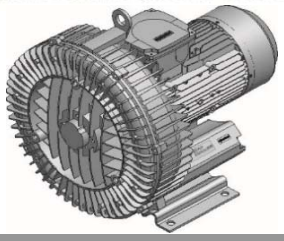
G-BH 1 N

Data sheet 2BH1 600

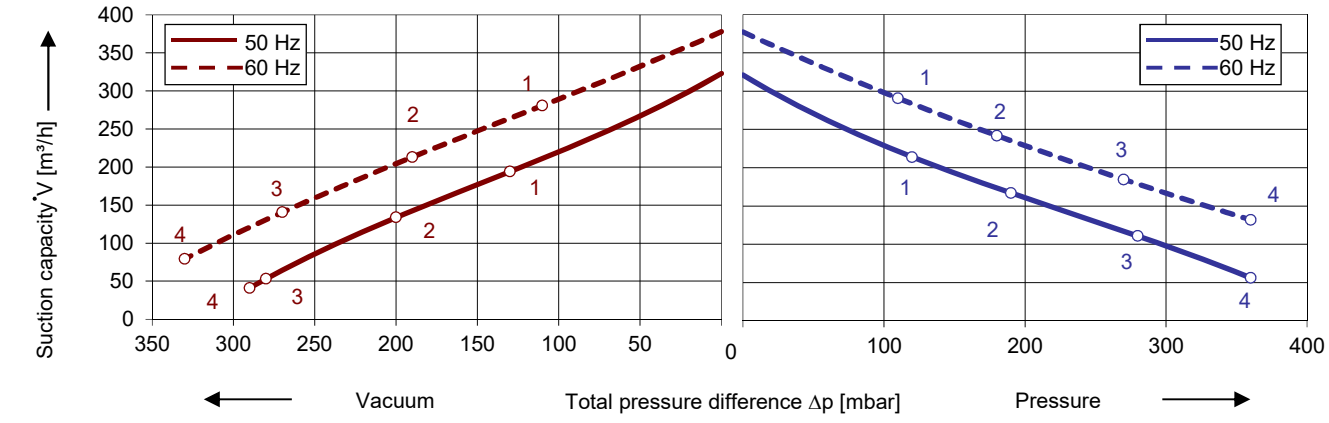
Side channel blower with IE3-motors

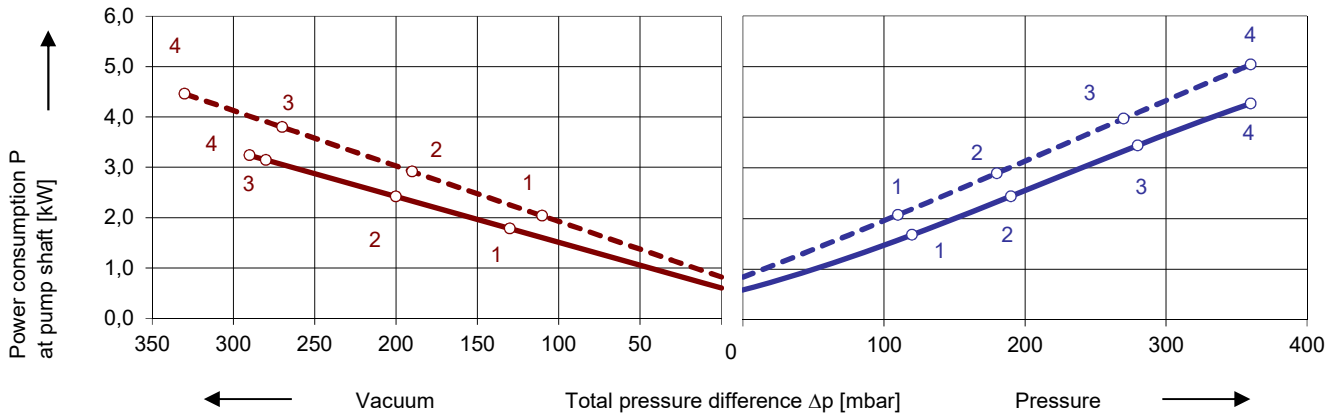


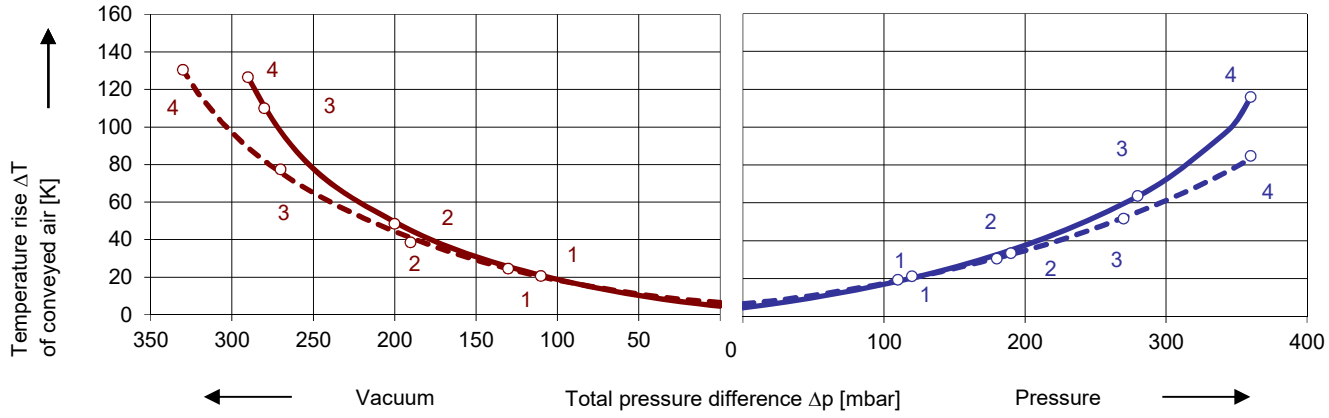
Performance curves

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 ± 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.

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Selection and ordering data

Type

No.	Frequency	Rated			Max. differential pressure [2]		Sound pres. Level [3]	Efficiency class [4]	Weight approx.	Order No.
		Voltage [1]	Current	Power	Vacuum	Pressure				
	Hz	V	A	kW	mbar		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	-130	120	69	IE3	31	**2BH1600-0AK01**
	60	190-210 YY / 380-420 Y	7,8 YY / 3,9 Y	2,00	-110	110	72	IE3		
	60	200 YY	7,8 YY	2,00	-110	110	72	NP		
2	50	190-210 Δ	9,9 Δ	2,5	-200	190	64	IE3	34	**2BH1600-0AK11**
	60	190-210 YY / 380-420 Y	12,0 YY / 6,0 Y	3,0	-190	180	70	IE3		
	60	200 YY	12,0 YY	3,0	-190	180	70	NP		
3	50	190-210 Δ	13,6 Δ	3,45	-260	270	68	IE3	40	**2BH1600-0AK21**
	60	190-210 YY / 380-420 Y	15,2 YY / 7,6 Y	4,0	-260	250	71	IE3		
	60	200 YY	15,2 YY	4,0	-260	250	71	NP		
4	50	190-210 Δ	17,1 Δ	4,6	-290	360	69	IE3	55	**2BH1600-1AK31**
	60	190-210 YY / 380-420 Y	19,6 YY / 9,8 Y	5,3	-330	360	71	IE3		
	60	200 YY	19,6 YY	5,3	-330	360	71	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	-130	120	69	IE3	31	**2BH1600-0AK06**
	60	220-240 YY / 440-480 Y	6,8 YY / 3,4 Y	2,00	-110	110	72	IE3		
	60	230 YY / 460 Y	6,8 YY / 3,4 Y	2,00	-110	110	72	NP		
2	50	220-240 Δ / 380-420 Y	8,6 Δ / 5,0 Y	2,50	-200	190	64	IE3	34	**2BH1600-0AK16**
	60	220-240 YY / 440-480 Y	10,4 YY / 5,2 Y	3,00	-190	180	70	IE3		
	60	230 YY / 460 Y	10,4 YY / 5,2 Y	3,00	-190	180	70	NP		
3	50	220-240 Δ / 380-420 Y	12,0 Δ / 6,9 Y	3,45	-260	270	68	IE3	40	**2BH1600-0AK26**
	60	220-240 YY / 440-480 Y	13,2 YY / 6,6 Y	4,0	-260	250	71	IE3		
	60	230 YY / 460 Y	13,2 YY / 6,6 Y	4,0	-260	250	71	NP		
4	50	220-240 Δ / 380-420 Y	14,9 Δ / 8,6 Y	4,6	-290	360	69	IE3	55	**2BH1600-1AK36**
	60	220-240 YY / 440-480 Y	17,0 YY / 8,5 Y	5,3	-330	360	71	IE3		
	60	230 YY / 460 Y	17,0 YY / 8,5 Y	5,3	-330	360	71	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	3 Y	1,75	-130	120	63	IE3	31	**2BH1600-0AQ03**
	60	550-600 Y	2,7 Y	2,00	-110	110	68	NP		
2	50	475-525 Y	4,0 Y	2,50	-200	190	64	IE3	34	**2BH1600-0AQ13**
	60	550-600 Y	4,1 Y	3,00	-190	180	70	NP		
3	50	475-525 Y	5,5 Y	3,45	-260	270	69	IE3	40	**2BH1600-0AQ23**
	60	550-600 Y	5,3 Y	4,0	-260	250	71	NP		
4	50	475-525 Y	6,9 Y	4,6	-290	360	69	IE3	55	**2BH1600-1AQ33**
	60	550-600 Y	6,8 Y	5,3	-330	360	71	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	-130	120	63	IE3	31	**2BH1600-0AQ07**
	60	440-480 Δ	3,4 Δ	2,00	-110	110	68	IE3		
	60	460 Δ	3,4 Δ	2,00	-110	110	68	NP		
2	50	380-420 Δ / 660-725 Y	5,0 Δ / 2,9 Y	2,50	-200	190	64	IE3	34	**2BH1600-0AQ17**
	60	440-480 Δ	5,2 Δ	3,00	-190	180	70	IE3		
	60	460 Δ	5,2 Δ	3,00	-190	180	70	NP		
3	50	380-420 Δ / 660-725 Y	6,9 Δ / 4,0 Y	3,45	-260	270	69	IE3	40	**2BH1600-0AQ27**
	60	440-480 Δ	6,6 Δ	4,0	-260	250	71	IE3		
	60	460 Δ	6,6 Δ	4,0	-260	250	71	NP		
4	50	380-420 Δ / 660-725 Y	8,6 Δ / 5,0 Y	4,6	-290	360	69	IE3	55	**2BH1600-1AQ37**
	60	440-480 Δ	8,5 Δ	5,3	-330	360	71	IE3		
	60	460 Δ	8,5 Δ	5,3	-330	360	71	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	-130	120	63	IE3	31	**2BH1600-0AQ06**
	60	440-480 Y	3,4 Y	2,00	-110	110	68	IE3		
2	50	220-240 Δ / 380-420 U	8,8 Δ / 5,1	2,5	-200	190	64	IE3	34	**2BH1600-0AQ16**
	60	440-480 Y	5,2 Y	3,0	-190	180	70	IE3		
3	50	220-240 Δ / 380-420 U	11,9 Δ / 6,9	3,45	-260	270	69	IE3	40	**2BH1600-0AQ26**
	60	440-480 Y	6,6 Y	4,0	-260	250	71	IE3		

1) In case of frequency converter operation the standard motor insulation system is suitable for converter input voltages up to 500 V.

2) Relief valves available for limiting differential pressure.

3) Measuring surface sound pressure level acc. 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 match 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 UL us		
50 Hz	**60Hz**		**60 Hz**	**2BH1…-0.** □ . □	
3~					
200 VΔ	200 V YY / 230 VΔ / 400 VY	NEMA Premium	•	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	NEMA Premium	•	K	6
190-210 VYY / 220-240 VΔ / 380-420VY	220-240 VYY / 440-480VY	IE3			
475-525 V Y	550-600 V Y	NEMA Premium	•	Q	3
475-525 VΔ	550-600 VΔ	NEMA Premium	•	Q	5
400 VΔ / 690 V Y	460 VΔ	NEMA Premium	•	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.

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