

4114 N/2H5 DC Axial Fan

preliminary; rev. 01; 18.05.2006

High performance DC Axial fan with electronically commutated external rotor motor. The Electronic commutation is completely integrated into the motor hub.



Features

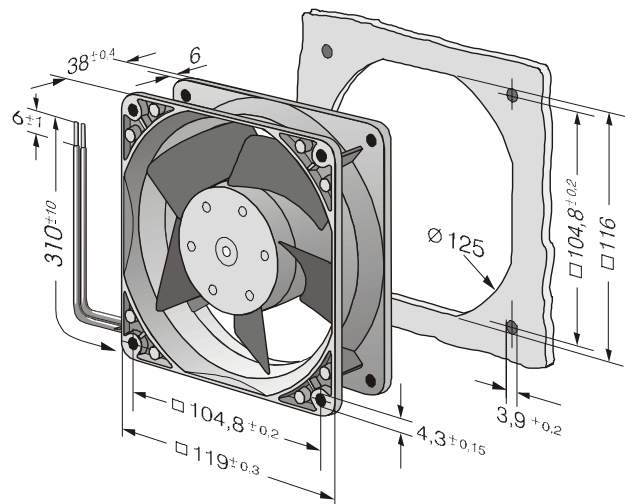
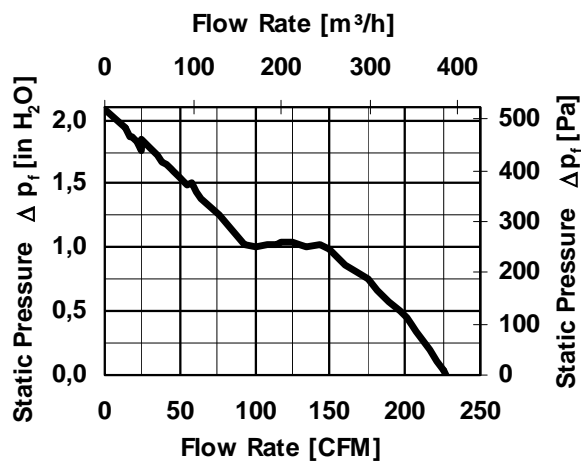
- Electronically protected against reverse polarity, overloading, and locking.
- Air intake over struts.
- Metal fan housing. Impeller of fibre-glass reinforced plastic PA
- Open collector Tacho Signal
- Electrical connection via 3 leads AWG 22 TR 64, 310mm long
Red = +24 VDC
Blue = GND
White = Tacho

General Data

| | | |
|---|-------------------|--------------------------|
| Nominal voltage | V DC | 24 |
| Voltage range | V DC | 16 - 30 |
| Nominal speed | min ⁻¹ | 7500 |
| Max. flow rate | m ³ /h | 386 |
| Max. flow rate | CFM | 227 |
| Max. pressure | Pa | 517 |
| Noise free air | dB(A) | tbd |
| Current consumption | mA | 1875 |
| Power consumption | W | 45 |
| Start-up current | mA | < 5.000 |
| Permanent ambient temperature at max. voltage | °C | -20 ... +65 |
| Service life L ₁₀ (40 °C) | h | App. 50.000 |
| Service life L ₁₀ (65 °C) | h | App. 30.000 |
| Fan housing / impeller | | Metal / PA 6.6 |
| Bearing system | | Ball bearings |
| Approvals | | CSA; UL; VDE applied for |
| Mass | g | 390 |

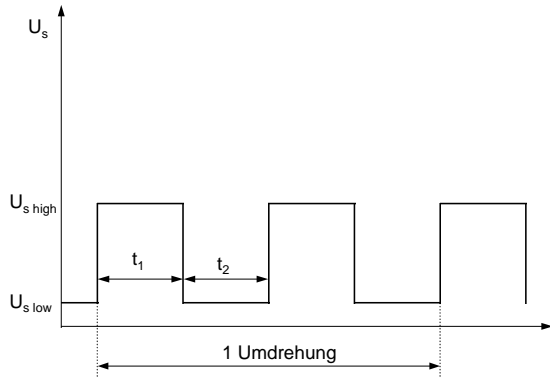
All technical data are mean values at nominal conditions.

Preliminary data – subject to change

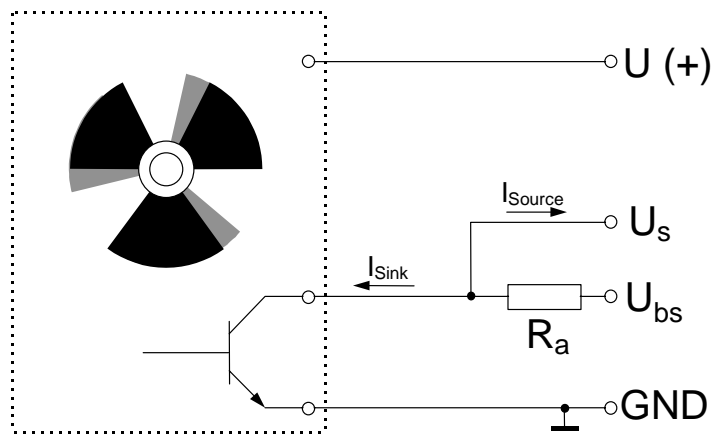


Tacho Signal /2

Output signal:



Connection Scheme:



U (+) = supply voltage (+)
 U_s = tachometer signal
 U_{bs} = supply voltage tachometer signal
 GND = ground (-)
 R_a = external pull up resistor

$$R_a = \frac{U_{bs} - U_{slow}}{I_{sink}}$$

Technical data:

| | |
|---------------------------------|--|
| Signal | 2 pulse per revolution |
| U _{bs} | 5...30 V DC |
| U _s high | 5...30 V DC @ I _{source} = 0 mA |
| U _s low | ≤ 0,4 V DC @ I _{sink} ≤ 2 mA |
| I _{sink} max | ≤ 20 mA |
| t ₁ / t ₂ | 0,8 - 1,2 |