

HFB44B05A, HFB44B12A

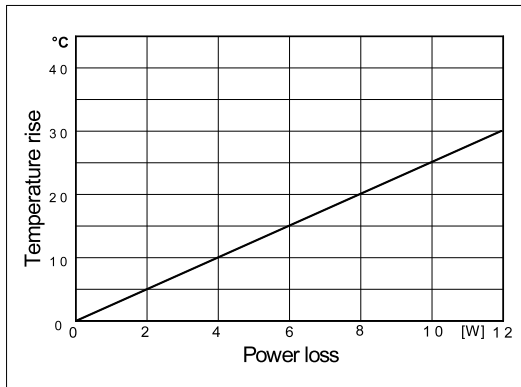
ACTIVE CHIP COOLER



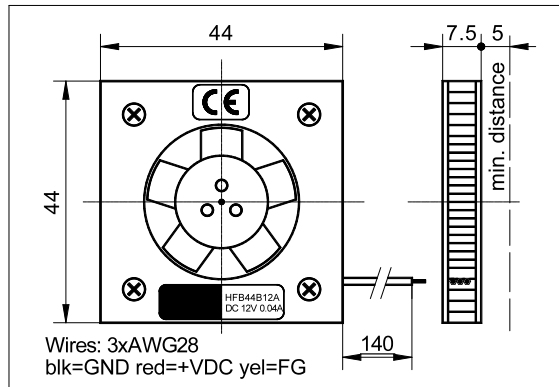
Due to its excellent cooling capacity, the active cooler with a height of only 7.5 mm is suitable for very low spaces. The modern motor system ensures a maximum conductance of heat and simultaneous very low current consumption. The brushless motor is electronically commutated. A special IC is responsible for the electrical control. Highest reliability is achieved by 100% burn-in. The air flow performance is increased and the noise is reduced by computer-aided optimization of the impeller and cooling surfaces. The fan is mounted by using double side adhesive thermo-conductive foil or thermo-conductive adhesive. An optional speed impulse output enables simple monitoring of speed.



COOLING PERFORMANCE



DIMENSIONS



PERFORMANCE

| CE | HFB44B05A | HFB44B12A |
|---|-------------------------------------|----------------------|
| Operating Voltage [V] | 4.5 ... 5.0 ... 5.5 | 10.2 ... 12 ... 13.8 |
| Typ. Operating Current [mA] | 90 | 40 |
| Max. Start Current [mA] | 160 | 70 |
| Thermal Resistance [K /W] | 2.5 | 2.5 |
| Typ. Noise @ 1m [dB(A)] | 28 | 28 |
| Operating Temperature (Non blocking rotor) [°C] | -10 ... +70 (85, 1h max.) | |
| Typ. Rotor Speed [RPM] | 8000 | |
| FG Output [Imp./rev.] | 3 | |
| Life Expectancy L ₁₀ /MTBF [h] | 75000/210000 @ T _H =60°C | |
| Bearing System | Ball bearing ZZ | |
| Weight [g] | 20 | |
| Packaging units [Pcs] | 50 – 500 | |

• **ALARMSIGNAL**

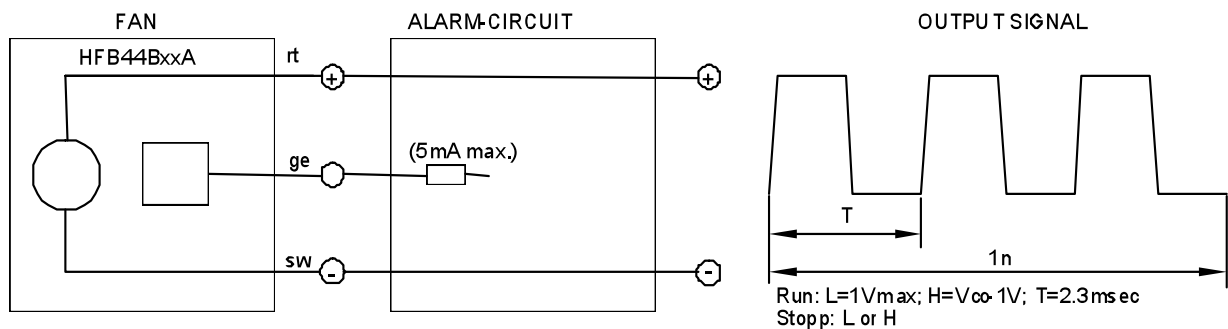
The **SEPA**® HFB44BxxA includes a pulse output which allows monitoring the correct function of the fan.

The pulse is like a rectangular wave, the frequency correlates to 3x rotor speed. At blocked motor the output signal could be L (<0.5V) or H.

IMPORTANT: The pulse output is *not* protected against short circuit and must not connect to GND or Vcc without pre-resistor. A pull-up-resistor is not needed.

Do not touch the rotor! Please note the handling instructions.

The HFB44BxxA has tinned lead wire ends.



• **ATTACHMENT:**

The **SEPA**® fan HFB44BxxA is mounted on the CPU by simply using the double side adhesive thermo-conductive foil TCT 42. The TCT 42 bonds reliably and permanently even as high temperatures. The TCT 42 is available in different sizes on request.

The surface of the heat sink and the CPU must be clean (free of oil and grease) and dry. Even traces of thermo conducting paste prevent reliable bonding!

For more information about adhesive pad or glue, please read the data sheets.

• **ACCESSORIES:**

- TCT 42 thermally conductive adhesive pad, 42x42mm
- HERNON 746 thermally conductive adhesive achieves a strong bond after 4 minutes
- CONNECTOR on request

• **ORDER INFORMATION**

- HFB44B05 **SEPA** CPU-Cooler 5VDC, 44x44x7,5 mm, ball bearing, **CE** on request
- HFB44B05A **SEPA** CPU-Cooler 5VDC, 44x44x7,5 mm, ball bearing, **FG, CE** 214421010
- HFB44B12 **SEPA** CPU-Cooler 12VDC, 44x44x7,5 mm, ball bearing, **CE** on request
- HFB44B12A **SEPA** CPU-Cooler 12VDC, 44x44x7,5 mm, ball bearing, **FG, CE** 214422010