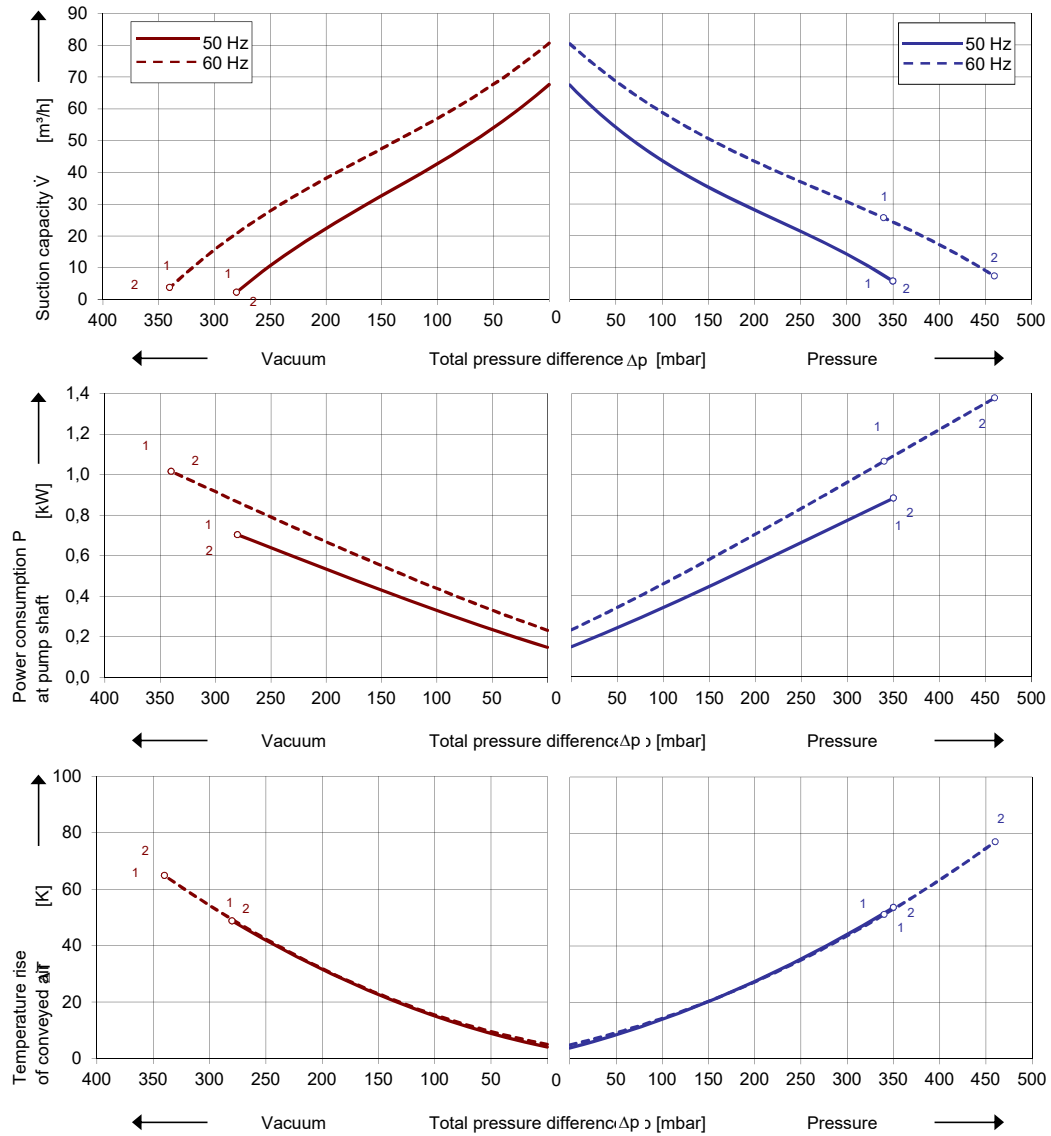




# G-BH 7 N

## Data sheet 2BH7 310

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  $\pm 10\%$ . 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.

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Selection and ordering data										
Type 2BH7 310										
No.	Fre- quency Hz	Rated			Max. differential <sup>2)</sup> pressure		Sound pressure level <sup>3)</sup> dB(A)	Efficiency <sub>η</sub>	Weight Approx. kg	Order No.
		Voltage <sup>1)</sup> V	Current A	Power kW	Vacuum mbar	Pressure				
<b>IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 and CAN/CSA C22.2 No. 68-09 (certificate number E225239)</b>										
1	50	190-210 Δ	4,2 Δ	1,0	-280	350	58	IE3	22	2BH7310-0AK31-1
	60	190-210 YY / 380-420 Y	4,8 YY / 2,4 Y	1,1	-340	340	62	IE3		
	60	200 YY	4,8 YY	1,1	-340	340	62	NP		
2	50	190-210 Δ	5,6 Δ	1,3	-280	350	59	IE3	24	2BH7310-0AK41-1
	60	190-210 YY / 380-420 Y	6,3 YY / 3,2 Y	1,6	-340	460	63	IE3		
	60	200 YY	6,3 YY	1,6	-340	460	63	NP		
<b>IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 and CAN/CSA C22.2 No. 68-09 (certificate number E225239)</b>										
1	50	220-240 Δ / 380-420 Y	3,7 Δ / 2,1 Y	1,0	-280	350	58	IE3	22	2BH7310-0AK36-1
	60	220-240 YY / 440-480 Y	4,2 YY / 2,1 Y	1,1	-340	340	62	IE3		
	60	230 YY / 460 Y	4,2 YY / 2,1 Y	1,1	-340	340	62	NP		
2	50	220-240 Δ / 380-420 Y	4,9 Δ / 2,9 Y	1,3	-280	350	59	IE3	24	2BH7310-0AK46-1
	60	220-240 YY / 440-480 Y	5,5 YY / 2,8 Y	1,6	-340	460	63	IE3		
	60	230 YY / 460 Y	5,5 YY / 2,8 Y	1,6	-340	460	63	NP		
<b>IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 and CAN/CSA C22.2 No. 68-09 (certificate number E225239)</b>										
1	50	500 Y	1,7 Y	1,0	-280	350	58	IE3	22	2BH7310-0AQ33-1
	60	575 Y	1,7 Y	1,1	-340	340	62	NP		
2	50	500 Y	2,3 Y	1,3	-280	350	59	IE3	24	2BH7310-0AQ43-1
	60	575 Y	2,2 Y	1,6	-340	460	63	NP		
<b>IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 and CAN/CSA C22.2 No. 68-09 (certificate number E225239)</b>										
1	50	/					58		22	2BH7310-0AQ36-1
	60						62			
	60						62			
2	50	/					59		24	2BH7310-0AQ46-1
	60						63			
	60						63			
<b>IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 and CAN/CSA C22.2 No. 68-09 (certificate number E225239)</b>										
1	50	380-420 Δ / 690 Y	2,1 Δ / 0,8 U	1,0	-280	350	58	IE3	22	2BH7310-0AQ37-1
	60			1,1	-340	340	62	IE3		
	60	460 Δ		1,1	-340	340	62	NP		
2	50	380-420 Δ / 690 Y	2,9 Δ / 1,3 U	1,3	-280	350	59	IE3	24	2BH7310-0AQ47-1
	60			1,6	-340	400	63	IE3		
	60	460 Δ		1,6	-340	400	63	NP		

- 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.

Voltage range		Efficiency	c US	60 Hz	2BH7...-... □ . □ -1
50 Hz	60Hz				
<b>3~</b>					
200 VΔ	200 V YY / 230 VΔ / 400 VY				
190-210 VΔ	190-210 VYY / 220-240 VΔ / 380-420VY	IE3	•		K 1
200 V YY / 230 VΔ / 400 VY	230 V YY / 460 VY	NEMA Premium IE3	•		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
220-240 VΔ / 380-420 V Y	440-480 V Y	IE3	•		Q 6
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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