

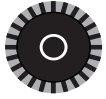
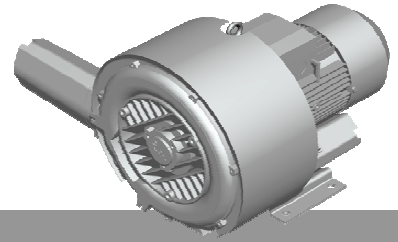


Elmo Rietschle
A Gardner Denver Product

G-BH1

Data sheet 2BH1 640

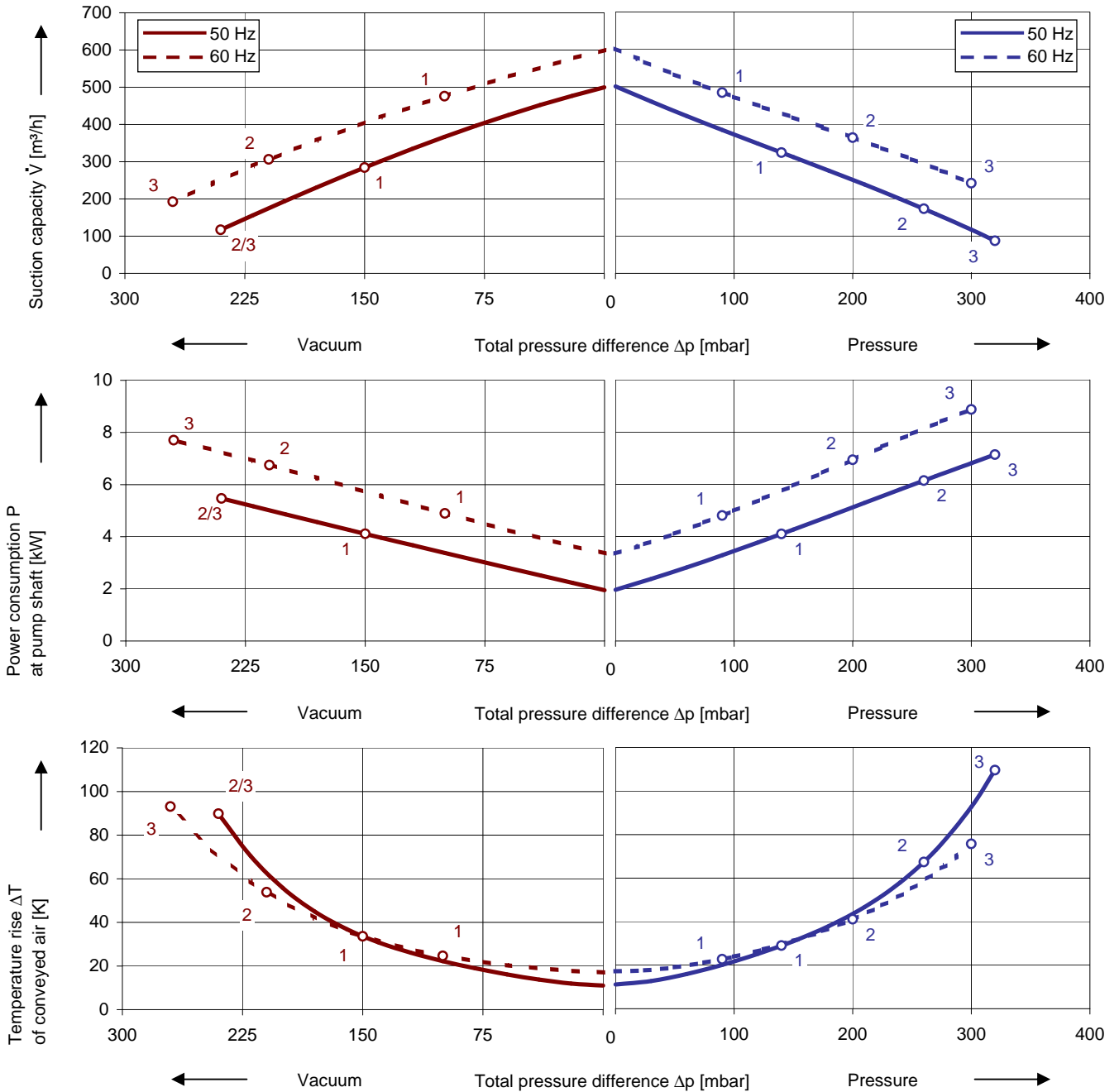
Side channel blower



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 2BH1 640

| No. | Fre- quency | Rated | | | Max. differential pressure ²⁾ | | Sound pressure level ³⁾ | Weight Approx. | Order No. |
|--|----------------|-----------------------|---------|-------|---|----------|--|-------------------|---------------|
| | | Voltage ¹⁾ | Current | Power | Vacuum | Pressure | | | |
| | | Hz | V | A | kW | mbar | | | |
| 3~ 50/60 Hz, IP55, Insulation material class F, UL 507 and CSA 22.2 No 113 (certificate number E225239) | | | | | | | | | |
| 1 | 50 | 345 - 415 Δ | 9.0 Δ | 4.0 | -150 | 140 | 74 | 53 | 2BH1640-7GH37 |
| | 60 | 380 - 480 Δ | 9.0 Δ | 4.6 | -100 | 90 | 78 | | |
| 2 | 50 | 345 - 415 Δ | 13.3 Δ | 5.5 | -240 | 260 | 74 | 73 | 2BH1640-7GH47 |
| | 60 | 380 - 480 Δ | 13.3 Δ | 6.3 | -210 | 200 | 78 | | |
| 3 | 50 | 345 - 415 Δ | 16.7 Δ | 7.5 | -240 | 320 | 74 | 86 | 2BH1640-7GH57 |
| | 60 | 380 - 480 Δ | 17.3 Δ | 8.6 | -270 | 300 | 78 | | |
| 3~ 50/60 Hz, IP55, Insulation material class F, UL 507 and CSA 22.2 No 113 (certificate number E225239) | | | | | | | | | |
| 1 | 50 | 500 Δ | 7.5 Δ | 4.0 | -150 | 140 | 74 | 53 | 2BH1640-7GC35 |
| | 60 | 575 Δ | 7.6 Δ | 4.6 | -100 | 90 | 78 | | |
| 2 | 50 | 500 Δ | 10.5 Δ | 5.5 | -240 | 260 | 74 | 73 | 2BH1640-7GC45 |
| | 60 | 575 Δ | 10.4 Δ | 6.3 | -210 | 200 | 78 | | |
| 3 | 50 | 500 Δ | 13 Δ | 7.5 | -240 | 320 | 74 | 86 | 2BH1640-7GC55 |
| | 60 | 575 Δ | 13.6 Δ | 8.6 | -270 | 300 | 78 | | |

- In case of frequency converter operation the standard motor insulation system is suitable for converter input voltages up to 460 V.
- Relief valves available for limiting differential pressure.
- 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).

All G-BH fulfil the 2006/42/EC (machinery) and 2006/95/EC (low voltage) directives and the EN 60034-1 norm "Rotating electrical machines".

The motors comply with EN 60 034-1 / -2 / -30 (IEC 60034) and thermal class F.

For three phase motors tolerances are +/-10% for fixed voltage motors and +/-5% for voltage range motors. Single phase machines are designed with a +/- 5% tolerance.

The frequency tolerance is +/- 2 % maximum.

Other voltages

| 50 Hz | 50 Hz voltage range | 60 Hz voltage range | 86 Hz (5000 rpm) | 2BH1...-7. | |
|-----------------------------|-------------------------------|-------------------------------|---------------------|------------|-----|
| 3~ | | | | | |
| ----- | 185 - 225 V Δ / 320 - 390 V Y | 200 - 240 V Δ / 345 - 415 V Y | ----- | | H 1 |
| ----- | 200 - 240 V Δ / 345 - 415 V Y | 220 - 275 V Δ / 380 - 480 V Y | 380 V Δ | | H 6 |
| ----- | 345 - 415 V Δ | 380 - 480 V Δ | ----- | | H 7 |
| ----- | 500 V Δ | 575 V Δ | ----- | | C 5 |
| IE2 3~ ⁵⁾ | | | | | |
| 200 V Δ / 345 V Y | 180 - 240 V Δ / 310 - 415 V Y | 200 - 275 V Δ / 345 - 480 V Y | ----- | | P 1 |
| 500 V Δ | 450 - 550 V Δ | 520 - 600 V Δ | ----- | | P 5 |
| 230 V Δ / 400 V Y | 200 - 260 V Δ / 350 - 450 V Y | 230 - 290 V Δ / 400 - 500 V Y | 400 V Δ | | P 6 |
| 400 V Δ / 690 V Y | 350 - 450 V Δ / 610 - 725 V Y | 400 - 500 V Δ / 690 - 725 V Y | ----- | | P 6 |

- Performance can differ if high efficiency motors are used. Please refer to corresponding data sheets.

Changes in particular of the quoted performance curve, data and weights may occur without prior notice. The data given do not constitute an obligation from our side to deliver as shown.

Gardner Denver

Elmo Rietschle is a brand of Gardner
Denver's Industrial Products Group
and part of Blower Operations

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

Gardner Denver Schopfheim GmbH

Roggenbachstraße 58
79650 Schopfheim - Germany

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

Gardner Denver Deutschland GmbH

Industriestraße 26
97616 Bad Neustadt - Germany

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