



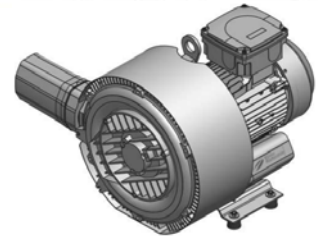
Elmo Rietschle

G-BH 1 N Data sheet 2BH1 410

Side channel blower with IE3-motors

IE3

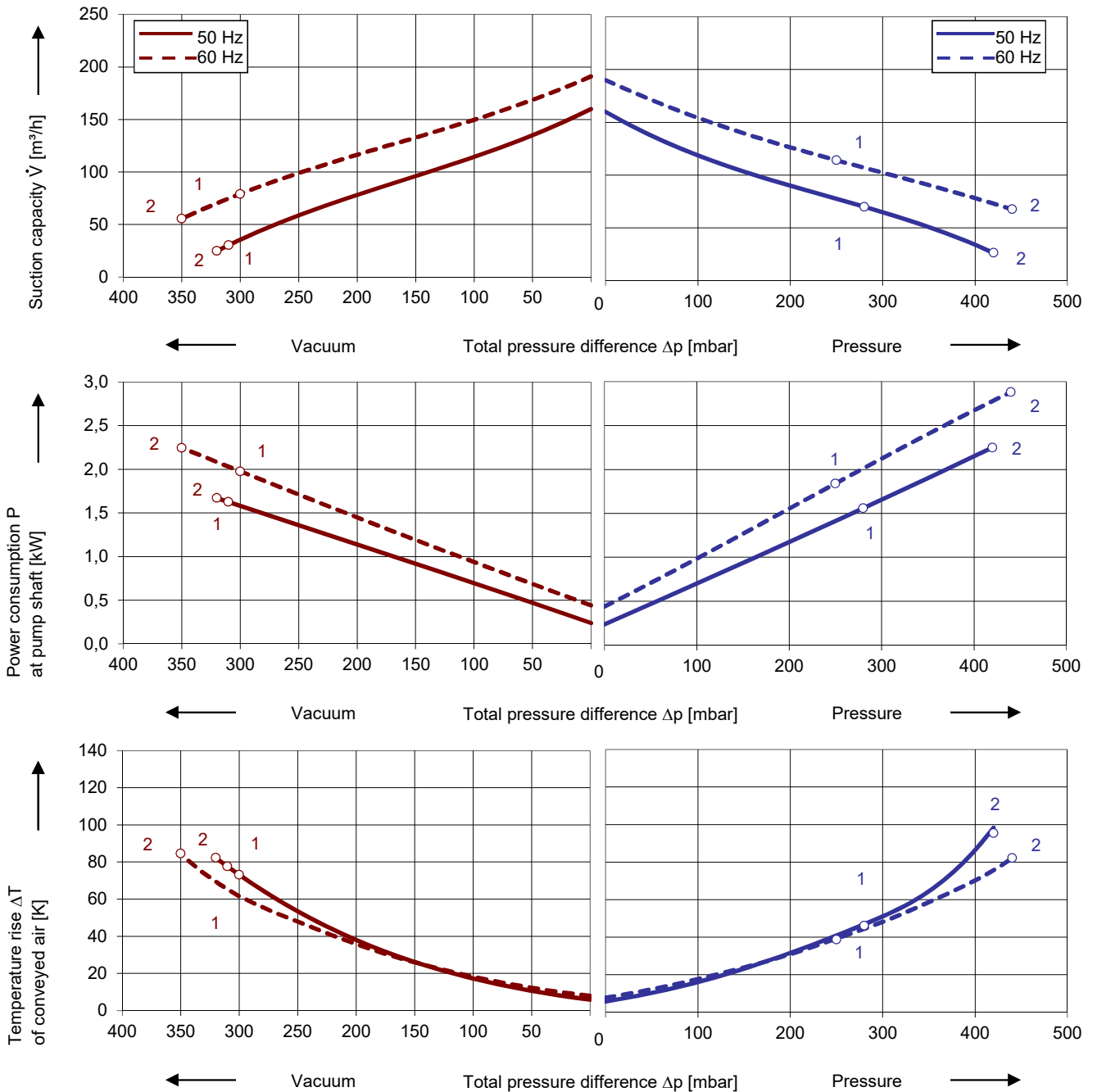
UL US



Performance curves

Vacuum operation

Compressor operation



The performance curves are based on air at a temperature of 15 °C and an atmospheric pressure of 1013 mbar with a tolerance of $\pm 10\%$. The total pressure differences are valid for suction and ambient temperature up to 25 °C. For other conditions please get in touch with us.

Every G-BH pump can be used both as vacuum pump and compressor in continuous operation over the total performance curve range. The motors are available as standard in protection category IP 55 and insulation class F. The vacuum pumps / compressors are UL and CSA approved.

Selection and ordering data

Type

No.	Fre- quency	Rated			Max. differential pressure 2)		Sound pres. Level 3)	Efficiency class 4)	Weight approx.	Order No.
		Voltage 1)	Current	Power	Vacuum	Pressure				
					mbar					
Hz	V	A	kW			dB(A)		kg		
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	6,9 Δ	1,75	-310	280	65	IE3	28	2BH1410-0HK31
	60	190-210 YY / 380-420 Y	7,8 YY / 3,9 Y	2,00	-300	250	68	IE3		
	60	200 YY	7,8 YY	2,00	-300	250	68	NP		
2	50	190-210 Δ	9,9 Δ	2,50	-320	420	67	IE3	32	2BH1410-0HK41
	60	190-210 YY / 380-420 Y	12,0 YY / 6,0 Y	3,00	-350	440	77	IE3		
	60	200 YY	12,0 YY	3,00	-350	440	77	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	6,0 Δ / 3,5 Y	1,75	-310	280	65	IE3	28	2BH1410-0HK36
	60	220-240 YY / 440-480 Y	6,8 YY / 3,4 Y	2,00	-300	250	68	IE3		
	60	230 YY / 460 Y	6,8 YY / 3,4 Y	2,00	-300	250	68	NP		
2	50	220-240 Δ / 380-420 Y	8,6 Δ / 5,0 Y	2,50	-320	420	67	IE3	32	2BH1410-0HK46
	60	220-240 YY / 440-480 Y	10,4 YY / 5,2 Y	3,00	-350	440	77	IE3		
	60	230 YY / 460 Y	10,4 YY / 5,2 Y	3,00	-350	440	77	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	2,8 Y	1,75	-310	280	65	IE3	28	2BH1410-0HQ33
	60	550-600 Y	2,7 Y	2,00	-300	250	68	NP		
2	50	475-525 Y	4,0 Y	2,50	-320	420	67	IE3	32	2BH1410-0HQ43
	60	550-600 Y	4,1 Y	3,00	-350	440	77	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	3,5 Δ / 2,0 Y	1,75	-310	280	65	IE3	28	2BH1410-0HQ37
	60	440-480 Δ	3,4 Δ	2,00	-300	250	68	IE3		
	60	460 Δ	3,4 Δ	2,00	-300	250	68	NP		
2	50	380-420 Δ / 660-725 Y	5,0 Δ / 2,9 Y	2,50	-320	420	67	IE3	32	2BH1410-0HQ47
	60	440-480 Δ	5,2 Δ	3,00	-350	440	77	IE3		
	60	460 Δ	5,2 Δ	3,00	-350	440	77	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	6,0 Δ / 3,5 Y	1,75	-310	280	65	IE3	28	2BH1410-0HQ36
	60	440-480 Y	3,4 Y	2,00	-300	250	68	IE3		
2	50	220-240 Δ / 380-420 Y	8,8 Δ / 5,1 Y	2,50	-320	420	67	IE3	32	2BH1410-0HQ46
	60	440-480 Y	5,2 Y	3,00	-350	440	77	IE3		

- In case of variable frequency drive operation the standard F 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 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)	c  us	60 Hz	
50 Hz	60Hz			2BH1...-1.	□ . □
3~					
200 VΔ	200 V YY / 230 VΔ / 400 VY		•	K	1
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	6
190-210 VYY / 220-240 VΔ / 380-420VY	220-240 VYY / 440-480VY	IE3			
475-525 V Y	550-600 V Y		•	Q	3
475-525 VΔ	550-600 VΔ		•	Q	5
220-240 VΔ / 380-420VY	440-480VY	IE3	•	Q	6
400 VΔ / 690 V Y	460 VΔ		•	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



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