

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

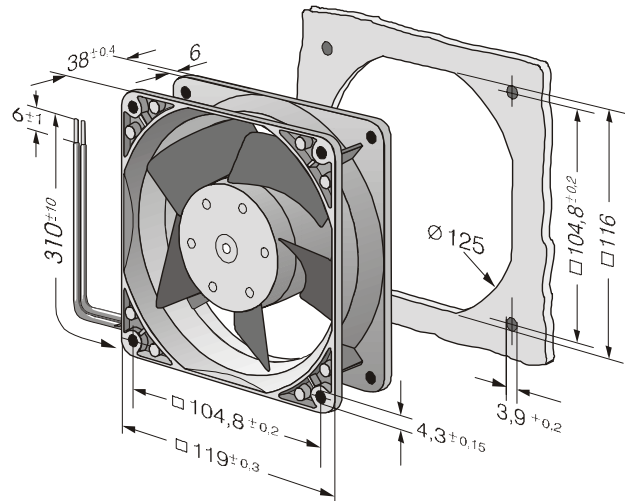
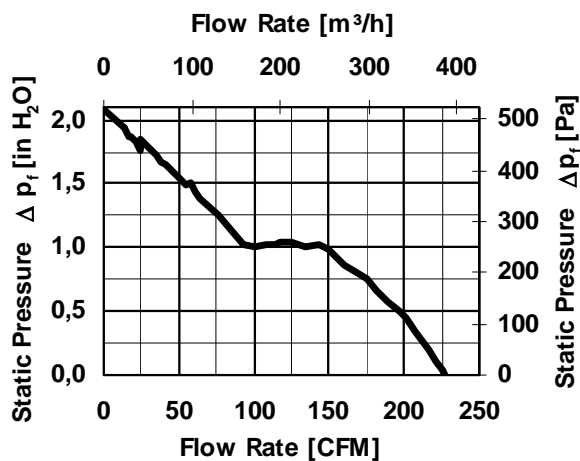
- Electronically protected against reverse polarity, overloading, and locking.
- Air intake over struts.
- Metal fan housing. Impeller of fibre-glass reinforced plastic PA
- Open collector Tacho Signal
- Electrical connection via 3 leads AWG 22 TR 64, 310mm long
Red = +24 VDC
Blue = GND
White = Tacho

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

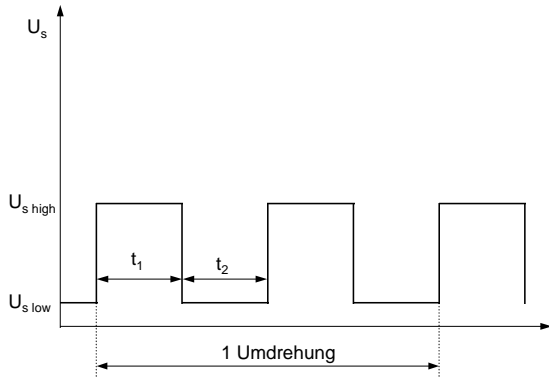
All technical data are mean values at nominal conditions.

Preliminary data – subject to change

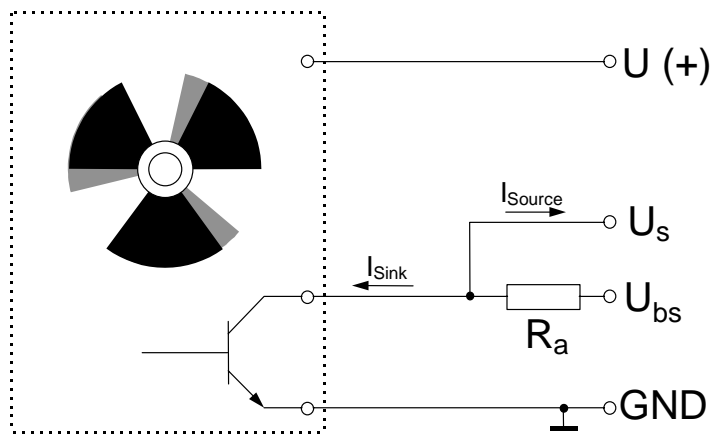


Tacho Signal /2

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