

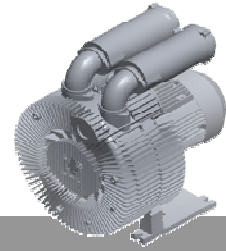


# Elmo Rietschle

## G-BH1

### Data sheet 2BH1 840

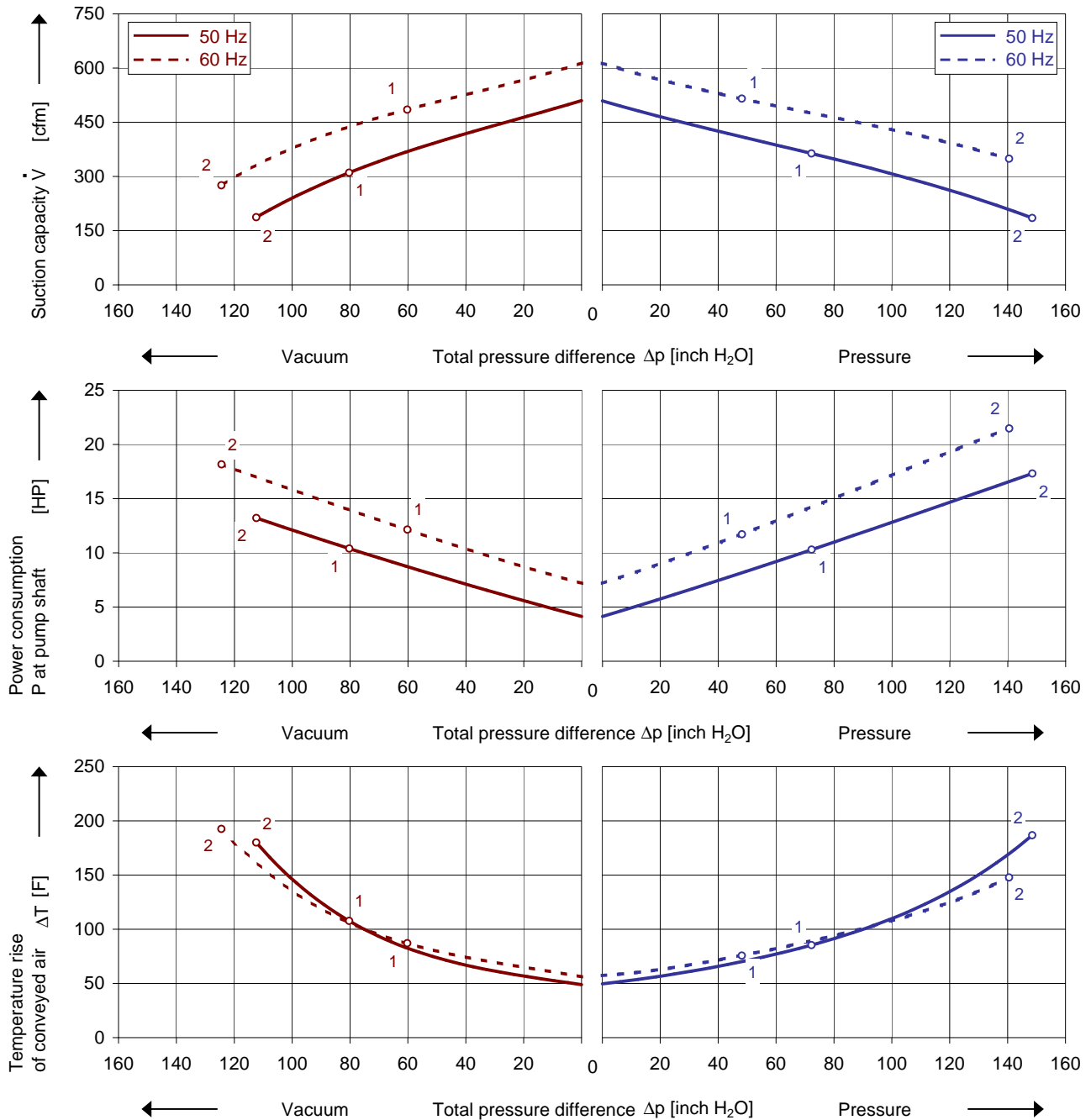
Side channel blower



#### 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 29.91 inch Hg with a tolerance of  $\pm 10\%$ . The total pressure differences are valid for inlet and ambient temperature up to 77 F. Suction capacity relates to inlet conditions. Pressure capacity relates to atmospheric conditions. For other conditions please get in touch with us.

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

## Selection and ordering data

### Type 2BH1 840

| 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>3~ 50/60 Hz, IP55, Insulation material class F, UL 507 and CSA 22.2 No 113 (certificate number E225239)</b> |                |                       |                 |       |   |          |  |                   |                      |
| 1  | 50             | 200-240 Δ / 345-415 Y | 29.0 Δ / 16.7 Y | 10.1  | -80   | 72       | 74                                       | 390               | <b>2BH1840-7JH26</b> |
|  | 60             | 220-275 Δ / 380-480 Y | 30.0 Δ / 17.3 Y | 11.5  | -60   | 48       | 78                                       |                   |                      |
| 2  | 50             | 200-240 Δ / 345-415 Y | 48.5 Δ / 28 Y   | 14.8  | -112  | 149      | 74                                       | 448               | <b>2BH1840-7JH36</b> |
|  | 60             | 220-275 Δ / 380-480 Y | 50.2 Δ / 29 Y   | 16.9  | -124  | 141      | 78                                       |                   |                      |
| <b>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                 | 13.0 Δ          | 10.1  | -80   | 72       | 74                                       | 390               | <b>2BH1840-7JC25</b> |
|  | 60             | 575 Δ                 | 13.6 Δ          | 11.5  | -60   | 48       | 78                                       |                   |                      |
| 2  | 50             | 500 Δ                 | 20.4 Δ          | 14.8  | -112  | 149      | 74                                       | 448               | <b>2BH1840-7JC35</b> |
|  | 60             | 575 Δ                 | 20.4 Δ          | 16.9  | -124  | 141      | 78                                       |                   |                      |

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.

## Motors for other mains

| Voltage range                 |                               | Fixed voltage               |                   | VFD     |  |                  |                       |                       |
|-------------------------------|-------------------------------|-----------------------------|-------------------|---------|---|------------------|-----------------------|-----------------------|
| 50 Hz                         | 60 Hz                         | 50 Hz                       | 60 Hz             | 87 Hz   | 60 Hz   | 2BH1840-7. □ . □ |                       |                       |
|                               |                               |                             |                   |         | Δ   | Y                |                       |                       |
| <b>3~</b>                     |                               |                             |                   |         |   |                  |                       |                       |
| 185 - 225 V Δ / 320 - 390 V Y | 200 - 240 V Δ / 345 - 415 V Y |                             |                   | 380 V Δ | •   | •                | H<br>H<br>H<br>C<br>C | 1<br>6<br>7<br>3<br>5 |
| 200 - 240 V Δ / 345 - 415 V Y | 220 - 275 V Δ / 380 - 480 V Y |                             |                   |         | •   | •                |                       |                       |
| 345 - 415 V Δ / 600 - 720 V Y | 380 - 480 V Δ / 660 - 720 V Y |                             |                   | •       | •   |                  |                       |                       |
|                               |                               | 500 V Y                     | 575 V Y           | •       | •   |                  |                       |                       |
|                               |                               | 500 V Δ                     | 575 V Δ           | •       | •   |                  |                       |                       |
| <b>3~</b>                     |                               |                             |                   |         |   |                  |                       |                       |
|                               |                               | <b>IE2 3~ <sup>5)</sup></b> |                   |         |   |                  | P<br>P<br>P<br>P<br>P | 1<br>3<br>5<br>6<br>7 |
| 180 - 240 V Δ / 310 - 415 V Y | 200 - 275 V Δ / 345 - 480 V Y | 200 V Δ / 345 V Y           | 230 V Δ / 400 V Y | 400 V Δ | •   | •                |                       |                       |
| 450 - 550 V Y                 | 520 - 600 V Y                 | 500 V Y                     | 575 V Y           |         | •   | •                |                       |                       |
| 450 - 550 V Δ                 | 520 - 600 V Δ                 | 500 V Δ                     | 575 V Δ           | •       | •   |                  |                       |                       |
| 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 | •       | •   |                  |                       |                       |
| 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           | •       | •   |                  |                       |                       |

5) Performance can differ if IE2 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.

Elmo Rietschle is a brand of Gardner Denver

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