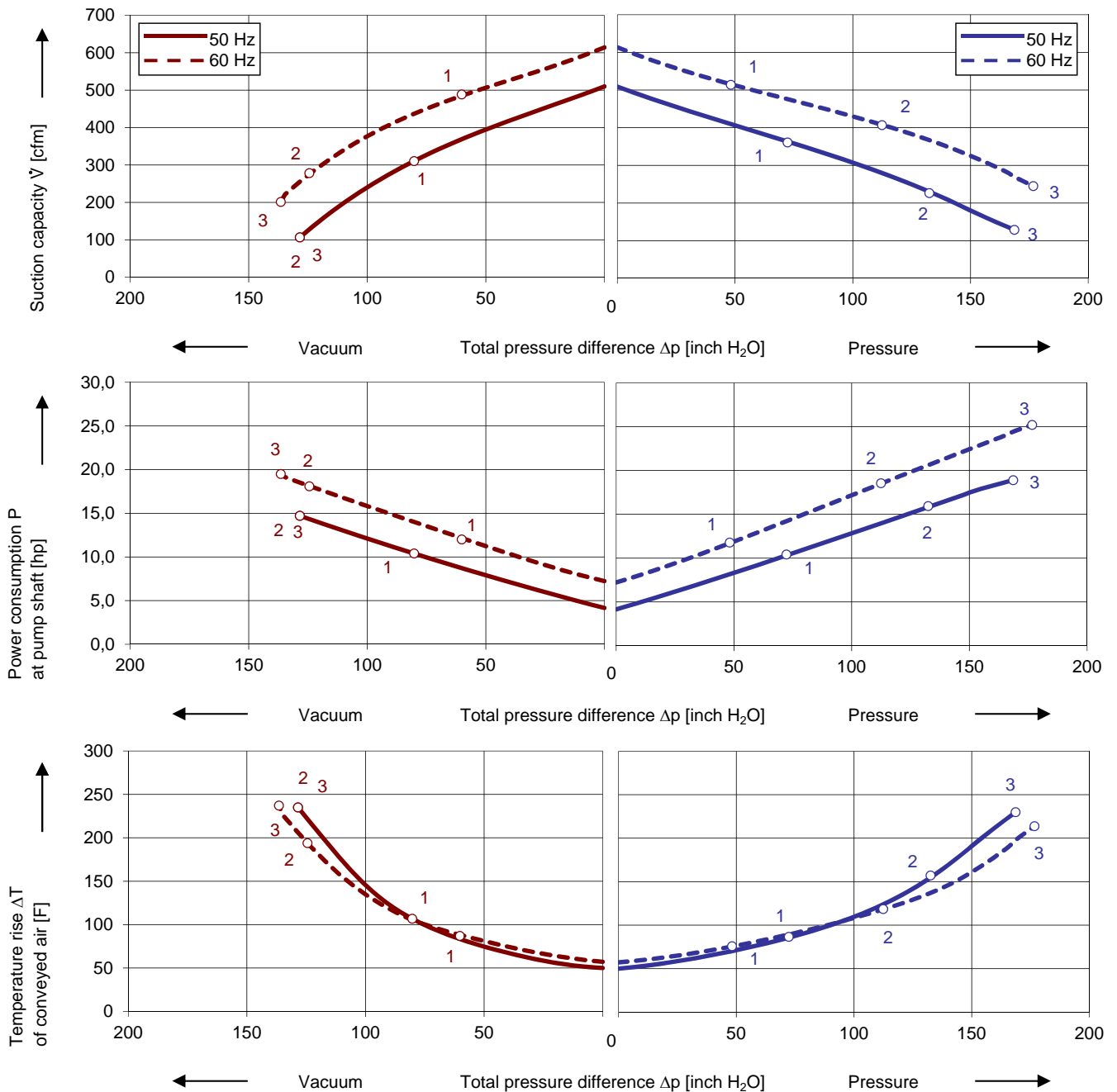
Side channel blower with NEMA Premium motor



### 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 <sup>2)</sup> pressure		sound press. level <sup>3)</sup>	Efficiency class <sup>4)</sup>	Weight approx.	Order No.
		Voltage <sup>1)</sup>	Current	Power	Vacuum	Pressure				
		Hz	V	A	hp	inch H <sub>2</sub> O				
<b>IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 (certificate number E225239)</b>										
1	50	190-210 Δ	30,8 Δ	11,5	-80	72	70	IE3	390	2BH1840-0JK21
	60	190-210 YY / 380-420 Y	35,2 YY / 17,6 Y	13,3	-60	48	74	IE3		
	60	200 YY	35,2 YY	13,3	-60	48	74	NP		
2	50	190-210 Δ	46,4 Δ	16,9	-128	132	71	IE3	434	2BH1840-0JK31
	60	190-210 YY / 440-480 Y	52,8 YY / 26,4 Y	19,4	-124	112	75	IE3		
	60	200 YY	52,8 YY	19,4	-124	112	75	NP		
3	50	190-210 Δ	63,1 Δ	23,2	-128	249	71	IE3	450	2BH1840-0JK41
	60	190-210 YY / 380-480 Y	72,2 YY / 36,1 Y	26,7	-136	261	75	IE3		
	60	200 YY	72,2 YY	26,7	-136	261	75	NP		
<b>IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 (certificate number E225239)</b>										
1	50	220-240 Δ / 380-420 Y	26,8 Δ / 15,5 Y	11,5	-80	72	70	IE3	390	2BH1840-0JK26
	60	220-240 YY / 440-480 Y	30,6 YY / 15,3 Y	13,3	-60	48	74	IE3		
	60	230 YY / 460 Y	30,6 YY / 15,3 Y	13,3	-60	48	74	NP		
2	50	220-240 Δ / 380-420 Y	40,3 Δ / 23,3 Y	16,9	-128	132	71	IE3	434	2BH1840-0JK36
	60	220-240 YY / 440-480 Y	46,0 YY / 23,0 Y	19,4	-124	112	75	IE3		
	60	230 YY / 460 Y	46,0 YY / 23,0 Y	19,4	-124	112	75	NP		
3	50	220-240 Δ / 380-420 Y	54,9 Δ / 31,7 Y	23,2	-128	249	71	IE3	450	2BH1840-0JK46
	60	220-240 YY / 380-420 Y	62,8 YY / 31,4 Y	26,7	-136	261	75	IE3		
	60	230 YY / 460 Y	62,8 YY / 31,4 Y	26,7	-136	261	75	NP		
<b>IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 (certificate number E225239)</b>										
1	50	475-525 Y	12,4 Y	11,5	-80	72	70	IE3	412	2BH1840-0JQ23
	60	550-600 Y	12,2 Y	13,3	-60	48	74	NP		
2	50	475-525 Y	18,6 Y	16,9	-128	132	71	IE3	448	2BH1840-0JQ33
	60	550-600 Y	18,4 Y	19,4	-124	112	75	NP		
3	50	475-525 Y	25,4 Y	23,2	-128	249	71	IE3	474	2BH1840-0JQ43
	60	550-600 Y	25,1 Y	26,7	-136	261	75	NP		
<b>IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 (certificate number E225239)</b>										
1	50	380-420 Δ / 660-725 Y	15,5 Δ / 8,9 Y	11,5	-80	72	70	IE3	412	2BH1840-0JQ27
	60	440-480 Δ	15,3 Δ	13,3	-60	48	74	IE3		
	60	460 Δ	15,3 Δ	13,3	-60	48	74	NP		
2	50	380-420 Δ / 660-725 Y	23,3 Δ / 13,4 Y	16,9	-128	132	71	IE3	448	2BH1840-0JQ37
	60	440-480 Δ	23,0 Δ	19,4	-124	112	75	IE3		
	60	460 Δ	23,0 Δ	19,4	-124	112	75	NP		
3	50	380-420 Δ / 660-725 Y	31,7 Δ / 18,3 Y	23,2	-128	249	71	IE3	474	2BH1840-0JQ47
	60	440-480 Δ	31,4 Δ	26,7	-136	261	75	IE3		
	60	460 Δ	31,4 Δ	26,7	-136	261	75	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 <sup>4)</sup>	c  us	60 Hz	2BH1...-1.	□ . □
50 Hz	60Hz					
<b>3~</b>						
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	IE3	•		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	IE3	•		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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