

**Elmo
Rietschle**

G-BH7 e

Data sheet 2BH7 310

Side channel blower with Frequency Converter

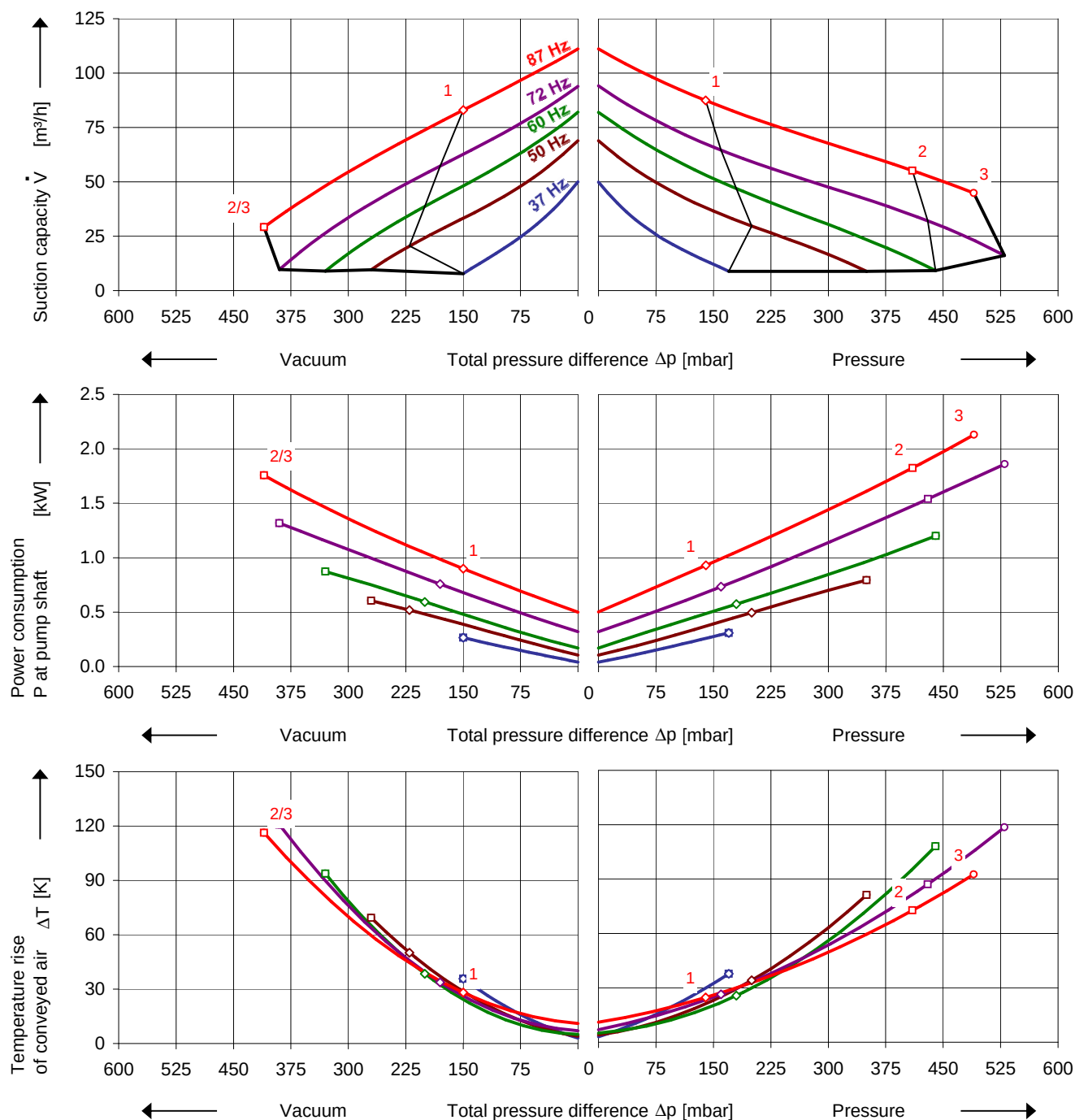
IE2



Performance curves

Vacuum operation

Compressor operation



The performance curves are based on air at a temperature of 15 °C and a 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 2BH7 310										
No.	Fre- quency	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	mbar		dB(A)	kg		
Integrated VFD 3~ 400V -15% ... 480V +10%, 50/60 Hz ±6% with IE2 motor with thermistor (PTC), IP55										
2	87	345 Δ	4.5 Δ	1.9	-410	410	76	27	2BH7310-0A241-7	B
3	87	345 Δ	6.1 Δ	2.6	-410	490	76	30	2BH7310-0A251-7	C
3~ 50/60 Hz, IP55, Insulation material class F, UL 507 and CSA 22.2 No 113 (certificate number E225239)										
1	50	345 Y	1.7 Y	0.6	-230	220	57	17	2BH7310-0AP11-7 ³⁾	A
	60	400 Y	1.7 Y	0.63	-200	180	62			A
	87	345 Δ	2.9 Δ	0.95	-150	140	76			A
2	50	345 Y	2.6 Y	1.1	-270	350	57	21	2BH7310-0AP41-7 ³⁾	A
	60	400 Y	2.5 Y	1.3	-330	440	62			A
	87	345 Δ	4.5 Δ	1.9	-410	410	76			B
3	50	345 Y	3.6 Y	1.5	-270	350	57	26	2BH7310-0AP51-7 ³⁾	A
	60	400 Y	3.4 Y	1.75	-330	440	62			A
	87	345 Δ	6.1 Δ	2.6	-410	490	76			C

- 1) We recommend differential pressure indicators / switches for limiting differential pressure. Relief valves are only useable at defined frequency.
- 2) 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).
- 3) PTC recommended for motor overload protection. Ordering example: 2BH7310- □□□□-□-Z Z=A11

All G-BH match 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		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	Order No.
A	2FC4152-1 □□ 00	400V (-15%)	4.0	1.5	3.3	10	3.9	2FX16190ER00
B	2FC4222-1 □□ 00		...	5.6	2.2	4.6	10	2FX16490ER00
C	2FC4302-1 □□ 00	480V (+10%)	7.5	3.0	6.2	16	5.0	
I/O's and automation						Order option	Example:	
ST	2 AIN / 2 AOUT / 4 DIGIN / 1 DIGOUT / 2 RELAYS					STANDARD	2BH7310-0A241-7-Z Z=U51 VFD type 2FC4222-1PB00 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.
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

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

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