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Limited partnership · Headquarters Mulfingen  
County court Stuttgart · HRA 590344General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen  
County court Stuttgart · HRB 590142**Nominal data**

<b>Type</b>	<b>R3G250-RE09-07</b>	
<b>Motor</b>	<b>M3G055-DF</b>	
Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Type of data definition		ml
Speed	min <sup>-1</sup>	2510
Power input	W	170
Current draw	A	1.4
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

**Data according to ErP directive**

Installation category	A
Efficiency category	Static
Variable speed drive	Yes
Specific ratio*	1.00

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

		Actual	Request 2013	Request 2015
Overall efficiency $\eta_{es}$		60.1	39.4	43.4
Efficiency grade N		78.7	58	62
Power input $P_{ed}$	kW	0.17		
Air flow $q_v$	m <sup>3</sup> /h	1005		
Pressure increase $p_{fs}$	Pa	322		
Speed n	min <sup>-1</sup>	2555		

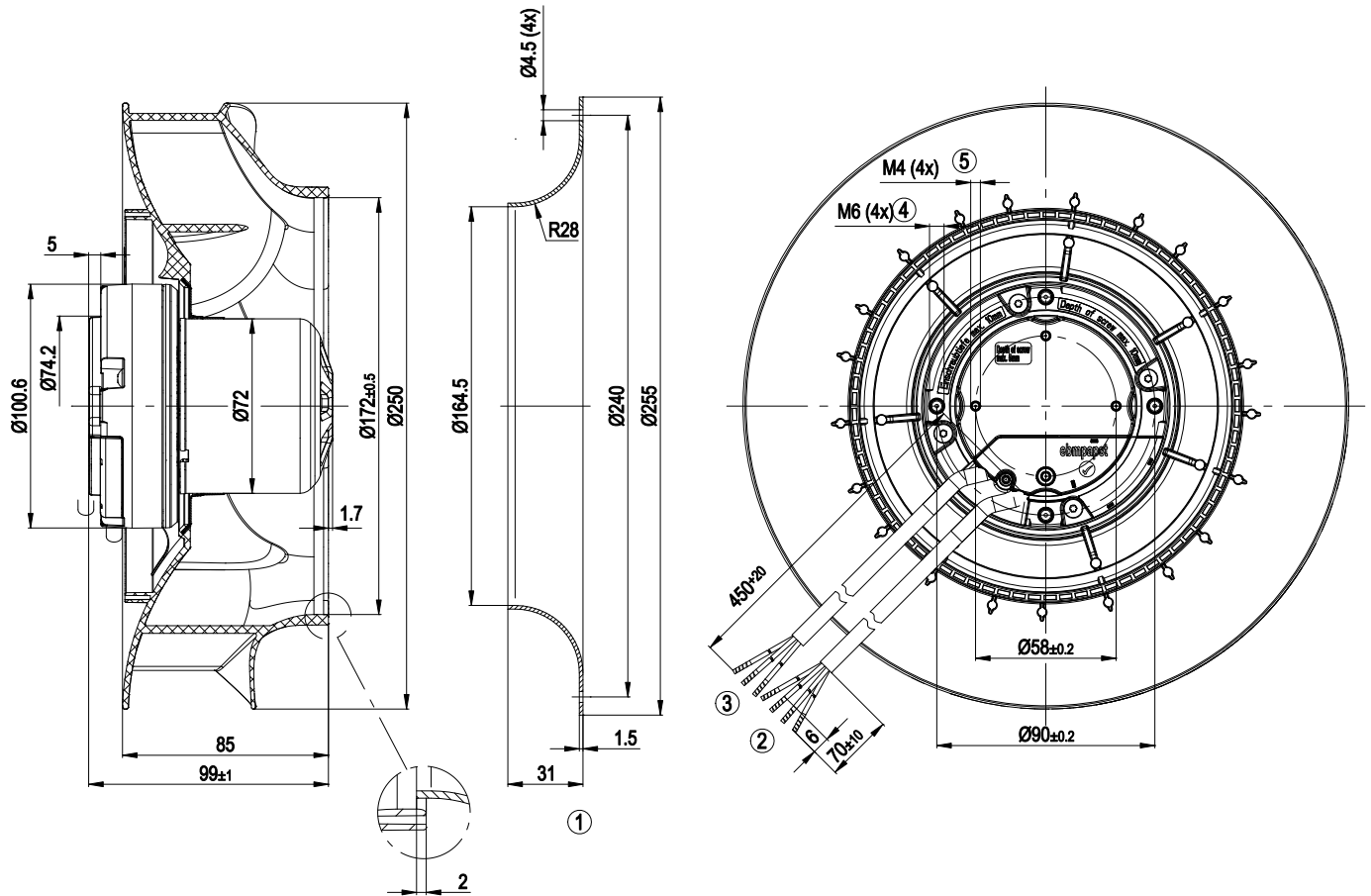
Data established at point of optimum efficiency



## Technical features

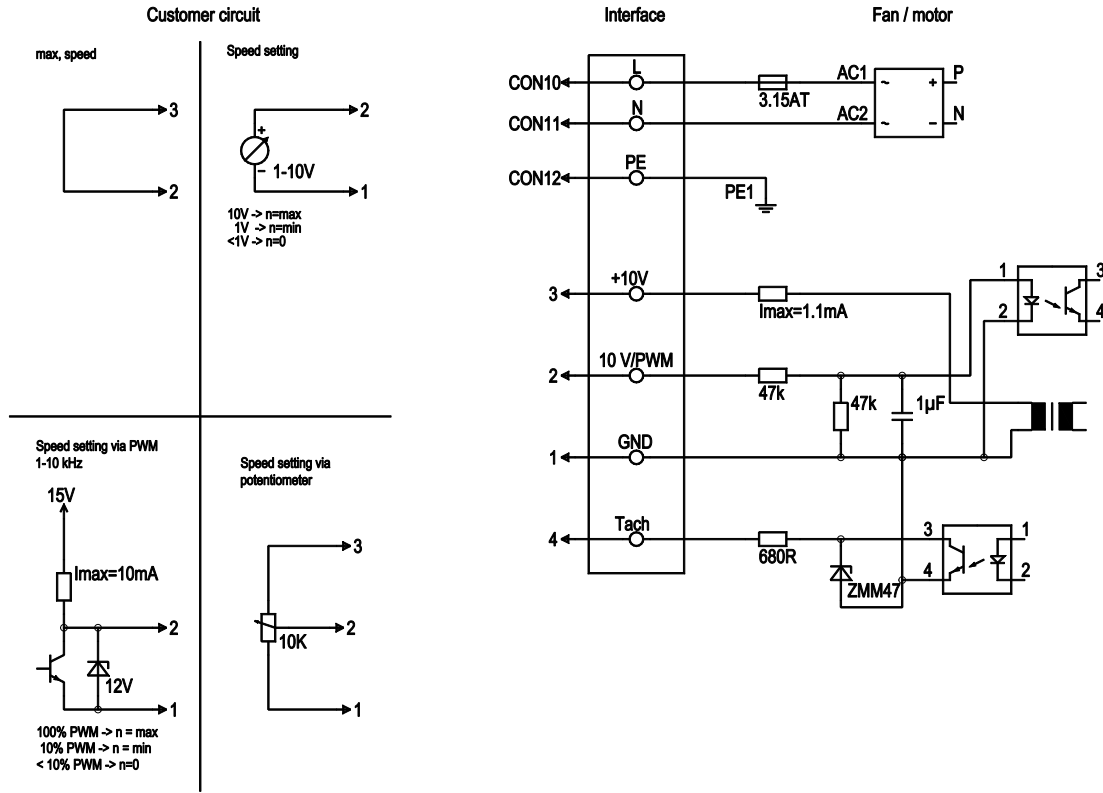
<b>Mass</b>	1.8 kg
<b>Size</b>	250 mm
<b>Surface of rotor</b>	Thick layer passivated
<b>Material of electronics housing</b>	Die-cast aluminium
<b>Material of impeller</b>	Plastic PA6, fibreglass-reinforced
<b>Number of blades</b>	7
<b>Direction of rotation</b>	Clockwise, seen on rotor
<b>Type of protection</b>	IP 54
<b>Insulation class</b>	"B"
<b>Max. permissible ambient motor temp. (transp./ storage)</b>	+ 80 °C
<b>Min. permissible ambient motor temp. (transp./storage)</b>	- 40 °C
<b>Mounting position</b>	Shaft horizontal or rotor on bottom; rotor on top on request
<b>Condensate discharge holes</b>	None, open rotor
<b>Operation mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Technical features</b>	<ul style="list-style-type: none"> <li>- Output 10 VDC, max. 1.1 mA</li> <li>- Tach output</li> <li>- Motor current limit</li> <li>- Soft start</li> <li>- Control input 0-10 VDC / PWM</li> <li>- Line undervoltage detection</li> <li>- Over-temperature protected electronics / motor</li> </ul>
<b>Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)</b>	<= 3.5 mA
<b>Motor protection</b>	Locked-rotor protection
<b>Cable exit</b>	Variable
<b>Protection class</b>	I (if protective earth is connected by customer)
<b>Product conforming to standard</b>	EN 60335-1

Product drawing



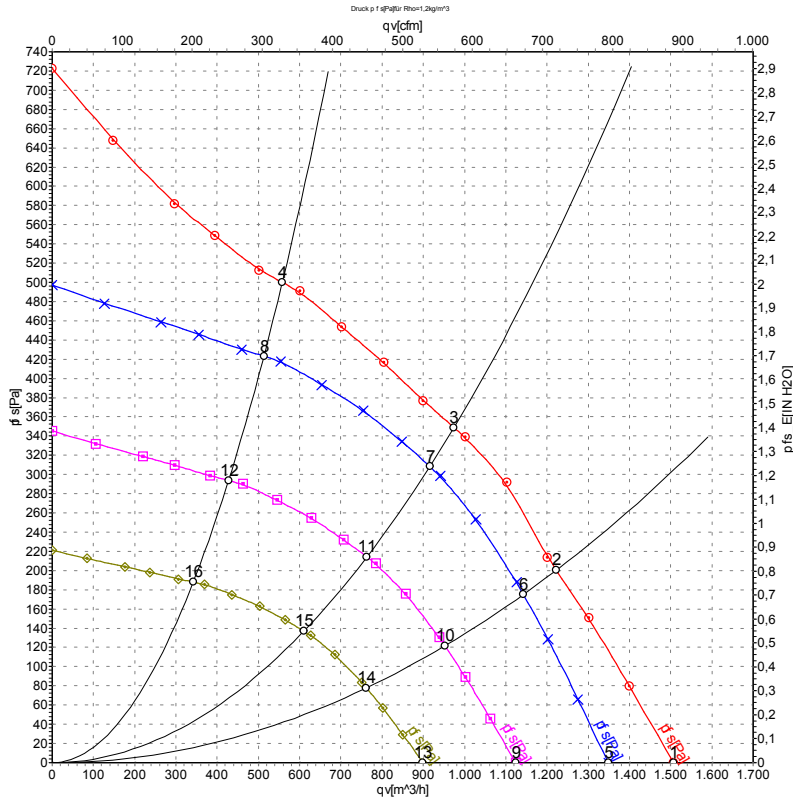
1	Accessory part: Inlet nozzle 96359-2-4013, not included in the standard scope of delivery
2	Connection line PVC 4X 0.5 mm <sup>2</sup> , 4 x brass lead tips crimped
3	Connection line PVC 3G 0.5 mm <sup>2</sup> , 3 x brass lead tips crimped
4	Depth of screw max. 10 mm
5	Depth of screw max. 5 mm

## Connection screen



Line	No.	Signal	Colour	Function / assignment
	CON10	L	black	Power supply 230 VAC, 50-60 Hz, for voltage range refer to rating plate
	CON11	N	blue	Neutral conductor
	CON12	PE	green/yellow	Protective earth
	1	GND	blue	GND - Connection for control interface
	2	0- 10V PWM	yellow	Control input 0 - 10 V or PWM, electrically isolated
	3	10V/ max 1.1mA	red	Voltage output 10V/ 1.1mA, electrically isolated, not short-circuit-proof.
	4	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated

## Charts: Air flow 50 Hz



Measurement: LU-128144

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebmpapst. Suction-side noise levels: L<sub>wA</sub> measured as per ISO 13347 / L<sub>pA</sub> 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	f	n	P <sub>ed</sub>	I	L <sub>pA<sub>in</sub></sub>	L <sub>wA<sub>in</sub></sub>	qv	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	dB(A)	dB(A)	m <sup>3</sup> /h	Pa
1	230	50	2680	146	1.17	68	76	1505	0
2	230	50	2565	170	1.40	63	71	1225	200
3	230	50	2510	170	1.40	59	67	975	350
4	230	50	2610	160	1.28	65	73	560	500
5	230	50	2400	104	0.84	65	73	1350	0
6	230	50	2400	140	1.11	62	70	1145	176
7	230	50	2400	142	1.12	58	66	915	309
8	230	50	2400	125	1.00	64	71	515	423
9	230	50	2000	60	0.49	61	69	1125	0
10	230	50	2000	81	0.64	58	66	950	122
11	230	50	2000	82	0.65	54	62	765	214
12	230	50	2000	72	0.58	60	67	430	294
13	230	50	1600	31	0.25	57	65	900	0
14	230	50	1600	41	0.33	53	61	760	78
15	230	50	1600	42	0.33	49	57	610	137
16	230	50	1600	37	0.30	55	62	340	188

U = Supply voltage · f = Frequency · n = Speed · P<sub>ed</sub> = Power input · I = Current draw · L<sub>pA<sub>in</sub></sub> = Sound pressure level inlet side · L<sub>wA<sub>in</sub></sub> = Sound power level inlet side · qv = Air flow  
 p<sub>fs</sub> = Pressure increase

