



**Elmo
Rietschle**

IE3

UL US



G-BH1 e

Data sheet 2BH1 600

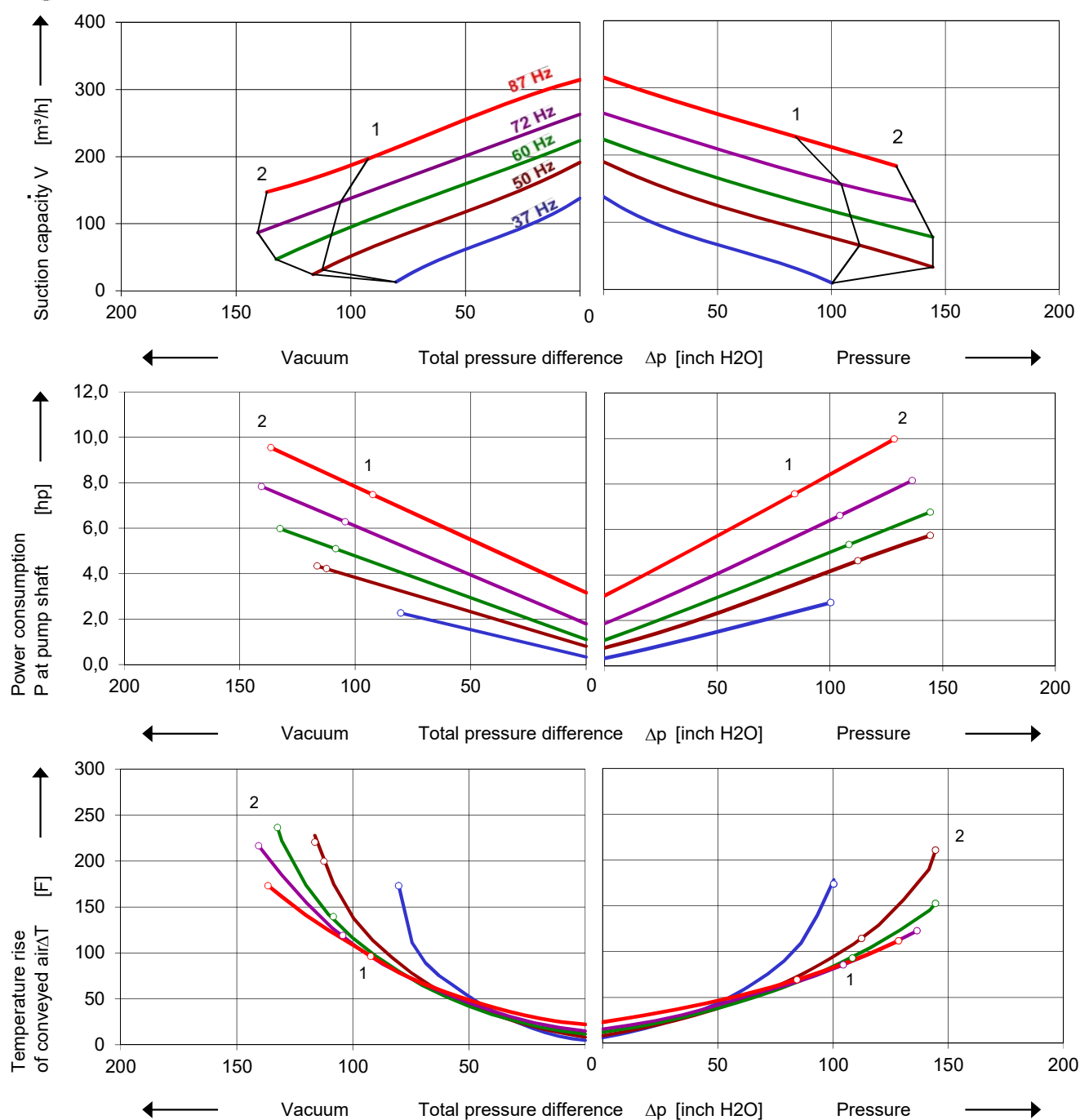
Side channel blower with Frequency Converter



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 $\pm 10\%$. 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 600

No.	Fre- quency	Rated motor			Max. differential pressure		Sound pressure level	Weight Approx.	Order No.		VFD type		
		Voltage	Current	Power	Vacuum	Pressure							
	Hz	V	A	hp	inch H ₂ O		dB(A)	lbs					
IE3 Integrated VFD 3~ 400V -15% ... 480V +10%, 50/60 Hz ±6% with thermistor (PTC), IP55, UL 1450													
1	87	380 Y	11,8 Y	7,78	-92	84	80	73/75	115	119	2BH1600-1A326	E	
2	87	380 Y	14,5 Y	10,06	-136	128	80	73/75	139	143	2BH1600-1A336	F	
IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 (certificate number E225239)													
1	37	-	-	-	-80	80	67	73/74	86	91	2BH1600-1AK16	3)	
	50	-	-	-	-80	76	64						
	60	-	-	-	-76	72	70						
	87	400 Δ	8,7 Δ	5,77	-52	48	78						
	37	-	-	-	-80	100	68	73/75	97	102	2BH1600-1AK26	3)	
	50	-	-	-	-112	112	71						
	60	-	-	-	-108	108	74						
	87	400 Δ	11,0 Δ	7,78	-92	84	80						
	2	37	-	-	-	-80	100	65	73/75	121	126	2BH1600-1AK36	3)
		50	-	-	-	-116	145	69					
		60	-	-	-	-132	145	71					
		87	400 Δ	14,4 Δ	10,06	-136	128	80					

With separately driven fan (order option G17)⁴⁾

- 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: 2BH1600-□□□□-Z Z=A11
- 4) Sound pressure level with G17 dependent on voltage (50Hz / 60Hz)

All G-BH blowers conform to the 2006/42/EC (machinery) and 2006/95/EC (low voltage) directives and the EN 60034 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%) ... 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		
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		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	2BH1600-1A326-Z Z=U51 VFD type 2FC4552-1PB00 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
		0 ... 1000 mbar	2FX6014-0BD00
INVERTERpc Software			
Free download at www.gd-elmorietschle.com >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 shown.

Elmo Rietschle is a brand of Gardner Denver

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