

Elmo Rietschle

IE3

CEC US



G-BH 2 N

Data sheet 2BH2 0540-3

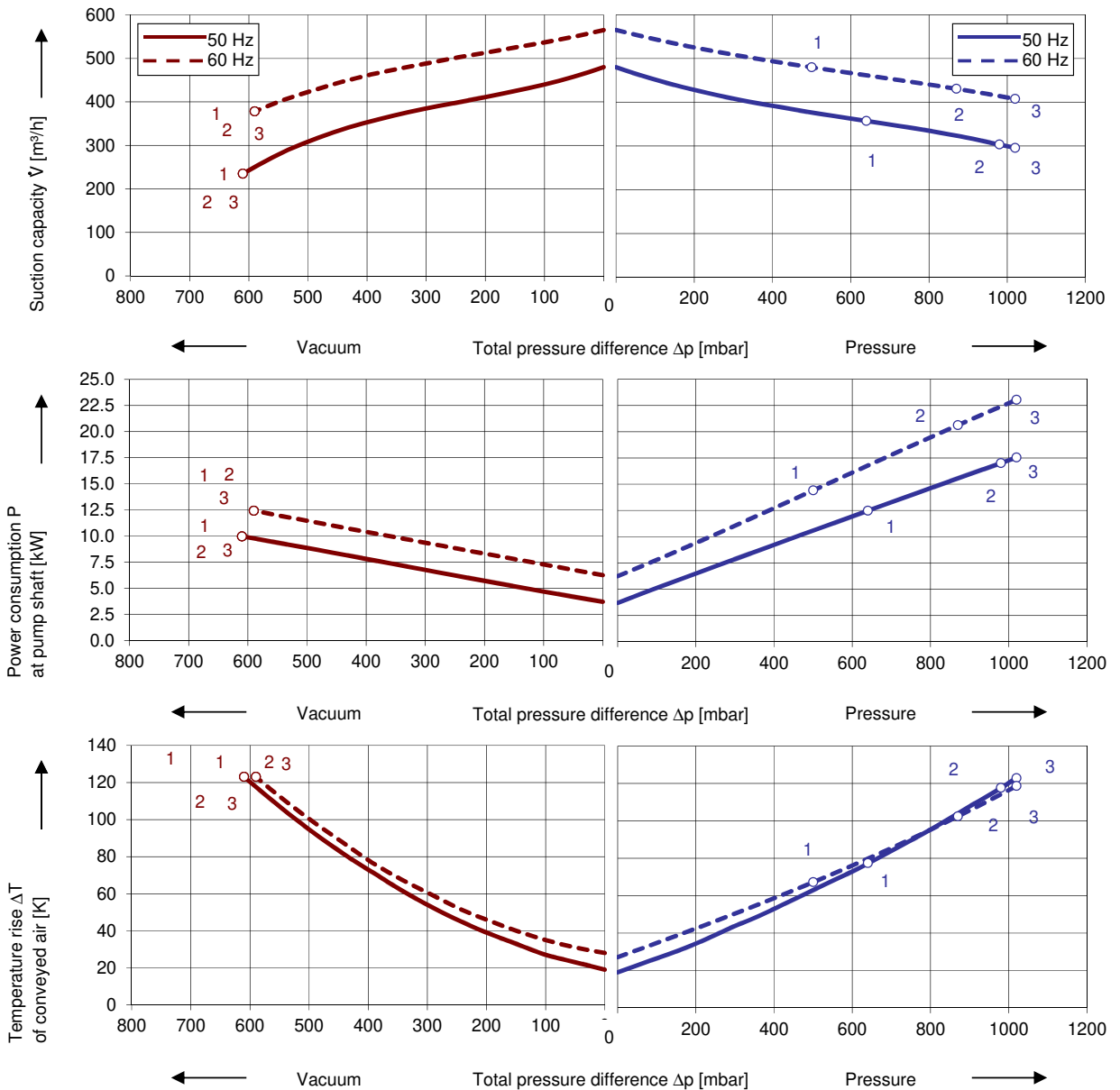
Side channel blower with IE3-motors



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 ²⁾		Sound pr. level ³⁾	Efficiency ⁴⁾	Weight	Order No.
		Voltage ¹⁾	Current	Power	Vacuum	Pressure				
		Hz	V	A	kW	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	46.4 Δ	12.6	-610	640	70	IE3	180	2BH20540-3AAKP1-BA
	60	190-210 YY / 380-420 Y	52.8 YY / 26.4	14.5	-590	500	75	IE3		
	60	200 YY	52.8 YY	14.5	-590	500	75	NP		
2	50	190-210 Δ	63.1 Δ	17.3	-610	980	70	IE3	190	2BH20540-3AAKQ1-BA
	60	190-210 YY / 380-420 Y	72.2 YY / 36.1	19.9	-590	870	75	IE3		
	60	200 YY	72.2 YY	19.9	-590	870	75	NP		
3	50	190-210 Δ	76.2 Δ	21.3	-610	1020	70	IE3	202	2BH20540-3AAKR1-BA
	60	190-210 YY / 380-420 Y	87.4 YY / 43.7	24.5	-590	1020	75	IE3		
	60	200 YY	87.4 YY	24.5	-590	1020	75	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	40.3 Δ / / 23.3 Y	12.6	-610	640	70	IE3	180	2BH20540-3AAKP6-BA
	60	220-240 YY / 440-480 Y	46.0 YY / / 23.0 Y	14.5	-590	500	75	IE3		
	60	230 YY / 460 Y	46.0 YY / / 23.0 Y	14.5	-590	500	75	NP		
2	50	220-240 Δ / 380-420 Y	54.9 Δ / / 31.7 Y	17.3	-610	980	70	IE3	190	2BH20540-3AAKQ6-BA
	60	220-240 YY / 440-480 Y	62.8 YY / / 31.4 Y	19.9	-590	870	75	IE3		
	60	230 YY / 460 Y	62.8 YY / / 31.4 Y	19.9	-590	870	75	NP		
3	50	220-240 Δ / 380-420 Y	66.3 Δ / / 38.3 Y	21.3	-610	1020	70	IE3	202	2BH20540-3AAKR6-BA
	60	220-240 YY / 440-480 Y	76.0 YY / / 38.0 Y	24.5	-590	1020	75	IE3		
	60	230 YY / 460 Y	76.0 YY / / 38.0 Y	24.5	-590	1020	75	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	18.6 Y	12.6	-610	640	70	IE3	180	2BH20540-3AAQP3-BA
	60	550-600 Y	18.4 Y	14.5	-590	500	75	NP		
2	50	475-525 Y	25.4 Y	17.3	-610	980	70	IE3	190	2BH20540-3AAQQ3-BA
	60	550-600 Y	25.1 Y	19.9	-590	870	75	NP		
3	50	475-525 Y	30.6 Y	21.3	-610	1020	70	IE3	202	2BH20540-3AAQR3-BA
	60	550-600 Y	30.4 Y	24.5	-590	1020	75	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	23.3 Δ / / 13.4 Y	12.6	-610	640	70	IE3	180	2BH20540-3AAQP7-BA
	60	440-480 Δ	23.0 Δ	14.5	-590	500	75	IE3		
	60	460 Δ	23.0 Δ	14.5	-590	500	75	NP		
2	50	380-420 Δ / 660-725 Y	31.7 Δ / / 18.3 Y	17.3	-610	980	70	IE3	190	2BH20540-3AAQQ7-BA
	60	440-480 Δ	31.4 Δ	19.9	-590	870	75	IE3		
	60	460 Δ	31.4 Δ	19.9	-590	870	75	NP		
3	50	380-420 Δ / 660-725 Y	38.3 Δ / / 22.1 Y	21.3	-610	1020	70	IE3	202	2BH20540-3AAQR7-BA
	60	440-480 Δ	38.0 Δ	24.5	-590	1020	75	IE3		
	60	460 Δ	38.0 Δ	24.5	-590	1020	75	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.

Motor for alternate voltages

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