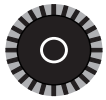
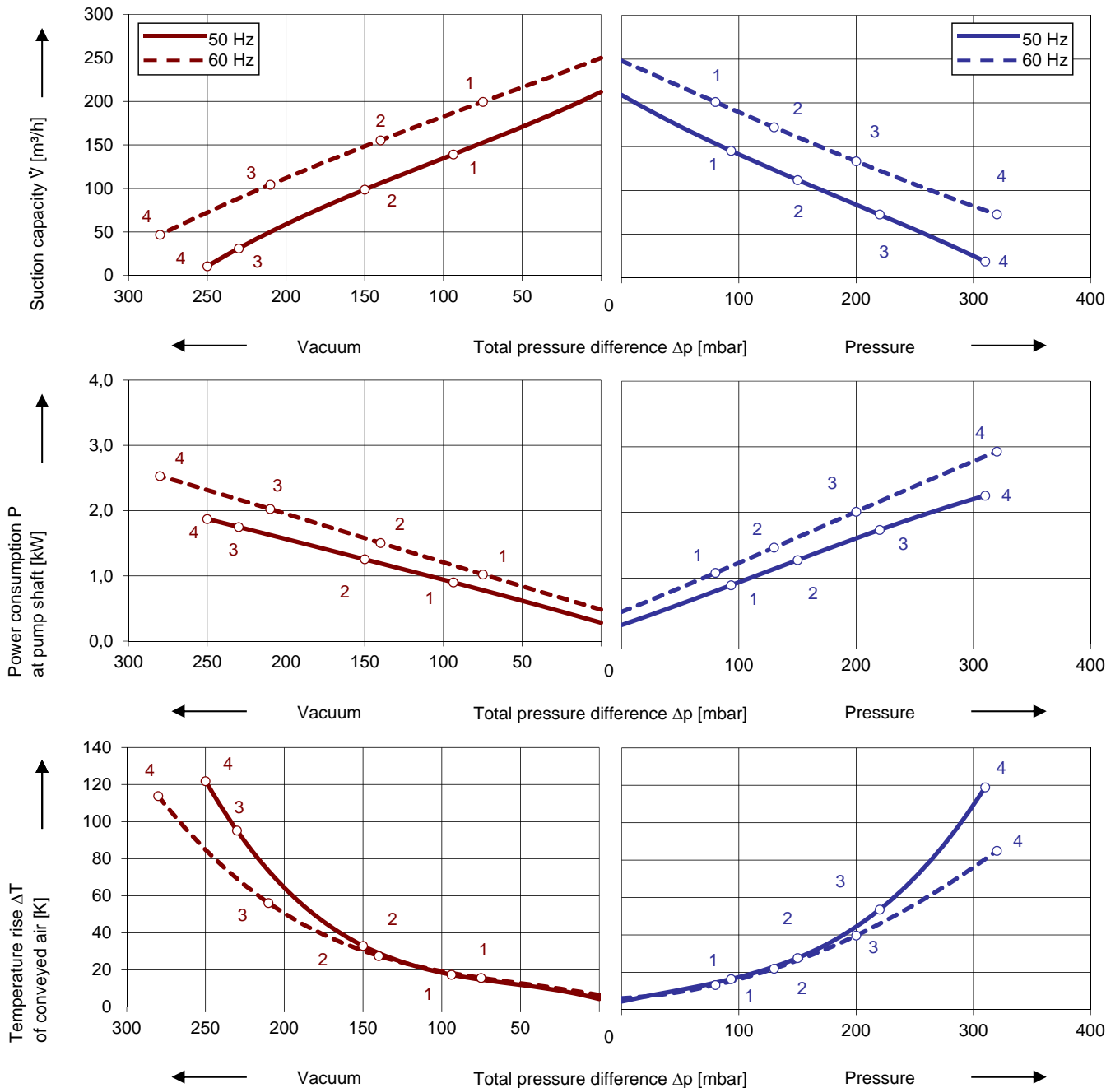




# G-BH 1 N

## Data sheet 2BH1 500

### 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.

## Selection and ordering data

Type											
No.	Fre- quency	Rated			Max. differential pressure <sup>2)</sup>		Sound pres. Level <sup>3)</sup>	Efficiency class <sup>4)</sup>	Weight approx.	Order No.	
		Voltage <sup>1)</sup>		Current	Power	Vacuum					Pressure
		Hz	V	A	kW	mbar					mbar
<b>IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1004 and CNA/CSA 22.2 No 68-09 (certificate number E225239)</b>											
1	50	190-210 Δ	3,8 Δ	0,86	-90	90	64	IE3	26	2BH1500-1AK01	
	60	190-210 YY / 380-420 Y	4,25 YY / 2,13 Y	0,99	-80	80	70	IE3			
2	50	190-210 Δ	5,6 Δ	1,30	-170	170	64	IE3	29	2BH1500-1AK11	
	60	190-210 YY / 380-420 Y	6,3 YY / 3,16 Y	1,60	-150	140	70	IE3			
3	50	190-210 Δ	6,9 Δ	1,75	-230	220	64	IE3	32	2BH1500-1AK21	
	60	190-210 YY / 380-420 Y	7,8 YY / 3,9 Y	2,00	-210	200	70	IE3			
4	50	190-210 Δ	9,9 Δ	2,5	-250	310	64	IE3	40	2BH1500-1AK31	
	60	190-210 YY / 380-420 Y	12,0 YY / 6,0 Y	3,0	-280	320	70	IE3			
<b>IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1004 and CNA/CSA 22.2 No 68-09 (certificate number E225239)</b>											
1	50	220-240 Δ / 380-420 Y	3,30 Δ / 1,90 Y	0,86	-90	90	64	IE3	26	2BH1500-1AK06	
	60	220-240 YY / 440-480 Y	3,7 YY / 1,85 Y	0,99	-80	80	70	IE3			
2	50	220-240 Δ / 380-420 Y	4,9 Δ / 2,85 Y	1,30	-170	170	64	IE3	29	2BH1500-1AK16	
	60	220-240 YY / 440-480 Y	5,5 YY / 2,75 Y	1,60	-150	140	70	IE3			
3	50	220-240 Δ / 380-420 Y	6,0 Δ / 3,45 Y	1,75	-230	220	64	IE3	32	2BH1500-1AK26	
	60	220-240 YY / 440-480 Y	6,8 YY / 3,4 Y	2,00	-210	200	70	IE3			
4	50	220-240 Δ / 380-420 Y	8,6 Δ / 5,0 Y	2,5	-250	310	64	IE3	40	2BH1500-1AK36	
	60	220-240 YY / 440-480 Y	10,4 YY / 5,2 Y	3,0	-280	320	70	IE3			
<b>IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1004 and CNA/CSA 22.2 No 68-09 (certificate number E225239)</b>											
1	50	500 Y	1,52 Y	0,86	-90	90	64	IE3	26	2BH1500-1AQ03	
	60	575 Y	1,48 Y	0,99	-80	80	70	NP			
2	50	500 Y	2,28 Y	1,30	-170	170	64	IE3	29	2BH1500-1AQ13	
	60	575 Y	2,20 Y	1,60	-150	140	70	NP			
3	50	500 Y	2,76 Y	1,75	-230	220	64	IE3	32	2BH1500-1AQ23	
	60	575 Y	2,72 Y	2,00	-210	200	70	NP			
4	50	500 Y	4,00 Y	2,5	-250	310	64	IE3	40	2BH1500-1AQ33	
	60	575 Y	4,1 Y	3,00	-280	320	70	NP			
<b>IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1004 and CNA/CSA 22.2 No 68-09 (certificate number E225239)</b>											
1	50	380-420 Δ / 660-725 Y	1,90 Δ / 1,10 Y	0,86	-90	90	64	IE3	26	2BH1500-1AQ07	
	60	440-480 Δ	1,85 Δ	0,99	-80	80	70	IE3			
2	50	380-420 Δ / 660-725 Y	2,85 Δ / 1,65 Y	1,30	-170	170	64	IE3	29	2BH1500-1AQ17	
	60	440-480 Δ	2,75 Δ	1,60	-150	140	70	IE3			
3	50	380-420 Δ / 660-725 Y	3,45 Δ / 2,00 Y	1,75	-230	220	64	IE3	32	2BH1500-1AQ27	
	60	440-480 Δ	3,4 Δ	2,0	-210	200	70	IE3			
4	50	380-420 Δ / 660-725 Y	5,0 Δ / 2,90 Y	2,5	-250	310	64	IE3	40	2BH1500-1AQ37	
	60	440-480 Δ	5,2 Δ	3,0	-280	320	70	IE3			
<b>IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1004 and CNA/CSA 22.2 No 68-09 (certificate number E225239)</b>											
1	50	460 Δ	1,85 Δ	0,99	-80	80	70	NP	26	2BH1500-1AQ07	
	60	460 Δ	1,85 Δ	0,99	-80	80	70	NP			
2	50	380-420 Δ / 660-725 Y	2,85 Δ / 1,65 Y	1,30	-170	170	64	IE3	29	2BH1500-1AQ17	
	60	440-480 Δ	2,75 Δ	1,60	-150	140	70	IE3			
3	50	380-420 Δ / 660-725 Y	3,45 Δ / 2,00 Y	1,75	-230	220	64	IE3	32	2BH1500-1AQ27	
	60	440-480 Δ	3,4 Δ	2,0	-210	200	70	IE3			
4	50	380-420 Δ / 660-725 Y	5,0 Δ / 2,90 Y	2,5	-250	310	64	IE3	40	2BH1500-1AQ37	
	60	440-480 Δ	5,2 Δ	3,0	-280	320	70	IE3			
<b>IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1004 and CNA/CSA 22.2 No 68-09 (certificate number E225239)</b>											
1	50	500 Y	1,52 Y	0,86	-90	90	64	IE3	26	2BH1500-1AQ03	
	60	575 Y	1,48 Y	0,99	-80	80	70	NP			
2	50	500 Y	2,28 Y	1,30	-170	170	64	IE3	29	2BH1500-1AQ13	
	60	575 Y	2,20 Y	1,60	-150	140	70	NP			
3	50	500 Y	2,76 Y	1,75	-230	220	64	IE3	32	2BH1500-1AQ23	
	60	575 Y	2,72 Y	2,00	-210	200	70	NP			
4	50	500 Y	4,00 Y	2,5	-250	310	64	IE3	40	2BH1500-1AQ33	
	60	575 Y	4,1 Y	3,00	-280	320	70	NP			

- In case of frequency converter operation the standard motor insulation system is suitable for converter input voltages up to 500 V.
- Relief valves available for limiting differential pressure.
- 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).
- The motors according to NEMA MG1-12. NP=NEMA Premium; NEMA Premium includes IE3.

All G-BH match the 2006/42/EC (machinery) and 2006/95/EC (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 <sup>4)</sup>	c  us	60 Hz	2BH1...-1. <input type="checkbox"/> . <input type="checkbox"/>
50 Hz	60Hz				
<b>3~</b>					
200 V Δ	200 V YY / 230 V Δ / 400 V Y		•		K 1
190-210 V Δ	190-210 V YY / 220-240 V Δ / 380-420 V Y		•		K 6
200 V Δ / 230 V Δ / 400 V Y	230 V YY / 460 V Y		•		K 6
190-210 V YY / 220-240 V Δ / 380-420 V Y	220-240 V YY / 440-480 V Y		•		K 6
475-525 V Y	550-600 V Y		•		Q 3
475-525 V Δ	550-600 V Δ		•		Q 5
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.

Elmo Rietschle is a brand of Gardner Denver

**Gardner  
Denver**

Your Ultimate Source for Vacuum and Pressure

Gardner Denver Deutschland GmbH

Industriestraße 26

97616 Bad Neustadt - Germany

Tel.: +49 9771 6888-0

Fax: +49 9771 6888-4000

www.gd-elmorietschle.com • er.de@gardnerdenver.com

Gardner Denver Schopfheim GmbH

Roggenbachstraße 58

79650 Schopfheim - Germany

Tel.: +49 7622 392-0

Fax: +49 7622 392-300