



Elmo Rietschle

G-BH 1 N

Data sheet 2BH1 510

Side channel blower with IE3-motors

IE3

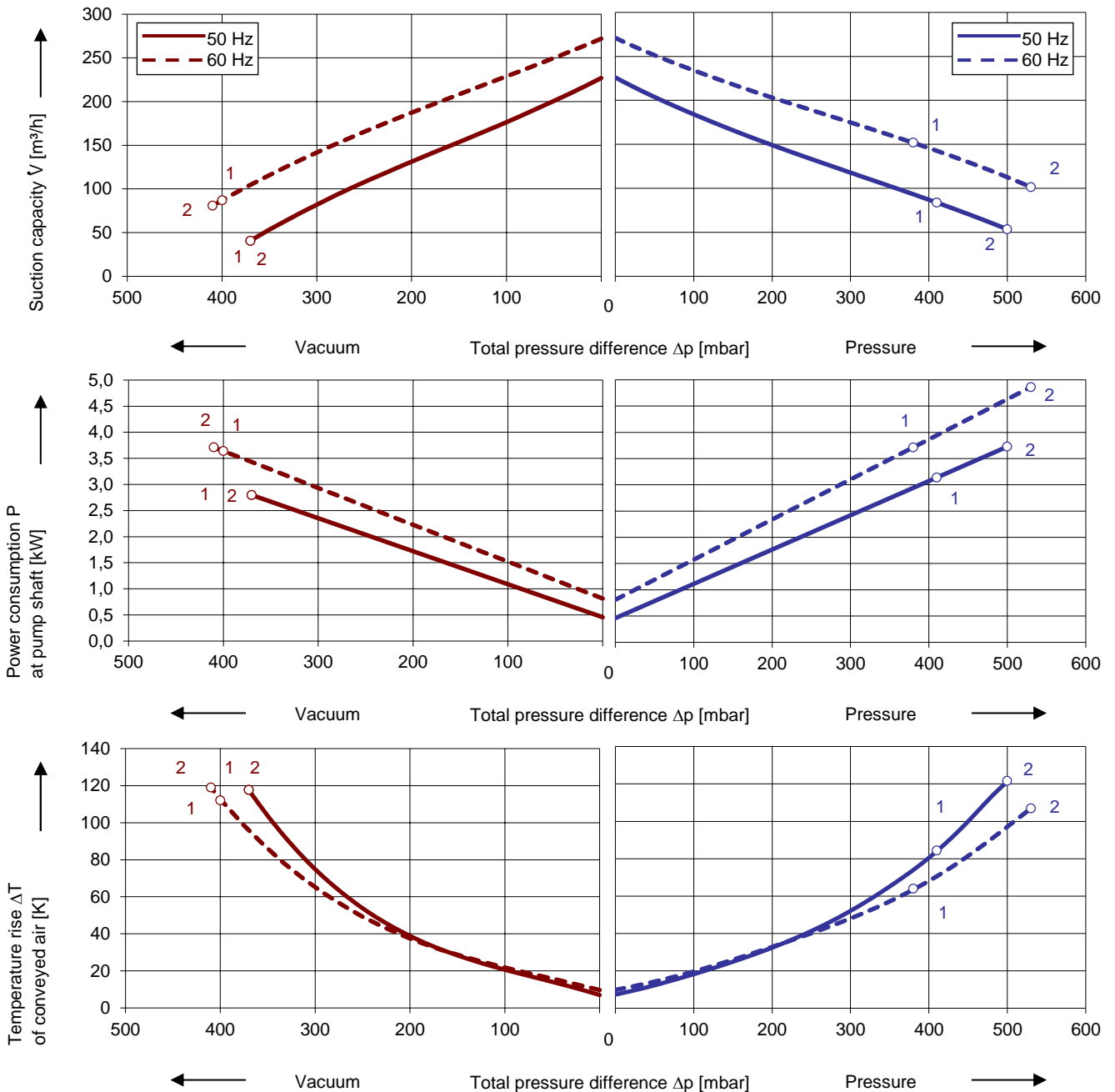
UL US



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 2BH1 510

No.	Fre- quency Hz	Rated			Max. differential pressure ²⁾		Sound pres. Level ³⁾ dB(A)	Efficiency class ⁴⁾	Weight approx. kg	Order No.
		Voltage ¹⁾ V	Current A	Power kW	Vacuum	Pressure				
					mbar					
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	13,3 Δ	3,45	-370	410	71	IE3	48	2BH1510-1HK41
	60	190-210 YY / 380-420 Y	15,2 YY / 7,6 Y	4,0	-400	380	73	IE3		
	60	200 YY	15,2 YY	4,0	-400	380	73	NP		
2	50	190-210 Δ	18,9 Δ	4,6	-370	500	70	IE3	48	2BH1510-1HK51
	60	190-210 YY / 380-420 Y	21,4 YY / 10,7 Y	5,3	-410	530	73	IE3		
	60	200 YY	21,4 YY	5,3	-410	530	73	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	11,6 Δ / 6,7 Y	3,45	-370	410	71	IE3	48	2BH1510-1HK46
	60	220-240 YY / 440-480 Y	13,2 YY / 6,6 Y	4,0	-400	380	73	IE3		
	60	230 YY / 460 Y	13,2 YY / 6,6 Y	4,0	-400	380	73	NP		
2	50	220-240 Δ / 380-420 Y	16,5 Δ / 9,5 Y	4,6	-370	500	70	IE3	48	2BH1510-1HK56
	60	220-240 YY / 440-480 Y	18,5 YY / 9,3 Y	5,3	-410	530	73	IE3		
	60	230 YY / 460 Y	18,5 YY / 9,3 Y	5,3	-410	530	73	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	5,4 Y	3,45	-370	410	71	IE3	48	2BH1510-1HQ43
	60	550-600 Y	5,3 Y	4,0	-400	380	73	NP		
2	50	475-525 Y	7,1 Y	4,6	-370	500	70	IE3	48	2BH1510-1HQ53
	60	550-600 Y	7,0 Y	5,3	-410	530	73	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	6,7 Δ / 3,85 Y	3,45	-370	410	71	IE3	48	2BH1510-1HQ47
	60	440-480 Δ	6,6 Δ	4,0	-400	380	73	IE3		
	60	460 Δ	6,6 Δ	4,0	-400	380	73	NP		
2	50	380-420 Δ / 660-725 Y	9,5 Δ / 5,5 Y	4,6	-370	500	70	IE3	48	2BH1510-1HQ57
	60	440-480 Δ	9,3 Δ	5,3	-410	530	73	IE3		
	60	460 Δ	9,3 Δ	5,3	-410	530	73	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	11,6 Δ / 6,7 Y	3,45	-370	410	71	IE3	48	2BH1510-1HQ46
	60	440-480 Y	6,6 Y	4,0	-400	380	73	IE3		
2	50	220-240 Δ / 380-420 Y	16,4 Δ / 9,5 Y	4,6	-370	500	70	IE3	48	2BH1510-1HQ56
	60	440-480 Y	9,3 Y	5,3	-410	530	73	IE3		

- 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 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 shown.



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
 Johann-Sutter-Strasse 6+8
 79650 Schopfheim - Germany
 Tel.: +49 7622 392-0
 Fax: +49 7622 392-300