



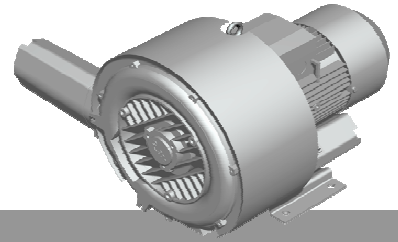
**Elmo  
Rietschle**  
A Gardner Denver Product

# G-BH1

## Data sheet 2BH1 410

### Side channel blower

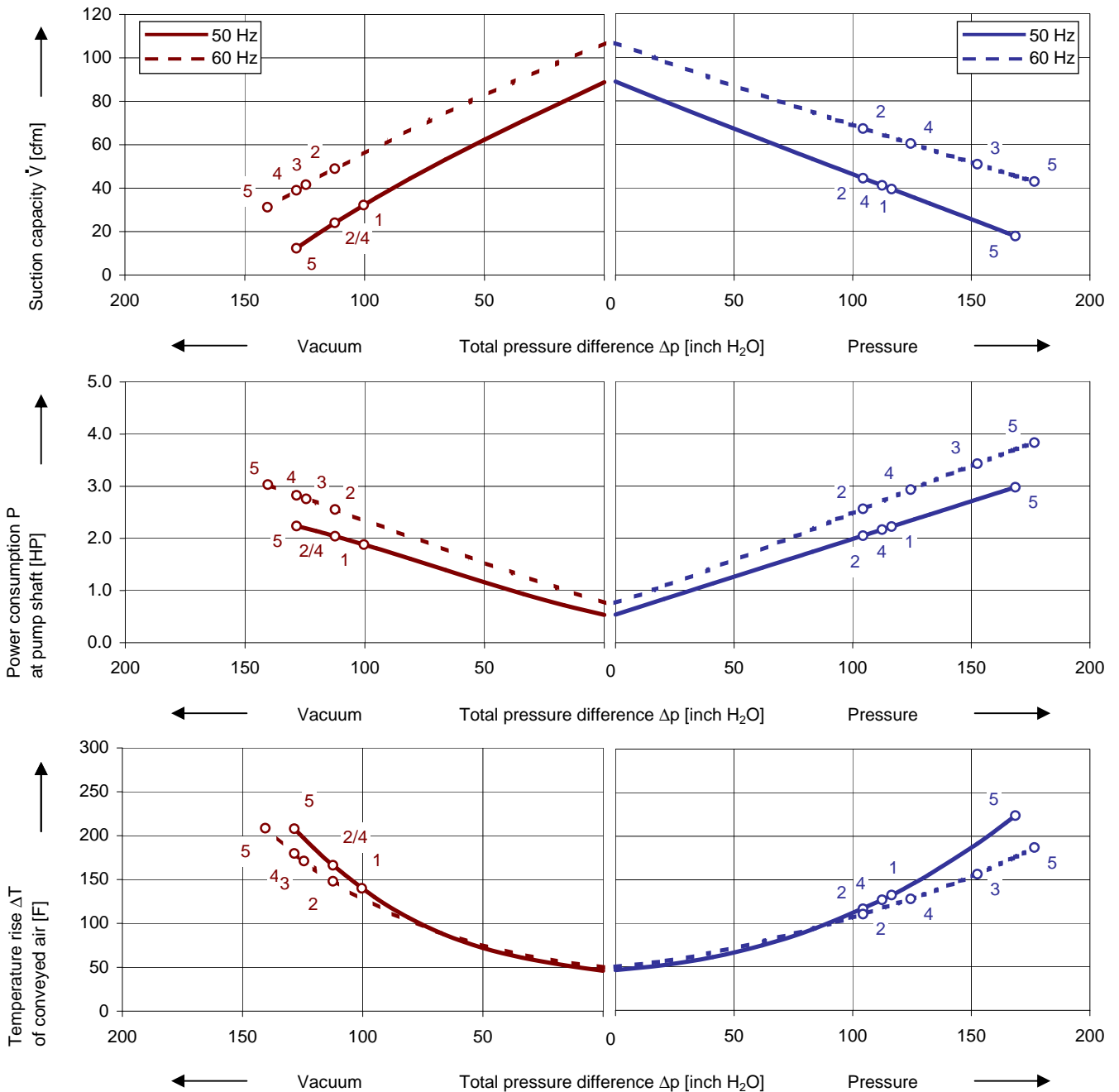
CD® US



#### Performance curves

##### Vacuum operation

##### Compressor operation



The performance curves are based on air at a temperature of 59 F and an atmospheric pressure of 29.91 inch Hg with a tolerance of ± 10 %. The total pressure differences are valid for suction and ambient temperature up to 77 F. Suction capacity relates to suction conditions. Pressure capacity relates to atmospheric conditions. For other conditions please get in touch with us.

Every G-BH pump can be used both as vacuum pump and compressor in continuous operation over the total performance curve range. The motors are available as standard in protection category IP 55 and insulation class F. The vacuum pumps / compressors are UL and CSA approved.

## Selection and ordering data

### Type 2BH1 410

No.	Fre- quency	Rated			Max. differential pressure <sup>2)</sup>		Sound pressure level <sup>3)</sup>	Weight Approx.	Order No.
		Voltage <sup>1)</sup>	Current	Power	Vacuum	Pressure			
					Hz	V			
<b>3- 50/60 Hz, IP55, Insulation material class F, UL 507 and CSA 22.2 No 113 (certificate number E225239)</b>									
4	50	200 - 240 Δ / 345 - 415 Y	7.5 Δ / 4.3 Y	2.15	-112	112	66	53	2BH1410-7HH36
	60	220 - 275 Δ / 380 - 480 Y	7.6 Δ / 4.4 Y	2.75	-128	124	69		
5	50	200 - 240 Δ / 345 - 415 Y	9.7 Δ / 5.6 Y	2.95	-128	169	66	60	2BH1410-7HH46
	60	220 - 275 Δ / 380 - 480 Y	10.0 Δ / 5.8 Y	3.42	-141	177	69		
<b>3- 50/60 Hz, IP55, Insulation material class F, UL 507 and CSA 22.2 No 113 (certificate number E225239)</b>									
4	50	500 Δ	2.9 Δ	2.35	-112	112	66	53	2BH1410-7HC35
	60	575 Δ	2.95 Δ	2.88	-128	124	69		
5	50	500 Δ	4.5 Δ	2.95	-128	169	66	60	2BH1410-7HC45
	60	575 Δ	4.55 Δ	3.42	-141	177	69		
<b>1- 50/60 Hz, IP55, Insulation material class F, UL 507 and CSA 22.2 No 113 (certificate number E225239), with attached capacitor for cont. operation</b>									
2	50	115 / 230	22.0 / 11.0	2.01	-112	104	66	53	2BH1410-7HV45
	60	115 / 230	24.0 / 12.0	2.35	-112	104	69		
<b>1- 50 Hz, IP55, Insulation material class F, with attached capacitor for cont. operation</b>									
1	50	230	9.1	2.01	-100	116	66	42	2BH1410-7HA31
<b>1- 60 Hz, IP55, Insulation material class F, with attached capacitor for cont. operation</b>									
3	60	230	14.3	3.42	-124	153	66	53	2BH1410-7HB48

- 1) In case of frequency converter operation the standard motor insulation system is suitable for converter input voltages up to 460 V.
- 2) Relief valves available for limiting differential pressure.
- 3) 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).

All G-BH fulfil 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.

For three phase motors tolerances are +/-10% for fixed voltage motors and +/-5% for voltage range motors. Single phase machines are designed with a +/- 5% tolerance.

The frequency tolerance is +/- 2 % maximum.

## Other voltages

50 Hz	50 Hz voltage range	60 Hz voltage range	86 Hz (5000 rpm)	2BH1...-7.	□	□
<b>3~</b>						
-----	185 - 225 V Δ / 320 - 390 V Y	200 - 240 V Δ / 345 - 415 V Y	-----			<b>H 1</b>
-----	200 - 240 V Δ / 345 - 415 V Y	220 - 275 V Δ / 380 - 480 V Y	380 V Δ			<b>H 6</b>
-----	345 - 415 V Δ	380 - 480 V Δ	-----			<b>H 7</b>
-----	500 V Δ	575 V Δ	-----			<b>C 5</b>
<b>IE2 3~<sup>5)</sup></b>	<b>3~<sup>5)</sup></b>					
200 V Δ / 345 V Y	180 - 240 V Δ / 310 - 415 V Y	200 - 275 V Δ / 345 - 480 V Y	-----			<b>P 1</b>
500 V Y	450 - 550 V Y	520 - 600 V Y	-----			<b>P 3</b>
230 V Δ / 400 V Y	200 - 260 V Δ / 350 - 450 V Y	230 - 290 V Δ / 400 - 500 V Y	400 V Δ			<b>P 6</b>
400 V Δ / 690 V Y	350 - 450 V Δ / 610 - 725 V Y	400 - 500 V Δ / 690 - 725 V Y	-----			<b>P 7</b>

- 5) Performance can differ if high efficiency motors are used. Please refer to corresponding data sheets.

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.

# Gardner Denver

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