



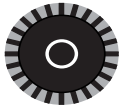
## G-BH2

### Data sheet 2BH2 0540-1

Side channel blower with IE2-motors

IE2

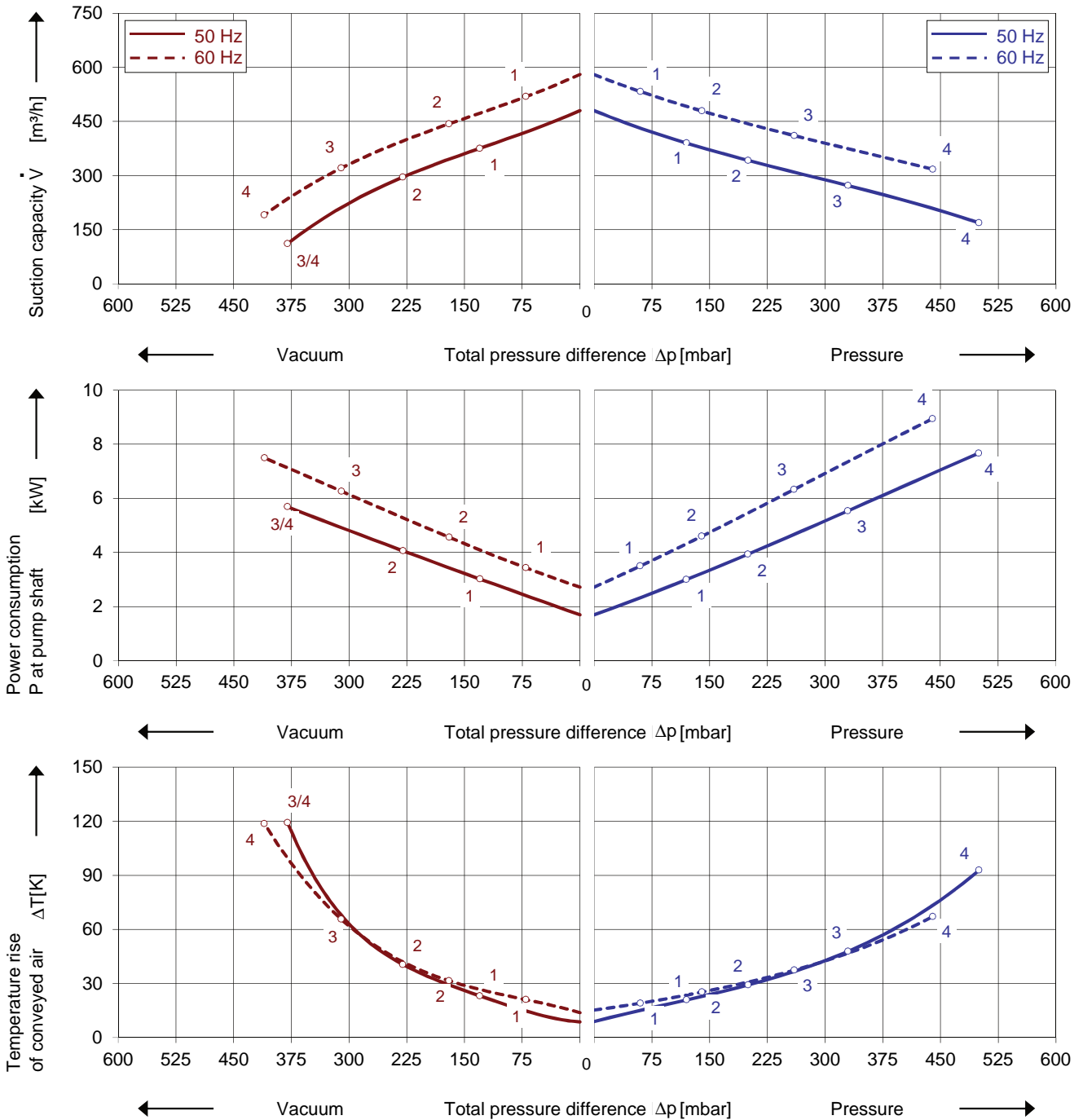
CEC US



#### 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 ± 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 2BH2 0540-1

| No.   | Fre-<br>quency | Rated                 |                |       | Max. differential<br>pressure <sup>2)</sup> |          | Sound<br>pressure<br>level <sup>3)</sup> | Weight<br>Approx. | Order No.          |
|---|----------------|-----------------------|----------------|-------|---|----------|--|-------------------|--------------------|
|   |                | Voltage <sup>1)</sup> | Current        | Power | Vacuum                                      | Pressure |  |                   |                    |
|   |                | Hz                    | V              | A     | kW  | mbar     |  |                   |                    |
| <b>IE2 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 and CNA/CSA 22.2 No 68-09 (certificate number E225239)</b> |                |                       |                |       |   |          |  |                   |                    |
| 1   | 50             | 230 Δ / 400 Y         | 10.1 Δ / 5.8 Y | 3.0   | -130  | 120      | 69                                       | 74                | 2BH20540-1AAPK6-AA |
|   | 60             | 265 Δ / 460 Y         | 9.7 Δ / 5.6 Y  | 3.45  | -70   | 60       | 73                                       |                   |                    |
| 2   | 50             | 400 Δ / 690 Y         | 7.6 Δ / 4.4 Y  | 4.0   | -230  | 200      | 69                                       | 85                | 2BH20540-1AAPL7-AA |
|   | 60             | 460 Δ                 | 7.3 Δ          | 4.55  | -170  | 140      | 73                                       |                   |                    |
| 3   | 50             | 400 Δ / 690 Y         | 10.1 Δ / 5.9 Y | 5.5   | -380  | 330      | 69                                       | 96                | 2BH20540-1AAPM7-AA |
|   | 60             | 460 Δ                 | 9.9 Δ          | 6.3   | -310  | 260      | 73                                       |                   |                    |
| 4   | 50             | 400 Δ / 690 Y         | 13.4 Δ / 7.7 Y | 7.5   | -380  | 500      | 69                                       | 104               | 2BH20540-1AAPN7-AA |
|   | 60             | 460 Δ                 | 13.1 Δ         | 8.6   | -410  | 440      | 73                                       |                   |                    |
| <b>IE2 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 and CNA/CSA 22.2 No 68-09 (certificate number E225239)</b> |                |                       |                |       |   |          |  |                   |                    |
| 1   | 50             | 500 Δ                 | 4.7 Δ          | 3.0   | -130  | 120      | 69                                       | 74                | 2BH20540-1AAPK5-AA |
|   | 60             | 575 Δ                 | 4.5 Δ          | 3.45  | -70   | 60       | 73                                       |                   |                    |
| 2   | 50             | 500 Δ                 | 6.0 Δ          | 4.0   | -230  | 200      | 69                                       | 85                | 2BH20540-1AAPL5-AA |
|   | 60             | 575 Δ                 | 5.9 Δ          | 4.55  | -170  | 140      | 73                                       |                   |                    |
| 3   | 50             | 500 Δ                 | 8.1 Δ          | 5.5   | -380  | 330      | 69                                       | 96                | 2BH20540-1AAPM5-AA |
|   | 60             | 575 Δ                 | 7.9 Δ          | 6.3   | -310  | 260      | 73                                       |                   |                    |
| 4   | 50             | 500 Δ                 | 10.7 Δ         | 7.5   | -380  | 500      | 69                                       | 104               | 2BH20540-1AAPN5-AA |
|   | 60             | 575 Δ                 | 10.5 Δ         | 8.6   | -410  | 440      | 73                                       |                   |                    |

- 1) In case of frequency converter operation the standard motor insulation system is suitable for converter input voltages up to 460 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).


All G-BH match 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.

## Motor for alternate voltages

| Voltage range                                  |  | Fixed voltage                |                              | VFD     | c  US |   |                        |   |
|--|--|------------------------------|------------------------------|---------|--|---|------------------------|---|
| 50 Hz  | 60 Hz  | 50 Hz                        | 60 Hz                        | 87 Hz   | 60 Hz  |   | 2BH20540-1AA □ . □ -AA |   |
|  |  |                              |                              |         | Δ  | Y |                        |   |
| 3~   |  | IE2 3~                       |                              |         |  |   |                        |   |
| 180 - 240 V Δ / 310 - 415 V Y<br>450 - 550 V Y | 200 - 275 V Δ / 345 - 480 V Y<br>520 - 600 V Y | 200 V Δ / 345 V Y<br>500 V Y | 230 V Δ / 400 V Y<br>575 V Y |         | •  | • | P                      | 1 |
| 450 - 550 V Δ                                  | 520 - 600 V Δ                                  | 500 V Δ                      | 575 V Δ                      |         | •  | • | P                      | 3 |
| 200 - 260 V Δ / 350 - 450 V Y                  | 230 - 290 V Δ / 400 - 500 V Y                  | 230 V Δ / 400 V Y            | 265 V Δ / 460 V Y            | 400 V Δ | •  | • | P                      | 5 |
| 350 - 450 V Δ / 610 - 725 V Y                  | 400 - 500 V Δ / 690 - 725 V Y                  | 400 V Δ / 690 V Y            | 460 V Δ                      |         | •  | • | P                      | 6 |
|  |  |                              |                              |         | •  | • | P                      | 7 |

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.

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