

# G-BH1 N

## Data sheet 2BH1 810

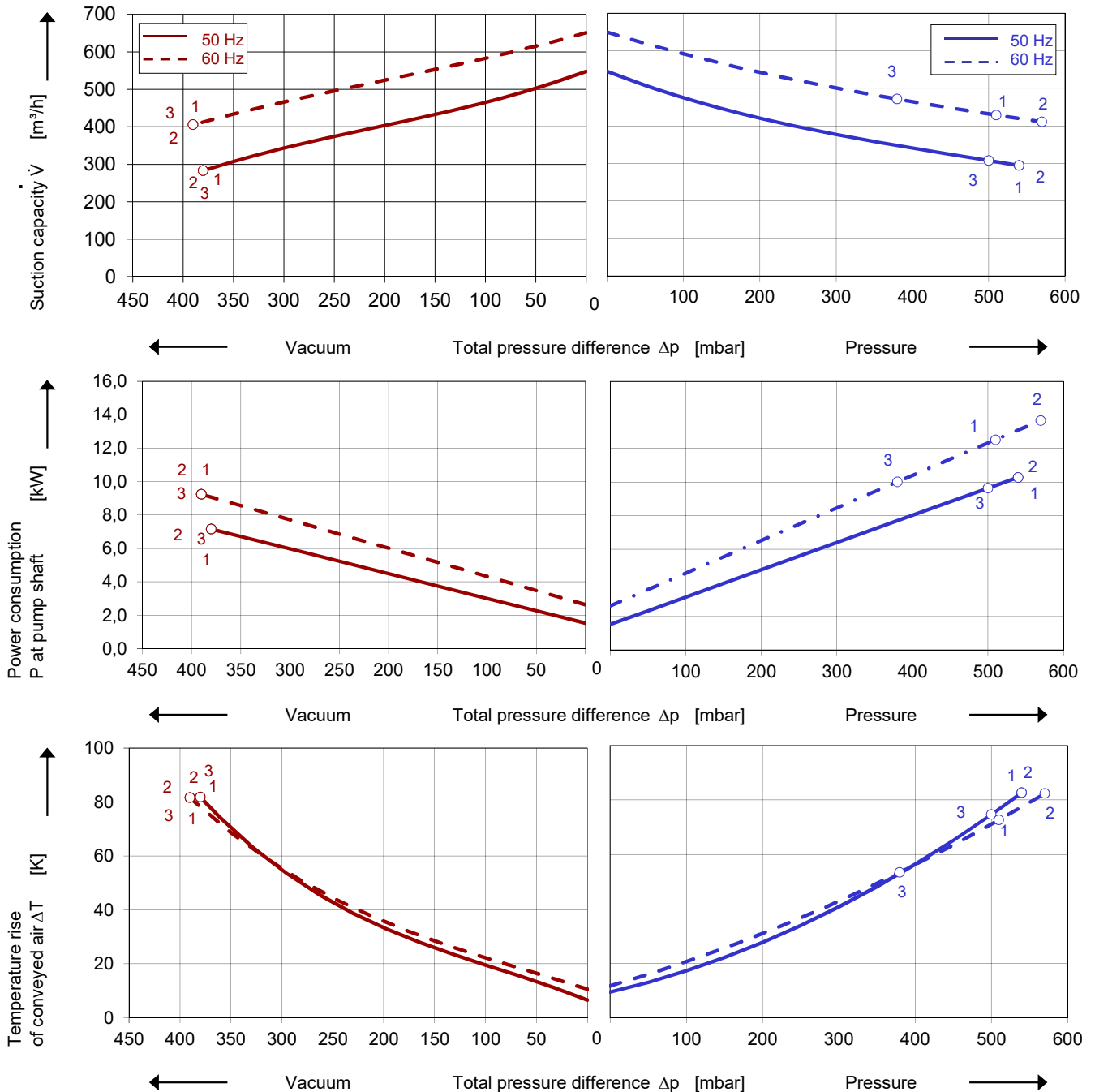
Side channel blower in ATEX configuration



### 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  $\pm 10\%$ . 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 810

No.	Fre- quency Hz	Rated			Max. differential pressure		Sound pressure level dB(A)	Weight Approx. kg	Degree of protection	ATEX category	Order No.
		Voltage V	Current A	Power kW	Vacuum	Pressure					
					mbar						
<b>IE3 3~ 50/60 Hz, Insulation material class F, Temperature class T3</b>											<b>3GD, 3/2D</b>
1	50	400 Δ / 690 Y	20,0 Δ / 11,6 Y	11,0	-380	540	71	182	IP65	3/2D <sup>2)</sup>	2BH1810-1HD36-Z Z=M34
	60	460 Δ	19,5 Δ	12,6	-390	510	76				
	50	400 Δ / 690 Y	20,0 Δ / 11,6 Y	11,0	-380	540	71		IP55	3GD <sup>2)</sup>	2BH1810-1HD36-Z Z=M74
	60	460 Δ	19,5 Δ	12,6	-390	510	76				
2	50	400 Δ / 690 Y	27,0 Δ / 15,7 Y	15,0	-380	540	71	196	IP65	3/2D <sup>2)</sup>	2BH1810-1HD46-Z Z=M34
	60	460 Δ	27,0 Δ	17,3	-390	570	76				
	50	400 Δ / 690 Y	27,0 Δ / 15,7 Y	15,0	-380	540	71		IP55	3GD <sup>2)</sup>	2BH1810-1HD46-Z Z=M74
	60	460 Δ	27,0 Δ	17,3	-390	570	76				
<b>IE3 3~ 50 Hz oder 3~ 60 Hz, Insulation material class F, Temperature class T3</b>											<b>3/2G</b>
3	50	230 Δ / 400 Y	31,5 Δ / 18,0 Y	10,0	-330	480	71	215	IP55	3/2G <sup>2)</sup>	2BH1810-1HD41-Z Z=M71 2BH1810-1HG41-Z Z=M71
	60	460 Y	15,6 Y	10,0	-390	380	76				
	50	400 Δ / 690 Y	18,0 Δ / 10,4 Y	10,0	-330	480	71		IP55	3/2G <sup>2)</sup>	2BH1810-1HD46-Z Z=M71 2BH1810-1HG46-Z Z=M71
	60	460 Δ	15,6 Δ	10,0	-390	380	76				

- 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).
- 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 IIIB 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 IE3. 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=
<b>3~</b>						
<b>3/2D, 3GD</b>	230 Δ / 400 Y	460 Y		<b>D</b>	<b>1</b>	<b>M34, M74</b>
	400 Δ / 690 Y	460 Δ		<b>D</b>	<b>6</b>	
	500 Δ	575 Δ		<b>D</b>	<b>5</b>	
<b>3/2G</b>	230 Δ / 400 Y	-		<b>D</b>	<b>1</b>	<b>M71</b>
	400 Δ / 690 Y	-		<b>D</b>	<b>6</b>	
	500 Δ	-		<b>D</b>	<b>5</b>	
	-	460 Y		<b>G</b>	<b>1</b>	
	-	460 Δ		<b>G</b>	<b>6</b>	
	-	575 Δ		<b>G</b>	<b>5</b>	

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 our side to deliver as shown.



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