



**Elmo
Rietschle**

G-BH 2 N

Data sheet 2BH2 0780-3

Side channel blower with IE3-motors

IE3

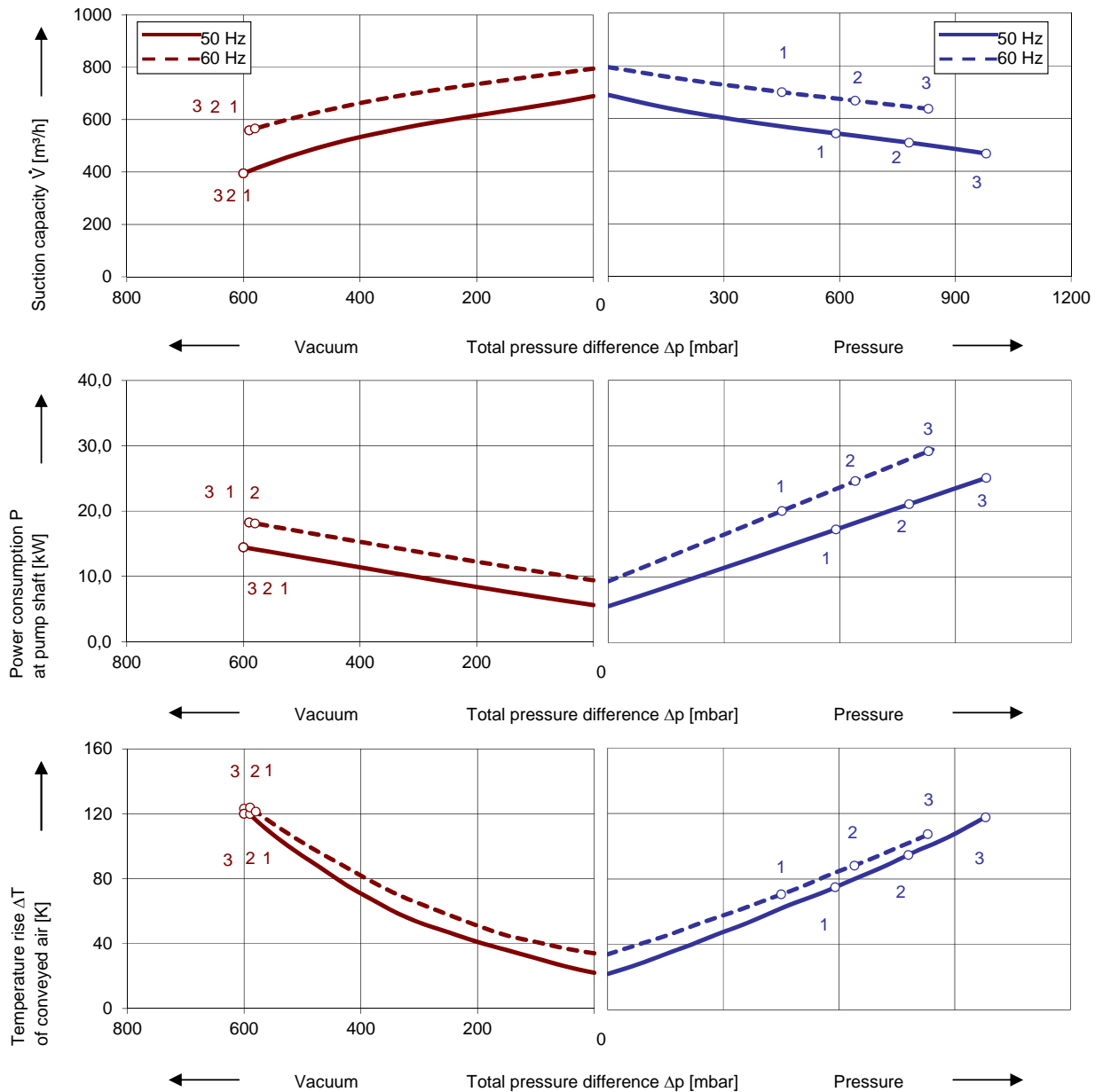
UL **CSA**



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.	Frequency	Rated			Max. differential pressure ²⁾		Sound pres. Level ³⁾	Efficiency class ⁴⁾	Weight approx.	Order No.
		Voltage ¹⁾	Current	Power	Vacuum	Pressure				
					mbar					
Hz	V	A	kW							
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	63,1 Δ	17,3	-600	590	74	IE3	242	2BH20780-3AAKQ1-BA
	60	190-210 YY / 380-420 Y	72,2 YY / 36,1 Y	19,9	-590	450	78	IE3		
	60	200 YY	72,2 YY	19,9	-590	450	78	NP		
2	50	190-210 Δ	76,2 Δ	21,3	-600	780	74	IE3	254	2BH20780-3AAKR1-BA
	60	190-210 YY / 380-420 Y	87,4 YY / 43,7 Y	24,5	-590	640	78	IE3		
	60	200 YY	87,4 YY	24,5	-590	640	78	NP		
3	50	190-210 Δ	91,5 Δ	25,3	-600	980	74	IE3	301	2BH20780-3AAKS1-BA
	60	190-210 YY / 380-420 Y	103 YY / 51,5 Y	29,0	-580	830	78	IE3		
	60	200 YY	103 YY	29,0	-580	830	78	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	54,9 Δ / 31,7 Y	17,3	-600	590	74	IE3	242	2BH20780-3AAKQ6-BA
	60	220-240 YY / 440-480 Y	62,8 YY / 31,4 Y	19,9	-590	450	78	IE3		
	60	230 YY / 460 Y	62,8 YY / 31,4 Y	19,9	-590	450	78	NP		
2	50	220-240 Δ / 380-420 Y	66,3 Δ / 38,3 Y	21,3	-600	780	74	IE3	254	2BH20780-3AAKR6-BA
	60	220-240 YY / 440-480 Y	76,0 YY / 38,0 Y	24,5	-590	640	78	IE3		
	60	230 YY / 460 Y	76,0 YY / 38,0 Y	24,5	-590	640	78	NP		
3	50	220-240 Δ / 380-420 Y	79,5 Δ / 46,0 Y	25,3	-600	980	74	IE3	301	2BH20780-3AAKS6-BA
	60	220-240 YY / 440-480 Y	90,0 YY / 45,0 Y	28,5	-580	800	78	IE3		
	60	230 YY / 460 Y	90,0 YY / 45,0 Y	28,5	-580	800	78	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 475-525	44,0 Y /	17,3	-600	590	74	IE3	242	2BH20780-3AAQ3-BA
	60	550-600 Y	0,0 Y /	19,9	-590	450	78	NP		
2	50	475-525 Y 475-525	53,0 Y /	21,3	-600	780	74	IE3	254	2BH20780-3AAQR3-BA
	60	550-600 Y	0,0 Y /	24,5	-590	640	78	NP		
3	50	475-525 Y 475-525	63,5 Y /	25,3	-600	980	74	IE3	301	2BH20780-3AAQ3-BA
	60	550-600 Y	0,0 Y /	28,5	-580	800	78	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	31,7 Δ / 18,3 Y	17,3	-600	590	74	IE3	242	2BH20780-3AAQ7-BA
	60	440-480 Δ	31,4 Δ /	19,9	-590	450	78	IE3		
	60	460 Δ	31,4 Δ /	19,9	-590	450	78	NP		
2	50	380-420 Δ / 660-725 Y	38,3 Δ / 22,1 Y	21,3	-600	780	74	IE3	254	2BH20780-3AAQR7-BA
	60	440-480 Δ	38,0 Δ /	24,5	-590	640	78	IE3		
	60	460 Δ	38,0 Δ /	24,5	-590	640	78	NP		
3	50	380-420 Δ / 660-725 Y	46,0 Δ / 26,5 Y	25,3	-600	980	74	IE3	301	2BH20780-3AAQS7-BA
	60	440-480 Δ	45,0 Δ /	29,0	-580	830	78	IE3		
	60	460 Δ	45,0 Δ /	29,0	-580	830	78	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 2014/35/EU (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.

Motor for alternate voltages					
Voltage range		Efficiency ⁴⁾	60 Hz	2BH2.....	□ . □
50 Hz	60Hz				
3-					
200 VΔ	200 V YY / 230 VΔ / 400 VY	IE3	•	K	1
190-210 VΔ	190-210 VYY / 220-240 VΔ / 380-420VY				
200 V YY / 230 VΔ / 400 VY	230 V YY / 460 VY	IE3	•	K	6
190-210 VYY / 220-240 VΔ / 380-420VY	220-240 VYY / 440-480VY				
475-525 V Y	550-600 V Y	NEMA Premium	•	Q	3
475-525 VΔ	550-600 VΔ				
400 VΔ / 690 V Y	460 VΔ	NEMA Premium	•	Q	7

#NV

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