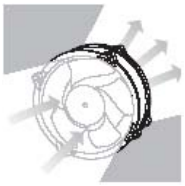
DV6248/2TDP-807/A01 DC Diagonal Fan

DC-Fan with PWM-dependent speed control. The DC drive employs an electronically commutated 3-phase external rotor motor with high efficiency. A highly integrated, specially programmed microcontroller implements motor commutation and speed control of the fan.
All functions are completely integrated into the hub.



Features

- Extremely wide voltage range. Max. speed may be chosen by variation of operating voltage range 40 to 55 VDC.
- Very low speed-fluctuations in the entire voltage range.
- Speed control by PWM input signal (f= 2 kHz +/- 20%, amplitude 5V)
- The fan is protected against reversed polarity.
- Electronic motor current limiting during start-up or blocking. Continuous blocking protection.
- Protection Class: IP 20.

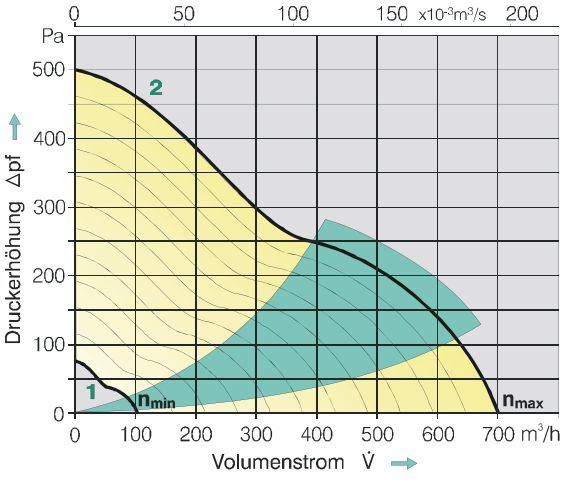


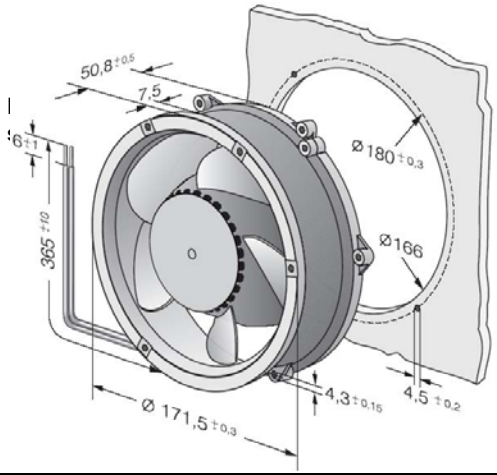
General Data

Nominal voltage	V DC	48
Voltage range	V DC	40 ... 57
Nominal speed	min^{-1}	5500±10%
Max. flow rate	m^3/h	700
Max. flow rate	CFM	412
Noise free air	dB(A)	69
Noise in operating range	bels	7,8
Current consumption	mA	1800
Power consumption	W	86,4
Perm.ambient temperature	°C	-20 ... +60
Service life (40 °C)	h	65.000
Safety approvals		CCC, UL, CSA, VDE
Fan housing / impeller		Aluminum alloy / PA6.6
Bearing system		Ball bearings
Mass	kg	0,820

All data are average figures at nominal votage — Subject to technical change.

Remark: CCC no. is 2003010401038569
UL no. is GPWV2.E38324.





PWM input signal:

PWM frquency: f = 2kHz +/-20%

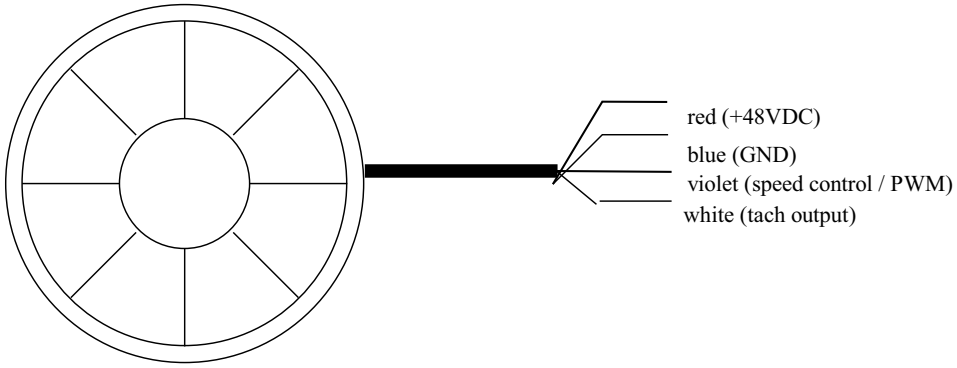
Amplitude: U = 5V

Speed - PWM

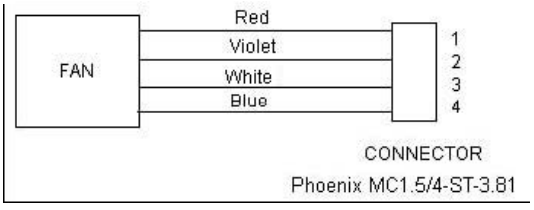
PWM [%] (f=2kHz)	Speed [rpm]	Air flow [m³/h]
100	5500	700
50	2900	400
0	0	0

PS: The max. speed is 5500rpm.

Connection diagram :



Lead (leadlength 365mm)	Description
Red	+48 V DC
Blue	GND 0 V
Violet	Speed control / PWM
White	Signal GND



Sensor signal Type /2

-Speed-proportional rectangular pulse for externally monitoring speed of fan motor.

-Open-Collector signal output.

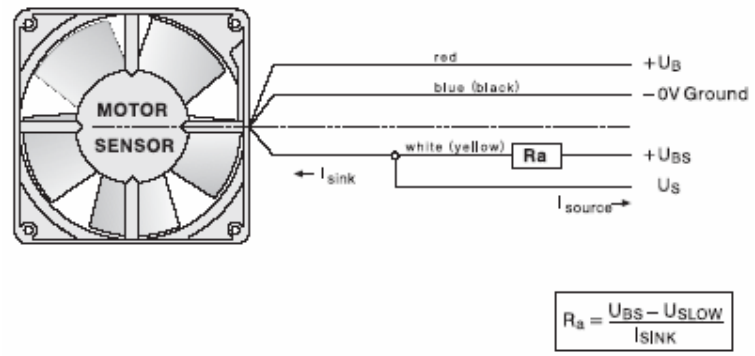
-Extremely wide operating voltage range (5…60V)

Series DV6200

Sensor signal $U_{s\ Low}$ (VDC)	≤0.4
Condition I_{sink} (mA)	2.0
Sensor signal $U_{s\ High}$ (VDC)	=UBS
Condition I_{source} (mA)	0
Sensor operating voltage U_{BS} (VDC)	60
Permissible sink current I_{sink} (mA)	max.20

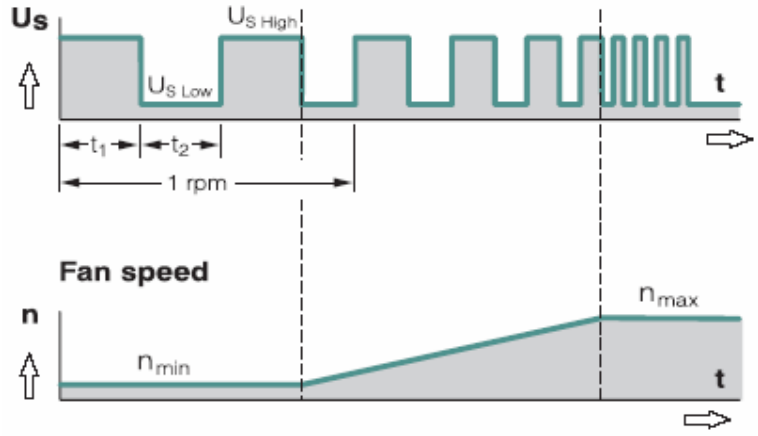
6 pulses per revolustion

Electrical connection



$$R_a = \frac{U_{BS} - U_{SLOW}}{I_{SINK}}$$

Signal output voltage



Signal symmetry [t_1, t_2] = 0.8 … 1.2

Signal frequency [F] = 6 x n/60 Hz