

6314 HU-901

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1 General

Fan type	Fan	
Rotational direction looking at rotor	counterclockwise	
Airflow direction	Air outlet over struts	
Bearing system	Ball bearing	
Mounting position	any	

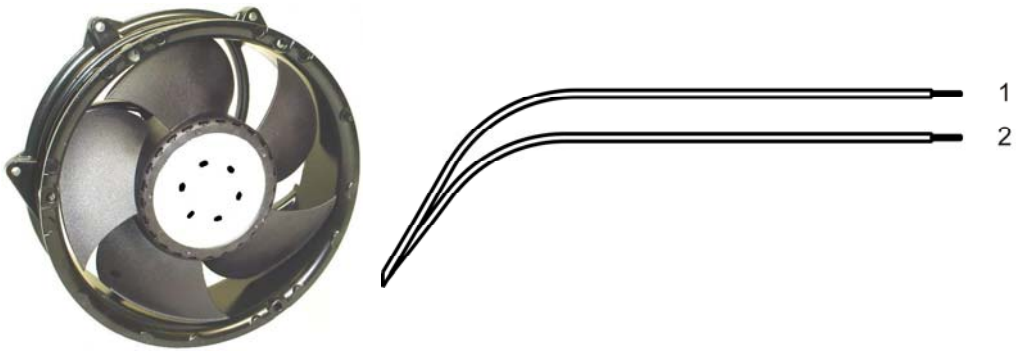
2 Mechanics

2.1 General

Depth	51,0 mm	
Diameter	172,0 mm	
Weight	0,880 kg	
Housing material	Metal	
Impeller material	Plastic	
Max. torque when mounted across both mounting flanges Screw size	wire outlet corner: 460 Ncm remaining corners: 460 Ncm ISO 4762 - M4 degreased, without an additional brace and without washer	

2.2 Connections

Electrical connection	Wires - Plug	
Length of lead wire Tolerance	L = 140 mm +- 10,0 mm	
Length of tube Tolerance	S = 10 mm +- 5,0 mm	
Wire gauge (AWG)	22	
Insulation diameter	1,70 mm	
Connector + Contact	see drawing	



	Colour	Operation
Wire 1	red	+ UB
Wire 2	blue	- GND

3 Operating Data

3.1 Operating Data - Electrical Interface - Input

Control input	None

3.2 Electrical Operating Data

Measurement conditions:	Normal air density = 1,2 kg/m3; 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.

∆p = 0: corresp. to free air flow (see section 3.5)
I: corresp. to arithm. mean current value

Features	Condition	Symbol	Values		
Voltage range	∆p = 0	U	12,0 V		28,0 V
Nominal voltage	∆p = 0	U_N		24,0 V	
Power consumption Tolerance	∆p = 0 0001	P	7,8 W +- 25,0 %	35,5 W +- 20,0 %	43,5 W +- 12,5 %
Current consumption Tolerance	∆p = 0 0001	I	650 mA +- 25,0 %	1.480 mA +- 20,0 %	1.550 mA +- 12,5 %
Speed Tolerance	∆p = 0 0001	n	2.700 1/min +- 12,5 %	5.300 1/min +- 10,0 %	5.700 1/min +- 10,0 %
Starting current consumption				4.000 mA	

Overvoltage only for temporary operation conditions

Note:
No inrush current at Unom means:

The internal electrolytic capacitor 120uF/50V has no resistor or inrush current limitation, essentially the power supply and the type and length of the connecting cable is limiting the Inrush current.

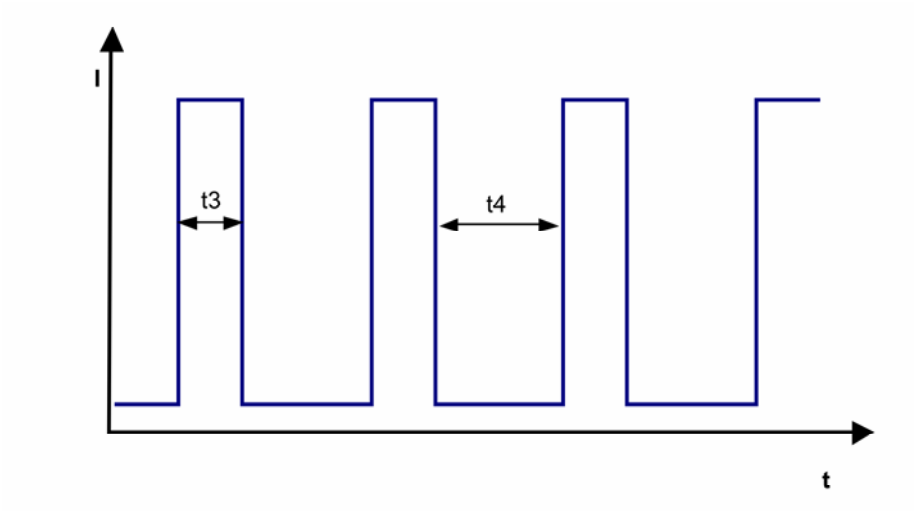
3.3 Operating Data - Electrical Interface -Output

Tacho type	None

Alarm type	None

3.4 Electrical Features

Electronic function	None	
Reversed polarity protection Max. residual current at Un	Rectifying diode IF <= 10 mA	
Locked rotor protection	Auto restart	
Locked rotor current at Un	approx. 4.000 mA	
Clock signal t3/t4 at locked rotor	Typical: 1,4 s / 5,3 s	



Internal Fuse:
Littlefuse NANO2(R) FUSE; Very fast acting 451 Series; 4 A (Art.-Nr.: 451004)

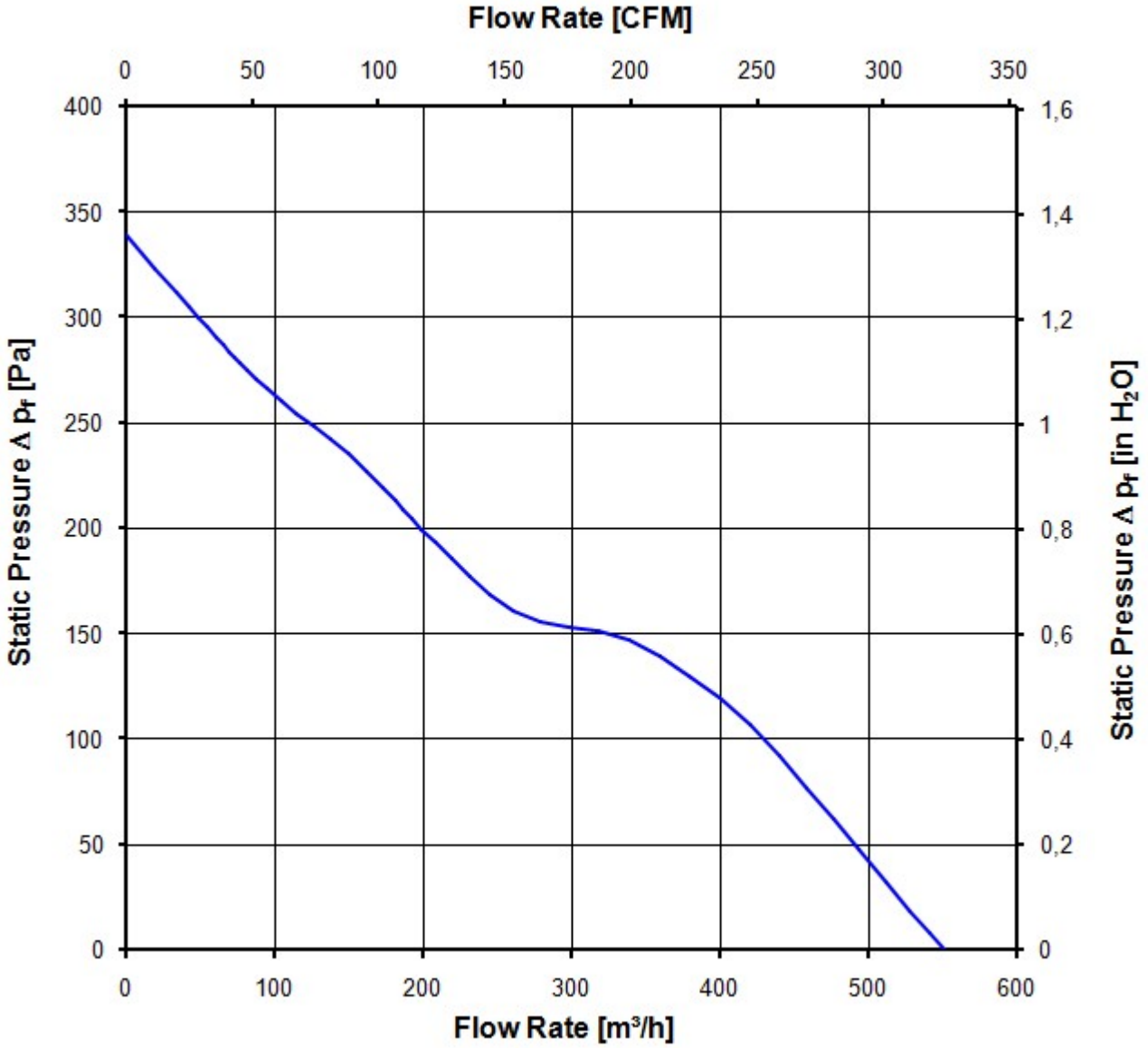
3.5 Aerodynamic

Measurement conditions:	Measured with a double chamber intake rig acc. to DIN EN ISO 5801. Normal air density = 1,2 kg/m3; Temperature 23°C +/- 3°C; In the intake and outlet area should not be any solid obstruction within 0,5 m. 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.

a.) Operation condition:

5.300 1/min at free air flow

Max. free-air flow (Δp = 0 / V̇ = max.)	550,0 m3/h	
Max. static pressure (Δp = max. / V̇ =0)	340 Pa	



3.6 Sound Data

Measurement conditions:	Sound pressure level: 1 Meter distance between microphone and the air intake. Sound power level: Acc. to DIN 45635 part 38 (ISO 10302) Measured in a semianchoic chamber with a background noise level of Lp(A) < 5 dB(A) For further measurement conditions see section 3.5

a.) Operation condition:

5.300 1/min at free air flow

Optimal operating point	400,0 m3/h @ 110 Pa	
Sound power level at the optimal operating point	7,1 bel(A)	
Sound pressure level at free air flow, measured in rubber bands	62,0 dB(A)	

4 Environment

4.1 General

Min. permitted ambient temperature TU min.	-20 °C	
Max. permitted ambient temperature TU max.	50 °C	
Min. permitted storage temperature TL min.	-40 °C	
Max. permitted storage temperature TL max.	80 °C	

Note to the operation conditions

Normal operation: -20°C ... +50 °C

Exceptional / Safe function (for temporary operation conditions): -20°C ... +72°C

4.2 Climatic requirements*)

Humidity requirements	humid temperature, cyclic; according to DIN EN 60068-2-38, 10 cycle and condensation water check; according to DIN EN ISO 6270-2, 14 days	
Water exposure	Splash water check IPX4; according to DIN EN 60529 VDE 0470, not certified	
Radiation exposure	Solar radiation; according to DIN EN 60068-2-5	
Dust requirements	Dust check IP5X; according to DIN EN 60529 VDE 0470, not certified	
Salt fog requirements	None	
Harmful gas requirements	None	

*) Permittet application area:
The product is for the use in partial sheltered rooms or open, roofed areas. Direct exposure to water is allowed provided that this does not prevent the normal operation. Saline ambient conditions must be avoided.
Pollution degree 3 (according DIN EN 60664-1)
It occurs conductive pollution or dry non-conductive pollution which becomes conductive due to condensation.

5 Safety

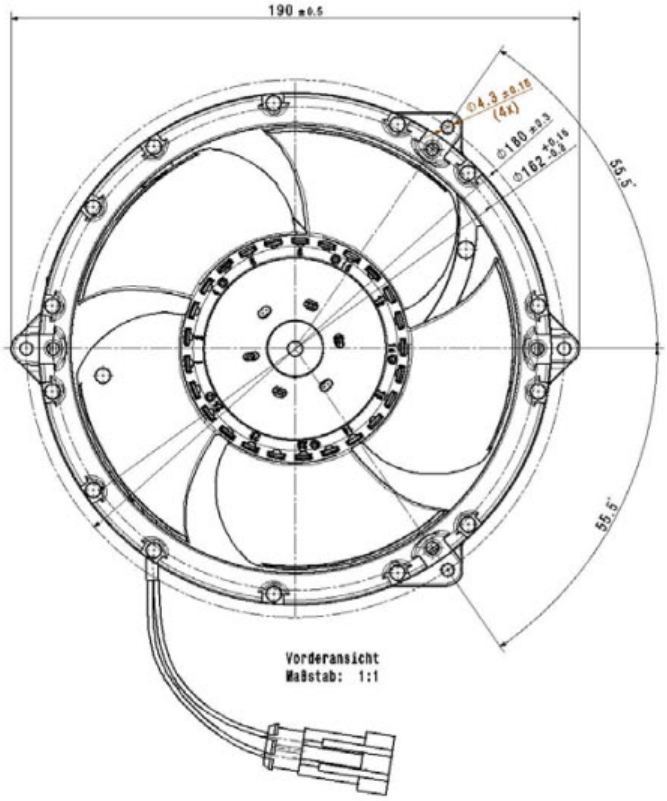
5.1 Electrical Safety

Dielectric strength DIN EN 60950 (VDE 0805) and DIN EN 60335 (VDE 0700) 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. 500 VAC / 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 / 1,2 mm	
Protection class	III	

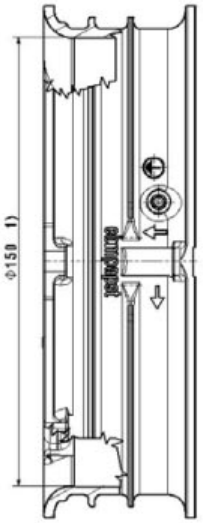
5.2 Approval Tests

CE	Yes
UL	Yes / UL audited by CSA according to UL507, Electric Fans
VDE	Yes / Approval acc. to EN 60950 (VDE 0805) - Information technology equipment
CSA	Yes / C22.2 No. 113 Fans and Ventilators
CCC	No

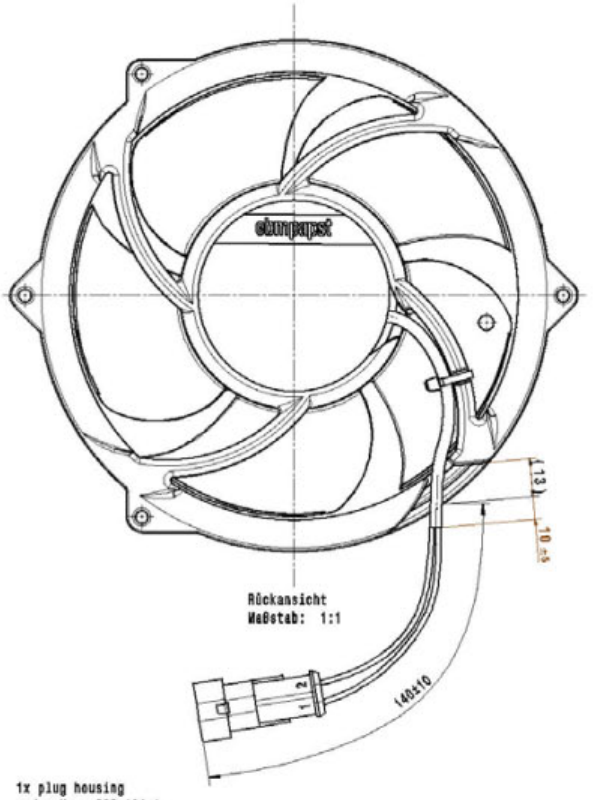
The approval tests are observed to:
Maximal permitted operating voltage (see section 3.1) and max. permitted ambient temperature TU max.



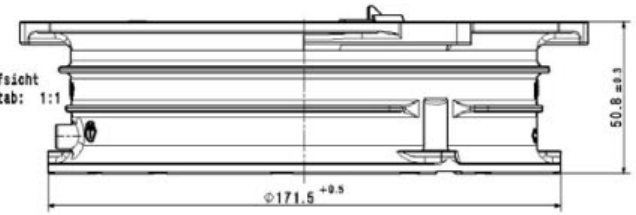
Vorderansicht
Maßstab: 1:1



Seitenansicht links
Maßstab: 1:1



Rückansicht
Maßstab: 1:1



Draufsicht
Maßstab: 1:1

Steckerbelegung/pin assignment

1. rot / red	+UB
2. blau / blue	GND

1x Steckergehaeuse	1x plug housing
Best.-Nr.: 282 104 -1	order No.: 282 104-1
Lieferant: AMP	supplier: AMP
4x Kontakt	4x contact
Best.-Nr.: 282 404-1	order No.: 282 404-1
Lieferant: AMP	supplier: AMP

1) Durchmesser für Ausschnitt (Luftauslass)
diameter for cutout (air outlet)

- Axialspiel: mit Feder spielfrei verspannt
- without axial clearance by a pre-loaded spring

ebmpapst

1:2; 1:1