



**Elmo
Rietschle**

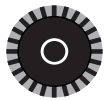
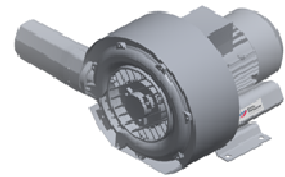
G-BH1 N

Data sheet 2BH1 310

Side channel blower in ATEX configuration



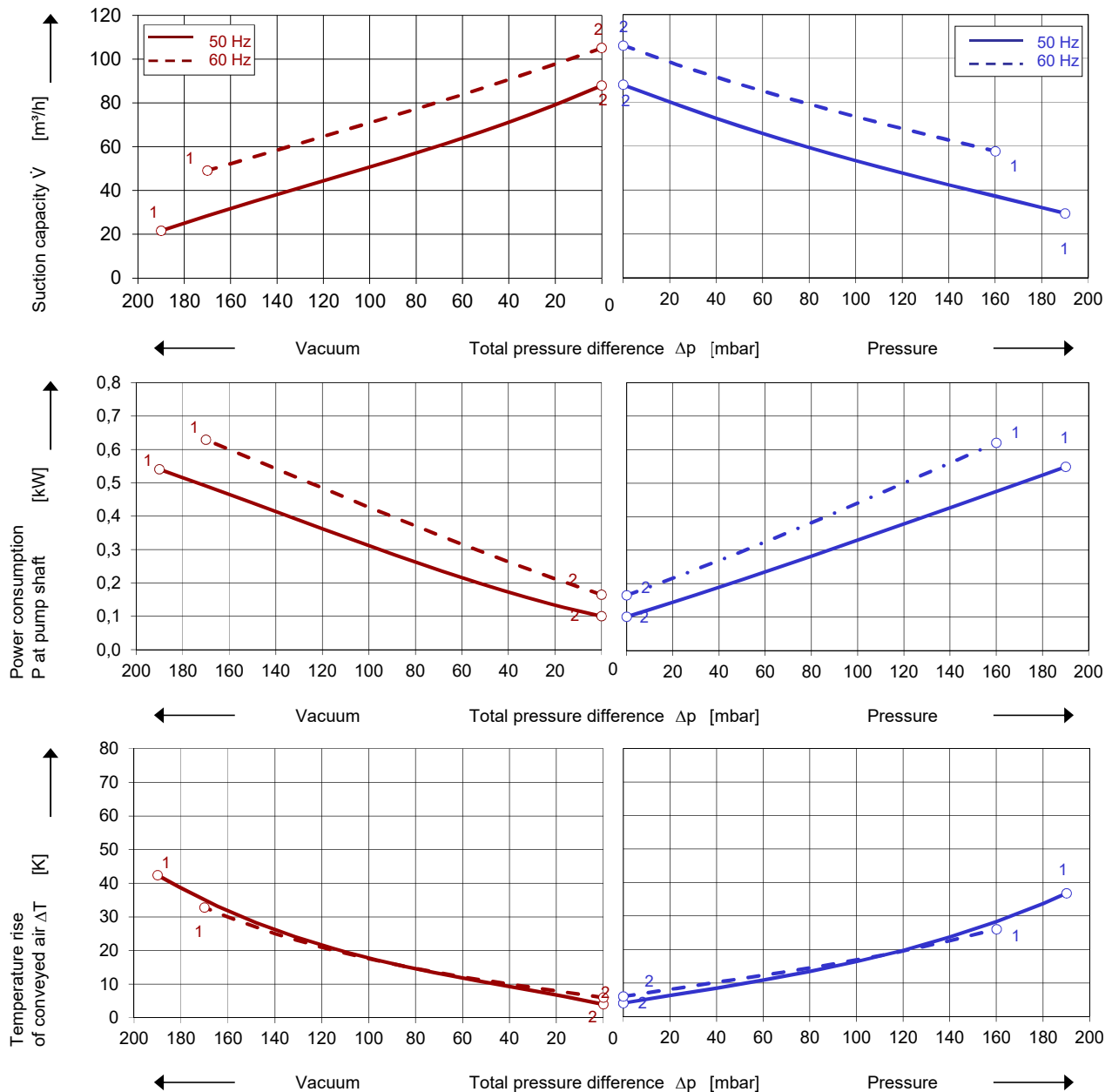
IE2



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. Blowers with 2014/34/EU (ATEX Directive) are available for categories 3GD 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	Weight Approx.	Degree of pro- tection	ATEX category	Order No.
		Voltage	Current	Power	Vacuum	Pressure					
		Hz	V	A	kW	mbar					
IE2 3~ 50/60 Hz, Insulation material class F, Temperature class T3											
										3GD, 3/2D	
1	50	230 Δ / 400 Y	2,35 Δ / 1,34 Y	0,55	-190	190			IP65	3/2D ²⁾	2BH1310-1HD21-Z Z=M34
	60	460 Y	1,34 Y	0,63	-170	160					
	50	230 Δ / 400 Y	2,35 Δ / 1,34 Y	0,55	-190	190		IP55	3GD ²⁾	2BH1310-1HD21-Z Z=M74	
	60	460 Y	1,34 Y	0,63	-170	160					

- 1) 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).
- 2) The abbreviations „D“ and „G“ used include the subcategories (i) for „inside“ and (o) for „outside“. Examples:
M74/75: 3GD includes 3(i) and 3(o) Ⓢ II 3G IIB T3 Gc and II 3D IIB T125°C Dc
M34: 3/2D includes 3D(i) and 2D(o) Ⓢ II 3/2D IIIC T125°C Dc/Db
M71: 3/2G includes 3G(i) and 2G(o) Ⓢ II 3/2G IIB T3 Gc/Gb

All G-BH fulfil the directives 2006/42 / EC (machines) and 2014/34 / EU (ATEX directive) as well as the standards EN 60079-0 / EN (potentially explosive areas: equipment - general requirements / device protection through increased safety "e ") and ISO 80079-36 (Explosive atmospheres: non-electrical devices for use in explosive atmospheres - basics and requirements).
The motors are comply with thermal class F in efficiency class IE2. The voltage tolerance is designed according to the standards mentioned above.
The frequency tolerance is +/- 2 % maximum

Other Voltages [V]

ATEX-category	50 Hz	60 Hz	2BH1...-1.	□	□	-Z	Z=
3~							
3/2D, 3GD	230 Δ / 400 Y	460 Y		D	1		M34, M74
	400 Δ / 690 Y	460 Δ		D	6		
	500 Δ	575 Δ		D	5		
3/2G	230 Δ / 400 Y	-		D	1		M71 on request
	400 Δ / 690 Y	-		D	6		
	500 Δ	-		D	5		
	-	460 Y		G	1		
	-	460 Δ		G	6		
	-	575 Δ		G	5		

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 c



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Gardner Denver Deutschland GmbH
Industriestraße 26
97616 Bad Neustadt - Germany
Tel.: +49 9771 6888-0
Fax: +49 9771 6888-4000
www.gd-elmorietschle.com • 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