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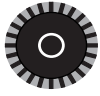
# G-BH 1 N

## Data sheet 2BH1 500

Side channel blower with IE3-motors

IE3

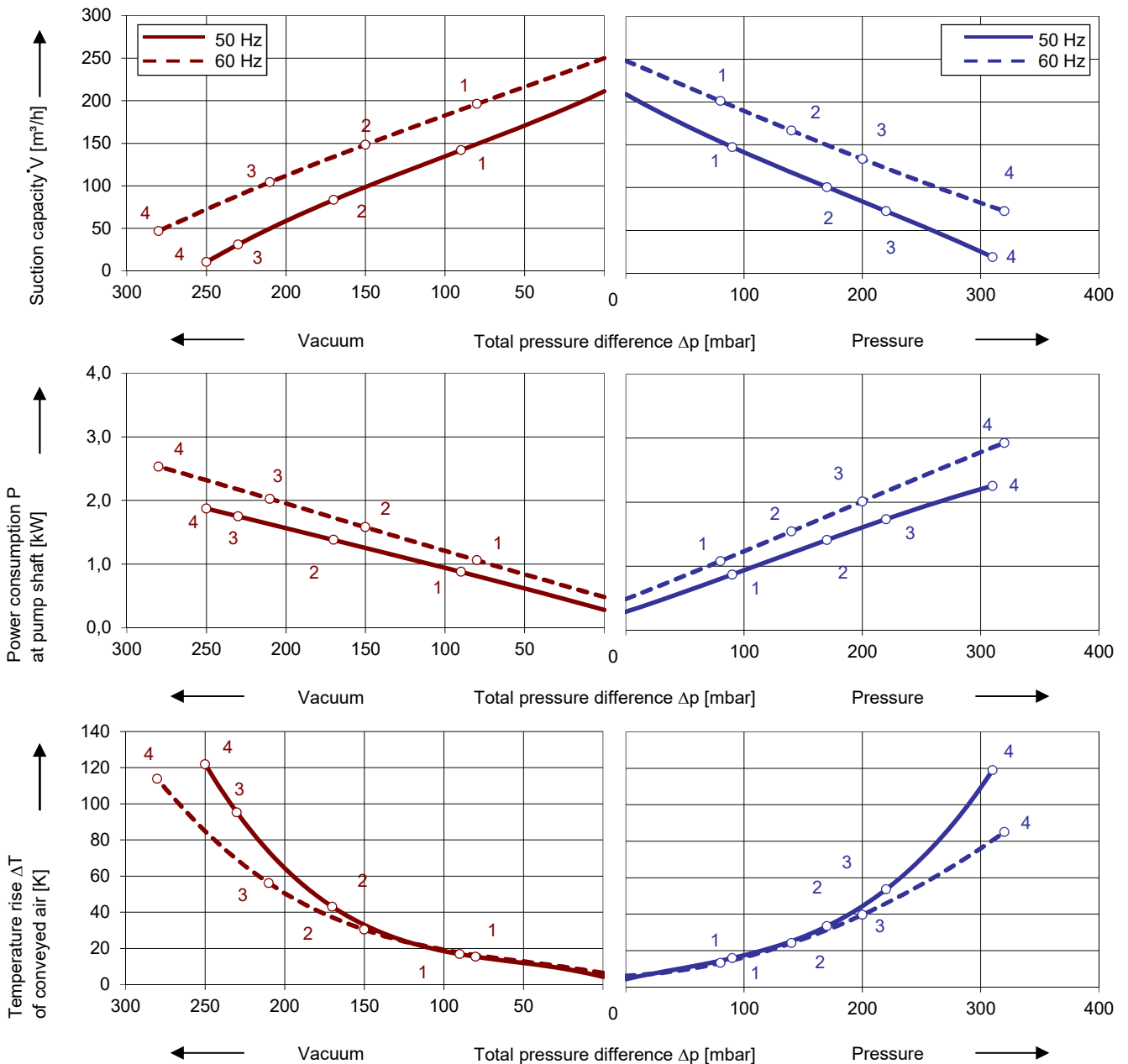
UL US



### 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. 3)	Efficiency class 4)	Weight approx.	Order No.	
		Voltage 1)		Current	Power	Vacuum					Pressure
		Hz	V	A	kW	mbar					
<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	0,95	-90	90	59	IE3	21	2BH1500-0AK01	
	60	190-210 YY / 380-420 Y	4,8 YY / 2,4 Y	1,10	-80	80	65	IE3			
	60	200 YY	4,8 YY	1,10	-80	80	65	NP			
2	50	190-210 Δ	5,6 Δ	1,30	-170	170	60	IE3	24	2BH1500-0AK11	
	60	190-210 YY / 380-420 Y	6,3 YY / 3,2 Y	1,60	-150	140	69	IE3			
	60	200 YY	6,3 YY	1,60	-150	140	69	NP			
3	50	190-210 Δ	6,9 Δ	1,75	-230	220	64	IE3	26	2BH1500-0AK21	
	60	190-210 YY / 380-420 Y	7,8 YY / 3,9 Y	2,0	-210	200	72	IE3			
	60	200 YY	7,8 YY	2,0	-210	200	72	NP			
4	50	190-210 Δ	9,9 Δ	2,50	-250	310	69	IE3	30	2BH1500-0AK31	
	60	190-210 YY / 380-420 Y	12,0 YY / 6,0 Y	3,00	-280	320	70	IE3			
	60	200 YY	12,0 YY	3,00	-280	320	70	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	0,95	-90	90	59	IE3	21	2BH1500-0AK06	
	60	220-240 YY / 440-480 Y	4,2 YY / 2,1 Y	1,10	-80	80	65	IE3			
	60	230 YY / 460 Y	4,2 YY / 2,1 Y	1,10	-80	80	65	NP			
2	50	220-240 Δ / 380-420 Y	4,9 Δ / 2,9 Y	1,30	-170	170	60	IE3	24	2BH1500-0AK16	
	60	220-240 YY / 440-480 Y	5,5 YY / 2,8 Y	1,60	-150	140	69	IE3			
	60	230 YY / 460 Y	5,5 YY / 2,8 Y	1,60	-150	140	69	NP			
3	50	220-240 Δ / 380-420 Y	6,0 Δ / 3,5 Y	1,75	-230	220	64	IE3	26	2BH1500-0AK26	
	60	220-240 YY / 440-480 Y	6,8 YY / 3,4 Y	2,00	-210	200	72	IE3			
	60	230 YY / 460 Y	6,8 YY / 3,4 Y	2,00	-210	200	72	NP			
4	50	220-240 Δ / 380-420 Y	8,6 Δ / 5,0 Y	2,5	-250	310	69	IE3	30	2BH1500-0AK36	
	60	220-240 YY / 440-480 Y	10,4 YY / 5,2 Y	3,0	-280	320	70	IE3			
	60	230 YY / 460 Y	10,4 YY / 5,2 Y	3,0	-280	320	70	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	475-525 Y	1,7 Y	0,95	-90	90	59	IE3	21	2BH1500-0AQ03	
	60	550-600 Y	1,7 Y	1,10	-80	80	65	NP			
	50	475-525 Y	2,3 Y	1,30	-170	170	60	IE3			
2	50	550-600 Y	2,2 Y	1,60	-150	140	69	NP	24	2BH1500-0AQ13	
	60	550-600 Y	2,2 Y	1,60	-150	140	69	NP			
	50	475-525 Y	2,8 Y	1,75	-230	220	64	IE3			
3	50	475-525 Y	2,7 Y	2,00	-210	200	72	NP	26	2BH1500-0AQ23	
	60	550-600 Y	2,7 Y	2,00	-210	200	72	NP			
	50	475-525 Y	4,0 Y	2,50	-250	310	69	IE3			
4	50	550-600 Y	4,1 Y	3,00	-280	320	70	NP	30	2BH1500-0AQ33	
	60	550-600 Y	4,1 Y	3,00	-280	320	70	NP			
	50	475-525 Y	4,0 Y	2,50	-250	310	69	IE3			
<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 / 660-725 Y	2,1 Δ / 1,2 Y	0,95	-90	90	59	IE3	21	2BH1500-0AQ07	
	60	440-480 Δ	2,1 Δ	1,10	-80	80	65	IE3			
	60	460 Δ	2,1 Δ	1,10	-80	80	65	NP			
2	50	380-420 Δ / 660-725 Y	2,9 Δ / 1,7 Y	1,30	-170	170	60	IE3	24	2BH1500-0AQ17	
	60	440-480 Δ	2,8 Δ	1,60	-150	140	69	IE3			
	60	460 Δ	2,8 Δ	1,60	-150	140	69	NP			
3	50	380-420 Δ / 660-725 Y	3,5 Δ / 2,0 Y	1,75	-230	220	64	IE3	26	2BH1500-0AQ27	
	60	440-480 Δ	3,4 Δ	2,00	-210	200	72	IE3			
	60	460 Δ	3,4 Δ	2,00	-210	200	72	NP			
4	50	380-420 Δ / 660-725 Y	5,0 Δ / 2,9 Y	2,50	-250	310	69	IE3	30	2BH1500-0AQ37	
	60	440-480 Δ	5,2 Δ	3,00	-280	320	70	IE3			
	60	460 Δ	5,2 Δ	3,00	-280	320	70	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	0,95	-90	90	59	IE3	21	2BH1500-0AQ06	
	60	440-480 Y	2,1 Y	1,10	-80	80	65	IE3			
	50	220-240 Δ / 380-420 Y	4,9 Δ / 2,9 Y	1,30	-170	170	60	IE3			
2	50	440-480 Y	2,8 Y	1,60	-150	140	69	IE3	24	2BH1500-0AQ16	
	60	440-480 Y	2,8 Y	1,60	-150	140	69	IE3			
	50	220-240 Δ / 380-420 Y	6,0 Δ / 3,5 Y	1,75	-230	220	64	IE3			
3	50	440-480 Y	3,4 Y	2,0	-210	200	72	IE3	26	2BH1500-0AQ26	
	60	440-480 Y	3,4 Y	2,0	-210	200	72	IE3			
	50	220-240 Δ / 380-420 Y	8,8 Δ / 5,1 Y	2,50	-250	310	69	IE3			
4	50	440-480 Y	5,2 Y	3,00	-280	320	70	IE3	30	2BH1500-0AQ36	
	60	440-480 Y	5,2 Y	3,00	-280	320	70	IE3			
	50	220-240 Δ / 380-420 Y	8,8 Δ / 5,1 Y	2,50	-250	310	69	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.

Voltage range		Efficiency 4)	c <sub>RU</sub> us	60 Hz	2BH1...-0. □ . □
50 Hz	60Hz				
<b>3~</b>					
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	IE3			K 6
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	IE3			K 6
475-525 V Y	550-600 V Y				Q 3
475-525 V Δ	550-600 V Δ				Q 5
220-240 V Δ / 380-420VY	440-480VY	IE3			Q 6
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.



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