

HFB44B05A, HFB44B12A

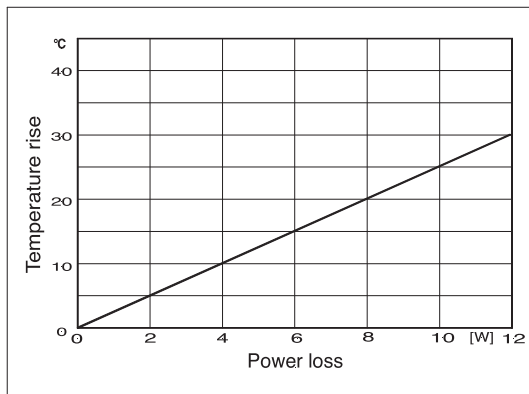
ACTIVE COOLER



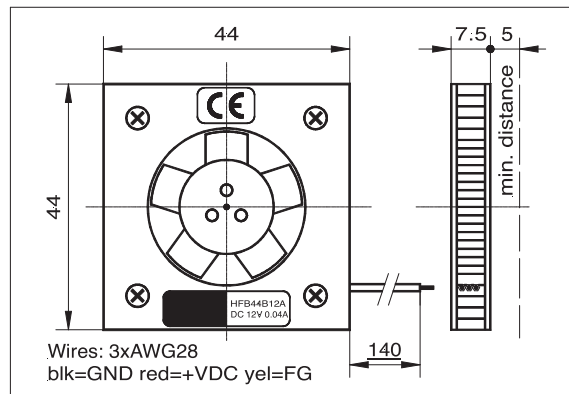
Due to its excellent cooling capacity, the active cooler with a height of only 7.5 mm is suitable for very low spaces. The modern motor system ensures a maximum conduction of heat and simultaneous very low current consumption. The brushless motor is electronically commutated. A special IC is responsible 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	

Technical changes without notice • 12/10

• **ALARMSIGNAL**

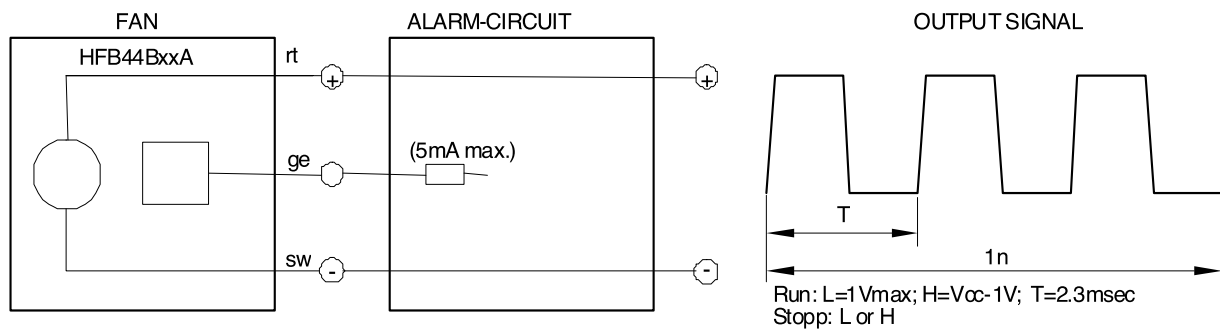
The **SEPA**® HFB44BxxA includes a pulse output which allows monitoring the correct function of the fan.

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 THPAD44. The THPAD contains an aluminium medium and bonds reliably and permanently even at high temperatures. The THPAD 44 is provided in appropriate size (see accessories).

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:**

THPAD44	thermo-conductive adhesive pad, 42x42mm, with aluminium carrier
LOCTITE 315	thermo-conductive glue, after 4 min. stalwart
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