

**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

Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

**Nominal data**

<b>Type</b>	<b>R3G355-RB03-03</b>	
<b>Motor</b>	<b>M3G074-DF</b>	
Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min <sup>-1</sup>	1250
Power consumption	W	168
Current draw	A	1.4
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment  
Subject to change

**Data according to Commission Regulation (EU) 327/2011 (EN 17166)**

		Actual	Req. 2015			
01 Overall efficiency $\eta_{es}$	%	65.5	43.3	09 Power consumption $P_{ed}$	kW	0.16
02 Measurement category		A		09 Air flow $q_v$	m <sup>3</sup> /h	1805
03 Efficiency category		Static		09 Pressure increase $p_{fs}$	Pa	191
04 Efficiency grade N		84.2	62	10 Speed (rpm) $n$	min <sup>-1</sup>	1240
05 Variable speed drive		Yes		11 Specific ratio <sup>*</sup>		1.00

Data obtained at optimum efficiency level.

The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

<sup>\*</sup> Specific ratio =  $1 + p_{fs} / 100\,000\text{ Pa}$ 

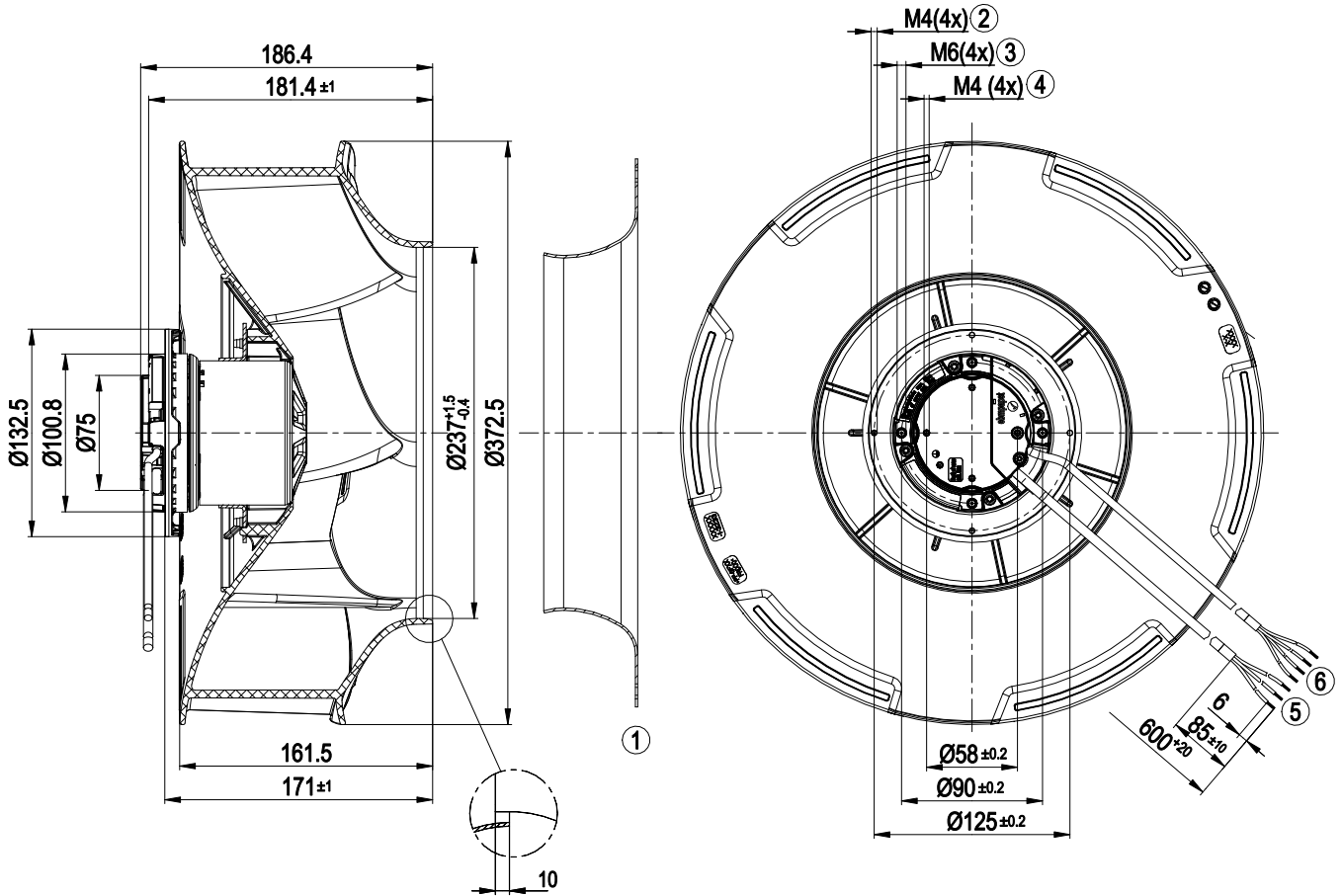
LU-139927



## Technical description

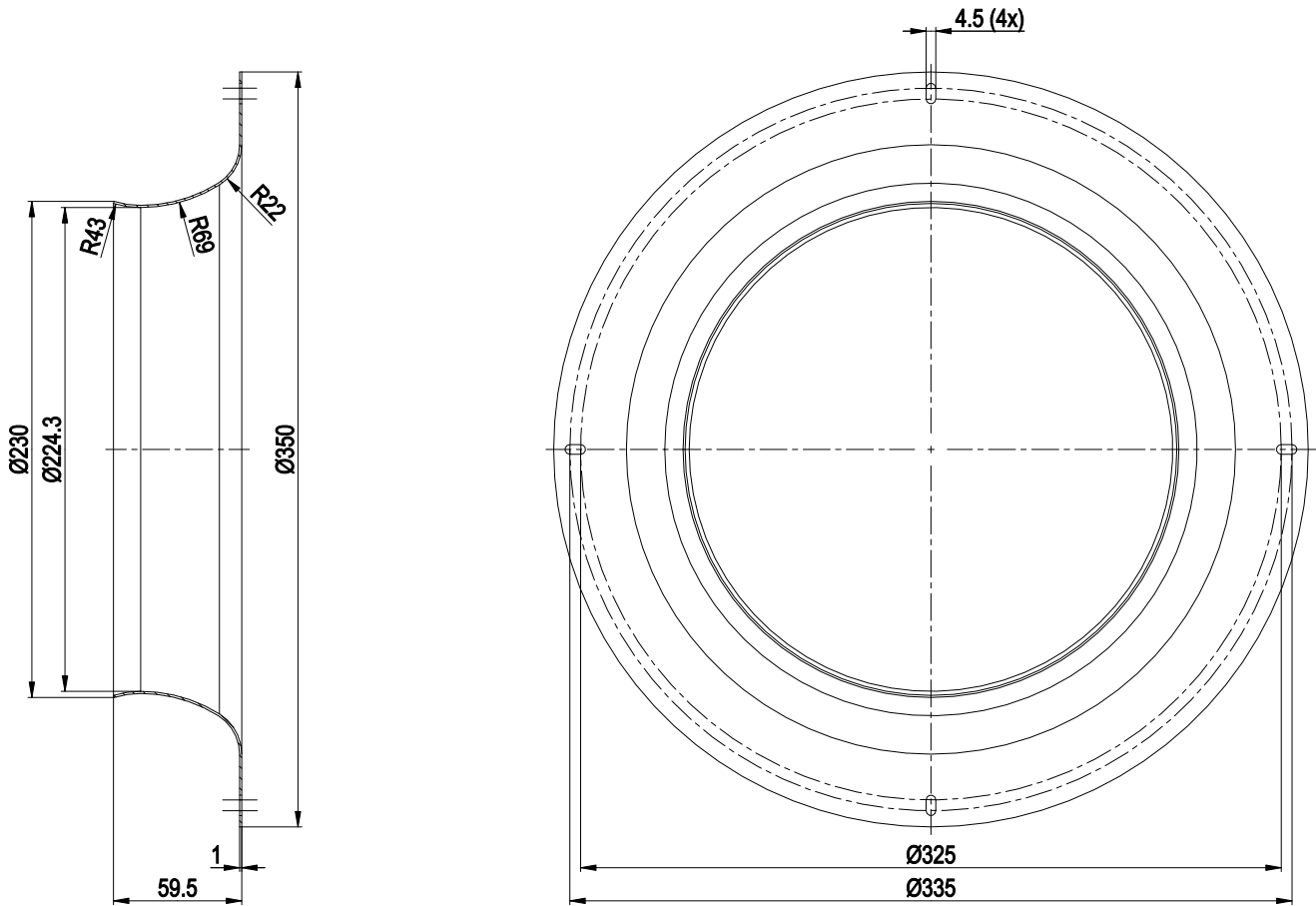
Weight	3.68 kg
Size	355 mm
Motor size	74
Rotor surface	Thick-film passivated
Impeller material	PP plastic
Number of blades	6
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1
Max. permitted ambient temp. for motor (transport/storage)	+80 °C
Min. permitted ambient temp. for motor (transport/storage)	-40 °C
Installation position	Any
Condensation drainage holes	None, open rotor
Cooling hole/opening	On rotor side
Mode	S1
Motor bearing	Ball bearing
Technical features	<ul style="list-style-type: none"> <li>- Output 10 VDC, max. 10 mA</li> <li>- Tach output</li> <li>- Power limiter</li> <li>- Motor current limitation</li> <li>- Soft start</li> <li>- Control input 0-10 VDC / PWM</li> <li>- Control interface with SELV potential safely disconnected from the mains</li> <li>- Overvoltage detection</li> <li>- Thermal overload protection for electronics/motor</li> <li>- Line undervoltage detection</li> </ul>
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Electronic motor protection
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	CE
Approval	CSA C22.2 No. 77 + CAN/CSA-E60730-1; CCC; EAC; UL 1004-7 + 60730-1

Product drawing



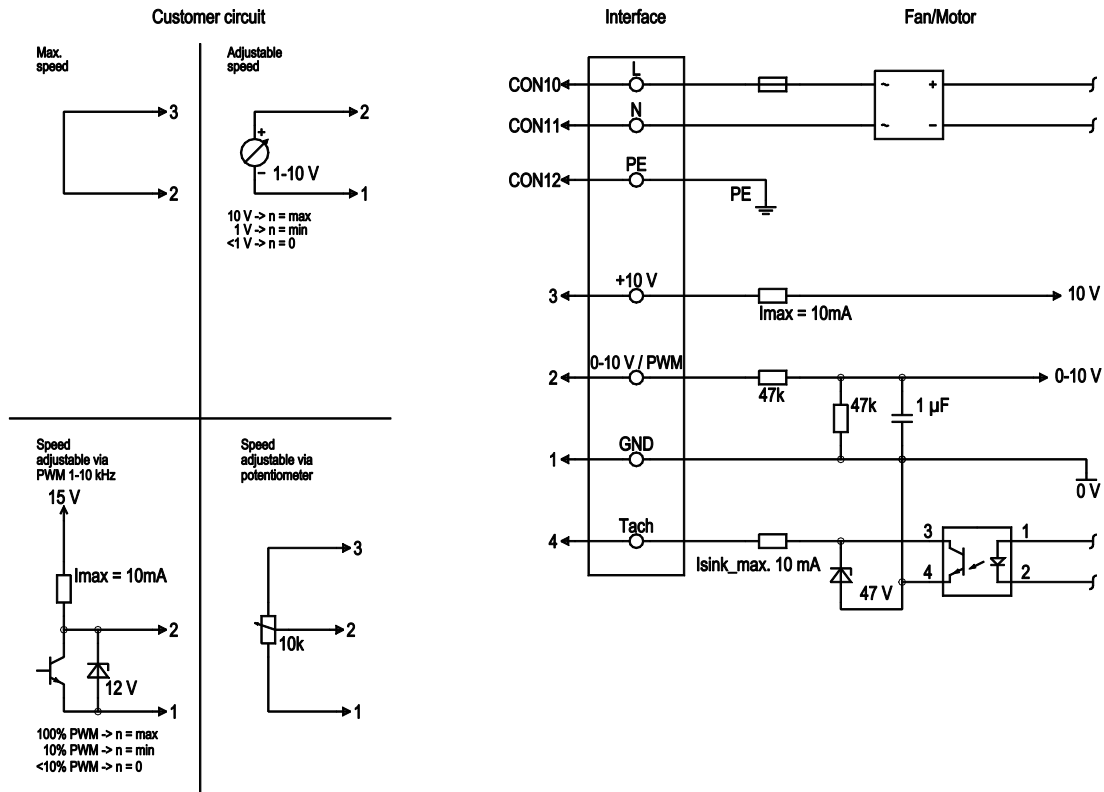
1	Accessory part: inlet ring 35500-2-4013 not included in scope of delivery, other inlet rings on request
2	Max. clearance for screw 10 mm
3	Max. clearance for screw 10 mm
4	Max. clearance for screw 5 mm
5	Cable PVC AWG20 3x splice
6	Cable PVC AWG22 4x splice

## Accessory part



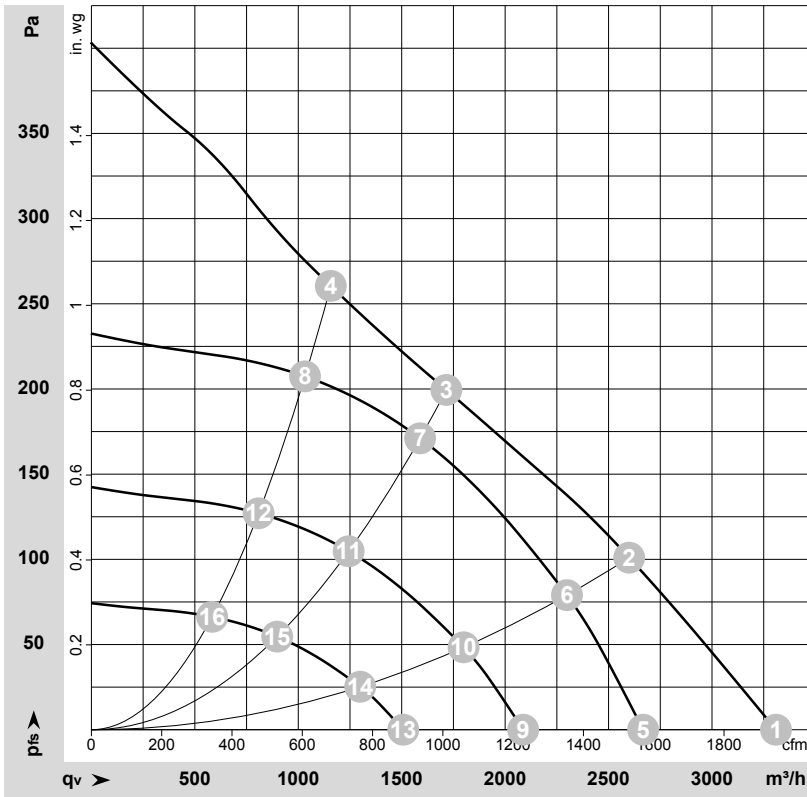
Inlet ring 35500-2-4013

## Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	CON10	L	black	Supply connection, power supply, phase, see nameplate for voltage range
	CON11	N	blue	Supply connection, power supply, neutral conductor, see nameplate for voltage range
	CON12	PE	green/yellow	Ground connection
	2	0- 10V PWM	yellow	0-10 V / PWM control input, R <sub>i</sub> =100 kΩ, SELV
	4	Tach	white	Tach output, open collector, 1 pulse per revolution, I <sub>sink_max</sub> = 10 mA, SELV
	3	+10 V	red	Fixed voltage output 10 VDC +/-3 %, I <sub>max</sub> . 10 mA, short-circuit-proof, power supply for ext. devices (e.g. pot), SELV
	1	GND	blue	Reference ground for control interface, SELV

## Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-139927-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebmpapst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

## Measured values

	Wired	U	f	n	P <sub>ed</sub>	I	LpA <sub>in</sub>	LwA <sub>in</sub>	q <sub>v</sub>	P <sub>fs</sub>	q <sub>v</sub>	P <sub>fs</sub>
		V	Hz	min <sup>-1</sup>	W	A	dB(A)	dB(A)	m <sup>3</sup> /h	Pa	cfm	in. wg
1	1~	230	50	1425	165	1.35	65	71	3310	0	1950	0.00
2	1~	230	50	1300	166	1.36	57	64	2600	100	1530	0.40
3	1~	230	50	1250	168	1.40	50	58	1715	200	1010	0.80
4	1~	230	50	1285	167	1.37	53	60	1155	260	680	1.04
5	1~	230	50	1150	86	0.71	59	66	2665	0	1570	0.00
6	1~	230	50	1150	115	0.94	54	61	2300	79	1355	0.32
7	1~	230	50	1150	132	1.08	48	56	1590	171	935	0.69
8	1~	230	50	1150	119	0.98	50	57	1035	208	610	0.84
9	1~	230	50	900	41	0.34	53	60	2085	0	1230	0.00
10	1~	230	50	900	55	0.45	48	55	1800	48	1060	0.19
11	1~	230	50	900	63	0.52	42	49	1245	105	730	0.42
12	1~	230	50	900	57	0.47	44	51	810	127	475	0.51
13	1~	230	50	650	16	0.13	45	52	1505	0	885	0.00
14	1~	230	50	650	21	0.17	39	47	1300	25	765	0.10
15	1~	230	50	650	24	0.19	34	41	900	55	530	0.22
16	1~	230	50	650	21	0.18	35	43	585	66	345	0.26

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P<sub>ed</sub> = Power consumption · I = Current draw · LpA<sub>in</sub> = Sound pressure level intake side · LwA<sub>in</sub> = Sound power level intake side  
 q<sub>v</sub> = Air flow · P<sub>fs</sub> = Pressure increase

