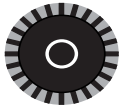


## G-BH2 e Data sheet 2BH2 0540-1

Side channel blower with Frequency Converter

IE2

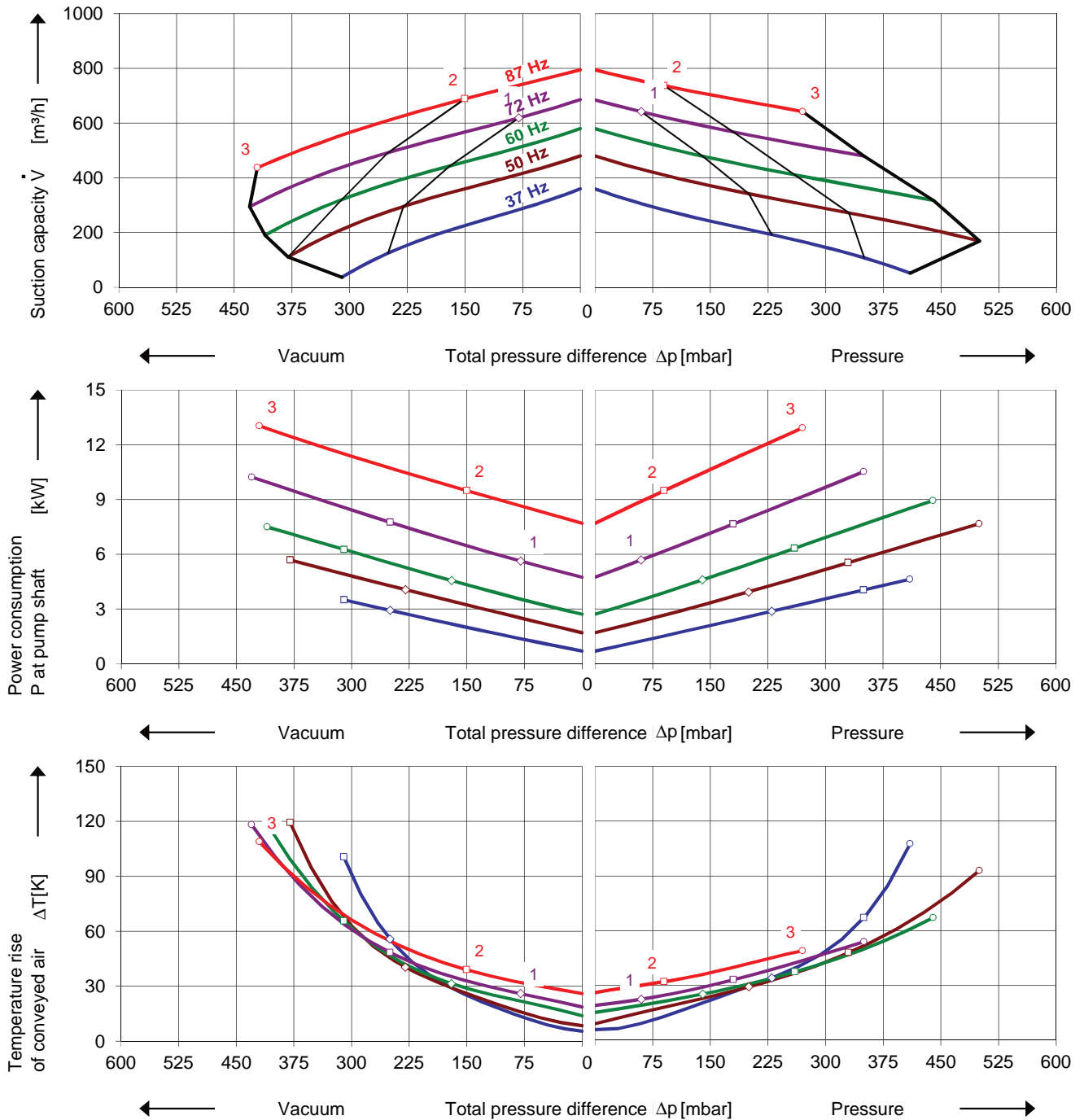
CEC US



### 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 2BH2 0540-1											
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					
Hz	V	A	kW	mbar		dB(A)	kg				
<b>IE2</b> Integrated VFD 3~ 400V -15% ... 480V +10%, 50/60 Hz ±6% with thermistor (PTC), IP55, UL 1450 and CNA/CSA 22.2 No 68-09											
3	87	345 Δ	26.5 Δ	12.9	-420	270		125	2BH20540-1AA2N1-AA		G
<b>IE2</b> 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 and CNA/CSA 22.2 No 68-09 (certificate number E225239)											
1	50	345 Y	8.8 Y	4.0	-230	200	69	85	2BH20540-1AAPL1-AA <sup>3)</sup>		D
	60	400 Y	8.4 Y	4.55	-170	140	73				D
	72	290 Δ	15.1 Δ	5.6	-80	60					F
2	50	345 Y	11.8 Y	5.5	-380	330	69	96	2BH20540-1AAPM1-AA <sup>3)</sup>	E	
	60	400 Y	11.4 Y	6.3	-310	260	73			E	
	87	345 Δ	20.5 Δ	9.5	-150	90	82			G	
3	50	345 Y	15.5 Y	7.5	-380	500	69	104	2BH20540-1AAPN1-AA <sup>3)</sup>	F	
	60	400 Y	15.1 Y	8.6	-410	440	73			F	
	87	345 Δ	26.5 Δ	12.9	-420	270	82			G	

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: 2BH20540-1 □□□□-□□-□ 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	480V (+10%)	17.8	7.5	14.8	25		
G	2FC4113-1 □ □ 00		28.0	11.0	23.3	35	21.0	2FX16990ER00

I/O's and automation			Order option	Example:
ST	2 AIN / 2 AOUT / 4 DIGIN / 1 DIGOUT / 2 RELAYS		STANDARD	2BH20540-1AA2N1-AA-Z Z=U51 VFD type 2FC4113-1PB00 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 >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](http://www.gd-elmorietschle.com) • [er.de@gardnerdenver.com](mailto:er.de@gardnerdenver.com)

Gardner Denver Schopfheim GmbH

Roggenbachstraße 58  
79650 Schopfheim - Germany

Tel.: +49 7622 392-0

Fax: +49 7622 392-300