

G-BH 1 N

Data sheet 2BH1 510

Side channel blower with NEMA Premium motor

IE3

NEMA
Premium

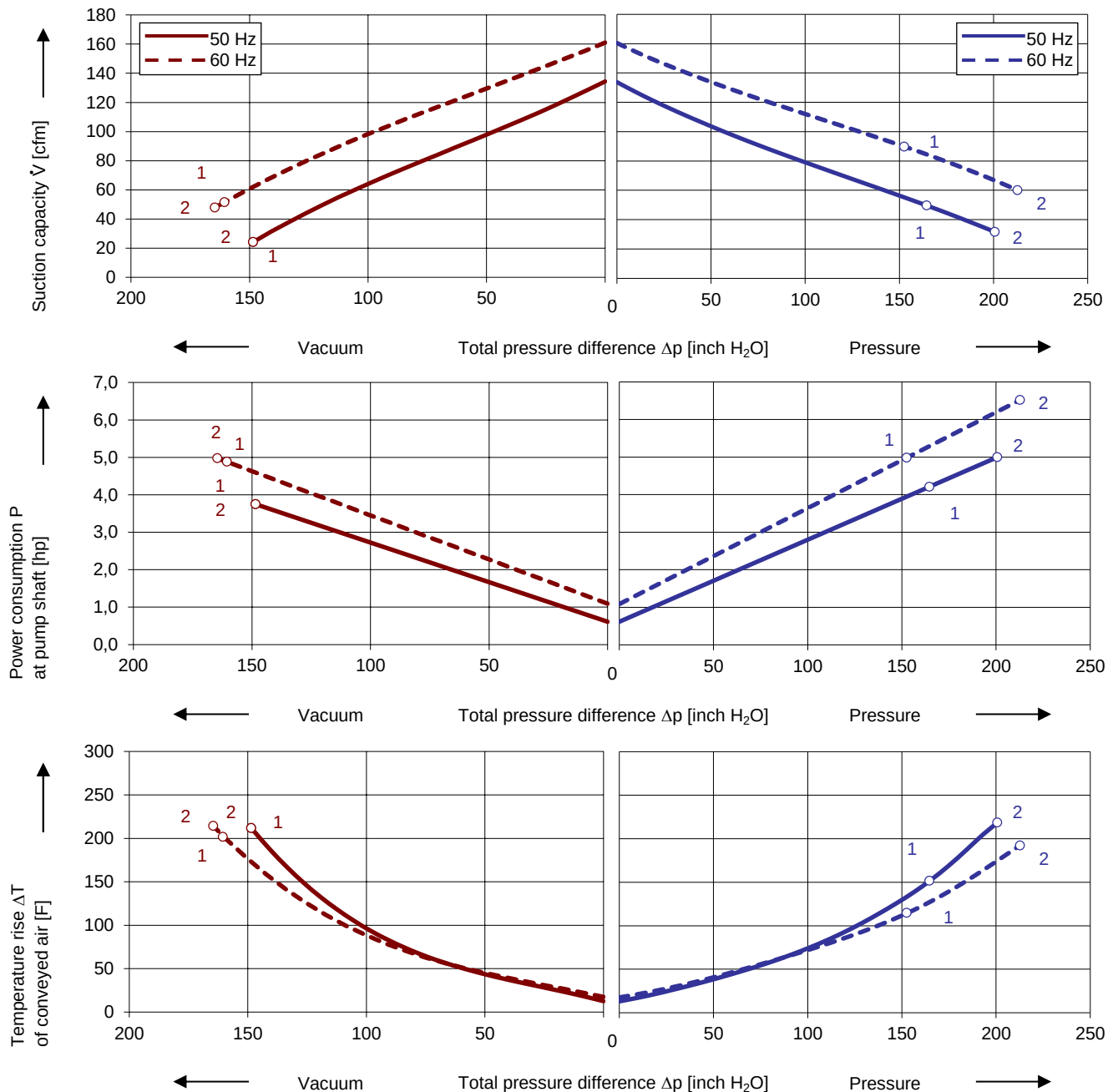
UL
US



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 2BH1 510										
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		dB(A)	lbs		
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	13,3 Δ	4,6	-149	165	71	IE3	146	2BH1510-1HK41
	60	190-210 YY / 380-420 Y	15,2 YY / 7,6 Y	5,4	-161	153	73	IE3		
	60	200 YY	15,2 YY	5,4	-161	153	73	NP		
2	50	190-210 Δ	18,9 Δ	6,2	-149	201	70	IE3	148	2BH1510-1HK51
	60	190-210 YY / 380-420 Y	21,4 YY / 10,7 Y	7,1	-165	213	73	IE3		
	60	200 YY	21,4 YY	7,1	-165	213	73	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	11,6 Δ / 6,7 Y	4,6	-149	165	71	IE3	146	2BH1510-1HK46
	60	220-240 YY / 440-480 Y	13,2 YY / 6,6 Y	5,4	-161	153	73	IE3		
	60	230 YY / 460 Y	13,2 YY / 6,6 Y	5,4	-161	153	73	NP		
2	50	220-240 Δ / 380-420 Y	16,5 Δ / 9,5 Y	6,2	-149	201	70	IE3	148	2BH1510-1HK56
	60	220-240 YY / 440-480 Y	18,5 YY / 9,3 Y	7,1	-165	213	73	IE3		
	60	230 YY / 460 Y	18,5 YY / 9,3 Y	7,1	-165	213	73	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	5,4 Y	4,6	-149	165	71	IE3	146	2BH1510-1HQ43
	60	550-600 Y	5,3 Y	5,4	-161	153	73	NP		
2	50	475-525 Y	7,1 Y	6,2	-149	201	70	IE3	148	2BH1510-1HQ53
	60	550-600 Y	7,0 Y	7,1	-165	213	73	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 Y	6,7 Δ / 3,9 Y	4,6	-149	165	71	IE3	146	2BH1510-1HQ47
	60	440-480 Δ	6,6 Δ	5,4	-161	153	73	IE3		
	60	460 Δ	6,6 Δ	5,4	-161	153	73	NP		
2	50	380-420 Δ / 660-725 Y	9,5 Δ / 5,5 Y	6,2	-149	201	70	IE3	148	2BH1510-1HQ57
	60	440-480 Δ	9,3 Δ	7,1	-165	213	73	IE3		
	60	460 Δ	9,3 Δ	7,1	-165	213	73	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	11,6 Δ / 6,7 Y	4,6	-149	165	71	IE3	146	2BH1510-1HQ46
	60	440-480 Y	6,6 Y	5,4	-161	153	73	IE3		
2	50	220-240 Δ / 380-420 Y	16,4 Δ / 9,5 Y	6,2	-149	201	70	IE3	148	2BH1510-1HQ56
	60	440-480 Y	9,3 Y	7,1	-165	213	73	IE3		

- 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 2014/35/EU (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)						
50 Hz		60Hz				60 Hz	2BH1...-1.			
3~										
200 VΔ		200 V YY / 230 VΔ / 400 VY			•		K			
190-210 VΔ		190-210 VYY / 220-240 VΔ / 380-420VY		IE3						
200 V YY / 230 VΔ / 400 VY		230 V YY / 460 VY			•		K			
190-210 VYY / 220-240 VΔ / 380-420VY		220-240 VYY / 440-480VY		IE3						
475-525 V Y		550-600 V Y			•		Q			
475-525 VΔ		550-600 VΔ								
220-240 VΔ / 380-420VY		440-480VY		IE3	•		Q			
400 VΔ / 690 V Y		460 VΔ								

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.



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