

G-BH2 e

Data sheet 2BH2 0780-1

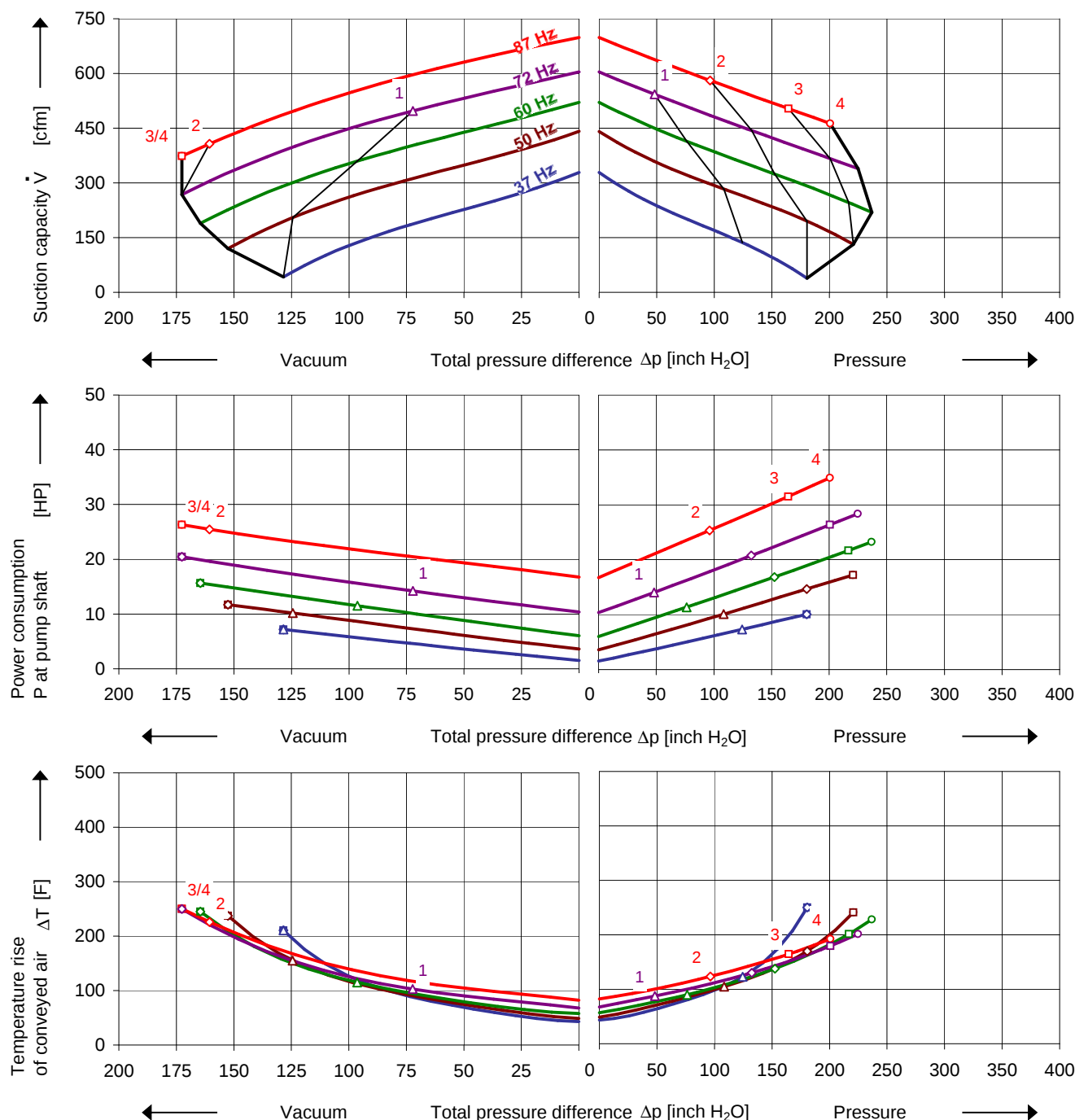
Side channel blower with Frequency Converter

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 $\pm 10\%$. 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 2BH2 0780-1											
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			dB(A)	lbs			
Integrated VFD 3~ 400V -15% ... 480V +10%, 50/60 Hz ±6% with IE2 motor with thermistor (PTC), IP55											
2	87	345 Δ	39.5 Δ	19.0	-400	240		389	2BH20780-1AA2P1-AA		J
3	87	345 Δ	48.0 Δ	23.6	-430	410		414	2BH20780-1AA2Q1-AA	K	
3~ 50/60 Hz, IP55, Insulation material class F, UL 507 and CSA 22.2 No 113 (certificate number E225239)											
1	50	345 Y	15.5 Y	7.5	-310	270	71	291	2BH20780-1AAPN1-AA ³⁾	F	
	60	400 Y	15.1 Y	8.6	-240	190	75			F	
	72	290 Δ	26.5 Δ	10.5	-180	120				G	
2	50	345 Y	23.0 Y	11.0	-380	450	71	340	2BH20780-1AAPP1-AA ³⁾	G	
	60	400 Y	22.5 Y	12.6	-410	380	75			G	
	87	345 Δ	39.5 Δ	19.0	-400	240	85			J	
4	50	345 Y	31.0 Y	15.0	-380	550	71	364	2BH20780-1AAPQ1-AA ³⁾	H	
	60	400 Y	30.5 Y	17.3	-410	590	75			H	
	87	345 Δ	53.0 Δ	26.0	-430	500	85				

- 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: 2BH20780-1 □□□□-□□-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		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.		
F	2FC4752-1 □□ 00	400V (-15%)	17.8	7.5	14.8	25	8.7	21.0	2FX16690ER00	
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	480V (+10%)	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	2BH20780-1AA2P1-AA-Z Z=U51 VFD type 2FC4183-1PB00 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 >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

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

Gardner Denver, Inc.

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