

4314/17V DC Axial Fan

Axial fan for DC operation driven by an electronically commutated external rotor motor with temperature dependent speed control.

A highly integrated, specially programmed micro-controller implements motor commutation and speed control.

Features

- Electronic protection against over-load, reverse polarity and rotor locking.
- Electrical connection via 4 leads
AWG 24 L=310mm
-Red: +Ub
-Black: GND
-Violet: Vario/NTC
-Yellow: Alarm
- Temperature-dependent speed control via connected NTC sensor positioned by customer.
Temperature control range 30°C ... 50°C
- When temperature sensor is disconnected/interrupted, the fan runs at max. speed available at operating conditions.
- The fan's electronic circuit incorporates two different locked rotor protection systems:
 1. Cycled switch-off of the power stages (t=2,5s), followed by a re-start process (t=0.8s).
 2. Additional protection by PTC resistor.

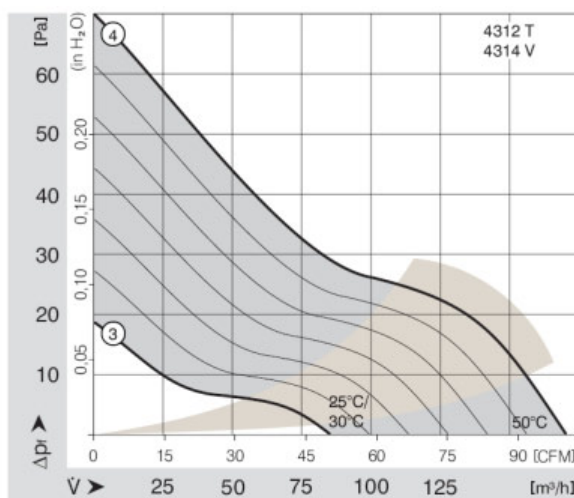


General Data

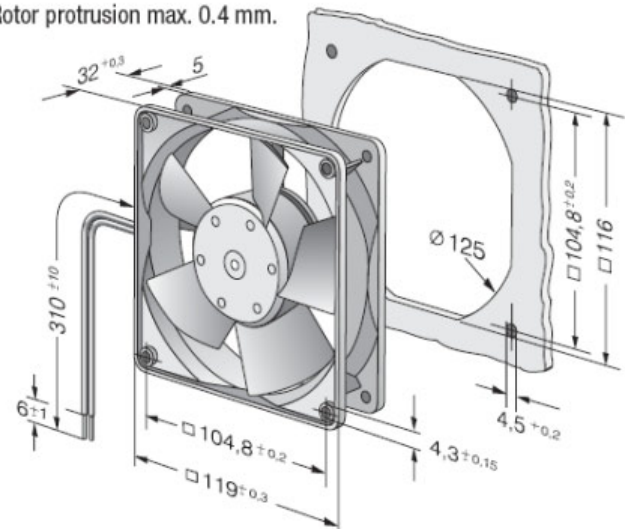
Nominal Voltage	V DC	24
Voltage range	V DC	21 – 27
Temperature	°C	30 50
Speed	rpm	1400 2800
Max. flow rate	m³/h	85 170
Max. flow rate	CFM	50.0 100.1
Noise free air	dB(A)	29 45
Noise in opt. Operating range	Bels	4.2 5.8
Current consumption	mA	125 225
Power consumption	W	3.0 5.4
Permanent ambient temperature at max. voltage	°C	-20 ... +65
Service life (75 °C)	h	37.500
Service life (40 °C)	h	70.000
Fan housing / impeller	PBTP / PA	
Bearing system	Ball bearings	
Mass	kg	0.220

All data are average figures at nominal voltage.

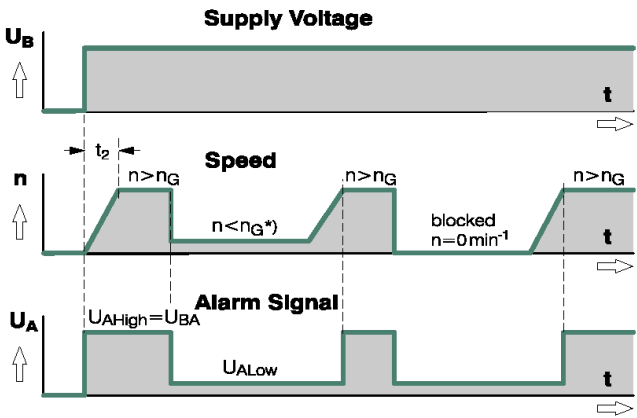
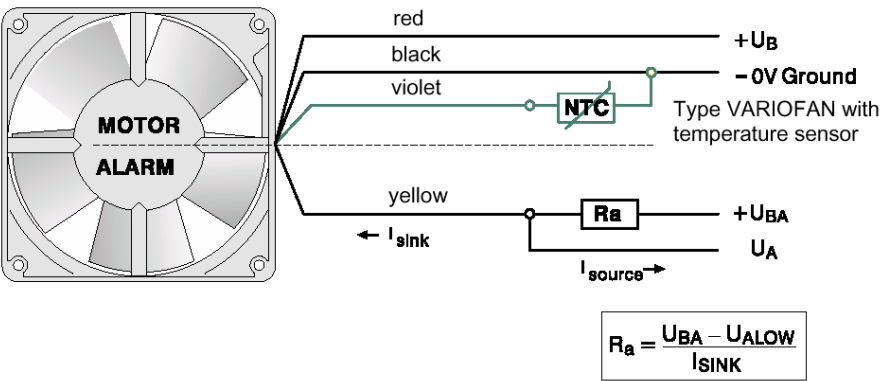
Subject to technical change.



Rotor protrusion max. 0.4 mm.



Electrical connection



t_2 = Alarm signal suppression during start-up
* $n <$ speed limit n_G by braking or blocking.

Alarm signal-data	Alarm output-voltage U_{ALow}	Condition:	Condition: $I_{sink} =$	Alarm output-voltage U_{AHigh}	Condition:	Condition: $I_{source} =$	Alarm operating-voltage $U_{BA \text{ max.}}$	Max. permissible Sink current	Alarm delay-time t_2	Condition:	Speed limit n_G
Type	V DC		mA	V DC		mA	V DC	mA	S		min^{-1}
4314/17 V VARIOFAN	≤ 0.4	$n < n_G$	2	60	$n > n_G$	0	≤ 60	20	≤ 15	*	1150 ± 100