

## Product Data Sheet

9695480314

VWEG172PJLQZ

6314 NH

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6314 NH

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**1 General**

Fan type	Axial-Panel-Fan	
Rotating direction looking at rotor	Counterclockwise	
Airflow direction	Air outlet over struts	
Bearing system	Ball bearing	
Mounting position - shaft	Any	

**2 Mechanics**

**2.1 General**

Depth	51,0 mm	
Diameter	172,0 mm	
Mass	0,730 kg	
Housing material	Metal	
Impeller material	Plastic	
Max. torque when mounted across both mounting flanges	Wire outlet corner: 600 Ncm Remaining corners: 600 Ncm	
Screw size	ISO 4762 - M4 degreased, without an additional brace and without washer	

**2.2 Connections**

Electrical connection	Wires	
Lead wire length	L = 365 mm	
Tolerance	+ - 10,0 mm	
Tube length	S = 10 mm	
Tolerance	+ - 5,0 mm	



Wire	Color	Operation	Wire size	Insulation diameter
1	red	+ UB	AWG 22	1,7 mm
2	blue	- GND	AWG 22	1,7 mm

The auxiliaries shown on the schematic diagram (which are required for the intended use) are not part of our delivery.

### 3 Operating Data

#### 3.1 Electrical Operating Data

Measurement conditions: Normal air density = 1,2 kg/m<sup>3</sup>; Temperature 23°C +/- 3°C; Motor axis horizontal; warm-up time before measuring 5 minutes (unless otherwise specified). In the intake and outlet area should not be any solid obstruction within 0,5 m.

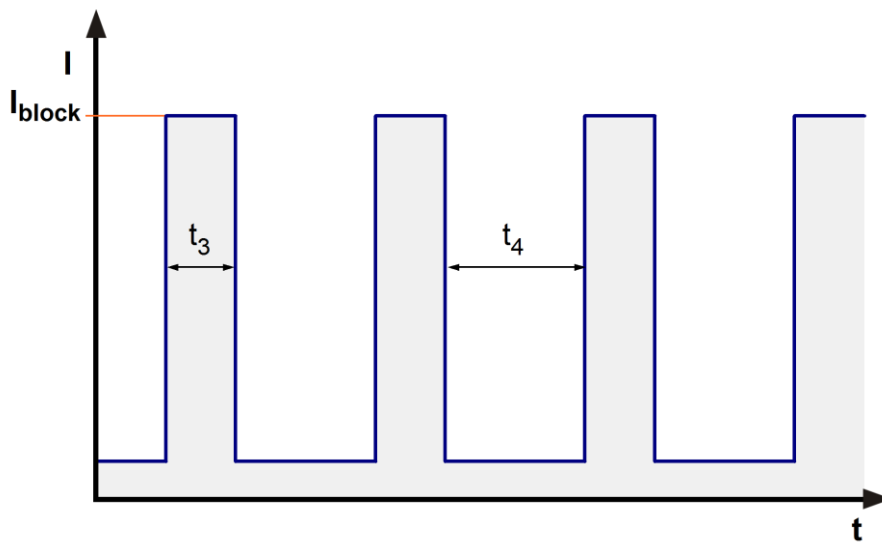
$\Delta p = 0$ : corresp. to free air flow (see chapter aerodynamics)  
I: corresp. to arithm. mean current value

Features	Condition	Symbol	Values		
Voltage range		U	16 V		32 V
Nominal voltage		U <sub>N</sub>		24,0 V	
Power consumption	$\Delta p = 0$	P	12 W	23 W	23,5 W
Tolerance	0010		+/- 10,0 %	+/- 10,0 %	+/- 10,0 %
Current consumption	$\Delta p = 0$	I	760 mA	940 mA	740 mA
Tolerance	0010		+/- 10,0 %	+/- 10,0 %	+/- 10,0 %
Speed	$\Delta p = 0$	n	2.700 1/min	3.500 1/min	3.500 1/min
Tolerance	0010		+/- 10,0 %	+/- 5,0 %	+/- 5,0 %

3.2 Electrical Features

Electronic function	None	
Reversed polarity protection	Rectifying diode	
Max. residual current at $U_N$	$I_F \leq 5 \text{ mA}$	
Locked rotor protection	Auto restart	
Locked rotor current at $U_N$	$I_{block}$ approx. 1.000 mA	
Clock signal at locked rotor	$t_3 / t_4$ typical: 0,5 s / 10,0 s	
Internal fuse	Littelfuse NANO2 > Very Fast-Acting > 451/453 Series 4A / 125V (Art.No.: 0451004.MRL)	
Voltage control *)	Fan turns on at $U_B > 13 \text{ V}$ or $< 36 \text{ V}$ Fan turns off at $U_B < 12 \text{ V}$ or $> 38 \text{ V}$	

\*) This fan has an undervoltage and overvoltage control circuit integrated which turns the motor off if the voltage is out of range.



This fan has a startup delay of 2,2 seconds after applying supply voltage.

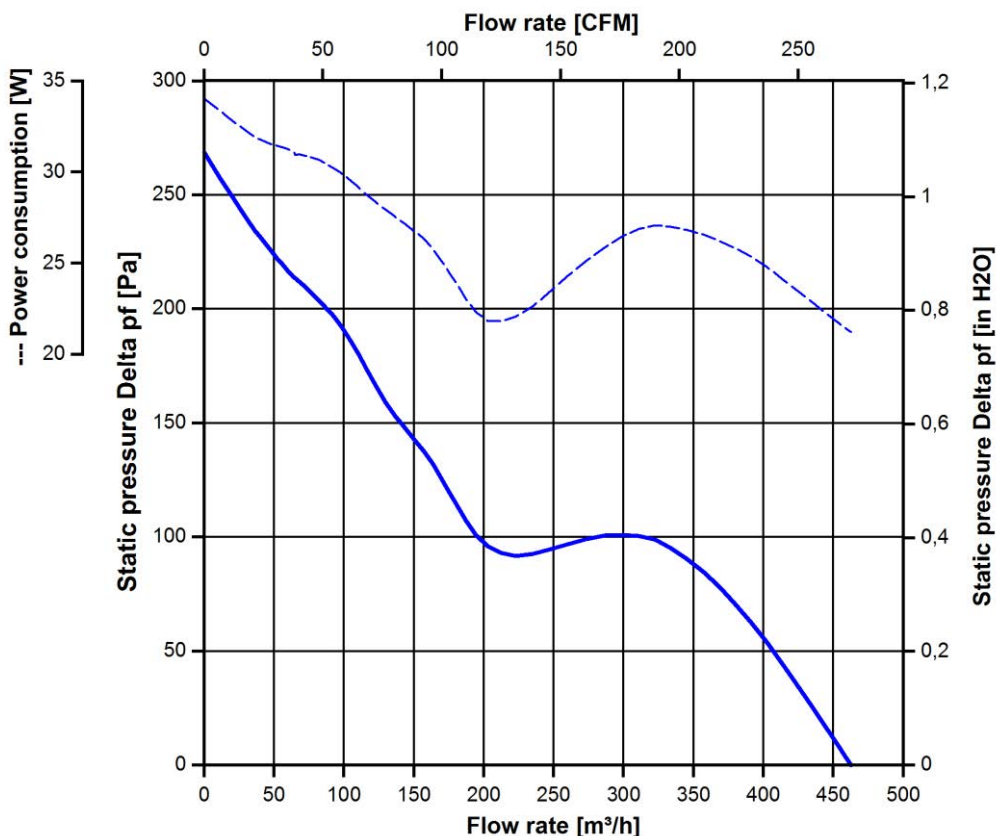
3.3 Aerodynamics

Measurement conditions: Measured with a double chamber intake rig acc. to DIN EN ISO 5801. Normal air density = 1,2 kg/m<sup>3</sup>; Temperature 23°C +/- 3°C; In the intake and outlet area should not be any solid obstruction within 0,5 m. Motor shaft horizontal. The information is only valid under the specified test conditions and may be changed by the installation conditions. If there are deviations from the standard test conditions, the characteristic values must be checked under the installed conditions. Power consumption of the fan motor when operating at normal voltage is shown. Depending on the operating conditions of the application, the power input may be higher.

a.) Operation condition:

3.500 1/min at free air flow

Max. free-air flow ( $\Delta p = 0 / \dot{V} = \text{max.}$ )	463 m <sup>3</sup> /h	
Max. static pressure ( $\Delta p = \text{max.} / \dot{V} = 0$ )	268 Pa	



### 3.4 Sound Data

Measurement conditions: Sound pressure level: 1 meter distance between microphone and the air intake.

Measured in a semianechoic chamber with a background noise level of  $L_p(A) < 5 \text{ dB(A)}$   
For further measurement conditions see chapter aerodynamics.

a.) Operation condition:

3.500 1/min at free air flow
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## 4 Environment

### 4.1 General

Min. permitted ambient temperature TU min.	-20 °C	
Max. permitted ambient temperature TU max.	70 °C	
Min. permitted storage temperature TL min.	-40 °C	
Max. permitted storage temperature TL max.	80 °C	

4.2 Climatic Requirements

Humidity requirements	humid heat, constant; according to DIN EN 60068-2-78, 14 days	
Water exposure	None	
Dust requirements	None	
Salt fog requirements	None	

Permitted application area:

The product is intended for use in sheltered rooms with controlled temperature and controlled humidity. Directly exposure to water must be avoided.

Pollution degree 1 (according DIN EN 60664-1)

There is either no pollution or it occurs only dry, non-conductive pollution. The pollution has no negative impact.

Please require severity levels and specification parameters from the responsible development departments.

## 5 Safety

### 5.1 Electrical Safety

Dielectric strength DIN EN 62368 and DIN EN 60335 A.) Type test Measuring conditions: After 48h of storage at 95% R.H. and 25°C. No arcing or breakdown is allowed! All connections together to ground. B.) Routine test Measuring conditions: At indoor climate. No arcing or breakdown is allowed! All connections together to ground.	500 VAC / 1 Min.  850 VDC / 1 Sec.	
Isolation resistance Measuring conditions: After 48h of storage at 95% R.H. and 25°C measured with U=500 VDC for 1 min.	RI > 10 MOhm	
Clearance / creepage distance	1,0 mm / 1,5 mm	
Protection class	III	

### 5.2 Approval Tests

CE	EC Declaration of Conformity	Yes
UKCA	UK Conformity Assessed	Not applicable
EAC	Eurasian Conformity	Yes
America	UL - Underwriters Laboratories	Yes / UL507, Electric Fans E38324
Europe	VDE - Association for Electrical or UL - Underwriters Laboratories or comparable	Yes / Approval acc. to EN 62368 - Audio/video, information and communication technology equipment
Canada	UL - Underwriters Laboratories or CSA - Canadian Standards Association	Yes / C22.2 No. 113 Fans and Ventilators
China	CCC - China Compulsory Certification or CQC - China Quality Certification	Not applicable

## 6 Reliability

### 6.1 General

Life expectancy L10 at TU = 40 °C	82.500 h	
Life expectancy L10 at TU max.	32.500 h	
Life expectancy L10 acc. to IPC 9591 at TU = 40 °C	140.000 h	

