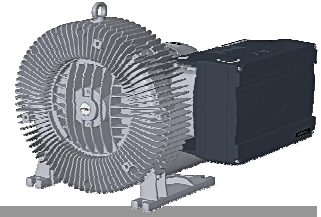
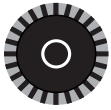
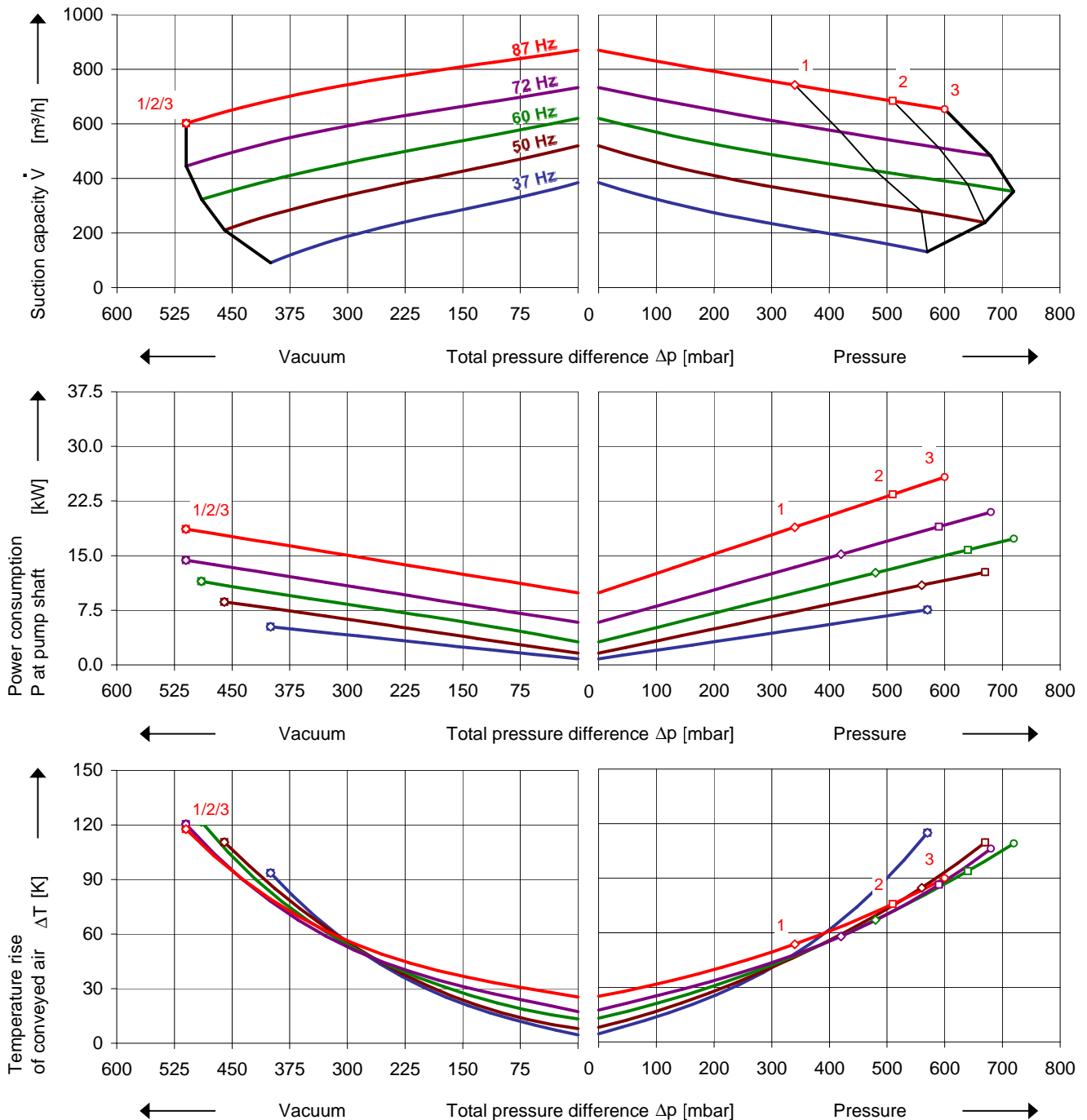


G-BH1 e

Data sheet 2BH1 810

IE2


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 810

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				
Integrated VFD 3- 400V -15% ... 480V +10%, 50/60 Hz ±6% with IE2 motor with thermistor (PTC), IP55										
1	87	345 Δ	38.0 Δ	19.0	-510	340	84	206	2BH1810-7H231	J
2	87	345 Δ	48.0 Δ	23.6	-510	510	84	218	2BH1810-7H241	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	23.0 Y	11.0	-460	560	74	203	2BH1810-7HP31 ³⁾	G
	60	400 Y	22.5 Y	12.6	-490	480	78			G
	87	345 Δ	38.0 Δ	19.0	-510	340	84			J
3	50	345 Y	31.0 Y	15.0	-460	670	74	215	2BH1810-7HP41 ³⁾	H
	60	400 Y	30.5 Y	17.3	-490	720	78			H
	87	360 Δ	53.0 Δ	26.0	-510	600	84			-

- 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: 2BH1810- □□□□-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.								
G	2FC4113-1 □□ 00	400V (-15%) ... 480V (+10%)	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	2BH1810-7H231-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	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

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