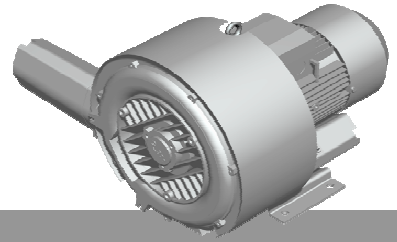




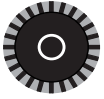
**Elmo  
Rietschle**  
A Gardner Denver Product



# G-BH1

## Data sheet 2BH1 610

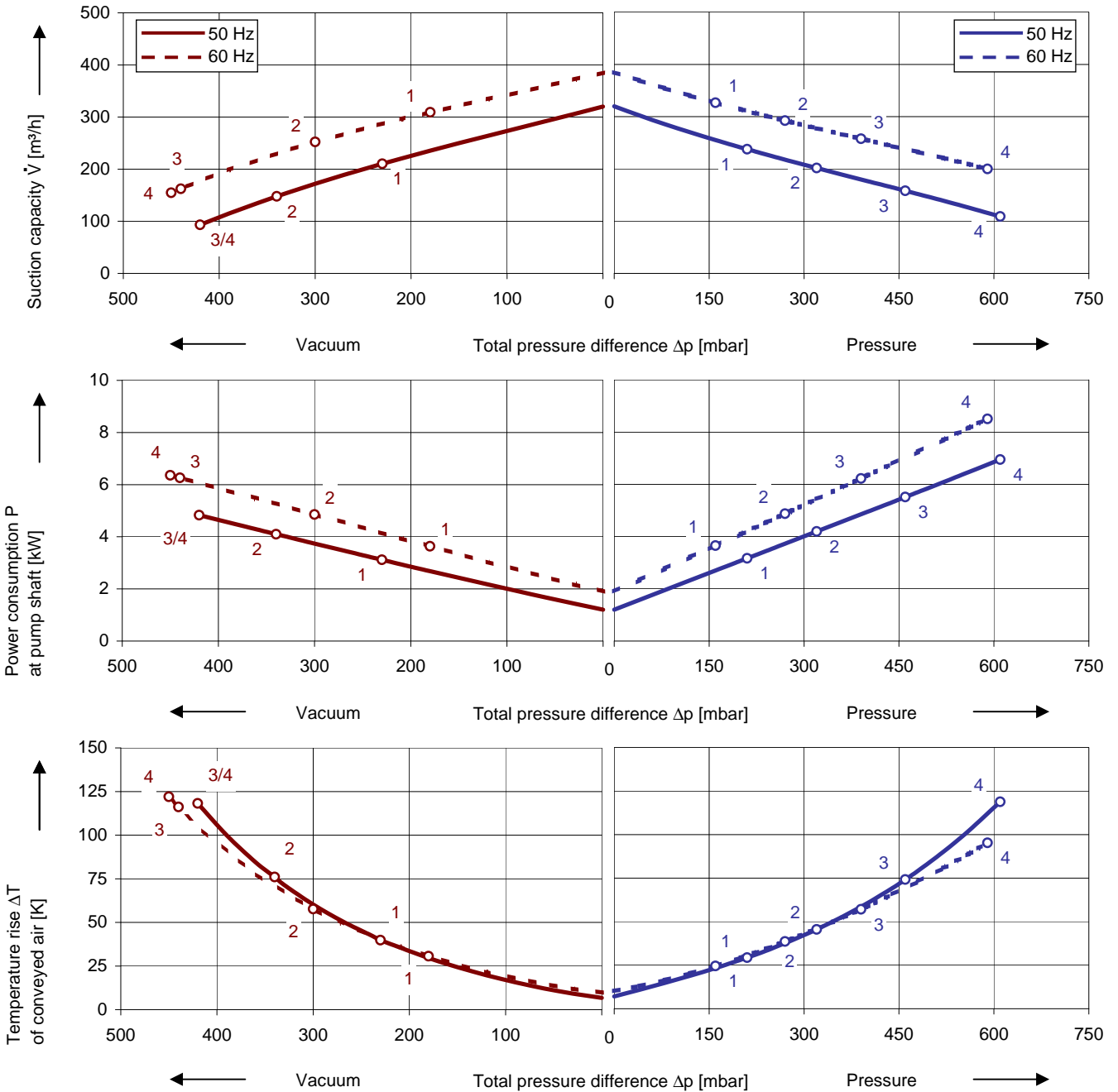
Side channel blower with IE2-motors



### 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.

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 610

No.	Fre- quency	Rated			Max. differential pressure <sup>1)</sup>		Sound pressure level <sup>2)</sup>	Weight Approx.	Order No.
		Voltage	Current	Power	Vacuum	Pressure			
		Hz	V	A	kW	mbar			
<b>3~ 50/60 Hz, IP55, Insulation material class F, UL 507 and CSA 22.2 No 113 (certificate number E225239), IE2 / (EFF I)</b>									
1	50	200 - 260 Δ / 350 - 450 Y	11.40 Δ / 6.5 Y	3	-230	210	73	47	2BH1610-7HP26
	60	230 - 290 Δ / 400 - 500 Y	10.80 Δ / 6.2 Y	3.45	-180	160	75		
2	50	350 - 450 Δ / 610 - 725 Y	8.40 Δ / 4.8 Y	4	-340	320	73	53	2BH1610-7HP37
	60	400 - 500 Δ / 690 - 725 Y	8.20 Δ / 4.7 Y	4.6	-300	270	75		
3	50	350 - 450 Δ / 610 - 725 Y	11.10 Δ / 6.4 Y	5.5	-420	460	73	70	2BH1610-7HP47
	60	400 - 500 Δ / 690 - 725 Y	11.00 Δ / 6.4 Y	6.3	-440	390	75		
4	50	350 - 450 Δ / 610 - 725 Y	15.00 Δ / 8.7 Y	7.5	-420	610	73	77	2BH1610-7HP57
	60	400 - 500 Δ / 690 - 725 Y	15.10 Δ / 8.8 Y	8.6	-450	590	75		
<b>3~ 50/60 Hz, IP55, Insulation material class F, UL 507 and CSA 22.2 No 113 (certificate number E225239), IE2 / (EFF I)</b>									
1	50	450 - 550 Δ	4.80 Δ	3	-230	210	73	47	2BH1610-7HP25
	60	520 - 600 Δ	4.80 Δ	3.45	-180	160	75		
2	50	450 - 550 Δ	6.40 Δ	4	-340	320	73	53	2BH1610-7HP35
	60	520 - 600 Δ	6.30 Δ	4.6	-300	270	75		
3	50	450 - 550 Δ	8.70 Δ	5.5	-420	460	73	70	2BH1610-7HP45
	60	520 - 600 Δ	8.60 Δ	6.3	-440	390	75		
4	50	450 - 550 Δ	11.60 Δ	7.5	-420	610	73	77	2BH1610-7HP55
	60	520 - 600 Δ	11.50 Δ	8.6	-450	590	75		

1) Relief valves available for limiting differential pressure.

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).

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.

The voltage tolerance is +/- 5%.

The frequency tolerance is +/- 2 % maximum.

## Other voltages

50 Hz	50 Hz voltage range	60 Hz voltage range	86 Hz (5000 rpm)	100 Hz (6000 rpm)	2BH1...-7.		
<b>3~ IE2 / (EFF I)</b>							
200 V Δ / 345 V Y 500 V Δ	180 - 240 V Δ / 310 - 415 V Y 450 - 550 V Δ	200 - 275 V Δ / 345 - 480 V Y 520 - 600 V Δ	----- -----	400 V Δ -----		P	1
230 V Δ / 400 V Y 400 V Δ / 690 V Y	200 - 260 V Δ / 350 - 450 V Y 350 - 450 V Δ / 610 - 725 V Y	230 - 290 V Δ / 400 - 500 V Y 400 - 500 V Δ / 690 - 725 V Y	400 V Δ -----	----- -----		P	5 6 7
<b>3~ <sup>4)</sup></b>							
----- ----- ----- -----	185 - 225 V Δ / 320 - 390 V Y 200 - 240 V Δ / 345 - 415 V Y 345 - 415 V Δ 500 V Δ	200 - 240 V Δ / 345 - 415 V Y 220 - 275 V Δ / 380 - 480 V Y 380 - 480 V Δ 575 V Δ	----- 380 V Δ ----- -----	400 V Δ ----- ----- -----		H H H C	1 6 7 5

4) Performance can differ if standard 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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