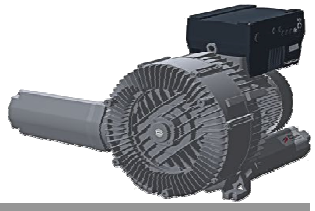
G-BH1 e
Data sheet 2BH1 910

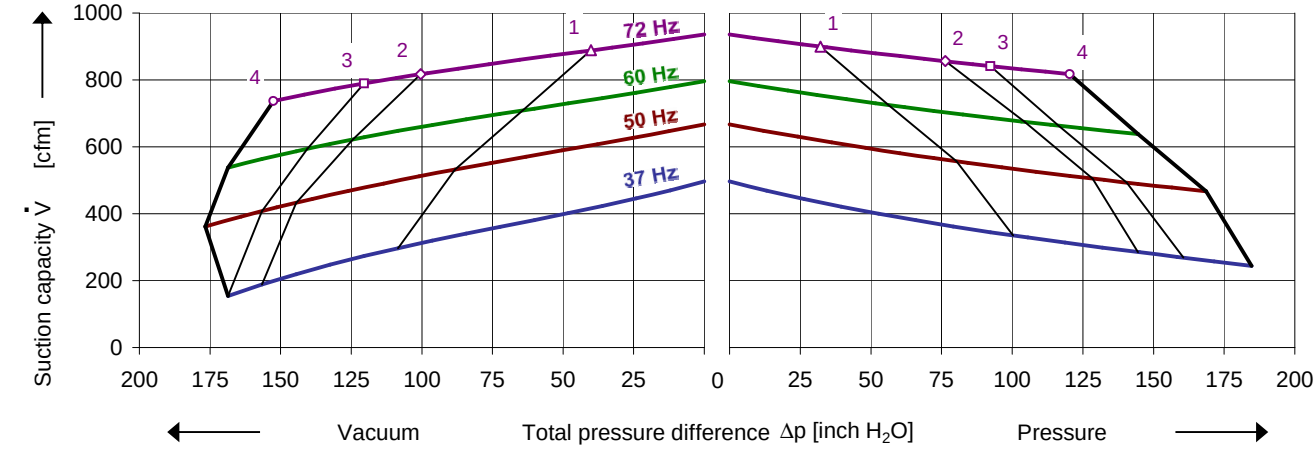
Side channel blower with Frequency Converter

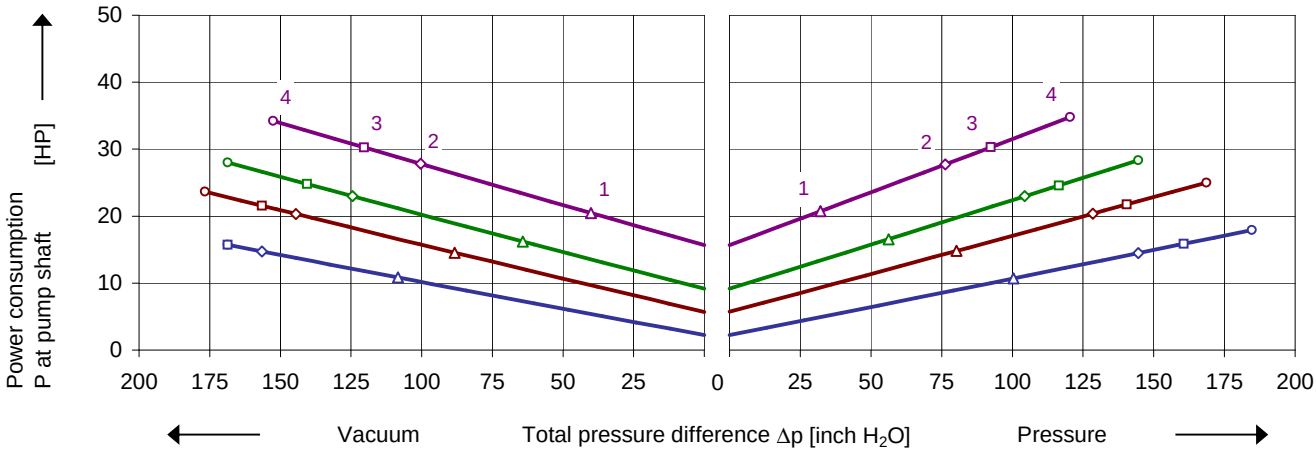
IE2

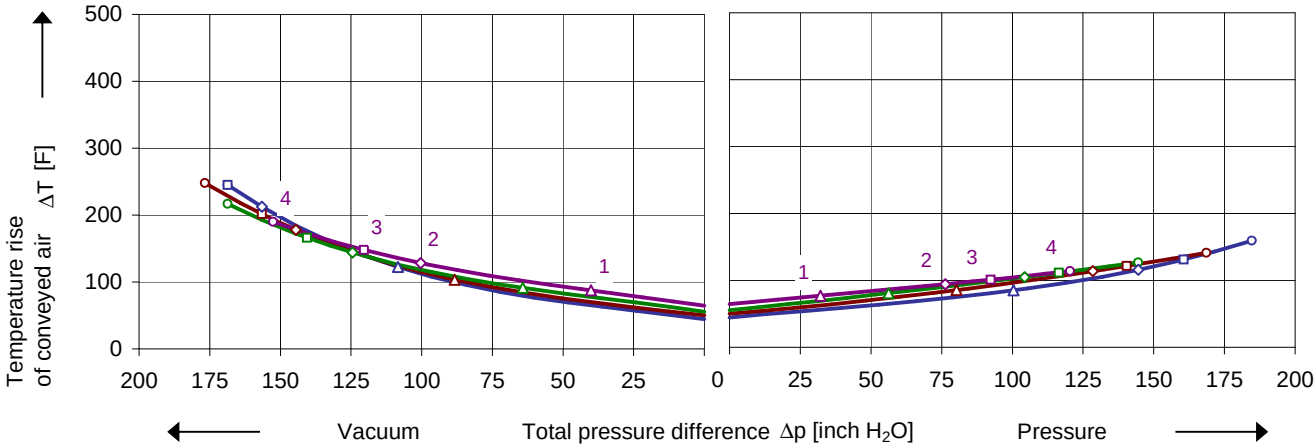


Performance curves

Vacuum operation (acfm) | **Pressure operation (scfm)**







The performance curves are based on air at a temperature of 59 F and an atmospheric pressure of 29.92 inch Hg with a tolerance of ± 10 %. The total Suction capacity relates to inlet conditions. Pressure capacity relates to atmospheric conditions. For other conditions please contact Elmo Rietschle.

The performance curves are based on frequency converter operation and a pulse frequency of 4 kHz minimum. Rated voltage/frequency set point is 345 V / 87 Hz and delta connection of motor. Frequency converters must be connected to a mains voltage of 380 V minimum.

Selection and ordering data

Type 2BH1 910

No.	Frequency	Rated motor			Max. differential pressure[1]		Sound pressure level[2]	Weight Approx.	Order No.	VFD type
		Voltage	Current	Power	Vacuum	Pressure				
	Hz	V	A	kW			dB(A)	ibs		
Integrated VFD 3~ 400V -15% … 480V +10%, 50/60 Hz ±6% with IE2 motor with thermistor (PTC), IP55										
3	72	330 Δ	48.0 Δ	22.6	-300	230	87	721	2BH1910-7H236	K
3~ 50/60 Hz, IP55, Insulation material class F, UL 507 and CSA 22.2 No 113 (certificate number E225239)										
1	50	400 Y	19.7 Y	11.0	-220	200	74	675	2BH1910-7HP16 [3]	G
	60	460 Y	19.5 Y	12.6	-160	140	84			G
	72	330 Δ	34.5 Δ	15.4	-100	80	87			J
2	50	400 Y	26.5 Y	15.0	-360	320	74	633	2BH1910-7HP26 [3]	G
	60	460 Y	26.5 Y	17.3	-310	260	84			G
	72	330 Δ	46.5 Δ	21.0	-250	190	87			K
4	50	400 Y	32.0 Y	18.5	-440	420	74	646	2BH1910-7HP36 [3]	H
	60	460 Y	32.0 Y	21.3	-420	360	84			H
	72	330 Δ	56.0 Δ	25.9	-380	300	87			-

1) We recommend differential pressure indicators / switches for limiting differential pressure. Relief valves are only useable at defined frequency.

2) Surface sound pressure levels are according 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).

3) PTC sensores recommended for motor overload protection. Ordering example: 2BH1910- □□□□□-Z Z=A11

All G-BH blowers conform to the 2006/42/EC (machinery) and 2006/95/EC (low voltage) directives and the EN 60034-1 norm “Rotating electrical machines”.
The motors comply with EN 60 034-1 / -2 / -30 (IEC 60034) and thermal class F.

Frequency converter (IP55) motor integrated / for wall mounting

	Frequency Converter Order No.	Rated mains voltage	Max. motor current	Typical motor power	Rated mains current	Fuse Protection	Weight Approx.	Adaptor for wall mounting Order No.
		V	A	kW	A	A	kg	
G	2FC4113-1 □□ 00	400V (-15%) … 480V (+10%)	28.0	11.0	23.3	35	21.0	2FX16990ER00
H	2FC4153-1 □□ 00		34.0	15.0	28.3	50		
J	2FC4183-1 □□ 00		40.0	18.5	33.3	50		
K	2FC4223-1 □□ 00		48.0	22.0	39.9	63		

	I/O's and automation	Order option	Example:
ST	2 AIN / 2 AOUT / 4 DIGIN / 1 DIGOUT / 2 RELAYS	STANDARD	**2BH1910-7H236-Z Z=U51**
PB	2 AIN / 2 AOUT / 4 DIGIN / 1 DIGOUT / 2 RELAYS / ProfiBus interface	Z = U51	VFD type 2FC4223-1PB00 to be delivered already installed
CB	2 AIN / 2 AOUT / 4 DIGIN / 1 DIGOUT / 2 RELAYS / CANopen interface	Z = U52	
PN	2 AIN / 2 AOUT / 4 DIGIN / 1 DIGOUT / 2 RELAYS / ProfiNet interface	Z = U53	
SC	2 AIN / 2 AOUT / 4 DIGIN / 1 DIGOUT / 2 RELAYS / SERCOS3 interface	Z = U54	

VFD accessories

Item	Order No.	Item		Order No.
Manual control		**Differential pressure transmitters**		
MMI handheld	**2FX4520-0ER00**	Vacuum	-1000 … 0 mbar	**2FX6022-0BD00**
USB adaptor cable	**2FX4521-0ER00**	Pressure	0 … 600 mbar	**2FX6013-0BD00**
			0 … 1000 mbar	**2FX6014-0BD00**
INVERTERpc Software				
Free download at www.gd-elmorietschle.com >Downloads >Product Documents >Accessories				

Changes in particular of the quoted performance curve, data and weights may occur without prior notice. The data given do 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

Gardner Denver, Inc.
1800 Gardner Expressway
Quincy, IL 62305
Tel: 217-222-5400
Fax: 217-221-8780

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