

G-BH 2 N

Data sheet 2BH2 0780-3

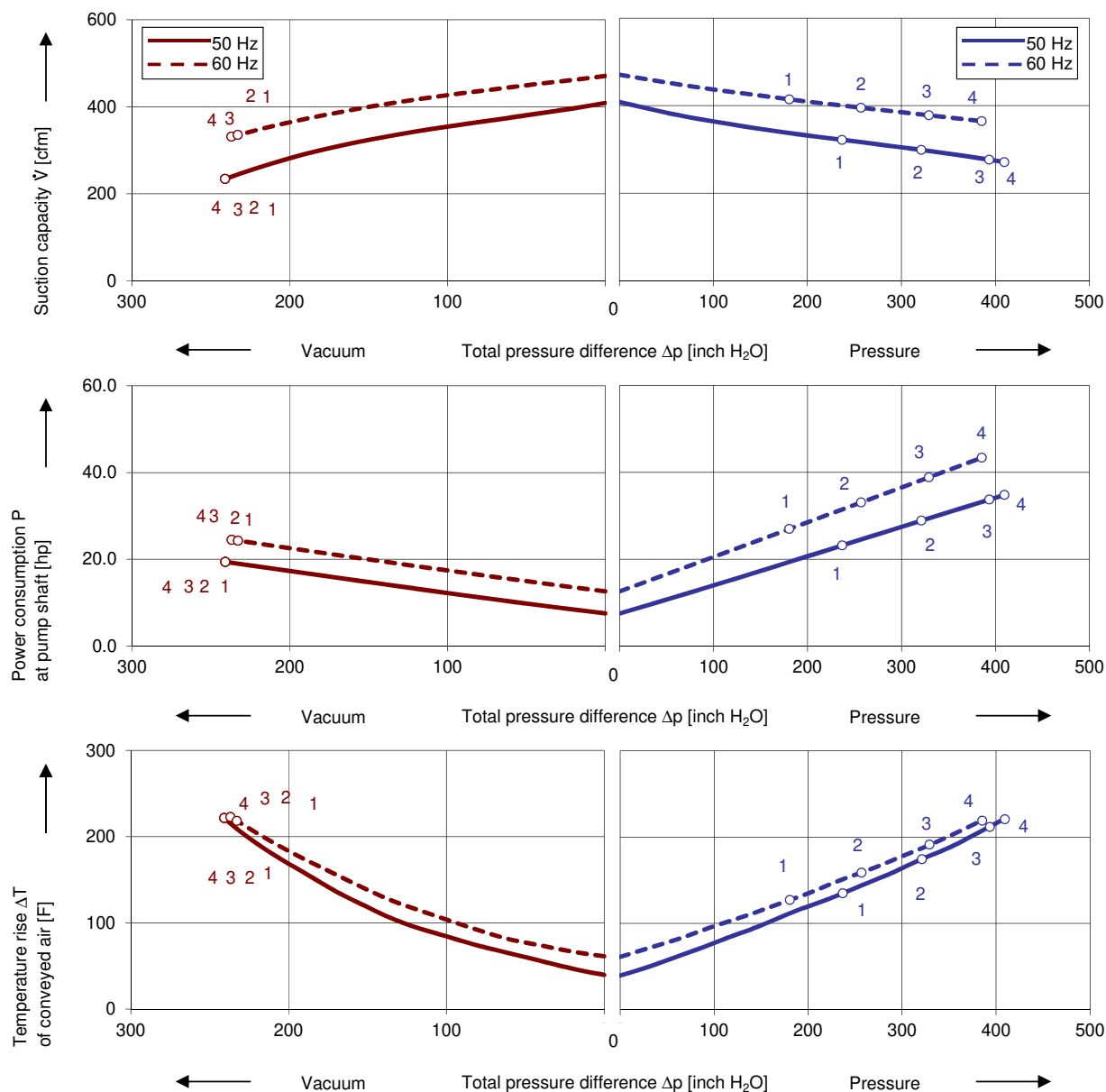
Side channel blower with NEMA Premium motor



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 pressure ²⁾		sound press. level ³⁾	Efficiency class ⁴⁾	Weight approx.	Order No.	
		Voltage ¹⁾	Current	Power	Vacuum	Pressure					
		Hz	V	A	hp	inch H2O					dB(A)
IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 and CAN/CSA C22.2 No. 68-09 (certificate number E225239)											
1	50	190-210 Δ	63.1 Δ	23.2	-241	237	71	IE3	534	2BH20780-3AAKQ1-BA	
	60	190-210 YY / 380-420 Y	72.2 YY / 36.1 Y	26.7	-237	181	75	IE3			
	60	200 YY	72.2 YY	26.7	-237	181	75	NP			
2	50	190-210 Δ	76.2 Δ	28.6	-241	321	71	IE3	560	2BH20780-3AAKR1-BA	
	60	190-210 YY / 380-420 Y	87.4 YY / 43.7 Y	32.9	-237	257	75	IE3			
	60	200 YY	87.4 YY	32.9	-237	257	75	NP			
3	50	190-210 Δ	91.5 Δ	33.9	-241	393	74	IE3	664	2BH20780-3AAKS1-BA	
	60	190-210 YY / 380-420 Y	103 YY / 51.5 Y	38.2	-233	329	78	IE3			
	60	200 YY	103 YY	38.2	-233	329	78	NP			
IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 and CAN/CSA C22.2 No. 68-09 (certificate number E225239)											
1	50	220-240 Δ / 380-420 Y	54.9 Δ / 31.7 Y	23.2	-241	237	71	IE3	534	2BH20780-3AAKQ6-BA	
	60	220-240 YY / 440-480 Y	62.8 YY / 31.4 Y	26.7	-237	181	75	IE3			
	60	230 YY / 460 Y	62.8 YY / 31.4 Y	26.7	-237	181	75	NP			
2	50	220-240 Δ / 380-420 Y	66.3 Δ / 38.3 Y	28.6	-241	321	71	IE3	560	2BH20780-3AAKR6-BA	
	60	220-240 YY / 440-480 Y	76.0 YY / 38.0 Y	32.9	-237	257	75	IE3			
	60	230 YY / 460 Y	76.0 YY / 38.0 Y	32.9	-237	257	75	NP			
3	50	220-240 Δ / 380-420 Y	79.5 Δ / 46.0 Y	33.9	-241	393	71	IE3	664	2BH20780-3AAKS6-BA	
	60	220-240 YY / 440-480 Y	90.0 YY / 45.0 Y	38.2	-233	329	75	IE3			
	60	230 YY / 460 Y	90.0 YY / 45.0 Y	38.2	-233	329	75	NP			
IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 and CAN/CSA C22.2 No. 68-09 (certificate number E225239)											
1	50	475-525 Y 475-525 U	Y / 25.4 Y	23.2	-241	237	71	IE3	534	2BH20780-3AAQQ3-BA	
	60	550-600 Y 475-525 U	0.0 Y / 25.1 Y	26.7	-237	181	75	NP			
2	50	475-525 Y 475-525 U	Y / 30.6 Y	28.6	-241	321	71	IE3	560	2BH20780-3AAQR3-BA	
	60	550-600 Y 475-525 U	0.0 Y / 30.4 Y	32.9	-237	257	75	NP			
3	50	475-525 Y 475-525 U	Y / 36.8 Y	33.9	-241	393	71	IE3	664	2BH20780-3AAQS3-BA	
	60	550-600 Y 475-525 U	0.0 Y / 36.0 Y	38.2	-233	329	75	NP			
IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 and CAN/CSA C22.2 No. 68-09 (certificate number E225239)											
1	50	380-420 Δ / 660-725 0	31.7 Δ / 18.3 Y	23.2	-241	237	71	IE3	534	2BH20780-3AAQQ7-BA	
	60	440-480 Δ	31.4 Δ /	26.7	-237	181	75	IE3			
	60	460 Δ	31.4 Δ /	26.7	-237	181	75	NP			
2	50	380-420 Δ / 660-725 0	38.3 Δ / 22.1 Y	28.6	-241	321	71	IE3	560	2BH20780-3AAQR7-BA	
	60	440-480 Δ	38.0 Δ /	32.9	-237	257	75	IE3			
	60	460 Δ	38.0 Δ /	32.9	-237	257	75	NP			
3	50	380-420 Δ / 660-725 0	46.0 Δ / 26.5 Y	33.9	-241	393	71	IE3	664	2BH20780-3AAQS7-BA	
	60	440-480 Δ	45.0 Δ /	38.2	-233	329	75	IE3			
	60	460 Δ	45.0 Δ /	38.2	-233	329	75	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	2BH2....-
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			•		
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			•		
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