

## RER101-36/12N/2HHPR-181

### DC Radial blower

Particularly flat, pressure resistant fan developed especially for installation in equipment of compact dimensions with additional humidity protection. The DC drive employs an electronically commutated external rotor motor. Motor electronics is completely integrated into the fan hub. With additional sensor lead for speed monitoring

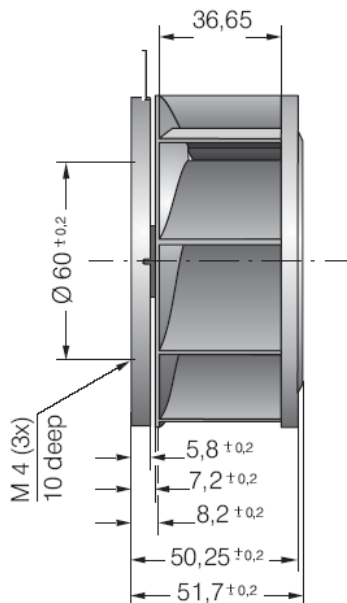
### Features

- The fan is protected against reverse polarity.
- Electronic locking protection is integrated into the fan circuit.
- Air exhaust radial. Rotational direction CW looking at rotor.
- Low EMI.
- OC tachometer output.
- PWM speed control input.
- Humidity protection by additional coating ("R"-coating)

### Electrical connection:

via 4 leads AWG22, TR64.  
Stripped and tinned ends

- Red 12 V
- Blue 0 V
- White OC Tachometer output
- Violet PWM control input

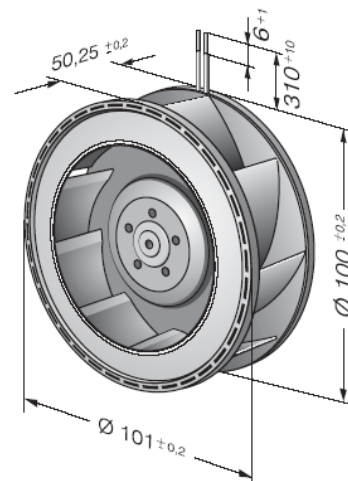


### General Data

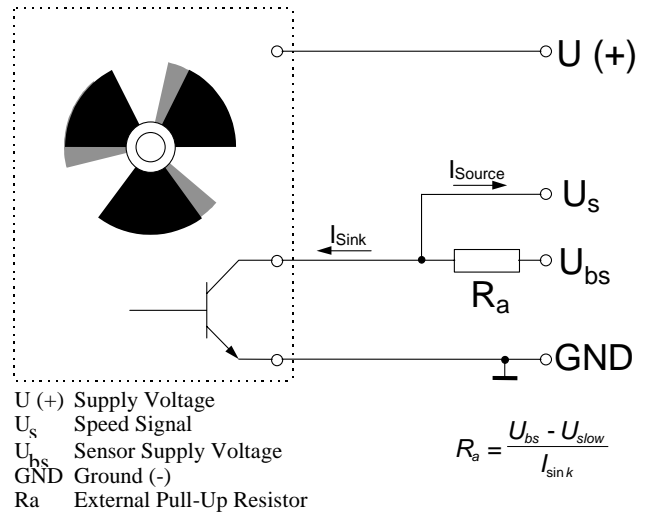
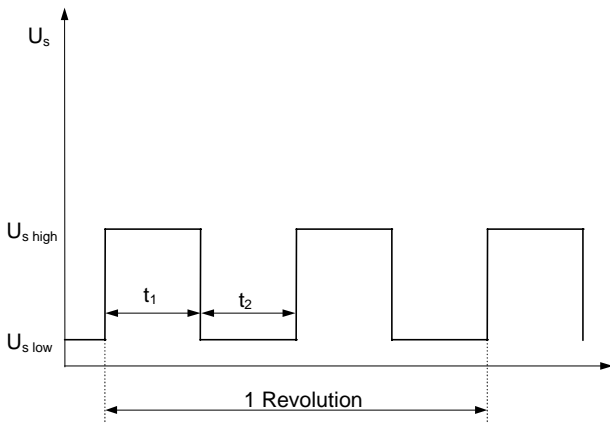
Nominal voltage	V DC	12,0
Voltage range	V DC	9 .. 13.6
Nominal speed	min <sup>-1</sup>	6000
PWM Speed control, 10 ...20 kHz	rpm	
0...1V – low		
9...10V - high		
Speed tolerance		+/-10%
0% PWM		6000
10% PWM		6000
50% PWM		3550
90% PWM		1000 jump to 0
100% PWM		0
Max. flow rate	m <sup>3</sup> /h	190
Max. flow rate	CFM	112
Noise in opt. Operating range	bels	7.4
Nominal current consumption	mA	1760
Nominal power consumption	W	21.1
Locked rotor current	mA	3300
Perm. Ambient temperature at max. voltage	°C	-20 ... +70
Service life at 40 °C	h	60.000
Blower wheel		Fiberglass reinforced plastic
Mounting flange		Fiberglass reinforced plastic
Bearing system		Ball bearings
Approvals		CE, UL
Mass	g	305

All data are average values at nominal voltage

Subject to technical change.

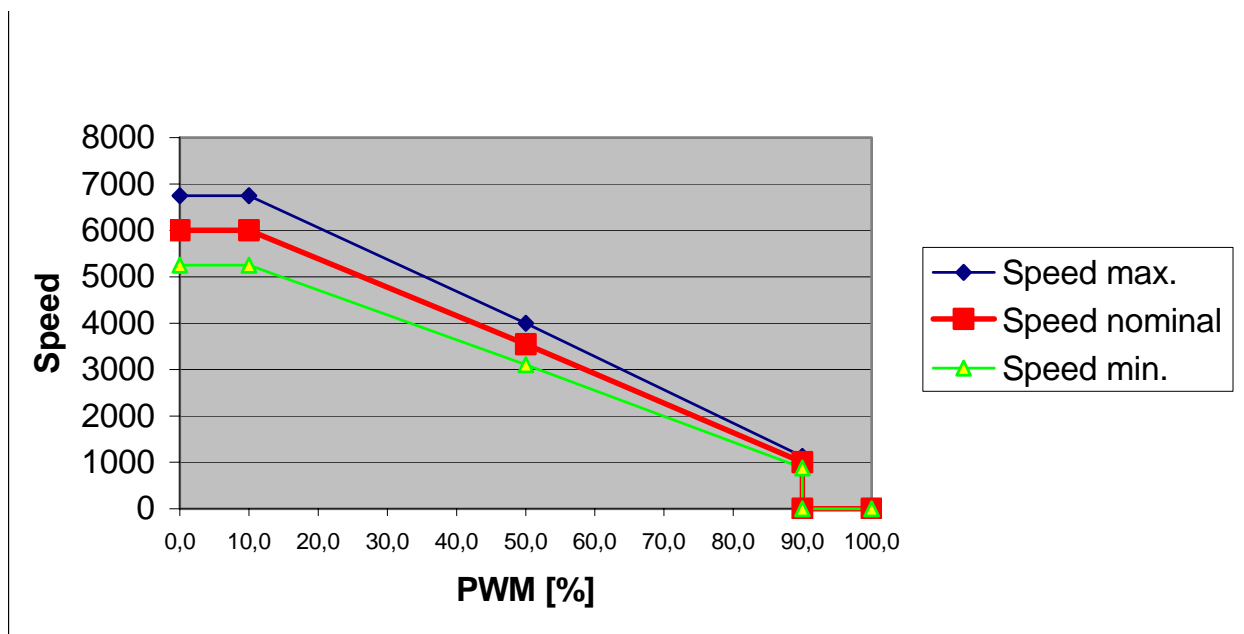


## Tacho Signal



Output	2 pulses per revolution
U <sub>bs</sub>	5...30 V DC
U <sub>s high</sub>	30 V DC at I <sub>source</sub> = 1 mA
U <sub>s low</sub>	<= 0,3 V DC at 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

## PWM vs speed graph



**Air performance graph:**  
at min.-, nominal and max. voltage

