

**Elmo  
Rietschle**

**IE3**

**CAUS**



# G-BH 2 N

## Data sheet 2BH2 0780-1

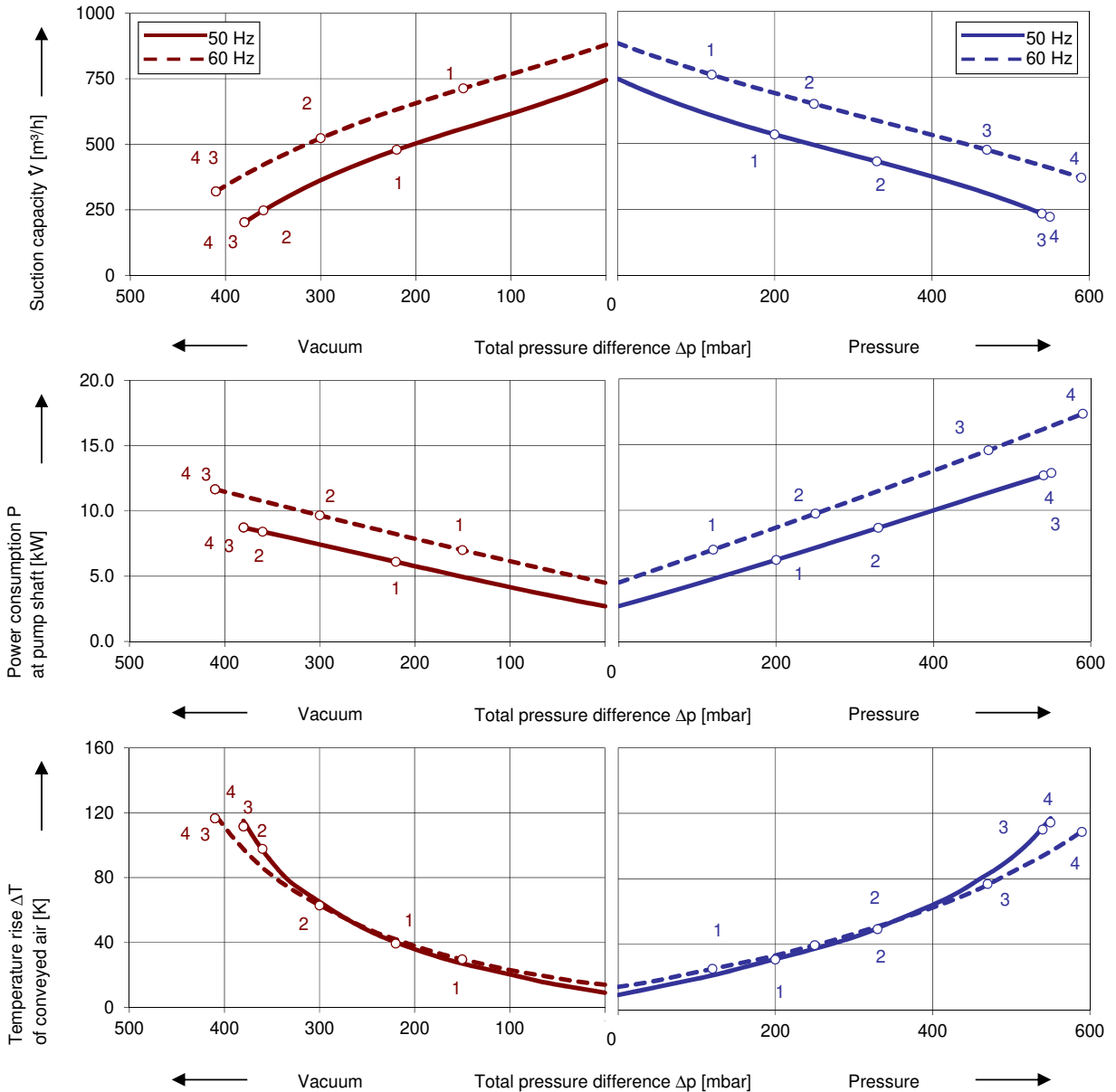
Side channel blower with IE3-motors



### 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											
No.	Fre- quency	Rated				Max. differential pressure <sup>2)</sup>		Sound pres. <sup>3)</sup> Level	Efficiency class <sup>4)</sup>	Weight approx. kg	Order No.
		Voltage <sup>1)</sup>		Current	Power	Vacuum	Pressure				
		Hz	V	A	kW	mbar	dB(A)				
IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 and CAN/CSA C22.2 No. 68-09 (certificate number E225239)											
1	50	190-210 Δ	23.5 Δ	6.3	-220	200	70	IE3	120	2BH20780-1AAKM1-BA	
	60	190-210 YY / 380-420 Y	27.6 YY / 13.8	7.3	-150	120	75	IE3			
	60	200 YY	27.6 YY	7.3	-150	120	75	NP			
2	50	190-210 Δ	30.8 Δ	8.6	-360	330	70	IE3	132	2BH20780-1AAKN1-BA	
	60	190-210 YY / 380-420 Y	35.2 YY / 17.6	9.9	-300	250	75	IE3			
	60	200 YY	35.2 YY	9.9	-300	250	75	NP			
3	50	190-210 Δ	46.4 Δ	12.6	-380	540	71	IE3	150	2BH20780-1AAKP1-BA	
	60	190-210 YY / 380-420 Y	52.8 YY / 26.4	14.5	-410	470	76	IE3			
	60	200 YY	52.8 YY	14.5	-410	470	76	NP			
4	50	190-210 Δ	63.1 Δ	17.3	-380	550	71	IE3	159	2BH20780-1AAKQ1-BA	
	60	190-210 YY / 380-420 Y	72.2 YY / 36.1	19.9	-410	590	76	IE3			
	60	200 YY	72.2 YY	19.9	-410	590	76	NP			
IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 and CAN/CSA C22.2 No. 68-09 (certificate number E225239)											
1	50	220-240 Δ / 380-420 Y	20.4 Δ / 11.8 Y	6.3	-220	200	70	IE3	120	2BH20780-1AAKM6-BA	
	60	220-240 YY / 440-480 Y	24.0 YY / 12.0 Y	7.3	-150	120	75	IE3			
	60	230 YY / 460 Y	24.0 YY / 12.0 Y	7.3	-150	120	75	NP			
2	50	220-240 Δ / 380-420 Y	26.8 Δ / 15.5 Y	8.6	-360	330	70	IE3	132	2BH20780-1AAKN6-BA	
	60	220-240 YY / 440-480 Y	30.6 YY / 15.3 Y	9.9	-300	250	75	IE3			
	60	230 YY / 460 Y	30.6 YY / 15.3 Y	9.9	-300	250	75	NP			
3	50	220-240 Δ / 380-420 Y	40.3 Δ / 23.3 Y	12.6	-380	540	71	IE3	150	2BH20780-1AAKP6-BA	
	60	220-240 YY / 440-480 Y	46.0 YY / 23.0 Y	14.5	-410	470	76	IE3			
	60	230 YY / 460 Y	46.0 YY / 23.0 Y	14.5	-410	470	76	NP			
4	50	220-240 Δ / 380-420 Y	54.9 Δ / 31.7 Y	17.3	-380	550	71	IE3	159	2BH20780-1AAKQ6-BA	
	60	220-240 YY / 440-480 Y	62.8 YY / 31.4 Y	19.9	-410	590	76	IE3			
	60	230 YY / 460 Y	62.8 YY / 31.4 Y	19.9	-410	590	76	NP			
IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 and CAN/CSA C22.2 No. 68-09 (certificate number E225239)											
1	50	475-525 Y	9.5 Y	6.3	-220	200	70	IE3	120	2BH20780-1AAQM3-BA	
	60	550-600 Y	9.6 Y	7.3	-150	120	75	NP			
2	50	475-525 Y	12.4 Y	8.6	-360	330	70	IE3	132	2BH20780-1AAQN3-BA	
	60	550-600 Y	12.2 Y	9.9	-300	250	75	NP			
3	50	475-525 Y	18.6 Y	12.6	-380	540	71	IE3	150	2BH20780-1AAQP3-BA	
	60	550-600 Y	18.4 Y	14.5	-410	470	76	NP			
4	50	475-525 Y	25.4 Y	17.3	-380	550	71	IE3	159	2BH20780-1AAQQ3-BA	
	60	550-600 Y	25.1 Y	19.9	-410	590	76	NP			
IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 and CAN/CSA C22.2 No. 68-09 (certificate number E225239)											
1	50	380-420 Δ / 660-725 Y	11.8 Δ / 8.9 Y	6.3	-220	200	70	IE3	120	2BH20780-1AAQM7-BA	
	60	440-480 Δ	12.0 Δ	7.3	-150	120	75	IE3			
	60	460 Δ	12.0 Δ	7.3	-150	120	75	NP			
2	50	380-420 Δ / 660-725 Y	15.5 Δ / 13.4 Y	8.6	-360	330	70	IE3	132	2BH20780-1AAQN7-BA	
	60	440-480 Δ	15.3 Δ	9.9	-300	250	75	IE3			
	60	460 Δ	15.3 Δ	9.9	-300	250	75	NP			
3	50	380-420 Δ / 660-725 Y	23.3 Δ / 13.4 Y	12.6	-380	540	71	IE3	150	2BH20780-1AAQP7-BA	
	60	440-480 Δ	23.0 Δ	14.5	-410	470	76	IE3			
	60	460 Δ	23.0 Δ	14.5	-410	470	76	NP			
4	50	380-420 Δ / 660-725 Y	31.7 Δ / 18.3 Y	17.3	-380	550	71	IE3	159	2BH20780-1AAQ7-BA	
	60	440-480 Δ	31.4 Δ	19.9	-410	590	76	IE3			
	60	460 Δ	31.4 Δ	19.9	-410	590	76	NP			

- 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).
- 4) The motors according to NEMA MG1-12. NP=NEMA Premium; NEMA Premium includes IE3.

All G-BH match the 2006/42/EC (machinery) and 2006/95/EC (low voltage) directives and the EN 60034 norm "Rotating electrical machines".

Service factor (SF) and motor efficiency according NEMA MG1-12.

Voltage tolerances for three phase motors are +/-10%.

The frequency tolerance is +/- 2 % maximum.

Voltage range		Efficiency <sup>4)</sup>	c  us		
50 Hz	60Hz			60 Hz	2BH2.....-... □ . □
3~					
200 V Δ	200 V YY / 230 V Δ / 400 VY	NEMA <b>IE3</b>	•	K	1
190-210 V Δ	190-210 VYY / 220-240 V Δ / 380-420VY				
200 V YY / 230 V Δ / 400 VY	230 V YY / 460 VY	NEMA <b>IE3</b>	•	K	6
190-210 VYY / 220-240 V Δ / 380-420VY	220-240 VYY / 440-480VY				
475-525 V Y	550-600 V Y	NEMA <b>IE3</b>	•	Q	3
475-525 V Δ	550-600 V Δ				
400 V Δ / 690 V Y	460 V Δ	NEMA <b>IE3</b>	•	Q	5
		NEMA <b>IE3</b>	•	Q	7

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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