



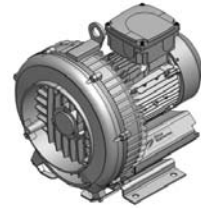
Elmo Rietschle

# G-BH 1 N Data sheet 2BH1 530

Side channel blower with IE3-motors

IE3

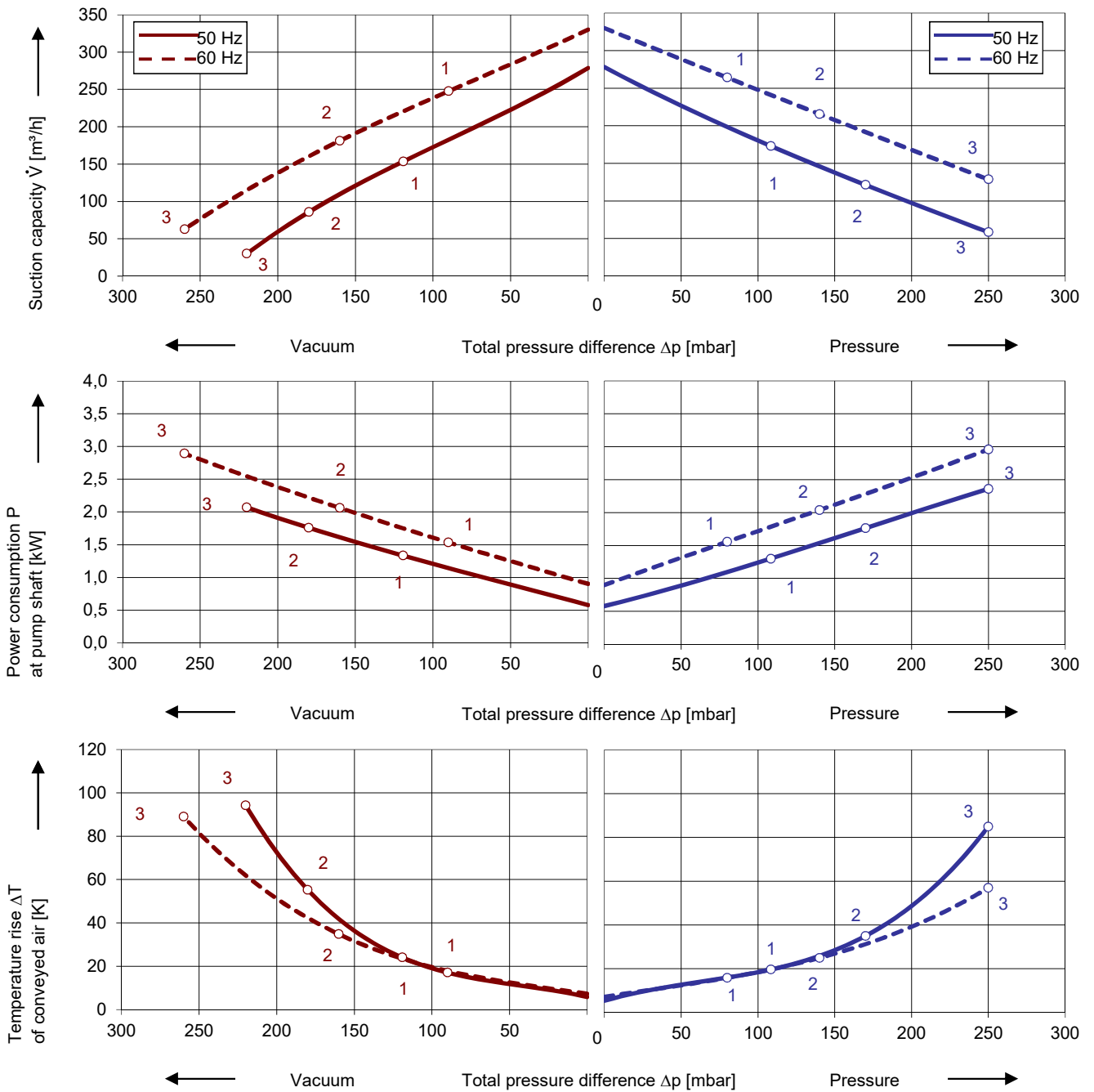
UL US



## 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)	Efficiency class 4)	Weight approx. kg	Order No.
		Voltage 1)	Current	Power	Vacuum	Pressure				
					mbar					
<b>IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 and CAN/CSA C22.2 No. 68-09 (certificate number E225239)</b>										
1	50	190-210 Δ	4,7 Δ	1,30	-120	110	60	IE3	25	2BH1530-0AK11
	60	190-210 YY / 380-420 Y	6,3 YY / 3,2 Y	1,60	-90	80	69	IE3		
	60	200 YY	6,3 YY	1,60	-90	80	69	NP		
2	50	190-210 Δ	6,1 Δ	1,75	-180	170	64	IE3	27	2BH1530-0AK21
	60	190-210 YY / 380-420 Y	7,8 YY / 3,9 Y	2,0	-160	140	72	IE3		
	60	200 YY	7,8 YY	2,0	-160	140	72	NP		
3	50	190-210 Δ	8,7 Δ	2,50	-220	250	69	IE3	31	2BH1530-0AK31
	60	190-210 YY / 380-420 Y	12,0 YY / 6,0 Y	3,00	-260	250	70	IE3		
	60	200 YY	12,0 YY	3,00	-260	250	70	NP		
<b>IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 and CAN/CSA C22.2 No. 68-09 (certificate number E225239)</b>										
1	50	220-240 Δ / 380-420 Y	4,5 Δ / 2,9 Y	1,30	-120	110	60	IE3	25	2BH1530-0AK16
	60	220-240 YY / 440-480 Y	5,5 YY / 2,8 Y	1,60	-90	80	69	IE3		
	60	230 YY / 460 Y	5,5 YY / 2,8 Y	1,60	-90	80	69	NP		
2	50	220-240 Δ / 380-420 Y	6,0 Δ / 3,5 Y	1,75	-180	170	64	IE3	27	2BH1530-0AK26
	60	220-240 YY / 440-480 Y	6,8 YY / 3,4 Y	2,00	-160	140	72	IE3		
	60	230 YY / 460 Y	6,8 YY / 3,4 Y	2,00	-160	140	72	NP		
3	50	220-240 Δ / 380-420 Y	7,5 Δ / 5,0 Y	2,5	-220	250	69	IE3	31	2BH1530-0AK36
	60	220-240 YY / 440-480 Y	10,4 YY / 5,2 Y	3,0	-260	250	70	IE3		
	60	230 YY / 460 Y	10,4 YY / 5,2 Y	3,0	-260	250	70	NP		
<b>IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 and CAN/CSA C22.2 No. 68-09 (certificate number E225239)</b>										
1	50	475-525 Y	2,3 Y	1,30	-120	110	60	IE3	25	2BH1530-0AQ13
	60	550-600 Y	2,2 Y	1,60	-90	80	69	NP		
2	50	475-525 Y	2,8 Y	1,75	-180	170	64	IE3	27	2BH1530-0AQ23
	60	550-600 Y	2,7 Y	2,00	-160	140	72	NP		
3	50	475-525 Y	4,0 Y	2,50	-220	250	69	IE3	31	2BH1530-0AQ33
	60	550-600 Y	4,1 Y	3,00	-260	250	70	NP		
<b>IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 and CAN/CSA C22.2 No. 68-09 (certificate number E225239)</b>										
1	50	380-420 Δ / 660-725 Y	2,9 Δ / 1,7 Y	1,30	-120	110	60	IE3	25	2BH1530-0AQ17
	60	440-480 Δ	2,8 Δ	1,60	-90	80	69	IE3		
	60	460 Δ	2,8 Δ	1,60	-90	80	69	NP		
2	50	380-420 Δ / 660-725 Y	3,5 Δ / 2,0 Y	1,75	-180	170	64	IE3	27	2BH1530-0AQ27
	60	440-480 Δ	3,4 Δ	2,00	-160	140	72	IE3		
	60	460 Δ	3,4 Δ	2,00	-160	140	72	NP		
3	50	380-420 Δ / 660-725 Y	5,0 Δ / 2,9 Y	2,50	-220	250	69	IE3	31	2BH1530-0AQ37
	60	440-480 Δ	5,2 Δ	3,00	-260	250	70	IE3		
	60	460 Δ	5,2 Δ	3,00	-260	250	70	NP		
<b>IE3 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 and CAN/CSA C22.2 No. 68-09 (certificate number E225239)</b>										
1	50	220-240 Δ / 380-420 Y	4,9 Δ / 2,9 Y	1,30	-120	110	60	IE3	25	2BH1530-0AQ16
	60	440-480 Y	2,8 Y	1,60	-90	80	69	IE3		
2	50	220-240 Δ / 380-420 Y	6,0 Δ / 3,5 Y	1,75	-180	170	64	IE3	27	2BH1530-0AQ26
	60	440-480 Y	3,4 Y	2,0	-160	140	72	IE3		
3	50	220-240 Δ / 380-420 Y	8,8 Δ / 5,1 Y	2,50	-220	250	69	IE3	31	2BH1530-0AQ36
	60	440-480 Y	5,2 Y	3,00	-260	250	70	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.

Voltage range		Efficiency 4)	c  us	60 Hz	
50 Hz	60Hz			2BH1...-0.	<input type="checkbox"/> <input type="checkbox"/>
<b>3~</b>					
200 V Δ	200 V YY / 230 V Δ / 400 VY		•	K	1
190-210 V Δ	190-210 VYY / 220-240 V Δ / 380-420VY	IE3	•	K	1
200 V YY / 230 V Δ / 400 VY	230 V YY / 460 VY		•	K	6
190-210 VYY / 220-240 V Δ / 380-420VY	220-240 VYY / 440-480VY	IE3	•	K	6
475-525 V Y	550-600 V Y		•	Q	3
475-525 V Δ	550-600 V Δ		•	Q	5
220-240 V Δ / 380-420VY	440-480VY	IE3	•	Q	6
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 shc