

Elmo Rietschle

G-BH 1 N

Data sheet 2BH1 930

Side channel blower with IE3-motors

IE3

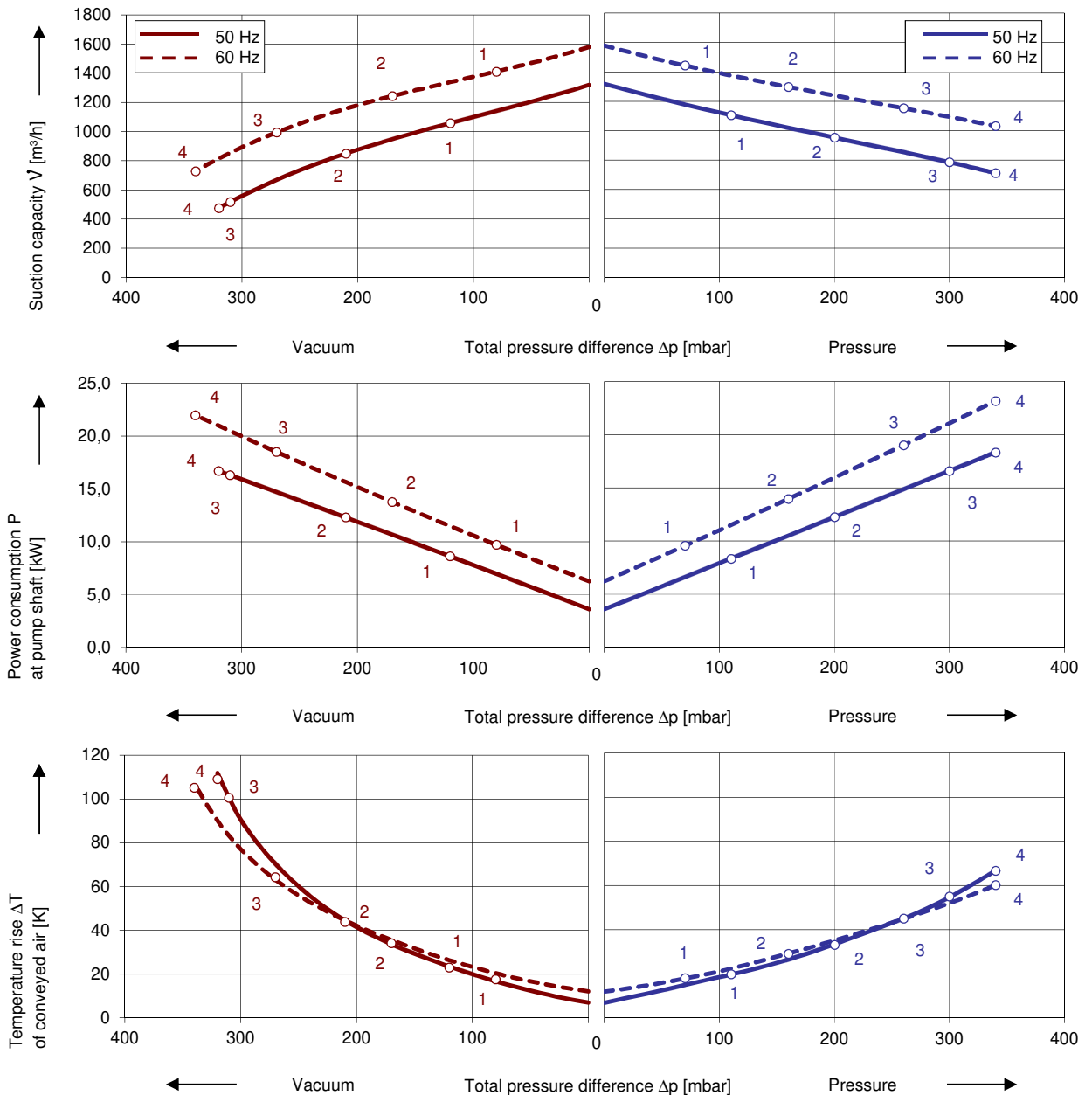
UL US



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 Hz	Rated			Max. differential pressure ²⁾		Sound pres. Level ³⁾ dB(A)	Efficiency class ⁴⁾	Weight approx. kg	Order No.
		Voltage ¹⁾ V	Current A	Power kW	Vacuum mbar	Pressure mbar				
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	30,8 Δ	8,6	-120	110	71	IE3	184	2BH1930-1AK01
	60	190-210 YY / 380-420 Y	35,2 YY / 17,6 Y	9,9	-80	70	75	IE3		
	60	200 YY	35,2 YY	9,9	-80	70	75	NP		
2	50	190-210 Δ	46,4 Δ	12,6	-210	200	74	IE3	203	2BH1930-1AK11
	60	190-210 YY / 380-420 Y	52,8 YY / 26,4 Y	14,5	-170	160	78	IE3		
	60	200 YY	52,8 YY	14,5	-170	160	78	NP		
3	50	190-210 Δ	63,1 Δ	17,3	-310	300	74	IE3	213	2BH1930-1AK21
	60	190-210 YY / 380-420 Y	72,2 YY / 36,1 Y	19,9	-270	260	78	IE3		
	60	200 YY	72,2 YY	19,9	-270	260	78	NP		
4	50	190-210 Δ	76,2 Δ	21,3	-320	370	74	IE3	225	2BH1930-1AK31
	60	190-210 YY / 380-420 Y	87,4 YY / 43,7 Y	24,5	-340	340	78	IE3		
	60	200 YY	87,4 YY	24,5	-340	340	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	26,8 Δ / 15,5 Y	8,6	-120	110	71	IE3	184	2BH1930-1AK06
	60	220-240 YY / 440-480 Y	30,6 YY / 15,3 Y	9,9	-80	70	75	IE3		
	60	230 YY / 460 Y	30,6 YY / 15,3 Y	9,9	-80	70	75	NP		
2	50	220-240 Δ / 380-420 Y	40,3 Δ / 23,3 Y	12,6	-210	200	74	IE3	203	2BH1930-1AK16
	60	220-240 YY / 440-480 Y	46,0 YY / 23,0 Y	14,5	-170	160	78	IE3		
	60	230 YY / 460 Y	46,0 YY / 23,0 Y	14,5	-170	160	78	NP		
3	50	220-240 Δ / 380-420 Y	54,9 Δ / 31,7 Y	17,3	-310	300	74	IE3	213	2BH1930-1AK26
	60	220-240 YY / 440-480 Y	62,8 YY / 31,4 Y	19,9	-270	260	78	IE3		
	60	230 YY / 460 Y	62,8 YY / 31,4 Y	19,9	-270	260	78	NP		
4	50	220-240 Δ / 380-420 Y	66,3 Δ / 38,3 Y	21,3	-320	370	74	IE3	225	2BH1930-1AK36
	60	220-240 YY / 440-480 Y	76,0 YY / 38,0 Y	24,5	-340	340	78	IE3		
	60	230 YY / 460 Y	76,0 YY / 38,0 Y	24,5	-340	340	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	12,4 Y	8,6	-120	110	71	IE3	184	2BH1930-1AQ03
	60	550-600 Y	12,2 Y	9,9	-80	70	75	NP		
	50	475-525 Y	18,6 Y	12,6	-210	200	74	IE3		
2	60	550-600 Y	18,4 Y	14,5	-170	160	78	NP	203	2BH1930-1AQ13
	50	475-525 Y	25,4 Y	17,3	-310	300	74	IE3		
	60	550-600 Y	25,1 Y	19,9	-270	260	78	NP		
3	50	475-525 Y	30,6 Y	21,3	-320	370	74	IE3	212	2BH1930-1AQ23
	60	550-600 Y	30,4 Y	24,5	-340	340	78	NP		
	50	475-525 Y	30,4 Y	24,5	-340	340	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	15,5 Δ / 8,9 Y	8,6	-120	110	71	IE3	184	2BH1930-1AQ07
	60	440-480 Δ	15,3 Δ	9,9	-80	70	75	IE3		
	60	460 Δ	15,3 Δ	9,9	-80	70	75	NP		
2	50	380-420 Δ / 660-725 Y	23,3 Δ / 13,4 Y	12,6	-210	200	74	IE3	203	2BH1930-1AQ17
	60	440-480 Δ	23,0 Δ	14,5	-170	160	78	IE3		
	60	460 Δ	23,0 Δ	14,5	-170	160	78	NP		
3	50	380-420 Δ / 660-725 Y	31,7 Δ / 18,3 Y	17,3	-310	300	74	IE3	212	2BH1930-1AQ27
	60	440-480 Δ	31,4 Δ	19,9	-270	260	78	IE3		
	60	460 Δ	31,4 Δ	19,9	-270	260	78	NP		
4	50	380-420 Δ / 660-725 Y	38,3 Δ / 22,1 Y	21,3	-320	370	74	IE3	225	2BH1930-1AQ37
	60	440-480 Δ	38,0 Δ	24,5	-340	340	78	IE3		
	60	460 Δ	38,0 Δ	24,5	-340	340	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	26,8 Δ / 15,5 Y	8,6	-120	110	71	IE3	184	2BH1930-1AQ06
	60	440-480 Y	15,3 Y	9,9	-80	70	75	IE3		
	50	210-240 Δ / 380-420 Y	42,5 Δ / 24,5 Y	12,6	-210	200	74	IE3		
2	60	440-480 Y	24,5 Y	14,5	-170	160	78	IE3	203	2BH1930-1AQ16
	50	220-240 Δ / 380-420 Y	57,0 Δ / 32,7 Y	17,3	-310	300	74	IE3		
	60	440-480 Y	32,4 Y	19,9	-270	260	78	IE3		

- In case of frequency converter operation the standard motor insulation system is suitable for converter input voltages up to 500 V.
- Relief valves available for limiting differential pressure.
- 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 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.

Voltage range		Efficiency 4)	c _{RU} us	60 Hz	2BH1...-1. □ . □
50 Hz	60Hz				
3-					
200 VΔ	200 V YY / 230 VΔ / 400 VY	NEMA Premium 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	NEMA Premium 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 IE3	•		Q 3
475-525 VΔ	550-600 VΔ				
400 VΔ / 690 V Y	460 VΔ	NEMA Premium IE3	•		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.