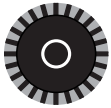
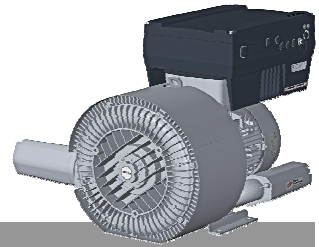


G-BH1 e

Data sheet 2BH1 610

Side channel blower with Frequency Converter

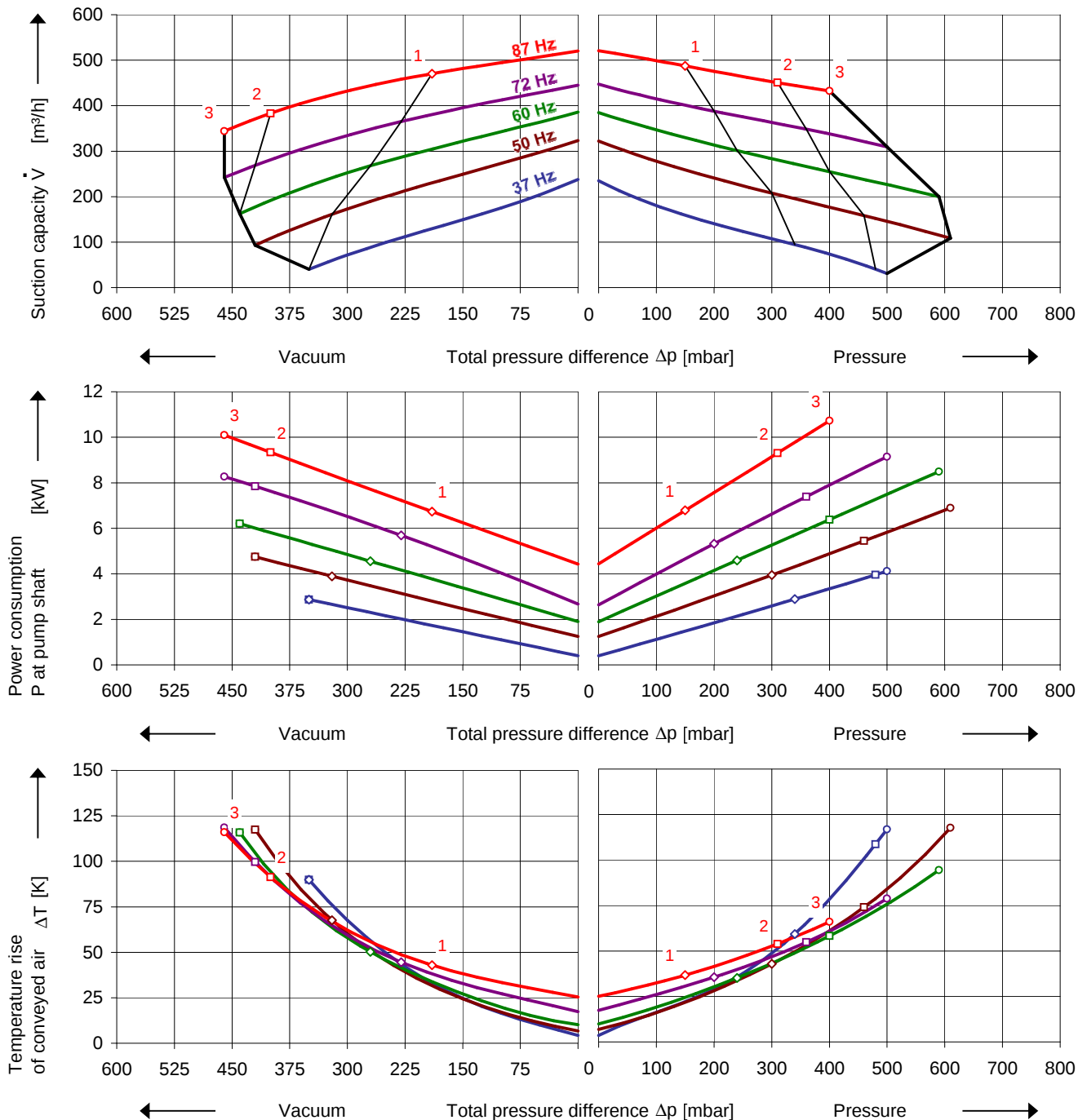
IE2



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 2BH1 610											
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											
1	87	345 Δ	15.1 Δ	6.9	-190	150	84	63	2BH1610-7H231		F
3	87	345 Δ	26.5 Δ	12.9	-460	400	84	103	2BH1610-7H251	G	
3~ 50/60 Hz, IP55, Insulation material class F, UL 507 and CSA 22.2 No 113 (certificate number E225239)											
1	50	345 Y	8.8 Y	4.0	-320	300	73	52	2BH1610-7HP31 ³⁾	D	
	60	400 Y	8.4 Y	4.55	-270	240	75			D	
	87	345 Δ	15.1 Δ	6.9	-190	150				F	
2	50	345 Y	11.8 Y	5.5	-420	460	73	81	2BH1610-7HP41 ³⁾	E	
	60	400 Y	11.4 Y	6.3	-440	400	75			E	
	87	345 Δ	20.5 Δ	9.5	-400	310				G	
3	50	345 Y	15.5 Y	7.5	-420	610	73	86	2BH1610-7HP51 ³⁾	F	
	60	400 Y	15.1 Y	8.6	-440	590	75			F	
	87	345 Δ	26.5 Δ	12.9	-460	400				F	

- 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: 2BH1610- □□□□-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.
D	2FC4402-1 □□ 00	400V (-15%)	9.5	4.0	7.9	16	5.0	2FX16490ER00
E	2FC4552-1 □□ 00		13.0	5.5	10.8	20	8.7	2FX16690ER00
F	2FC4752-1 □□ 00	...	17.8	7.5	14.8	25		
G	2FC4113-1 □□ 00	480V (+10%)	28.0	11.0	23.3	35		
I/O's and automation						Order option	Example:	
ST 2 AIN / 2 AOUT / 4 DIGIN / 1 DIGOUT / 2 RELAYS						STANDARD	2BH1610-7H231-Z Z=U51 VFD type 2FC4752-1PB00 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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