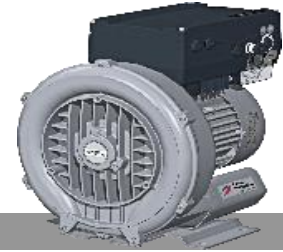




Elmo Rietschle

IE3

CEC US



# G-BH1 e Data sheet 2BH1 630

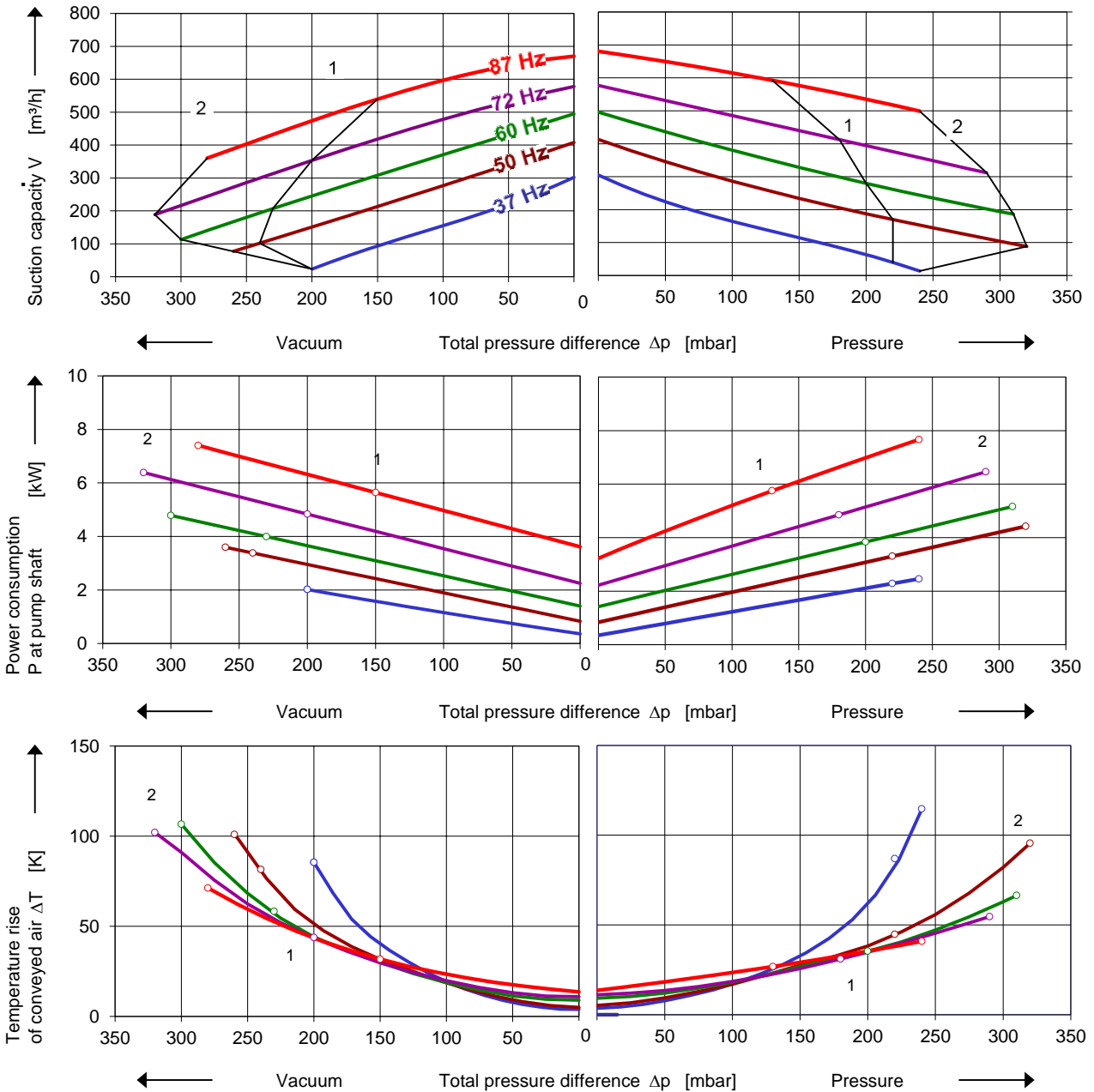
Side channel blower with Frequency Converter



## 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 2BH1 630

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				

### 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	5,8	-150	130	80	73/75	53	55	2BH1630-1A326 <sup>5)</sup>	E
2	87	380 Y	14,9 Y	7,5	-280	240	80	73/75	60	62	2BH1630-1A336 <sup>5)</sup>	F

### IE3 3- 50/60 Hz, IP55, Insulation material class F, UL 1450 and CAN/CSA C22.2 No. 68-09 (certificate number E225239)

	37	-	-	-	-180	170	67	73/74	41	43	2BH1630-0AK16 <sup>3)5)</sup>	D
	50	-	-	-	-160	150	64					
	60	-	-	-	-140	120	70					
	87	400 Δ	8,7 Δ	4,3	-50	40	78					
1	37	-	-	-	-200	220	68	73/75	45	47	2BH1630-0AK26 <sup>3)5)</sup>	E
	50	-	-	-	-240	220	71					
	60	-	-	-	-230	200	74					
	87	400 Δ	11,0 Δ	5,8	-150	130	80					
2	37	-	-	-	-200	240	65	73/75	52	54	2BH1630-1AK36 <sup>3)5)</sup>	F
	50	-	-	-	-260	320	69					
	60	-	-	-	-300	310	71					
	87	400 Δ	14,4 Δ	7,5	-280	240	80					

With separately driven fan (order option G17)<sup>4)</sup>

- 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: 2BH1630-□□□□-Z Z=A11
- 4) Sound pressure level with G17 dependent on voltage (50Hz / 60Hz)
- 5) Order number for suction port at the blower cover: 2BH1630-7E □□□

All G-BH match the 2006/42/EC (machinery) and 2014/35/EU (low voltage) directives and the EN 60034 norm "Rotating electrical machines". The motors comply with EN 60 034 (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.	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	2BH1630-1A326-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.
<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

### INVERTERpc Software

Free download at [www.gd-elmorietschle.com](http://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

**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**  
Johann-Sutter-Straße 6+8  
79650 Schopfheim - Germany  
Tel.: +49 7622 392-0  
Fax: +49 7622 392-300