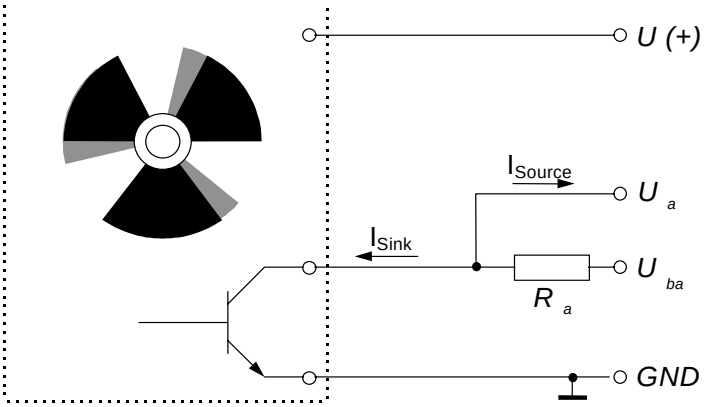
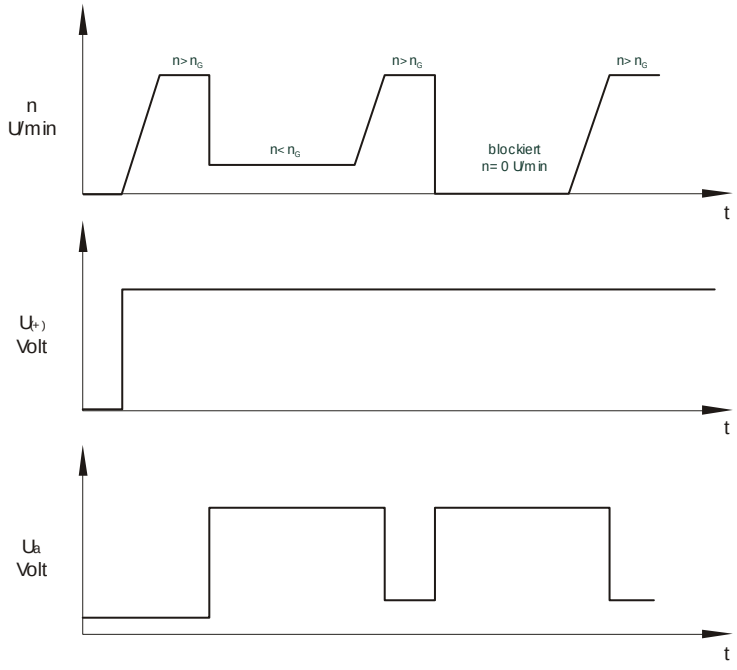
Alarm Signal Output:



U (+) = Supply Voltage (+)
U_a = Alarm Signal
U_{ba} = Alarm Supply Voltage
GND = Ground (-)
Ra = External Pull up-Resistor

$$R_a = \frac{U_{ba} - U_{aL}}{I_{sink}}$$



Alarm Circuit

This fan is equipped with an integrated alarm circuit producing a continuous output signal U_a for monitoring fan speed. At proper operation in the nominal voltage range the alarm output is a „low“ level.
When speed decreases below limit speed n_G = 1300rpm to 1400rpm, e.g. by high friction torque, locked rotor condition, or low operating voltage, a „high“ level output will occur.
When speed recovers, the alarm signal goes back to „low“, i.e. alarm is non-latched.

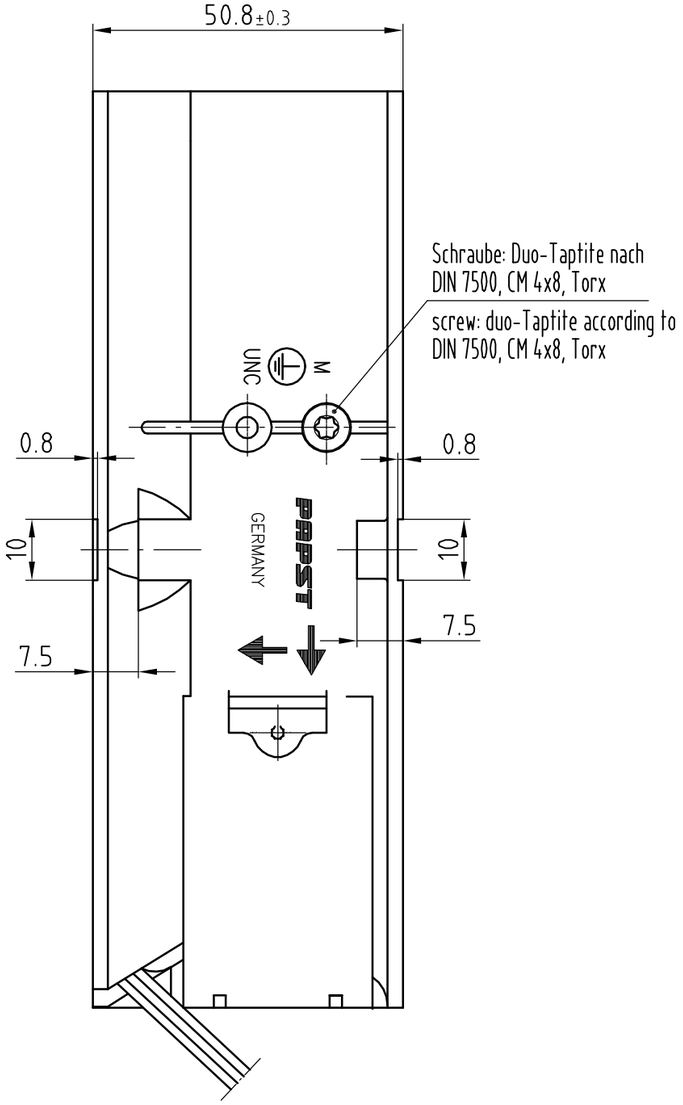
Technical Data

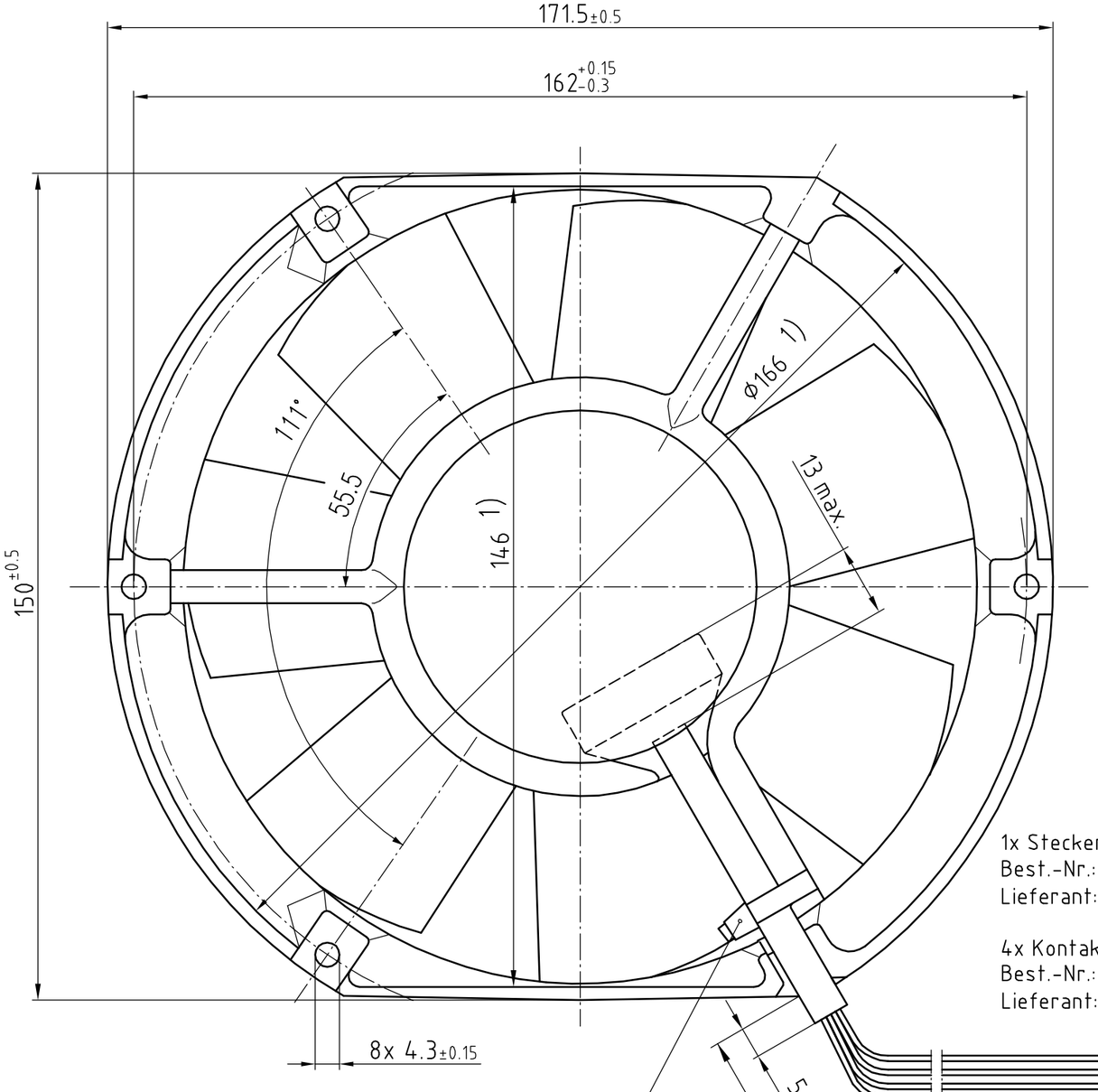
Designation	Test condition	Symbol	Value
Alarm output voltage		U_{ba} max	60 V DC
Max. sink current		I_{sink} max	20 mA
Output voltage “Low” n<n_G	I_{sink} = 2 mA	U_a L	≤ 0,4 V
Output voltage “High” n>n_G		U_a H	60 V
Leakage current n>n_G	U_a = 60 V	I_{sink}	max. 50µA
Alarm delay time	at start up only	t_2	10 s +/- 5%
Signal rise and fall time U_a		t_r, t_f	min.0,5V/µs (Stand TTL)
Alarm trip speed		n_G	1300rpm to 1400rpm

t_r → Low-High t_f → High-Low Alarm Signal suppressed at start-up

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Schutzvermerk nach DIN ISO 16016 beachten/
Refer to protection notice DIN ISO 16016!





Steckerbelegung PIN configuration	Litzenfarbe wire colour	
1	rot / red	+48V
2	weiß / white	alarm
3	blau / blue	GND
3	violett / violet	CTRL

1x Steckergehäuse
Best.-Nr.: 65240-004
Lieferant: FCI

1x plug housing
order No.: 65240-004
supplier: FCI

4x Kontakt
Best.-Nr.: 76347-301
Lieferant: FCI

4x contact
order No.: 76347-301
supplier: FCI

1) Maße für Montagewand

Axialspiel: mit Feder spielfrei verspannt

1) measures for mounting plate

without axial clearance by a pre-loaded spring

Tolerierung/Tolerances: DIN 7167 Allgemeintoleranzen/ Gen. tolerances: DIN ISO 2768-mK-E		
AutoCAD 2002		Artikel/Title: Axiallüfter, axial fan
	Datum/Date: Name/Name	Massstab/scale: 1:1
Bearb./Drawn: 10.03.2005 RAGG		
–		Zchg.-Nr./ Dwg.-No.: 9695430215
Index/Index	Aend.-Nr./Change-No.	Blatt/Page: 002
gepr. u. zur Verwendung freigegeben/Checked for release von/by SEIDLER am/on 14.03.2005	ebm-papst St. Georgen GmbH & Co. KG	Ers.f.Zchg./ Replaces: A3

Vertraulich / Confidential Information 19.04.2007