

G-BH2

Data sheet 2BH20540-1

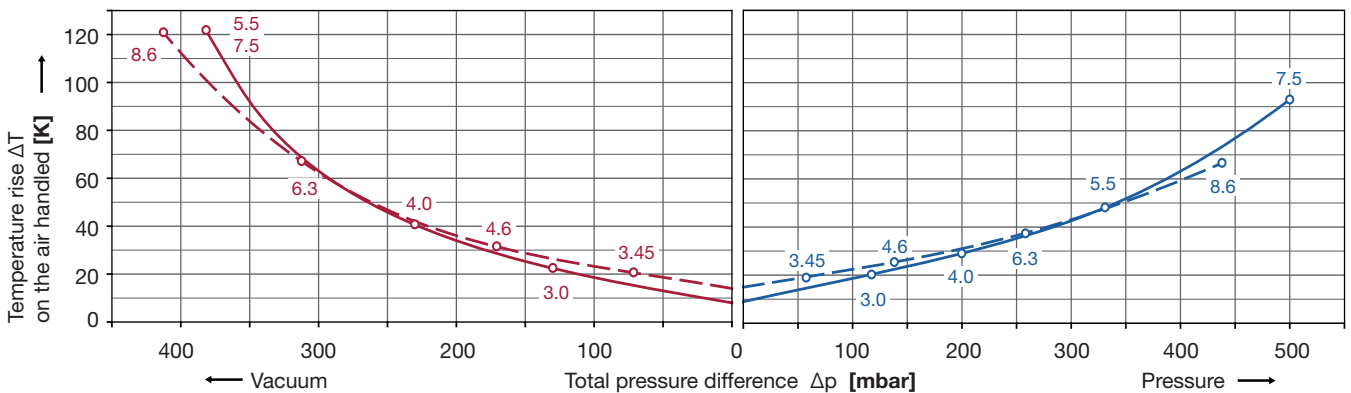
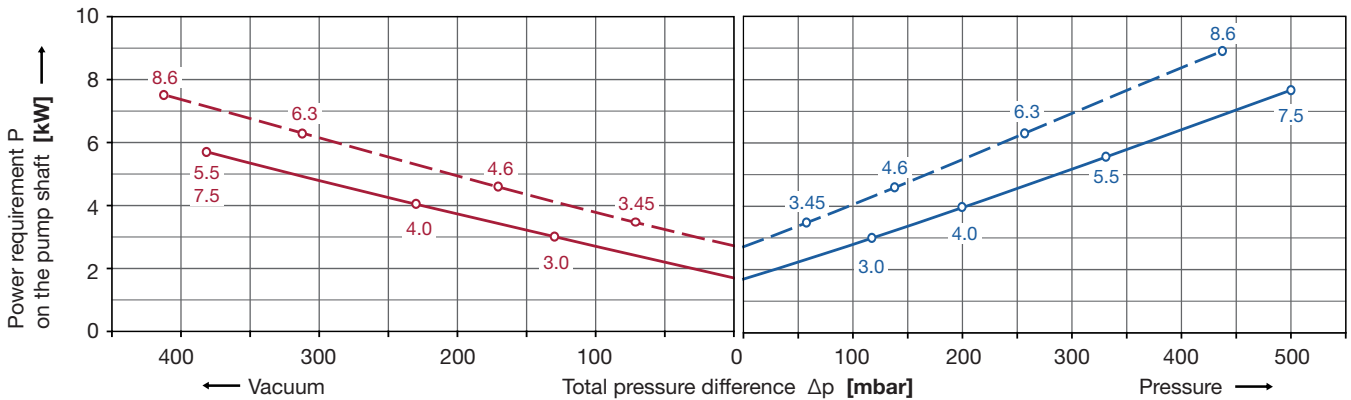
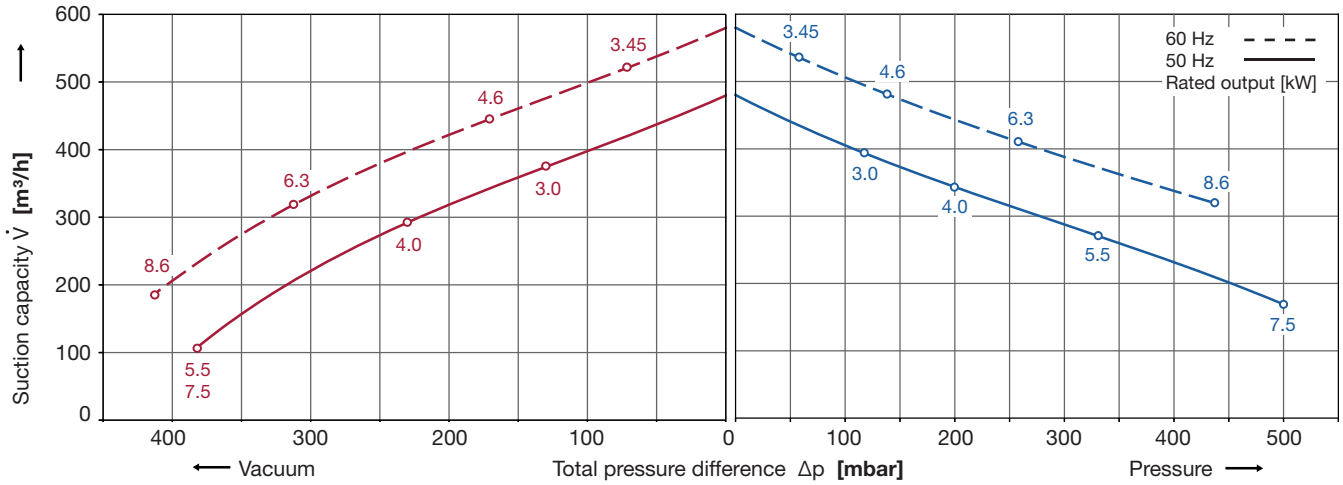
Side channel blower



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 $\pm 10\%$. The total pressure differences are valid for suction and ambient temperature up to 25 °C. For other conditions please confer with us.

Each 2BH2 type can be applied both as vacuum pump and compressor in continuous operation over the total stated performance curve range. The motors are available as standard in protection category IP 55 and isolation class F. The vacuum pumps/compressors are approved according to UL and CSA.


| Selection and ordering data | | | | | | | | Order-Nr. |
|---|----------------|---------------------------|----------------|-----------------------------------|----------|--|---------------|--------------------|
| Rated output | Fre- quency | Rated | | max. diff. pressure ¹⁾ | | Sound- pressure- level ²⁾ | Weight ca. | |
| | | voltage | current | vacuum | pressure | | | |
| kW | Hz | V | A | mbar | mbar | dB (A) | kg | |
| 3~ 50/60 Hz, IP55, insulation class F, UL 507 and CSA 22.2 No. 13 (Certificate Number E225239) | | | | | | | | |
| 3.0 | 50 | 200 - 260 Δ / 350 - 450 Y | 11.4 Δ / 6.5 Y | -130 | +120 | 69 | 74 | 2BH20540-1AAPK6-AA |
| 3.45 | 60 | 230 - 290 Δ / 400 - 500 Y | 11.4 Δ / 6.5 Y | -70 | +60 | 73 | 74 | |
| 4.0 | 50 | 350 - 450 Δ / 610 - 725 Y | 8.4 Δ / 4.8 Y | -230 | +200 | 69 | 85 | 2BH20540-1AAPL7-AA |
| 4.6 | 60 | 400 - 500 Δ | 8.2 Δ | -170 | +140 | 73 | 85 | |
| 5.5 | 50 | 350 - 450 Δ / 610 - 725 Y | 11.1 Δ / 6.4 Y | -380 | +330 | 69 | 96 | 2BH20540-1AAPM7-AA |
| 6.3 | 60 | 400 - 500 Δ | 11.0 Δ | -310 | +260 | 73 | 96 | |
| 7.5 | 50 | 350 - 450 Δ / 610 - 725 Y | 15.0 Δ / 8.6 Y | -380 | +500 | 69 | 104 | 2BH20540-1AAPN7-AA |
| 8.6 | 60 | 400 - 500 Δ | 15.1 Δ | -410 | +440 | 73 | 104 | |

1) Relief-valve are available for limiting differential pressure.

2) Measuring-surface sound-pressure level acc. to EN ISO 3744, measured on an equivalent unit at a distance of 1 m. The pump is throttled to an average suction pressure, with piping connected, but is not fitted with relief valves, tolerance ± 3 dB (A).

All 2BH2 achieve the standards and norms of the low voltage directive 2006/95/EC and EN 60034-1 rotating electrical machines. 2BH2 with frequency inverter achieve additional the norms EN 61000-6-2 / -6-4 electromagnetic compatibility (EMC).

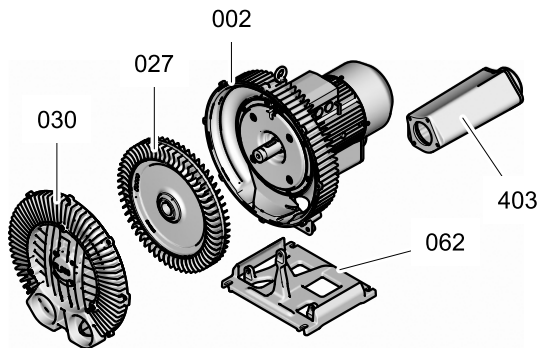
The motors are designed according to the EN 60034-1 / IEC 60034-1 and temperature class F. For the three phase machines the tolerances are ± 10 % for fixed voltage incl. ATEX and ± 5 % for voltage range. In compliance with UL 507 and CSA 22.2 No. 113 -10% / +6%.

| Other voltages | | | | | | | |
|--|---|---|------------------------------------|------------------------------------|-------------|-----------------------------|------------------------------|
| 50 Hz (EFF I) | 50 Hz voltage ranges | 60 Hz voltage ranges  | 86 Hz (5000 rpm) | 100 Hz (6000 rpm) | 2BH20540-1A | <input type="checkbox"/> P. | <input type="checkbox"/> -AA |
| 200 V Δ / 345 V Y 500 V Δ 230 V Δ / 400 V Y 400 V Δ / 690 V Y | 180 - 240 V Δ / 310 -415 V Y 450 - 550 V Δ 200 - 260 V Δ / 350 - 450 V Y 350 - 450 V Δ / 610 - 725 V Y | 200 - 275 V Δ / 345 - 480 V Y 520 - 600 V Δ 230 - 290 V Δ / 400 - 500 V Y 400 - 500 V Δ / 690 - 725 V Y* | ----- ----- 400 V Δ ----- | 400 V Δ ----- ----- ----- | | | 1 5 6 7 |

* No approval according to UL for voltage ranges above 600 V.

standard A
suction port at cover B

Material list



| No. | Description | Material |
|-----|------------------|----------------|
| 002 | Blower housing | aluminum alloy |
| 027 | Impeller | aluminum alloy |
| 030 | Blower cover | aluminum alloy |
| 062 | Base | cast irons |
| 403 | Silencer housing | aluminum alloy |