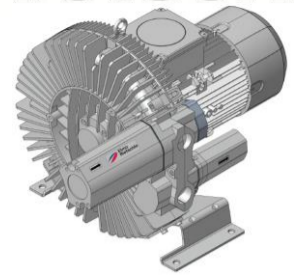




**Elmo
Rietschle**

IE3

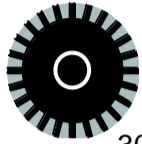
CEC US



G-BH 7 N

Data sheet 2BH7 610-3N

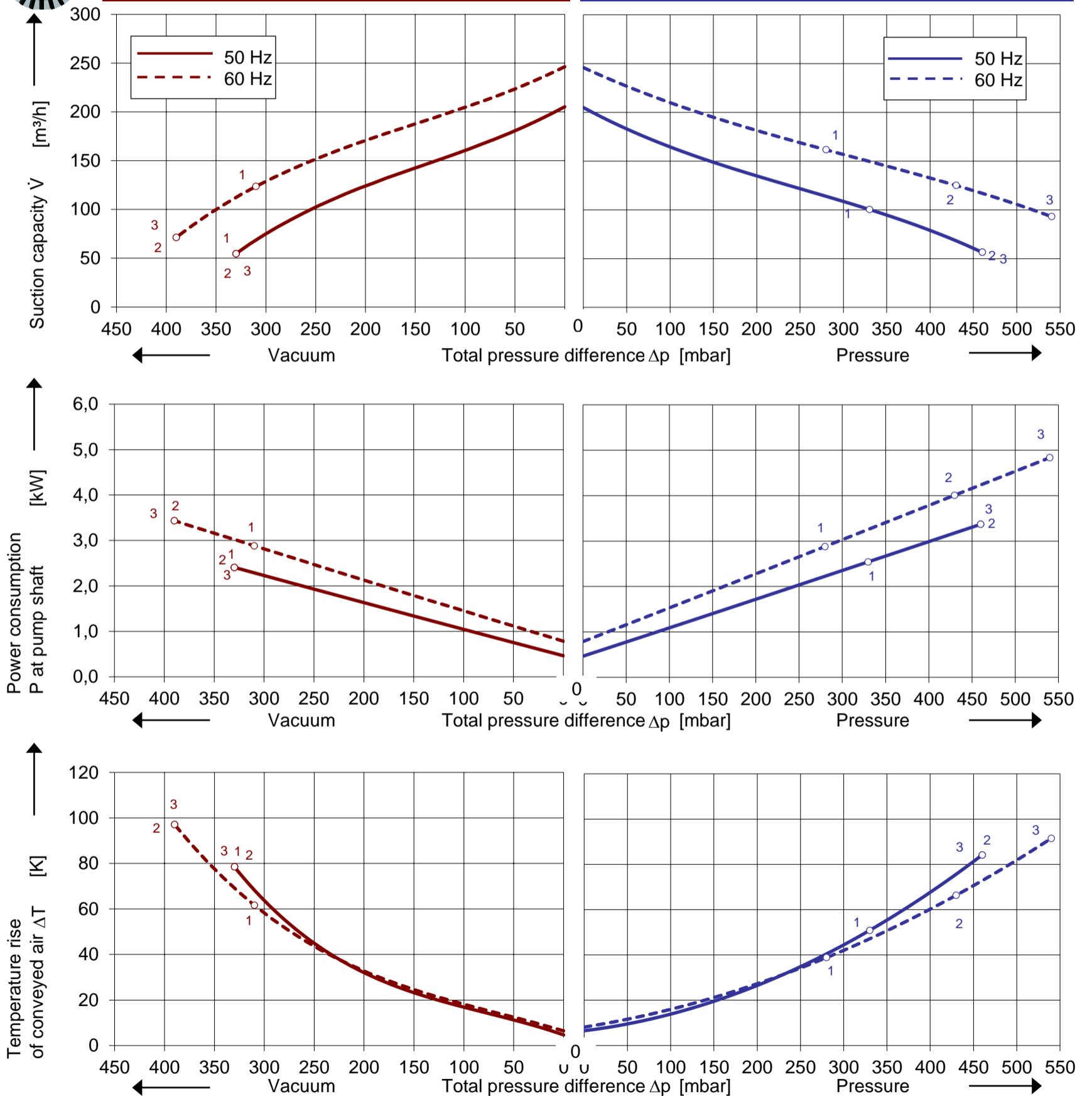
Side channel blower with IE3-motors



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 2BH7 610-3N

No.	Fre- quency Hz	Rated			Max. differential pressure ²⁾		Sound pressure level ³⁾ dB(A)	Efficiency ⁴⁾	Weight Approx. kg	Order No.
		Voltage ¹⁾	Current	Power	Vacuum	Pressure				
		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	9,9 Δ	2,5	-330	330	63	IE3	42	2BH7610-3NK11-2
	60	190-210 YY / 380-420 Y	12,0 YY / 6,0 Y	3,0	-310	280	68	IE3		
	60	200 YY	12,0 YY	3,0	-310	280	68	NP		
2	50	190-210 Δ	13,3 Δ	3,5	-330	460	67	IE3	47	2BH7610-3NK21-2
	60	190-210 YY / 380-420 Y	15,2 YY / 7,6 Y	4,0	-390	430	72	IE3		
	60	200 YY	15,2 YY	4,0	-390	430	72	NP		
3	50	190-210 Δ	17,1 Δ	4,6	-330	460	66	IE3	52	2BH7610-3NK41-2
	60	190-210 YY / 380-420 Y	19,6 YY / 9,8 Y	5,3	-390	540	69	IE3		
	60	200 YY	19,6 YY	5,3	-390	540		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	8,6 Δ / 5,0 Y	2,5	-330	330	63	IE3	42	2BH7610-3NK16-2
	60	220-240 YY / 440-480 Y	10,4 YY / 5,2 Y	3,0	-310	280	68	IE3		
	60	230 YY / 460 Y	10,4 YY / 5,2 Y	3,0	-310	280	68	NP		
2	50	220-240 Δ / 380-420 Y	11,6 Δ / 6,7 Y	3,5	-330	460	67	IE3	47	2BH7610-3NK26-2
	60	220-240 YY / 440-480 Y	13,2 YY / 6,6 Y	4,0	-390	430	72	IE3		
	60	230 YY / 460 Y	13,2 YY / 6,6 Y	4,0	-390	430	72	NP		
3	50	220-240 Δ / 380-420 Y	14,9 Δ / 8,6 Y	4,6	-330	460	66	IE3	52	2BH7610-3NK46-2
	60	220-240 YY / 440-480 Y	17,0 YY / 8,5 Y	5,3	-390	540	69	IE3		
	60	230 YY / 460 Y	17,0 YY / 8,5 Y	5,3	-390	540		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	500 Y	4,0 Y	2,5	-330	330	63	IE3	42	2BH7610-3NQ13-2
	60	575 Y	4,1 Y	3,0	-310	280	68	NP		
2	50	500 Y	5,4 Y	3,5	-330	460	67	IE3	47	2BH7610-3NQ23-2
	60	575 Y	5,3 Y	4,0	-390	430	72	NP		
3	50	500 Y	6,9 Y	4,6	-330	460	66	IE3	54	2BH7610-3NQ43-2
	60	575 Y	6,8 Y	5,3	-390	540	69	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	5,0 Δ / 2,9 Y	2,5	-330	330	63	IE3	42	2BH7610-3NQ17-2
	60	440-480 Δ	5,2 Δ	3,0	-310	280	68	IE3		
	60	460 Δ	5,2 Δ	3,0	-310	280	68	NP		
2	50	380-420 Δ / 660-725 Y	6,7 Δ / 3,9 Y	3,5	-330	460	67	IE3	47	2BH7610-3NQ27-2
	60	440-480 Δ	6,6 Δ	4,0	-390	430	72	IE3		
	60	460 Δ	6,6 Δ	4,0	-390	430	72	NP		
3	50	380-420 Δ / 660-725 Y	8,6 Δ / 5,0 Y	4,6	-330	460	66	IE3	52	2BH7610-3NQ47-2
	60	440-480 Δ	8,5 Δ	5,3	-390	540	69	IE3		
	60	460 Δ	8,5 Δ	5,3	-390	540		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	8,6 Δ / 5,0 Y	2,5	-330	330	63	IE3	42	2BH7610-3NQ16-2
	60	440-480 Y	5,2 Y	3,0	-310	280	68	IE3		
2	50	220-240 Δ / 380-420 Y	11,8 Δ / 6,8 Y	3,45	-330	460	67	IE3	47	2BH7610-3NQ26-2
	60	440-480 Y	6,7 Y	4,0	-390	430	72	IE3		
3	50	220-240 Δ / 380-420 Y	15,1 Δ / 8,7 Y	4,6	-330	460	66	IE3	52	2BH7610-3NQ46-2
	60	440-480 Y	8,6 Y	5,3	-390	540	69	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

		Efficiency ⁴⁾ 			
50 Hz	60Hz	60 Hz	2BH7...-..	□	□ -2
3~					
200 VΔ	200 V YY / 230 VΔ / 400 VY		•	K	1
190-210 VΔ	190-210 VYY / 220-240 VΔ / 380-420VY	IE3			
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			
475-525 V Y	550-600 V Y		•	Q	3
475-525 VΔ	550-600 VΔ		•	Q	5
220-240 VD / 380-420VY	440-480VY	IE3	•	Q	6
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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