



**Elmo
Rietschle**

G-BH 1 N
Data sheet 2BH1 900
Side channel blower with IE3-motors

IE3

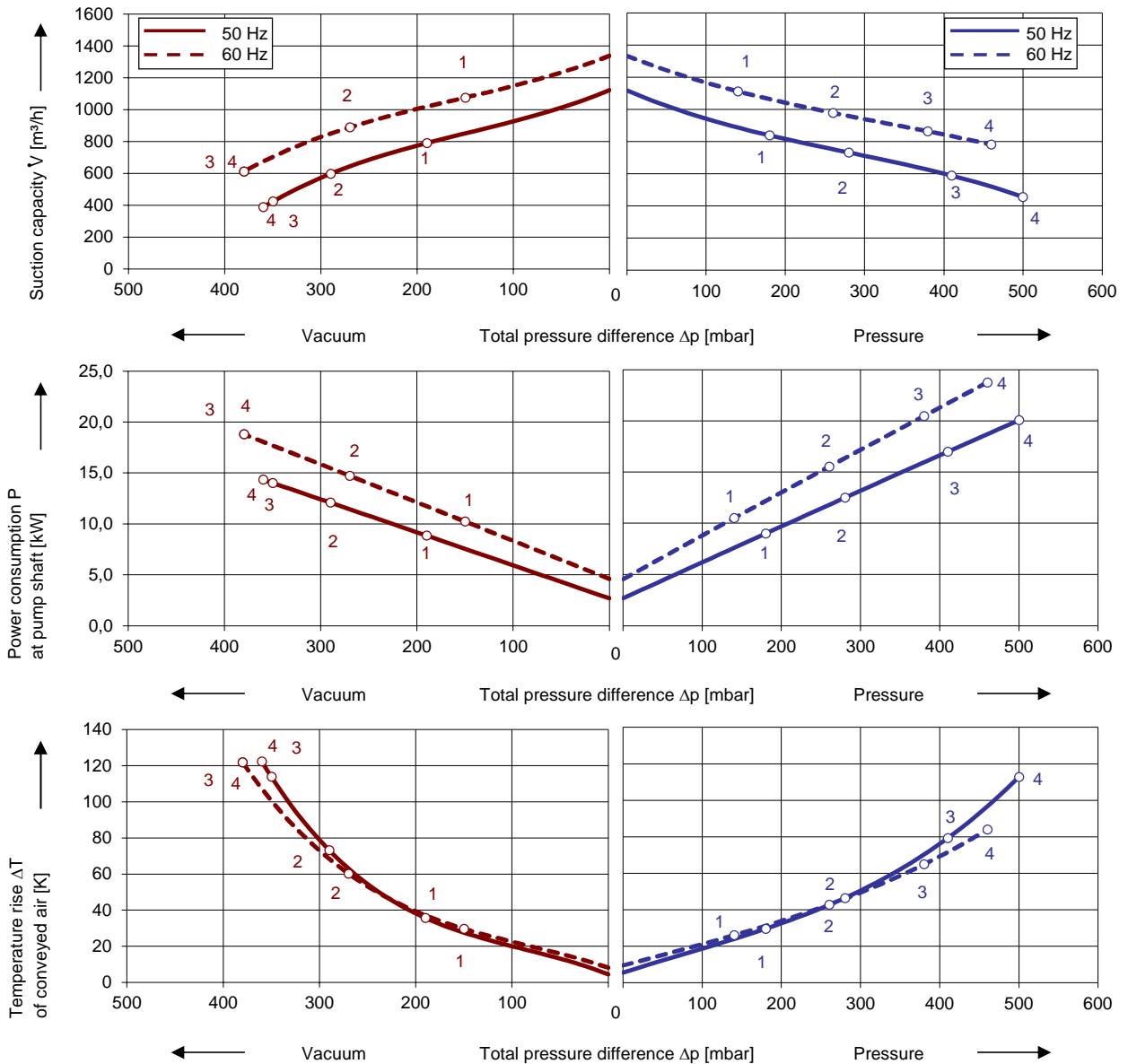
CE



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.

Selection and ordering data										
Type										
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 mbar	Pressure				
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	30,8 Δ	8,6	-190	180	71	IE3	183	2BH1900-1AK01
	60	190-210 YY / 380-420 Y	35,2 YY / 17,6 Y	9,9	-150	140	75	IE3		
	60	200 YY	35,2 YY	9,9	-150	140	75	NP		
2	50	190-210 Δ	46,4 Δ	12,6	-290	280	74	IE3	202	2BH1900-1AK11
	60	190-210 YY / 380-420 Y	52,8 YY / 26,4 Y	14,5	-270	260	78	IE3		
	60	200 YY	52,8 YY	14,5	-270	260	78	NP		
3	50	190-210 Δ	63,1 Δ	17,3	-350	410	74	IE3	212	2BH1900-1AK21
	60	190-210 YY / 380-420 Y	72,2 YY / 36,1 Y	19,9	-380	380	78	IE3		
	60	200 YY	72,2 YY	19,9	-380	380	78	NP		
4	50	190-210 Δ	76,2 Δ	21,3	-360	500	74	IE3	225	2BH1900-1AK31
	60	190-210 YY / 380-420 Y	87,4 YY / 43,7 Y	24,5	-380	460	78	IE3		
	60	200 YY	87,4 YY	24,5	-380	460	78	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	26,8 Δ / 15,5 Y	8,6	-190	180	71	IE3	183	2BH1900-1AK06
	60	220-240 YY / 440-480 Y	30,6 YY / 15,3 Y	9,9	-150	140	75	IE3		
	60	230 YY / 460 Y	30,6 YY / 15,3 Y	9,9	-150	140	75	NP		
2	50	220-240 Δ / 380-420 Y	40,3 Δ / 23,3 Y	12,6	-290	280	74	IE3	202	2BH1900-1AK16
	60	220-240 YY / 440-480 Y	46,0 YY / 23,0 Y	14,5	-270	260	78	IE3		
	60	230 YY / 460 Y	46,0 YY / 23,0 Y	14,5	-270	260	78	NP		
3	50	220-240 Δ / 380-420 Y	54,9 Δ / 31,7 Y	17,3	-350	410	74	IE3	212	2BH1900-1AK26
	60	220-240 YY / 440-480 Y	62,8 YY / 31,4 Y	19,9	-380	380	78	IE3		
	60	230 YY / 460 Y	62,8 YY / 31,4 Y	19,9	-380	380	78	NP		
4	50	220-240 Δ / 380-420 Y	66,3 Δ / 38,3 Y	21,3	-360	500	74	IE3	225	2BH1900-1AK36
	60	220-240 YY / 440-480 Y	76,0 YY / 38,0 Y	24,5	-380	460	78	IE3		
	60	230 YY / 460 Y	76,0 YY / 38,0 Y	24,5	-380	460	78	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	12,4 Y	8,6	-190	180	71	IE3	183	2BH1900-1AQ03
	60	550-600 Y	12,2 Y	9,9	-150	140	75	NP		
	50	475-525 Y	18,6 Y	12,6	-290	280	74	IE3		
2	60	550-600 Y	18,4 Y	14,5	-270	260	78	NP	202	2BH1900-1AQ13
	50	475-525 Y	25,4 Y	17,3	-350	410	74	IE3		
	60	550-600 Y	25,1 Y	19,9	-380	380	78	NP		
3	50	475-525 Y	30,6 Y	21,3	-360	500	74	IE3	212	2BH1900-1AQ23
	60	550-600 Y	30,4 Y	24,5	-380	460	78	NP		
	50	475-525 Y	30,4 Y	24,5	-380	460	78	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	15,5 Δ / 8,9 Y	8,6	-190	180	71	IE3	183	2BH1900-1AQ07
	60	440-480 Δ	15,3 Δ	9,9	-150	140	75	IE3		
	60	460 Δ	15,3 Δ	9,9	-150	140	75	NP		
2	50	380-420 Δ / 660-725 Y	23,3 Δ / 13,4 Y	12,6	-290	280	74	IE3	202	2BH1900-1AQ17
	60	440-480 Δ	23,0 Δ	14,5	-270	260	78	IE3		
	60	460 Δ	23,0 Δ	14,5	-270	260	78	NP		
3	50	380-420 Δ / 660-725 Y	31,7 Δ / 18,3 Y	17,3	-350	410	74	IE3	212	2BH1900-1AQ27
	60	440-480 Δ	31,4 Δ	19,9	-380	380	78	IE3		
	60	460 Δ	31,4 Δ	19,9	-380	380	78	NP		
4	50	380-420 Δ / 660-725 Y	38,3 Δ / 22,1 Y	21,3	-360	500	74	IE3	224	2BH1900-1AQ37
	60	440-480 Δ	38,0 Δ	24,5	-380	460	78	IE3		
	60	460 Δ	38,0 Δ	24,5	-380	460	78	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	26,8 Δ / 15,5 Y	8,6	-190	180	71	IE3	183	2BH1900-1AQ06
	60	440-480 Y	15,3 Y	9,9	-150	140	75	IE3		
	50	220-240 Δ / 380-420 Y	42,5 Δ / 24,5 Y	12,6	-290	280	74	IE3		
2	60	440-480 Y	24,5 Y	14,5	-270	260	78	IE3	202	2BH1900-1AQ16
	50	220-240 Δ / 380-420 Y	57,0 Δ / 32,7 Y	17,3	-350	410	74	IE3		
	60	440-480 Y	32,4 Y	19,9	-380	380	78	IE3		
3	50	220-240 Δ / 380-420 Y	57,0 Δ / 32,7 Y	17,3	-350	410	74	IE3	212	2BH1900-1AQ26
	60	440-480 Y	32,4 Y	19,9	-380	380	78	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.

Voltage range		Efficiency ⁴⁾	c US	60 Hz	2BH1...-1. □ . □
50 Hz	60Hz				
3-					
200 V Δ	200 V YY / 230 V Δ / 400 V Y	NEMA Premium IE3	•	K	1
190-210 V Δ	190-210 V YY / 220-240 V Δ / 380-420 V Y				
200 V YY / 230 V Δ / 400 V Y	230 V YY / 460 V Y	NEMA Premium IE3	•	K	6
190-210 V YY / 220-240 V Δ / 380-420 V Y	220-240 V YY / 440-480 V Y				
475-525 V Y	550-600 V Y	NEMA Premium IE3	•	Q	3
220-240 V Δ / 380-420 V Y	440-480 V Y				
400 V Δ / 690 V Y	460 V Δ	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.



Gardner Denver Deutschland GmbH
 Industriestraße 26
 97616 Bad Neustadt - Germany
 Tel.: +49 9771 6888-0
 Fax: +49 9771 6888-4000
 www.elmorietschle.com • er.de@irco.com

Gardner Denver Schopfheim GmbH
 Johann-Sutter-Straße 6+8
 79650 Schopfheim - Germany
 Tel.: +49 7622 392-0
 Fax: +49 7622 392-300