

G-BH2 e

Data sheet 2BH2 0540-3

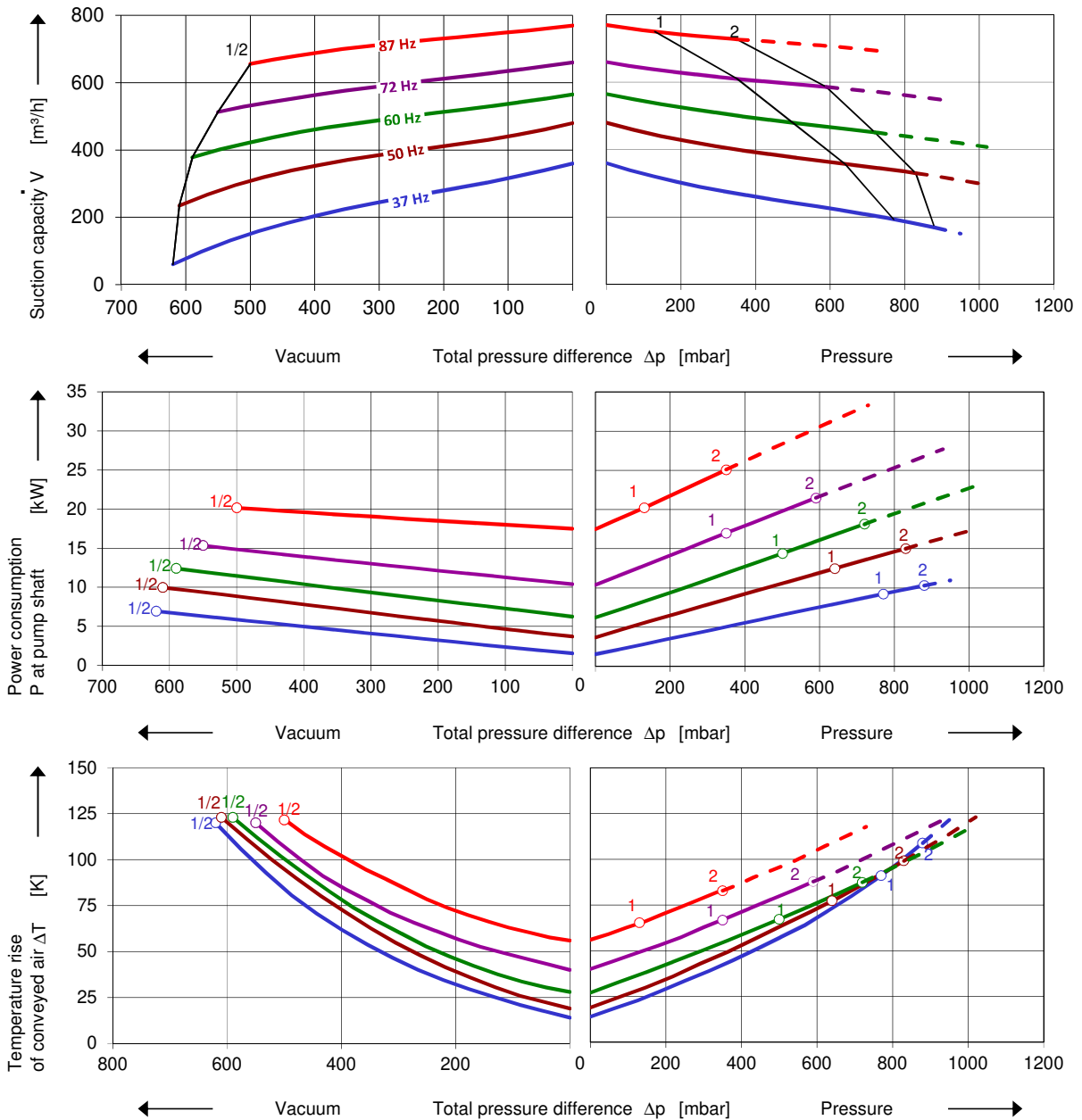
Side channel blower with Frequency Converter



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 and a pulse frequency of 4 kHz minimum. Rated voltage/frequency set point is 345 V / 87 Hz and delta connection of motor. Frequency converters must be connected to a mains voltage of 380 V minimum.

| Selection and ordering data | | | | | | | | | | | | |
|------------------------------------------------------------------------------------------------------------------|----------------|---------|---------|-------|-------------------------------|--------------------|-------------------------|---------------------|-----------|-----|----------------------------------|----------|
| Type 2BH2 0540-3 | | | | | | | | | | | | |
| No. | Fre- quency | Rated | | | Max. differential pressure | | Sound pressure level | Weight Approx. | Order No. | | | VFD type |
| | | Voltage | Current | Power | Vacuum | Pressure | | | | | | |
| | | Hz | V | A | kW | mbar ¹⁾ | | dB(A) ²⁾ | kg | | | |
| Integrated VFD 3~ 400V -15% ... 480V +10%, 50/60 Hz ±6% with thermistor (PTC), IP55, UL 1450 | | | | | | | | | | | | |
| 1 | 85 | 380 Y | 41.0 Y | 20.5 | -500 | 130 | 85 | 79/80 | 180 | 182 | 2BH20540-3AA3P6-BA | K |
| 2 | 85 | 380 Y | 48.0 Y | 25.0 | -500 | 350 | 85 | 79/80 | 180 | 182 | 2BH20540-3AA3Q6-BA | K |
| 3~ 50/60 Hz, IP55, Insulation material class F, UL 1450 and CAN/CSA C22.2 No. 68-09 (certificate number E225239) | | | | | | | | | | | | |
| 1 | 37 | - | - | - | -620 | 770 | 72 | 79/80 | 180 | 182 | 2BH20540-3AAKQ6-BA ³⁾ | J |
| | 50 | - | - | - | -610 | 640 | 70 | | | | | |
| | 60 | - | - | - | -590 | 500 | 75 | | | | | |
| | 85 | 400 Δ | 39.5 Δ | 20.5 | -500 | 130 | 85 | | | | | |
| | 37 | - | - | - | -620 | 950 | 72 | 79/80 | 190 | 192 | 2BH20540-3AAKQ6-BA ³⁾ | |
| | 50 | - | - | - | -610 | 980 | 70 | | | | | |
| | 60 | - | - | - | -590 | 870 | 75 | | | | | |
| | 85 | 400 Δ | 53.7 Δ | 28.8 | -500 | 520 | 85 | | | | | |
| | 37 | - | - | - | -620 | 950 | 72 | 79/80 | 202 | 204 | 2BH20540-3AAKR6-BA ³⁾ | |
| | 50 | - | - | - | -610 | 1020 | 70 | | | | | |
| | 60 | - | - | - | -590 | 1020 | 75 | | | | | |
| | 85 | 400 Δ | 65.3 Δ | 35.5 | -500 | 730 | 85 | | | | | |

With separately driven fan (order option G17)

- 1) We recommend differential pressure indicators / switches for limiting differential pressure. Relief valves are only useable at defined frequency.
- 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 p
- 3) PTC recommended for motor overload protection. Ordering example: 2BH20540-3 □□□□-□□-□-□ Z=A11
- 4) Sound pressure level with G17 dependent on voltage (50Hz / 60Hz)

All G-BH match the 2006/42/EC (machinery) and 2006/95/EC (low voltage) directives and the EN 60034 norm "Rotating electrical machines".

The motors comply with EN 60 034-1 / -2 / -30 (IEC 60034) and thermal class F.

The frequency tolerance is +/- 2% maximum.

| Frequency converter (IP55) motor integrated / for wall mounting | | | | | | | | |
|----------------------------------------------------------------------------|-----------------|-----------------------------------|-----------------------|------------------------|------------------------|-----------------|--------------------------------------------------------------------------------------|------------------------------|
| Frequency Converter | | Rated mains voltage | Max. motor current | Typical motor power | Rated mains current | Fuse Protection | Weight Approx. | Adaptor for wall mounting |
| Order No. | | V | A | kW | A | A | kg | Order No. |
| A | 2FC4152-1 □□ 00 | 400V (-15%) ... 480V (+10%) | 4 | 2 | 3 | 10 | 4 | 2FX16190ER00 |
| B | 2FC4222-1 □□ 00 | | 6 | 2 | 5 | 10 | 5 | 2FX16490ER00 |
| C | 2FC4302-1 □□ 00 | | 8 | 3 | 6 | 16 | | |
| D | 2FC4402-1 □□ 00 | | 10 | 4 | 8 | 16 | 9 | 2FX16690ER00 |
| E | 2FC4552-1 □□ 00 | | 13 | 6 | 11 | 20 | | |
| F | 2FC4752-1 □□ 00 | | 18 | 8 | 15 | 25 | | |
| G | 2FC4113-1 □□ 00 | | 28 | 11 | 23 | 35 | 21 | 2FX16990ER00 |
| H | 2FC4153-1 □□ 00 | | 34 | 15 | 28 | 50 | | |
| J | 2FC4183-1 □□ 00 | | 40 | 19 | 33 | 50 | | |
| K | 2FC4223-1 □□ 00 | | 48 | 22 | 40 | 63 | | |
| I/O's and automation | | | | | | Order option | Example: | |
| ST 2 AIN / 2 AOUT / 4 DIGIN / 1 DIGOUT / 2 RELAYS | | | | | | STANDARD | 2BH20540-3AA3P6-BA Z=U51 VFD type 2FC4223-1PB00 to be delivered already installed | |
| PB 2 AIN / 2 AOUT / 4 DIGIN / 1 DIGOUT / 2 RELAYS / ProfiBus interface | | | | | | Z = U51 | | |
| CB 2 AIN / 2 AOUT / 4 DIGIN / 1 DIGOUT / 2 RELAYS / CANopen interface | | | | | | Z = U52 | | |
| PN 2 AIN / 2 AOUT / 4 DIGIN / 1 DIGOUT / 2 RELAYS / ProfiNet interface | | | | | | Z = U53 | | |
| SC 2 AIN / 2 AOUT / 4 DIGIN / 1 DIGOUT / 2 RELAYS / SERCOS3 interface | | | | | | Z = U54 | | |
| EC 2 AIN / 2 AOUT / 4 DIGIN / 1 DIGOUT / 2 RELAYS, with EtherCAT-Interface | | | | | | Z = U56 | | |

| VFD accessories | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------------------------------------|---------------|
| Item | Order No. | Item | Order No. |
| Manual control | | Differential pressure transmitters | |
| MMI handheld | 2FX4520-0ER00 | Vacuum -1000 ... 0 mbar | 2FX6022-0BD00 |
| USB adaptor cable | 2FX4521-0ER00 | Pressure 0 ... 600 mbar | 2FX6013-0BD00 |
| | | 0 ... 1000 mbar | 2FX6014-0BD00 |
| INVERTERpc Software | | | |
| Free download at www.gd-elmoietschle.com >Downloads >frequency-converters >Miscellaneous >Software | | | |

Changes in particular of the quoted performance curve, data and weights may occur without prior notice. The data given does not constitute an obligation from our side to deliver as shown.



Your Ultimate Source for Vacuum and Pressure

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