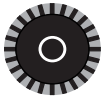
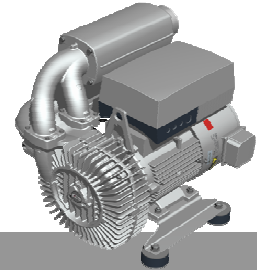


G-BH8

Data sheet 2BH8 51

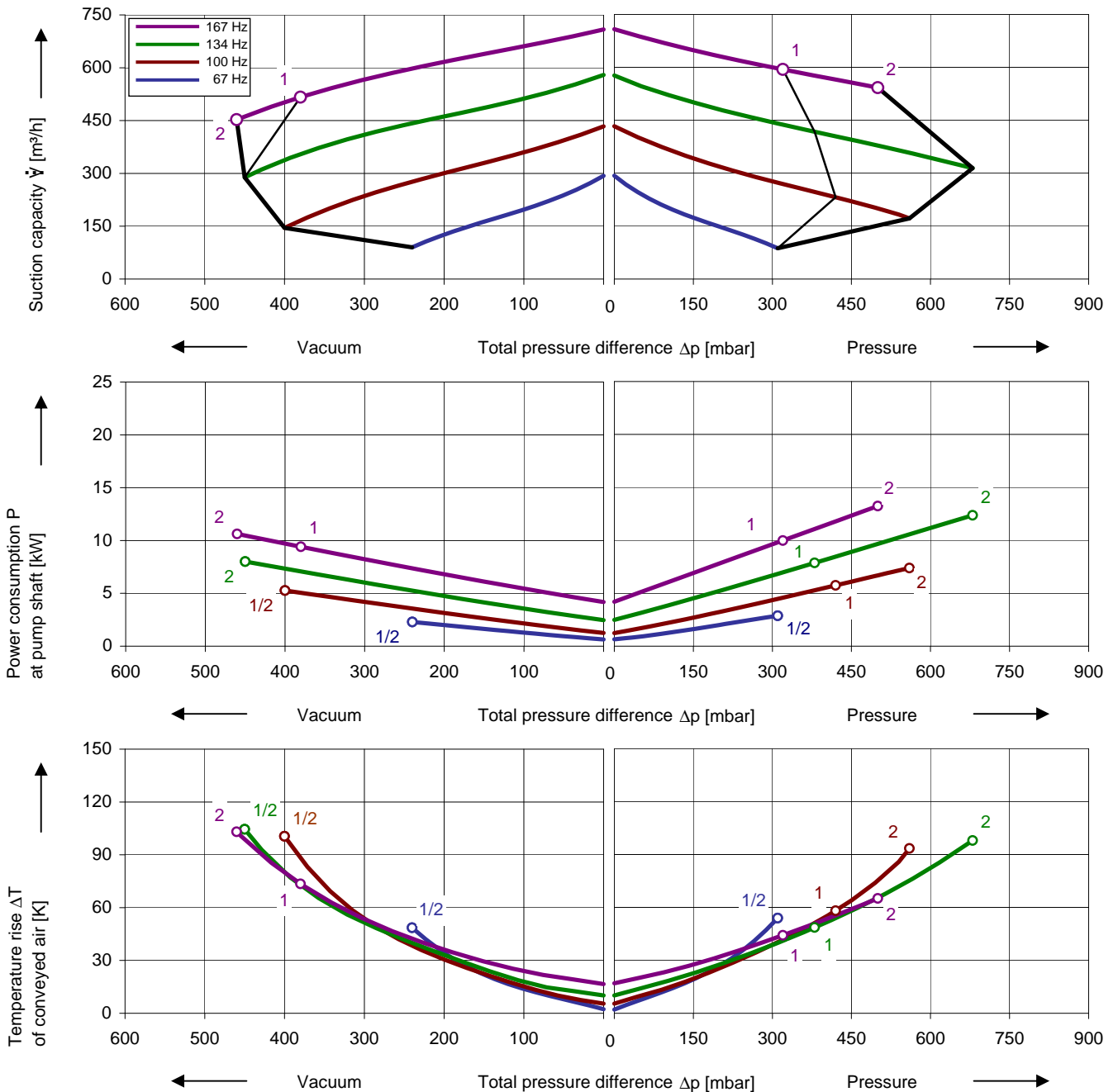
Vacuum pumps and compressors with frequency converter



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.

The performance curves are based on frequency converter operation at 400 V mains voltage and a pulse frequency of 4 kHz minimum. Corner frequency (rated frequency of voltage-frequency-control) is 167 Hz for 380 V rated motor voltage.

Selection and ordering data

Type 2BH8 51

| No. | Fre- quency | Rated mains | | Rated motor | | Rated | Max. differential pressure ¹⁾ | | Sound pressure level ²⁾ | Weight Approx. | Order No. |
|---|----------------|-----------------------|---------|-------------|-----------------------|-------|---|----------|--|-------------------|---------------------------|
| | | Voltage ⁴⁾ | Current | Voltage | Current ³⁾ | Power | Vacuum | Pressure | | | |
| | Hz | V | A | V | A | kW | mbar | | dB(A) | kg | |
| 3--, IP55, Insulation material class F, integrated FC, PTC sensor for motor protection | | | | | | | | | | | |
| 1 | 167 | 400 | 21.5 | | | 9.2 | -380 | 320 | 77 | 84 | 2BH85100-1AANM0-AA |
| 3--, IP55, Insulation material class F, PTC sensor for motor protection | | | | | | | | | | | |
| 2 | 167 | | | 380 Y | 22.0 Y | 11.8 | -460 | 500 | 77 | 73 | 2BH85100-1AATM0-AA |

Stand alone FC (IP20)

| Rated mains voltage ³⁾ | Max. motor current ⁴⁾ | Typical motor power | Rated mains current | | Mains choke / filter | | Stand alone FC (IP20) | |
|--|-------------------------------------|------------------------|---------------------|------|----------------------|----------------------|-----------------------|------------------------------------|
| | | | without | with | Weight Approx. | Order No. | Weight Approx. | Order No. |
| V | A | kW | A | | kg | | kg | |
| Operation with standard rated power, UL 508C and CSA 22.2 No. 14 (certificate number E224047) | | | | | | | | |
| 400 | 16.5 | 7.5 | 21.5 | 15.0 | 3.0 | 2FX4606-0NE00 | 3.6 | 2FC4752-2NE00 |
| 400 | 23.5 | 11 | - | 21.0 | 8.2 | 2FX4613-1NE00 | 3.6 | 2FC4113-2NE00 ⁵⁾ |

- 1) We recommend differential pressure indicators / switches for limiting differential pressure.
- 2) 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). Operation with pulse frequency 8 kHz
- 3) Input voltage range of frequency converters is 400 V - 500 V +/- 10%. Permitted (input) frequency range is 45 Hz - 65 Hz +/- 0%. The standard motor insulation system is suitable for converter input voltages up to 460 V.
- 4) Rated motor current of blower must not exceed 1.05 x max. motor current of the stand alone FC. Example: for rated motor current of 48,5 A the stand alone FC 2FC4223-2NE00 (47 A) can be used.
- 5) Mains choke / mains filter mentioned is mandatory for operation.

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.

Frequency converter accessories

| Item | Order No. | Item | Order No. |
|--------------------------------|---------------|----------------------------|---------------|
| Operating panels | | PC control | |
| Keypad | 2FX4505-0NE00 | Parameterization software | 2FX4515-0NE00 |
| Keypad-Handheld | 2FX4506-0NE00 | RS 232 interface | 2FX4510-0LE00 |
| Connection cable 2,5 m | 2FX4511-0LE00 | RS 232 cable | 2FX4513-0LE00 |
| Connection cable 5 m | 2FX4512-0LE00 | Connection cable | 2FX45..-0LE00 |
| Automation / networking | | Pressure indicators | |
| Switch-potentiometer-unit | 2FX4503-0LE00 | Vacuum -1000 ... 0 mbar | 2FX6021-0BD00 |
| Application module | 2FX4502-0NE00 | Pressure 0 ... 600 mbar | 2FX6011-0BD00 |
| Profibus module | 2FX4507-0NE00 | Pressure 0 ... 1000 mbar | 2FX6012-0BD00 |

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
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