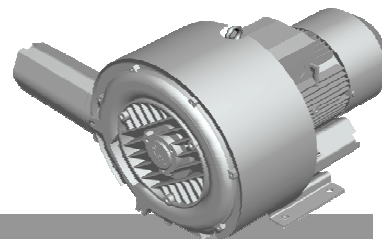


# G-BH1

## Data sheet 2BH1 310

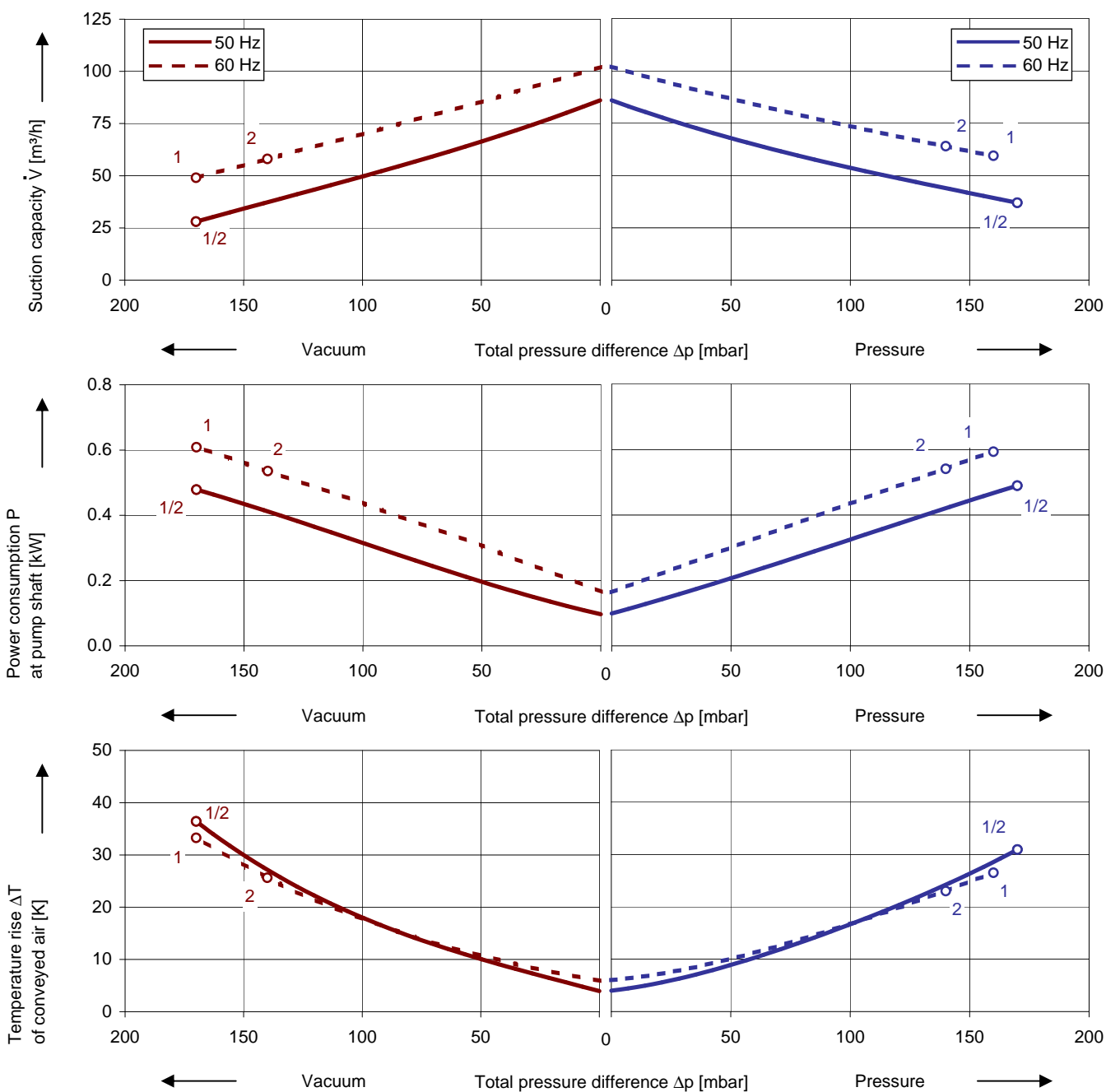
### Side channel blower in ATEX configuration



#### 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 ± 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. Blowers with ATEX 94/9 EG are available for categories 3D, 3G and 3/2D as fixed voltage machines for 50 and 60 Hz. For category 3/2G 50 Hz or 60 Hz versions only are available.

## Selection and ordering data

### Type 2BH1 310

No.	Fre- quency	Rated			Max. differential pressure		Sound pressure level <sup>2)</sup>	Weight Approx.	Degree of pro- tection	ATEX category	Order No.
		Voltage <sup>1)</sup>	Current	Power	Vacuum	Pressure					
	Hz	V	A	kW	mbar		dB(A)	kg			
<b>3- 50/60 Hz, Insulation material class F, Temperature class T3</b>											<b>3D, 3G, 3/2D</b>
1	50	230 Δ / 400 Y	2.35 Δ / 1.36 Y	0.55	-170	170	55	15	IP65	3/2D <sup>3)</sup>	2BH1310-7HD21-Z Z=M34
	60	460 Y	1.32 Y	0.63	-170	160	61		IP55	3D <sup>3)</sup>	2BH1310-7HD21-Z Z=M35
									IP55	3G <sup>3)</sup>	2BH1310-7HD21-Z Z=M72
<b>3- 50 Hz oder 3- 60 Hz, Insulation material class F, Temperature class T3</b>											<b>3/2G</b>
2	50	230 Δ / 400 Y	2.4 Δ / 1.4 Y	0.55	-170	170	55	15	IP55	3/2G <sup>3)</sup>	2BH1310-7HD21-Z Z=M71
	60	460 Y	1.2 Y	0.55	-140	140	61		IP55	3/2G <sup>3)</sup>	2BH1310-7HG21-Z Z=M71

- 1) In case of frequency converter operation the standard motor insulation system is suitable for converter input voltages up to 460 V.
- 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) The abbreviations „D“ and „G“ used include the subcategories (i) for „inside“ and (o) for „outside“. Examples:  
3D includes 3D(i) and 3D(o),  
3/2D includes 3D(i) and 2D(o),  
3/2G includes 3G(i) and 2G(o)

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 +/-10%. The frequency tolerance is +/- 2 % maximum.

## Other voltages

ATEX Category	50 Hz	60 Hz	2BH1...-7. □ . □ -Z	Z=
<b>3-</b>				
<b>3/2D, 3D, 3G</b>	230 V Δ / 400 V Y	460 V Y	D	1
	400 V Δ / 690 V Y	460 V Δ	D	6
	500 V Δ	575 V Δ	D	5
<b>3/2G</b>	230 V Δ / 400 V Y	-	D	1
	400 V Δ / 690 V Y	-	D	6
	500 V Δ	-	D	5
	-	460 V Y	G	1
	-	460 V Δ	G	6
	-	575 V Δ	G	5

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

*Elmo Rietschle is a brand of Gardner  
Denver's Industrial Products Group  
and part of Blower Operations*

er.de@gardnerdenver.com  
www.gd-elmorietschle.com

**Gardner Denver Deutschland GmbH**

Industriestraße 26  
97616 Bad Neustadt - Germany

Tel.: +49 9771 6888-0  
Fax: +49 9771 6888-4000

**Gardner Denver Schopfheim GmbH**

Roggenbachstraße 58  
79650 Schopfheim - Germany

Tel.: +49 7622 392-0  
Fax: +49 7622 392-300