



**Elmo
Rietschle**

IE3

CE **UL** **US**



G-BH 2 N

Data sheet 2BH2 0780-2

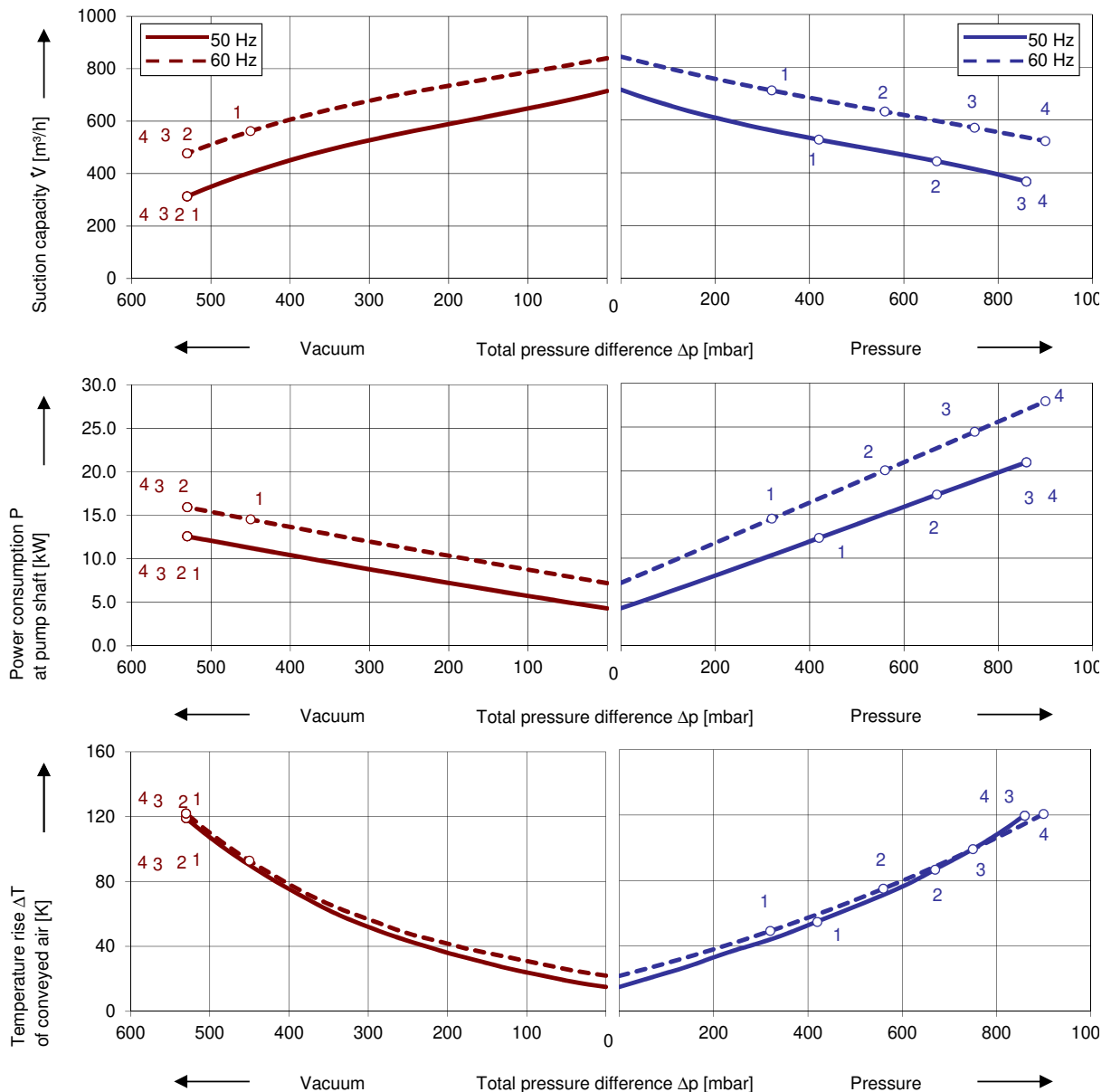
Side channel blower with IE3-motors



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	Rated			Max. differential pressure ²⁾		Sound pres. Level ³⁾	Efficiency class ⁴⁾	Weight approx kg	Order No.
		Voltage ¹⁾	Current	Power	Vacuum	Pressure				
	Hz	V	A	kW	mbar		dB(A)			
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	-530	420	71	IE3	191	2BH20780-2AAKP1-BA
	60	190-210 YY / 380-420 Y	52.8 YY / 26.4	14.5	-450	320	76	IE3		
	60	200 YY	52.8 YY	14.5	-450	320	76	NP		
2	50	190-210 Δ	63.1 Δ	17.3	-530	670	71	IE3	201	2BH20780-2AAKQ1-BA
	60	190-210 YY / 380-420 Y	72.2 YY / 36.1	19.9	-530	560	76	IE3		
	60	200 YY	72.2 YY	19.9	-530	560	76	NP		
3	50	190-210 Δ	76.2 Δ	21.3	-530	860	71	IE3	213	2BH20780-2AAKR1-BA
	60	190-210 YY / 380-420 Y	87.4 YY / 43.7	24.5	-530	750	76	IE3		
	60	200 YY	87.4 YY	24.5	-530	750	76	NP		
4	50	190-210 Δ	91.5 Δ	25.3	-530	860	71	IE3	261	2BH20780-2AAKS1-BA
	60	190-210 YY / 380-420 Y	103 YY / 51.5	28.5	-530	900	76	IE3		
	60	200 YY	103 YY	28.5	-530	900	76	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	-530	420	71	IE3	191	2BH20780-2AAKP6-BA
	60	220-240 YY / 440-480 Y	46.0 YY / 23.0 Y	14.5	-450	320	76	IE3		
	60	230 YY / 460 Y	46.0 YY / 23.0 Y	14.5	-450	320	76	NP		
2	50	220-240 Δ / 380-420 Y	54.9 Δ / 31.7	17.3	-530	670	71	IE3	201	2BH20780-2AAKQ6-BA
	60	220-240 YY / 440-480 Y	62.8 YY / 31.4	19.9	-530	560	76	IE3		
	60	230 YY / 460 Y	62.8 YY / 31.4	19.9	-530	560	76	NP		
3	50	220-240 Δ / 380-420 Y	66.3 Δ / 38.3	21.3	-530	860	71	IE3	213	2BH20780-2AAKR6-BA
	60	220-240 YY / 440-480 Y	76.0 YY / 38.0	24.5	-530	750	76	IE3		
	60	230 YY / 460 Y	76.0 YY / 38.0	24.5	-530	750	76	NP		
4	50	220-240 Δ / 380-420 Y	79.5 Δ / 46.0	25.3	-530	860	71	IE3	261	2BH20780-2AAKS6-BA
	60	220-240 YY / 440-480 Y	90.0 YY / 45.0	28.5	-530	900	76	IE3		
	60	230 YY / 460 Y	90.0 YY / 45.0	28.5	-530	900	76	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	-530	420	71	IE3	191	2BH20780-2AAQP3-BA
	60	550-600 Y	18.4 Y	14.5	-450	320	76	NP		
2	50	475-525 Y	25.4 Y	17.3	-530	670	71	IE3	200	2BH20780-2AAQQ3-BA
	60	550-600 Y	25.1 Y	19.9	-530	560	76	NP		
3	50	475-525 Y	30.6 Y	21.3	-530	860	71	IE3	212	2BH20780-2AAQR3-BA
	60	550-600 Y	30.4 Y	24.5	-530	750	76	NP		
4	50	475-525 Y	36.8 Y	25.3	-530	860	71	IE3	261	2BH20780-2AAQS3-BA
	60	550-600 Y	36.0 Y	29.0	-530	900	76	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	31.7 Δ / / 13.4 Y	12.6	-530	420	71	IE3	191	2BH20780-2AAQP7-BA
	60	440-480 Δ	31.4 Δ	14.5	-450	320	76	IE3		
	60	460 Δ	31.4 Δ	14.5	-450	320	76	NP		
2	50	380-420 Δ / 660-725 Y	38.3 Δ / / 18.3 Y	17.3	-530	670	71	IE3	200	2BH20780-2AAQQ7-BA
	60	440-480 Δ	38.0 Δ	19.9	-530	560	76	IE3		
	60	460 Δ	38.0 Δ	19.9	-530	560	76	NP		
3	50	380-420 Δ / 660-725 Y	38.3 Δ / / 22.1 Y	21.3	-530	860	71	IE3	212	2BH20780-2AAQR7-BA
	60	440-480 Δ	38.0 Δ	24.5	-530	750	76	IE3		
	60	460 Δ	38.0 Δ	24.5	-530	750	76	NP		
4	50	380-420 Δ / 660-725 Y	46.0 Δ / / 26.5 Y	25.3	-530	860	71	IE3	261	2BH20780-2AAQS7-BA
	60	440-480 Δ	45.0 Δ	29.0	-530	900	76	IE3		
	60	460 Δ	45.0 Δ	29.0	-530	900	76	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)				
50 Hz			60Hz					60 Hz	2BH2.....	
3~										
200 VΔ			200 V YY / 230 VΔ / 400 VY				•		K	1
190-210 VΔ			190-210 VYY / 220-240 VΔ / 380-420VY				•		K	6
200 V YY / 230 VΔ / 400 VY			230 V YY / 460 VY				•		K	3
190-210 VYY / 220-240 VΔ / 380-420VY			220-240 VYY / 440-480VY				•		Q	5
475-525 V Y			550-600 V Y				•		Q	7
475-525 VΔ			550-600 VΔ				•		Q	
400 VΔ / 690 V Y			460 VΔ				•		Q	

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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