



## G-BH2

### Data sheet 2BH2 0540-3

Side channel blower with IE2-motors

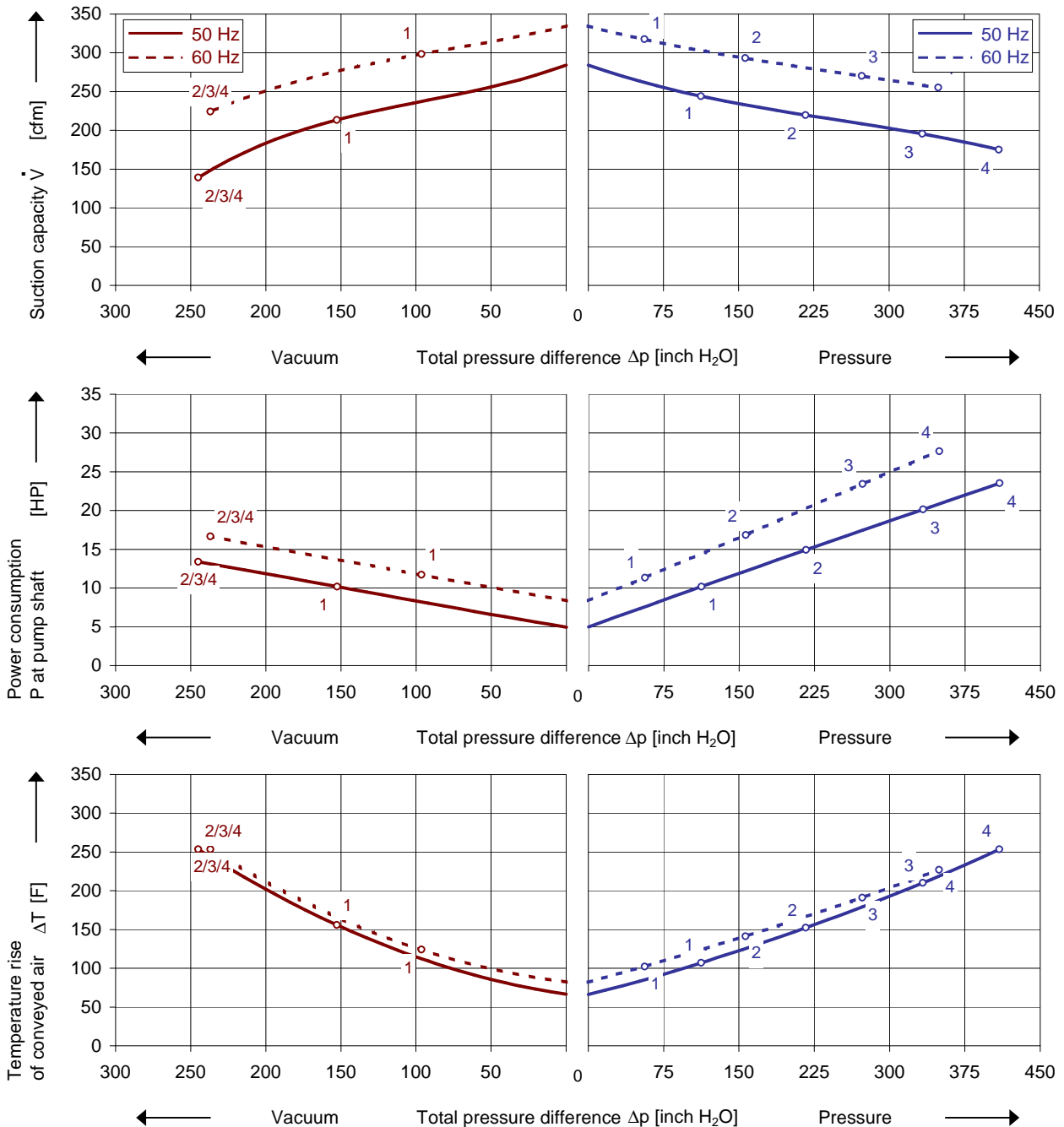
## IE2



### Performance curves

#### Vacuum operation (acfm)

#### Pressure operation (scfm)



The performance curves are based on air at a temperature of 59 F and an atmospheric pressure of 29.92 inch Hg with a tolerance of ± 10 %. The total Suction capacity relates to inlet conditions. Pressure capacity relates to atmospheric conditions. For other conditions please contact Elmo Rietschle.

Every G-BH blower can be used either for vacuum or pressure in continuous operation over the total performance curve range. The standard motors have a protection category of IP 55 and insulation class F. These blowers are UL and CSA approved.

## Selection and ordering data

### Type 2BH2 0540-3

| 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     | HP  |          |  | dB(A)             |                    |
| <b>IE2 3~ 50/60 Hz, IP55, Insulation material class F, UL 507 and CSA 22.2 No 113 (certificate number E225239)</b> |                |                       |                 |       |   |          |  |                   |                    |
| 1  | 50             | 200 Δ / 345 Y         | 26.5 Δ / 15.5 Y | 10.1  | -153  | 112      | 71                                       | 355               | 2BH20540-3AAPN1-AA |
|  | 60             | 230 Δ / 400 Y         | 26.0 Δ / 15.1 Y | 11.5  | -96   | 56       | 77                                       |                   |                    |
| 2  | 50             | 200 Δ / 345 Y         | 39.5 Δ / 23 Y   | 14.8  | -245  | 217      | 71                                       | 472               | 2BH20540-3AAP1-AA  |
|  | 60             | 230 Δ / 400 Y         | 39.0 Δ / 22.5 Y | 16.9  | -237  | 157      | 77                                       |                   |                    |
| 3  | 50             | 200 Δ / 345 Y         | 53.0 Δ / 31 Y   | 20.1  | -245  | 333      | 71                                       | 414               | 2BH20540-3AAPQ1-AA |
|  | 60             | 230 Δ / 400 Y         | 53.0 Δ / 30.5 Y | 23.2  | -237  | 273      | 77                                       |                   |                    |
| 4  | 50             | 200 Δ / 345 Y         | 64.0 Δ / 37 Y   | 24.8  | -245  | 409      | 71                                       | 439               | 2BH20540-3AAPR1-AA |
|  | 60             | 230 Δ / 400 Y         | 64.0 Δ / 36.5 Y | 28.6  | -237  | 349      | 77                                       |                   |                    |
| <b>IE2 3~ 50/60 Hz, IP55, Insulation material class F, UL 507 and CSA 22.2 No 113 (certificate number E225239)</b> |                |                       |                 |       |   |          |  |                   |                    |
| 1  | 50             | 500 Δ                 | 10.7 Δ          | 10.1  | -153  | 112      | 71                                       | 355               | 2BH20540-3AAPN5-AA |
|  | 60             | 575 Δ                 | 10.5 Δ          | 11.5  | -96   | 56       | 77                                       |                   |                    |
| 2  | 50             | 500 Δ                 | 15.8 Δ          | 14.8  | -245  | 217      | 71                                       | 472               | 2BH20540-3AAP5-AA  |
|  | 60             | 575 Δ                 | 15.6 Δ          | 16.9  | -237  | 157      | 77                                       |                   |                    |
| 3  | 50             | 500 Δ                 | 21.5 Δ          | 20.1  | -245  | 333      | 71                                       | 414               | 2BH20540-3AAPQ5-AA |
|  | 60             | 575 Δ                 | 21.0 Δ          | 23.2  | -237  | 273      | 77                                       |                   |                    |
| 4  | 50             | 500 Δ                 | 25.5 Δ          | 24.8  | -245  | 409      | 71                                       | 439               | 2BH20540-3AAPR5-AA |
|  | 60             | 575 Δ                 | 25.5 Δ          | 28.6  | -237  | 349      | 77                                       |                   |                    |

1) In case of variable frequency drive operation the standard motor insulation system is suitable for VFD input voltages up to 460 V.

2) Relief valves available for limiting differential pressure.

3) Surface sound pressure levels are according 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 blowers conform to 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 | 2BH20540-3AA □ . □ -AA |   |   |
|  |  |                              |                              |         | Δ     | Y                      |   |   |
| <b>3~</b>                                      |  | <b>IE2 3~</b>                |                              |         |       |                        |   |   |
| 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.

Elmo Rietschle is a brand of Gardner Denver

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