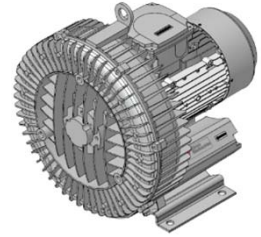




Elmo Rietschle

IE3

UL US



G-BH 1 N HT

Data sheet 2BH1 830-2

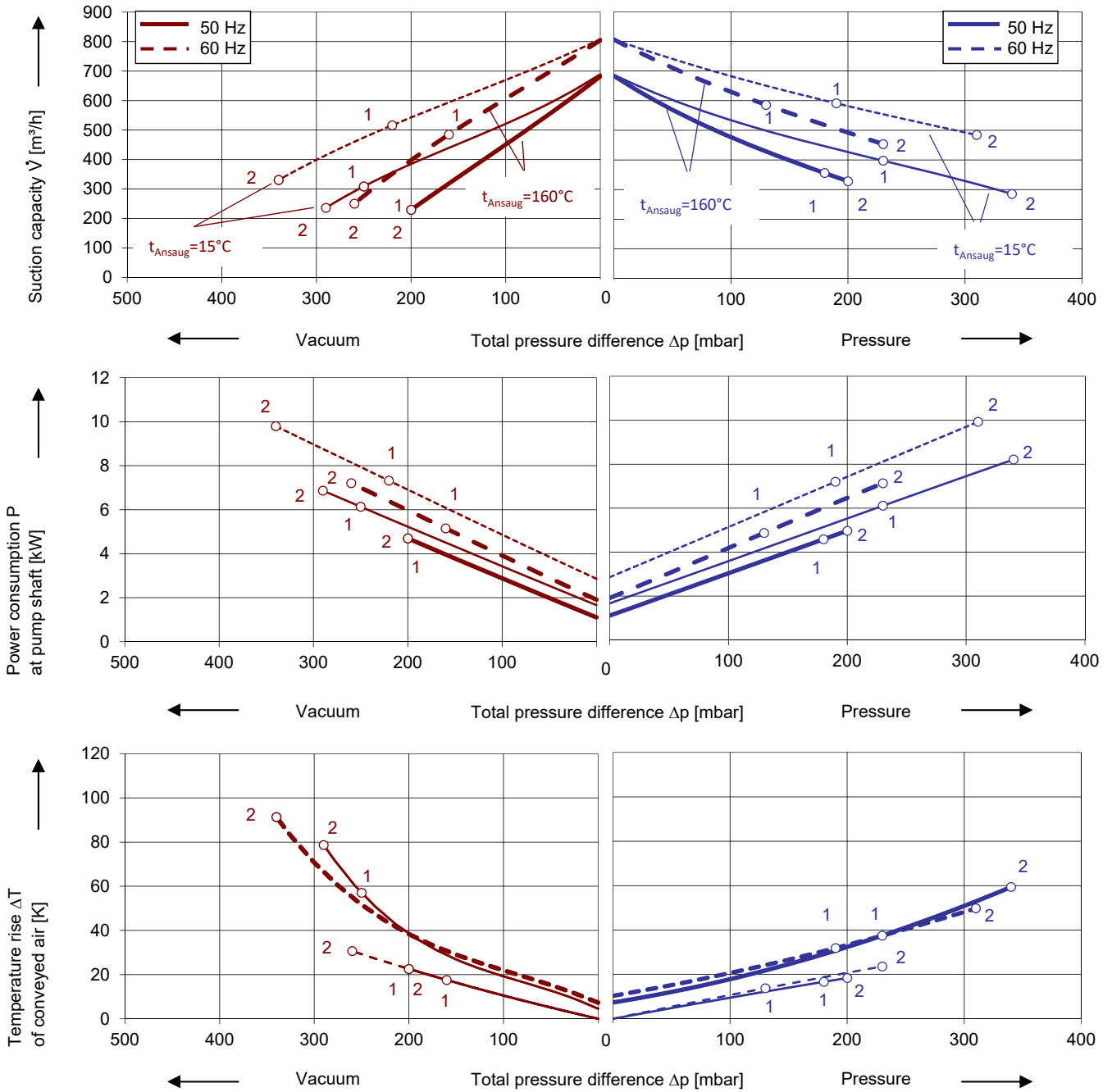
Side channel blower with IE3-motors



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 ± 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⁾	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	19,4 Δ	5,1	-200	180	81	IE3	133	2BH1830-2AK11
	60	190-210 YY / 380-480 Y	22,0 YY / 11,0 Y	5,8	-160	130	83	IE3		
	60	200 YY	22,0 YY	5,8	-160	130	83	NP		
2	50	190-210 Δ	24,0 Δ	6,9	-200	200	82	IE3	145	2BH1830-2AK21
	60	190-210 YY / 380-420 Y	29,0 YY / 14,5 Y	7,9	-260	230	84	IE3		
	60	200 YY	29,0 YY	7,9	-260	230	84	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	16,7 Δ / 9,7 Y	5,1	-200	180	81	IE3	133	2BH1830-2AK16
	60	220-240 YY / 440-480 Y	18,7 YY / 9,4 Y	5,8	-160	130	83	IE3		
	60	230 YY / 460 Y	18,7 YY / 9,4 Y	5,8	-160	130	83	NP		
2	50	220-240 Δ / 380-420 Y	21,8 Δ / 12,6 Y	6,9	-200	200	82	IE3	145	2BH1830-2AK26
	60	220-240 YY / 440-480 Y	25,0 YY / 12,5 Y	7,9	-260	230	84	IE3		
	60	230 YY / 460 Y	25,0 YY / 12,5 Y	7,9	-260	230	84	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	7,7 Y	5,1	-200	180	81	IE3	133	2BH1830-2AQ13
	60	575 Y	7,6 Y	5,8	-160	130	83	NP		
2	50	500 Y	10,0 Y	6,9	-200	200	82	IE3	145	2BH1830-2AQ23
	60	575 Y	10,0 Y	7,9	-260	230	84	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	9,7 Δ / 5,6 Y	5,1	-200	180	81	IE3	133	2BH1830-2AQ17
	60	440-480 Δ	9,5 Δ	5,8	-160	130	83	IE3		
	60	460 Δ	9,5 Δ	5,8	-160	130	83	NP		
2	50	380-420 Δ / 660-725 Y	12,6 Δ / 7,3 Y	6,9	-200	200	82	IE3	145	2BH1830-2AQ27
	60	440-480 Δ	12,5 Δ	7,9	-260	230	84	IE3		
	60	460 Δ	12,5 Δ	7,9	-260	230	84	NP		

- 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		
50 Hz	60Hz			60 Hz	2BH1...-2. <input type="checkbox"/> . <input type="checkbox"/>
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
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.



Your Ultimate Source for Vacuum and Pressure

Gardner Denver Deutschland GmbH

Industriestraße 26
97616 Bad Neustadt - Germany

Tel.: +49 9771 6888-0
Fax: +49 9771 6888-4000

www.gd-elmorietschle.com • er.de@gardnerdenver.com

Gardner Denver Schopfheim GmbH

Johann-Sutter-Straße 6+8
79650 Schopfheim - Germany

Tel.: +49 7622 392-0
Fax: +49 7622 392-300