

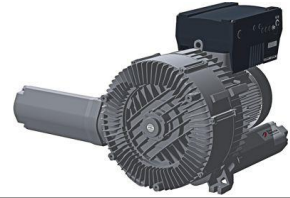
# G-BH1 e

## Data sheet 2BH1 910

Side channel blower with Frequency Converter

IE3

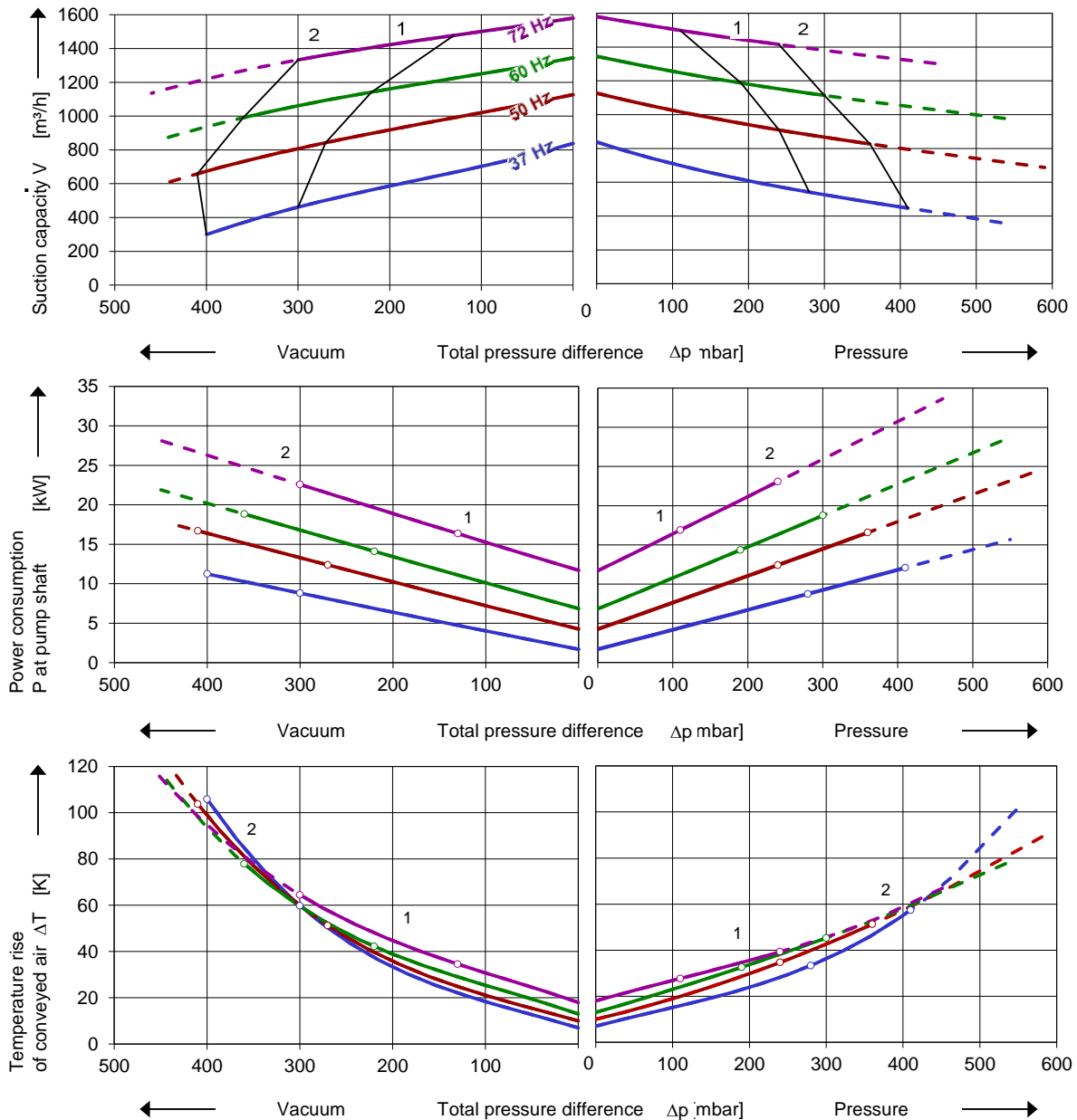
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### Performance curves

#### 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.

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.	Fre- quency	Rated motor			Max. differential pressure <sup>1)</sup>		Sound pressure level <sup>2)</sup>	Weight Approx.	Order No.	VFD type		
		Voltage	Current	Power	Vacuum	Pressure						
		V	A	kW	mbar		dB(A)		kg			
<b>IE3 Integrated VFD 3~ 400V -15% ... 480V +10%, 50/60 Hz ±6% with thermistor (PTC), IP55, UL 1450</b>												
1	72	400 Y	32,3 Y	17,4	-130	110	81	78/79	315	317	2BH1910-1H314	H
2	72	400 Y	44,5 Y	23,9	-300	240	81	78/79	323	325	2BH1910-1H324	K
<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	37	-	-	-	-300	280	71	78/79	295	297	2BH1910-1HK16	3)
	50	-	-	-	-270	240	72					
	60	-	-	-	-220	190	76					
	72	330 Δ	39,3 Δ	17,4	-130	110	81					
2	37	-	-	-	-400	410	71	78/79	303	305	2BH1910-1HK26	3)
	50	-	-	-	-410	360	72					
	60	-	-	-	-360	300	76					
	72	330 Δ	54,1 Δ	23,9	-300	240	81					
	37	-	-	-	-400	410	71	78/79	298	300	2BH1910-1HK36	3)
	50	-	-	-	-440	480	72					
	60	-	-	-	-440	410	76					
	72	330 Δ	65,3 Δ	29,4	-420	340	81					
	37	-	-	-	-400	550	71	78/79	335	337	2BH1910-1HK46	3)
	50	-	-	-	-440	590	72					
	60	-	-	-	-450	540	76					
	72	330 Δ	79,0 Δ	35,0	-460	460	81					

With separately driven fan (order option G17)<sup>4)</sup>

- We recommend differential pressure indicators / switches for limiting differential pressure. Relief valves are only useable at defined frequency.
- 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).
- PTC recommended for motor overload protection. Ordering example: 2BH1910-□□□□-Z Z=A11
- 0

All G-BH match the 2006/42/EC (machinery) and 2014/35/EU (low voltage) directives and the EN 60034 norm "Rotating electrical machines".  
The motors comply with EN 60 034 (IEC 60034) and thermal class F.

## Frequency converter (IP55) motor integrated / for wall mounting

Frequency Converter		Rated mains voltage	Max. motor current	Typical motor power	Rated mains current	Fuse Protection	Weight Approx.	Adaptor for wall mounting
Order No.								V
A	2FC4152-1 □□ 00	400V (-15%) ... 480V (+10%)	4,0	1,5	3,3	10	3,9	2FX16190ER00
B	2FC4222-1 □□ 00		5,6	2,2	4,6	10	5,0	2FX16490ER00
C	2FC4302-1 □□ 00		7,5	3,0	6,2	16		
D	2FC4402-1 □□ 00		9,5	4,0	7,9	16	8,7	2FX16690ER00
E	2FC4552-1 □□ 00		13,0	5,5	10,8	20		
F	2FC4752-1 □□ 00		17,8	7,5	14,8	25	21,0	2FX16990ER00
G	2FC4113-1 □□ 00		28,0	11,0	23,3	35		
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	2BH1910-1H314-Z Z=U51 VFD type 2FC4153-1PB00 to be delivered already installed
PB 2 AIN / 2 AOUT / 4 DIGIN / 1 DIGOUT / 2 RELAYS / ProfiBus interface	Z = U51	
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.
<b>Manual control</b>		<b>Differential pressure transmitters</b>	
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
<b>INVERTERpc Software</b>			
Free download at <a href="http://www.gd-elmorietschle.com">www.gd-elmorietschle.com</a> >Downloads >frequency-converters >Miscellaneous >Software			

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 show

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