R3G108-AF13-07

EC centrifugal fan

forward curved, single inlet

ebm-papst Mulfingen GmbH & Co. KG
Bachmühle 2 · D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com
www.ebmpapst.com

Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
County court Stuttgart · HRB 590142

Nominal data

Type	**R3G108-AF13-07**	
Motor	**M3G045-AI**	
Nominal voltage	VDC	24
Nominal voltage range	VDC	21,6 .. 26,4
Type of data definition		ml
Speed (rpm)	min^{-1}	1930
Power input	W	15
Current draw	A	0.64
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

EC centrifugal fan

forward curved, single inlet

Technical features

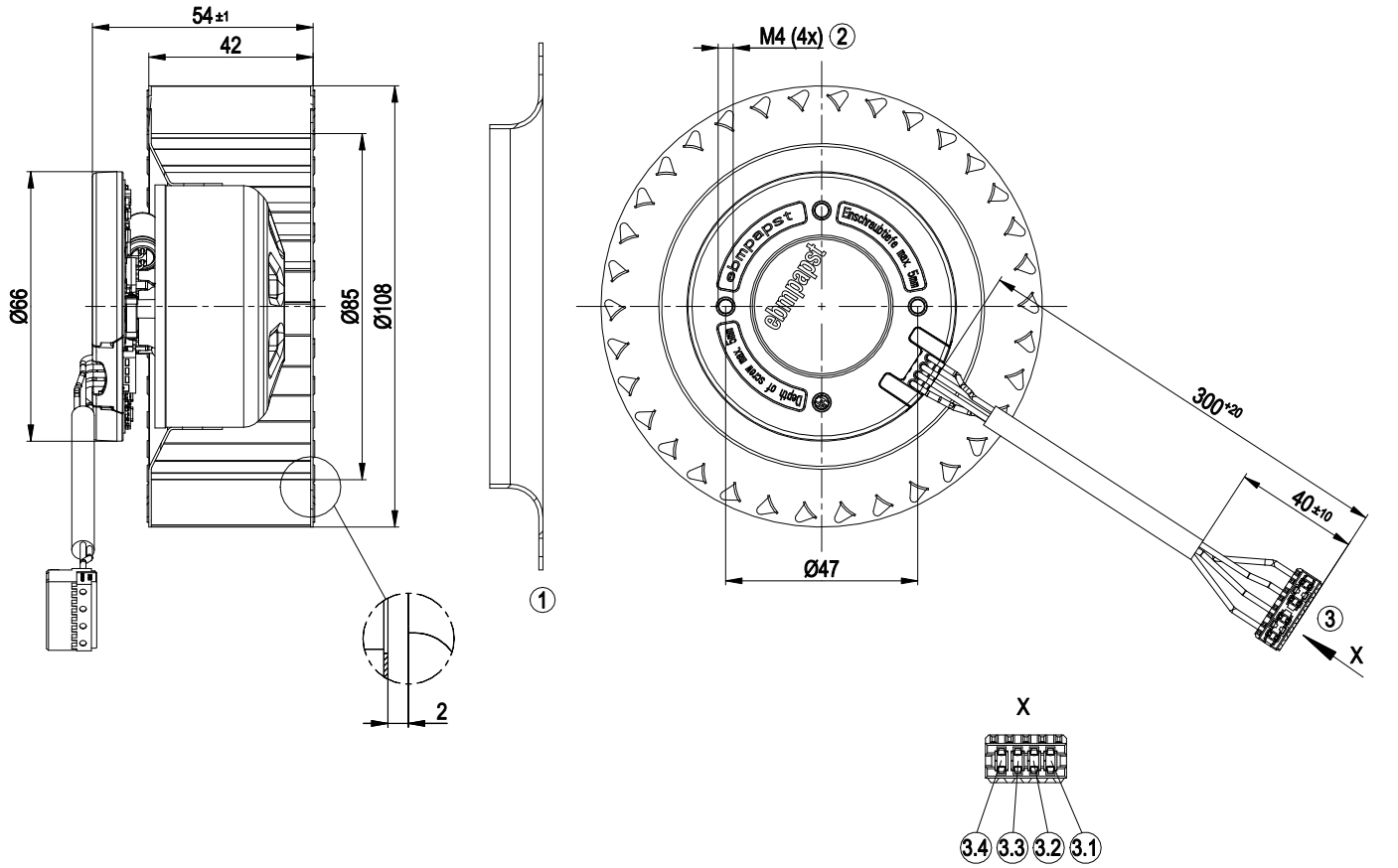
Mass	0.7 kg
Size	108 mm
Surface of rotor	Thick layer passivated
Material of impeller	Sheet steel, galvanised
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 00
Insulation class	"B"
Humidity (F)/environmental protection class (H)	H0 - dry environment
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None, open rotor
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Output limit - Soft start - Control input 0-10 VDC / PWM - Overvoltage detection - Over-temperature protected motor - Line undervoltage detection
Electrical leads	With plug
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	III
Product conforming to standard	EN 60335-1
Approval	VDE

ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC centrifugal fan

forward curved, single inlet

Product drawing



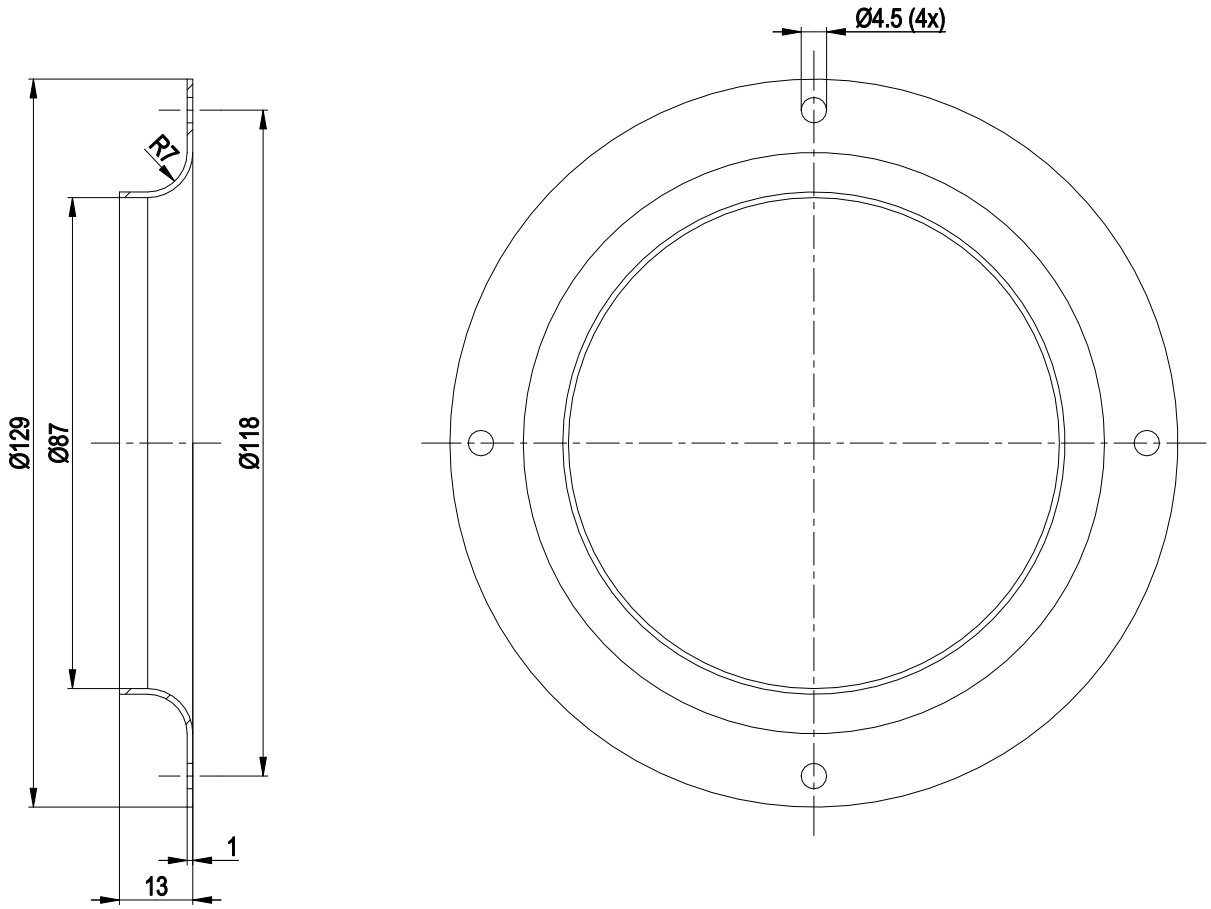
1	Accessory part: Inlet nozzle 09566-2-4013 not included in scope of delivery
2	Thread reach max. 5 mm
3	Connection line PVC AWG22, connector housing 4-pin Stocko MFMP 7262-004-013-960-000-00-G
3.1	GND (blue)
3.2	PWM/LIN (yellow)
3.3	DUE (white)
3.4	UN +24 VDC (red)

ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC centrifugal fan

forward curved, single inlet

Accessory part



1	Accessory part: Inlet nozzle 09566-2-4013 not included in scope of delivery

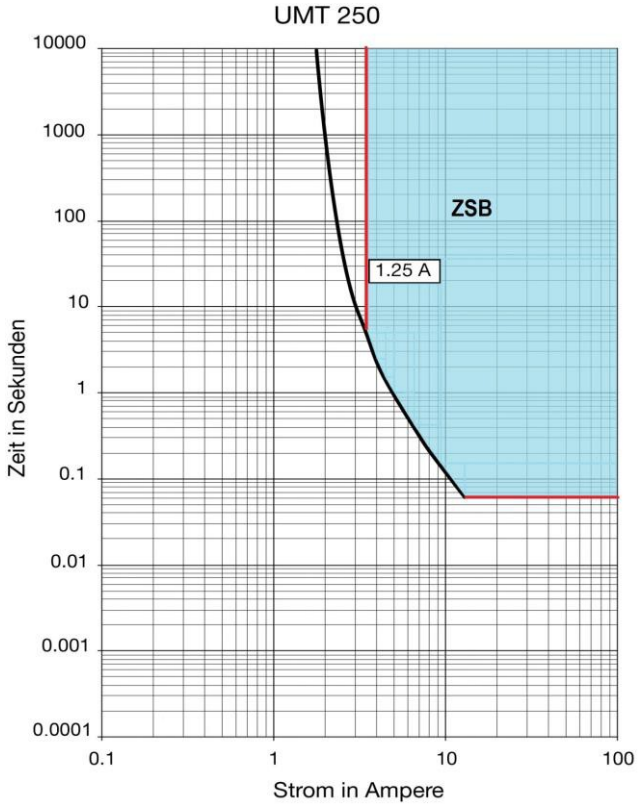
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

Anforderungen an das Netzteil

Versorgung durch ein SELV Netzteil nach EN 60335-1

Nennspannung: 24VDC Spannungsbereich:	24VDC +/-10%
Mindeststrom im Fehlerfall:	3,44A für min.12s oder innerhalb des geforderten Zeit/ Strombereiches (ZSB) im unteren Schaubild (an der Anschlussleitung gemessen)

Es handelt sich bei allen Angaben um typische Werte.



Tu=23°C

Quelle: *Datenblatt Schurter UMT 250*

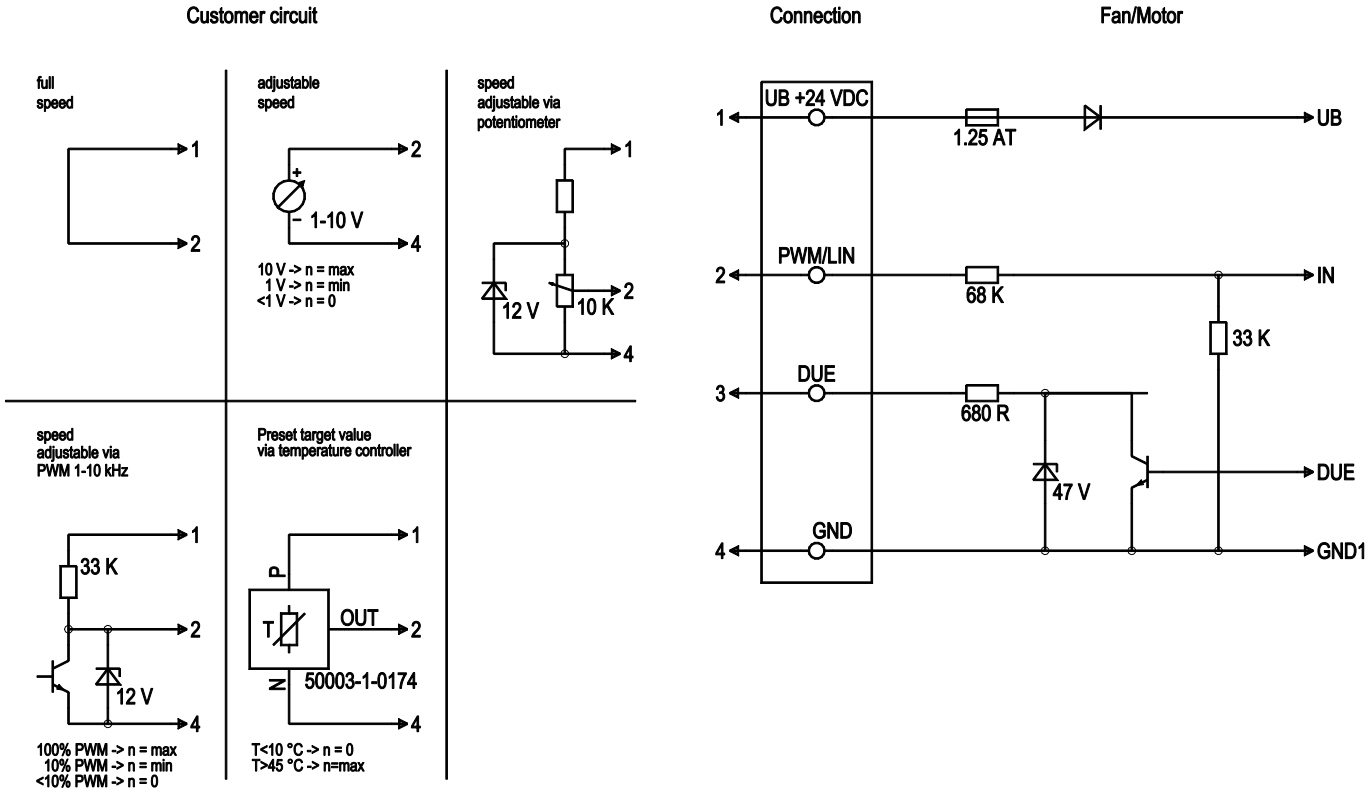
Sicherheit ist in Verbindung mit dem verwendeten Netzteil im Endgerät zu prüfen!

ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC centrifugal fan

forward curved, single inlet

Connection screen



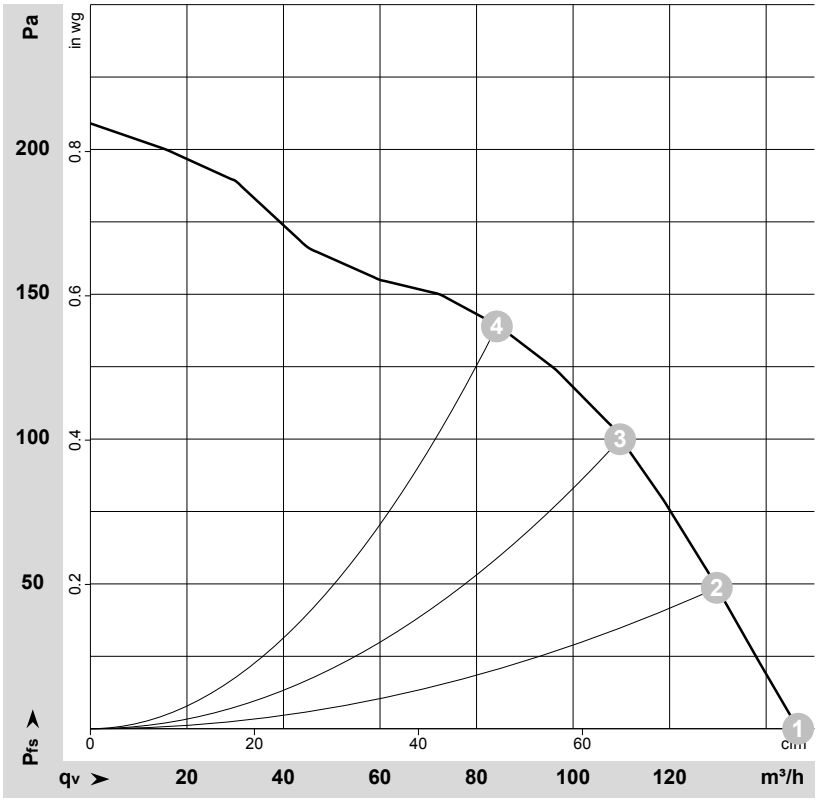
No.	Conn.	Designation	Colour	Function / assignment
1		UN +24 VDC	red	Power supply +24 VDC
2		PWM/LIN	yellow	Control input
3		DUE	white	Speed monitoring output, 1 pulse per revolution, Isink max = 10 mA
4		GND	blue	Reference earth

ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC centrifugal fan

forward curved, single inlet

Charts: Air flow



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-174486-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	U	n	P_{ed}	I	LpA_{in}	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
	V	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	24	1930	15	0.64	54	61	145	0	85	0.00
2	24	2010	14	0.58	54	60	130	50	75	0.20
3	24	2120	12	0.51	54	59	110	100	65	0.40
4	24	2245	10.0	0.43	51	58	85	140	50	0.56

U = Supply voltage · n = Speed (rpm) · P_{ed} = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · q_V = Air flow · p_{fs} = Pressure increase

ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com