

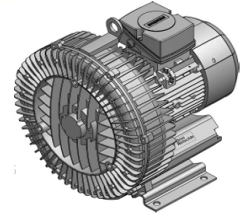
Elmo Rietschle

G-BH 1 N

Data sheet 2BH1 600

Side channel blower with IE3-motors

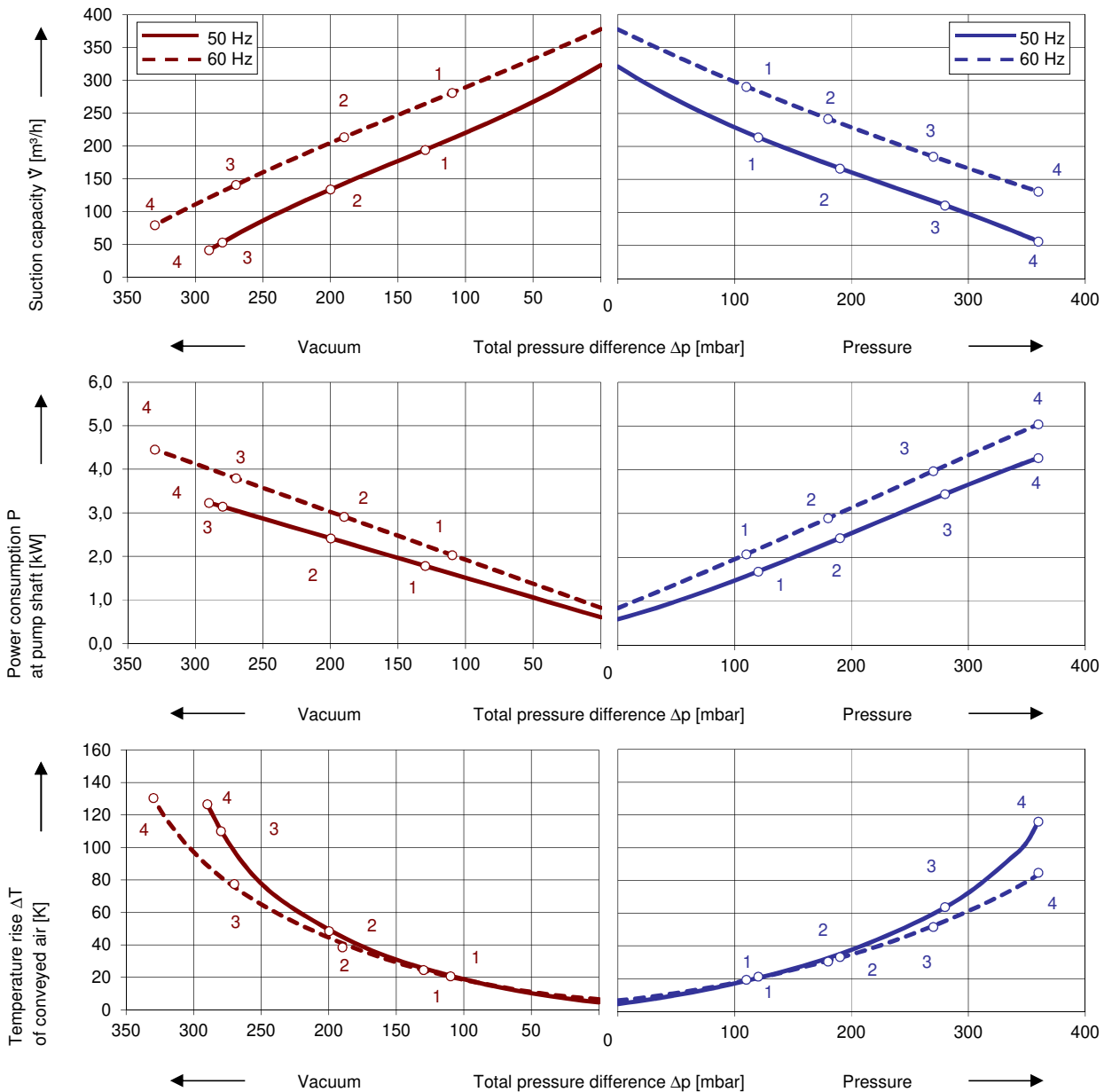
IE3



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				
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	6,9 Δ	1,75	-130	120	69	IE3	31	2BH1600-0AK01
	60	190-210 YY / 380-420 Y	7,8 YY / 3,9 Y	2,00	-110	110	72	IE3		
60	200 YY		7,8 YY	2,00	-110	110	72	NP		
2	50	190-210 Δ	9,9 Δ	2,50	-200	190	64	IE3		
	60	190-210 YY / 380-420 Y	12,0 YY / 6,0 Y	3,00	-190	180	70	IE3		
60	200 YY		12,0 YY	3,00	-190	180	70	NP		
3	50	190-210 Δ	13,3 Δ	3,45	-280	280	71	IE3		
	60	190-210 YY / 380-420 Y	15,2 YY / 7,6 Y	4,0	-270	270	74	IE3		
60	200 YY		15,2 YY	4,0	-270	270	74	NP		
4	50	190-210 Δ	17,1 Δ	4,6	-290	360	69	IE3		
	60	190-210 YY / 380-420 Y	19,6 YY / 9,8 Y	5,3	-330	360	71	IE3		
60	200 YY		19,6 YY	5,3	-330	360	71	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	6,0 Δ / 3,5 Y	1,75	-130	120	69	IE3	31	2BH1600-0AK06
	60	220-240 YY / 440-480 Y	6,8 YY / 3,4 Y	2,00	-110	110	72	IE3		
60	230 YY / 460 Y		6,8 YY / 3,4 Y	2,00	-110	110	72	NP		
2	50	220-240 Δ / 380-420 Y	8,6 Δ / 5,0 Y	2,50	-200	190	64	IE3		
	60	220-240 YY / 440-480 Y	10,4 YY / 5,2 Y	3,00	-190	180	70	IE3		
60	230 YY / 460 Y		10,4 YY / 5,2 Y	3,00	-190	180	70	NP		
3	50	220-240 Δ / 380-420 Y	11,6 Δ / 6,7 Y	3,45	-280	280	71	IE3		
	60	220-240 YY / 440-480 Y	13,2 YY / 6,6 Y	4,0	-270	270	74	IE3		
60	230 YY / 460 Y		13,2 YY / 6,6 Y	4,0	-270	270	74	NP		
4	50	220-240 Δ / 380-420 Y	14,9 Δ / 8,6 Y	4,6	-290	360	69	IE3		
	60	220-240 YY / 440-480 Y	17,0 YY / 8,5 Y	5,3	-330	360	71	IE3		
60	230 YY / 460 Y		17,0 YY / 8,5 Y	5,3	-330	360	71	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	3 Y	1,75	-130	120	63	IE3	31	2BH1600-0AQ03
	60	550-600 Y	2,7 Y	2,00	-110	110	68	NP		
2	50	475-525 Y	4,0 Y	2,50	-200	190	64	IE3		
	60	550-600 Y	4,1 Y	3,00	-190	180	70	NP		
3	50	475-525 Y	5,4 Y	3,45	-280	280	71	IE3		
	60	550-600 Y	5,2 Y	4,00	-270	270	74	NP		
4	50	475-525 Y	6,9 Y	4,6	-290	360	69	IE3		
	60	550-600 Y	6,8 Y	5,3	-330	360	71	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	3,5 Δ / 2,0 Y	1,75	-130	120	63	IE3	31	2BH1600-0AQ07
	60	440-480 Δ	3,4 Δ	2,00	-110	110	68	IE3		
60	460 Δ		3,4 Δ	2,00	-110	110	68	NP		
2	50	380-420 Δ / 660-725 Y	5,0 Δ / 2,9 Y	2,5	-200	190	64	IE3		
	60	440-480 Δ	5,2 Δ	3,0	-190	180	70	IE3		
60	460 Δ		5,2 Δ	3,0	-190	180	70	NP		
3	50	380-420 Δ / 660-725 Y	6,7 Δ / 3,9 Y	3,45	-280	280	71	IE3		
	60	440-480 Δ	6,6 Δ	4,0	-270	270	74	IE3		
60	460 Δ		6,6 Δ	4,0	-270	270	74	NP		
4	50	380-420 Δ / 660-725 Y	8,6 Δ / 5,0 Y	4,6	-290	360	69	IE3		
	60	440-480 Δ	8,5 Δ	5,3	-330	360	71	IE3		
60	460 Δ		8,5 Δ	5,3	-330	360	71	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	6,0 Δ / 4 Y	1,75	-130	120	63	IE3	31	2BH1600-0AQ06
	60	440-480 Y	3,5 Y	2,00	-110	110	68	IE3		
2	50	220-240 Δ / 380-420 U	8,6 Δ / 5	2,50	-200	190	64	IE3		
	60	440-480 Y	5,2 Y	3,00	-190	180	70	IE3		
3	50	220-240 Δ / 380-420 U	11,6 Δ / 7	3,45	-280	280	71	IE3		
	60	440-480 Y	6,6 Y	4,0	-270	270	74	IE3		
4	50	220-240 Δ / 380-420 U	15,1 Δ / 9	4,6	-290	360	69	IE3		
	60	440-480 Y	8,5 Y	5,3	-330	360	71	IE3		

- 1) In case of frequency converter operation the standard motor insulation system is suitable for converter input voltages up to 500 V.
- 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⁾	c US	60 Hz	2BH1...-A □ . □
50 Hz	60Hz				
3~					
200 V Δ	200 V YY / 230 V Δ / 400 V Y		•	K	1
190-210 V Δ	190-210 V YY / 220-240 V Δ / 380-420 V Y				
200 V YY / 230 V Δ / 400 V Y	230 V YY / 460 V Y		•	K	6
190-210 V YY / 220-240 V Δ / 380-420 V Y	220-240 V YY / 440-480 V Y				
475-525 V Y	550-600 V Y		•	Q	3
475-525 V Δ	550-600 V Δ				
400 V Δ / 690 V Y	460 V Δ		•	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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