

# 4112 N/2H3 DC Axial Fan

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



## Features

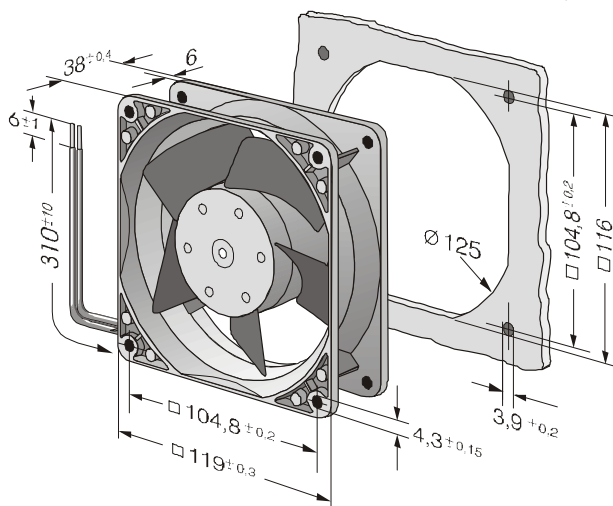
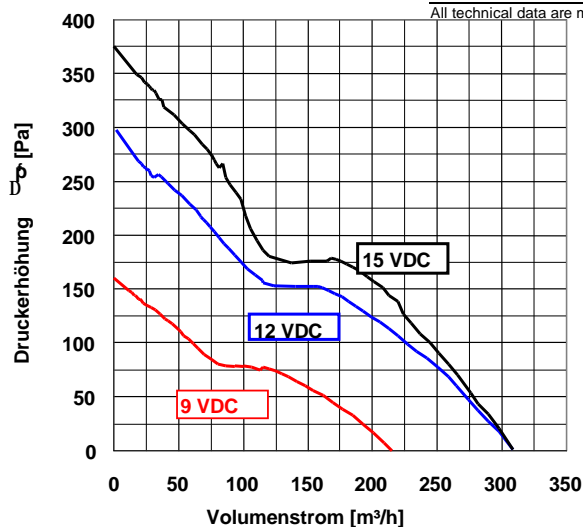
- Electronically protected against reverse polarity, overloading, and locking.
- Air intake over struts.
- Metal fan housing. Impeller of fibre-glass reinforced plastic PA
- Open collector Tacho Signal
- Electrical connection via 3 leads AWG 22 TR 64, 310mm long  
Red = +12 VDC  
Blue = GND  
White = Tacho

## General Data

Nominal voltage	V DC	12
Voltage range	V DC	9 - 15
Nominal speed	min <sup>-1</sup>	6000
Max. flow rate	m <sup>3</sup> /h	310
Max. flow rate	CFM	182,4
Max. pressure	Pa	300
Noise free air	dB(A)	65
Current consumption	mA	1800
Power consumption	W	21,6
Start-up current	mA	tbd
Permanent ambient temperature at max. voltage	°C	-20 ... +65
Service life L <sub>10</sub> (40 °C)	h	65.000
Service life L <sub>10</sub> (65 °C)	h	37.500
Fan housing / impeller	Metal / PA 6.6	
Bearing system	Ball bearings	
Approvals	CSA; UL; VDE applied for	
Mass	g	390

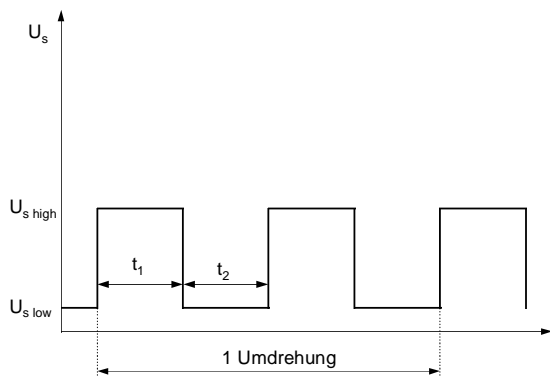
All technical data are mean values at nominal conditions.

subject to change

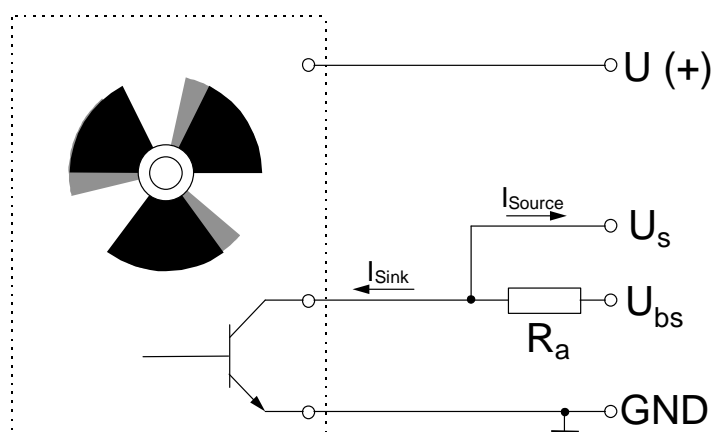


## Tacho Signal /2

### Output signal:



### Connection Scheme:



U (+) = supply voltage (+)  
 U<sub>s</sub> = tacho signal  
 U<sub>bs</sub> = supply voltage tacho signal  
 GND = ground (-)  
 R<sub>a</sub> = external pull up resistor

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

### Technical data:

Signal	2 pulse per revolution
U <sub>bs</sub>	5...30 V DC
U <sub>s high</sub>	5...30 V DC @ I <sub>source</sub> = 0 mA
U <sub>s low</sub>	≤ 0,4 V DC @ I <sub>sink</sub> ≤ 2 mA
I <sub>sink max</sub>	≤ 4 mA
t <sub>1</sub> / t <sub>2</sub>	0,8 - 1,2