

# AC centrifugal fan - RadiCal

single inlet

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### Nominal data

Type	R2E220-RA44-14			
Motor	M2E068-BF			
Phase		1~	1~	1~
Nominal voltage	VAC	115	115	115
Frequency	Hz	50	60	60
Type of data definition		ml	ml	ml
Valid for approval / standard		CE	CE	UL 2111
Speed	min <sup>-1</sup>	2150	2100	2100
Power input	W	85	100	108
Current draw	A	0.75	0.88	0.9
Motor capacitor	µF	8	8	8
Capacitor voltage	VDB	220	220	220
Capacitor standard		P0 (CE)	P0 (CE)	UL
Min. back pressure	Pa	0	0	0
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	50	60	60
Starting current	A	1.0	1.01	1.08

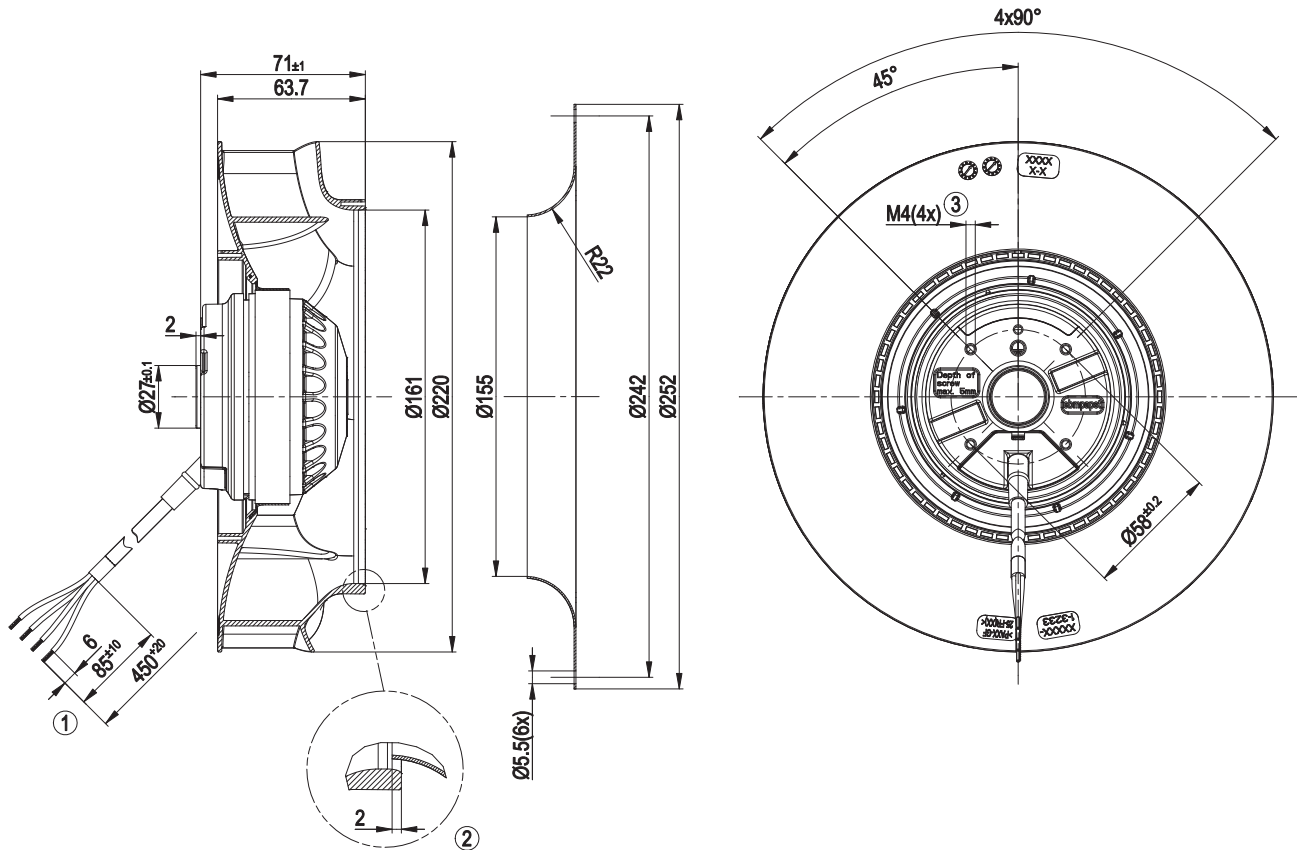
ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit  
Subject to alterations



### Technical features

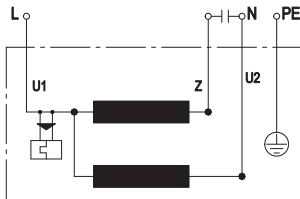
<b>Mass</b>	1.3 kg
<b>Size</b>	220 mm
<b>Surface of rotor</b>	Uncoated
<b>Material of impeller</b>	Plastic PA6 , fibreglass-reinforced
<b>Direction of rotation</b>	Clockwise, seen on rotor
<b>Type of protection</b>	IP 44; Depending on installation and position
<b>Insulation class</b>	"F"
<b>Humidity class</b>	F0
<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>	Any
<b>Condensate discharge holes</b>	None
<b>Motor bearing</b>	Ball bearing
<b>Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)</b>	< 0.75 mA
<b>Motor protection</b>	Thermal overload protector (TOP) wired internally
<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; CE
<b>Approval</b>	UL 2111; CSA C22.2 Nr.77

## Product drawing



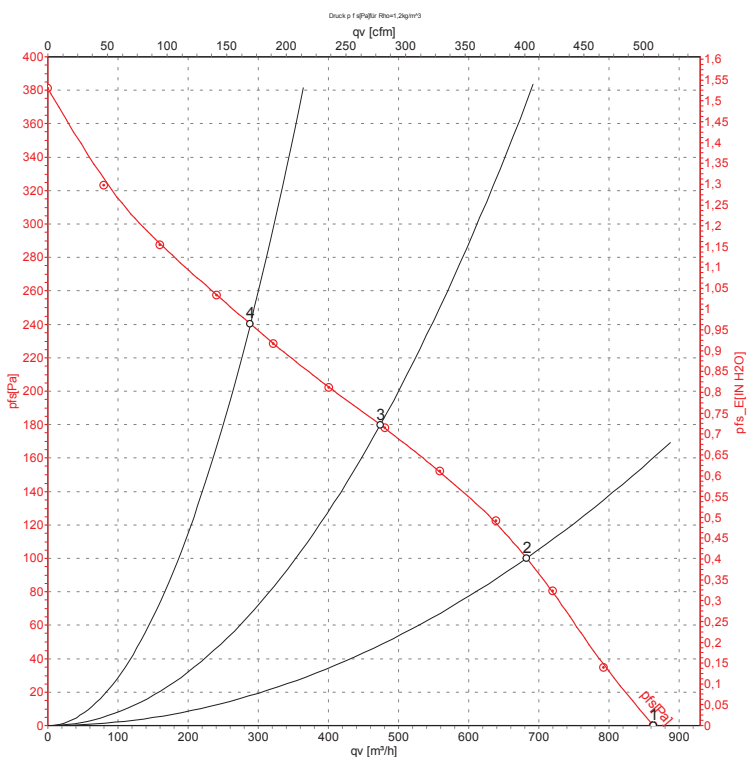
- |   |   |
|---|---|
| 1 | Connection line PFA 4G 0.5mm <sup>2</sup> , 4x brass lead tips crimped                    |
| 2 | Accessory part: Inlet nozzle 09609-2-4013, not included in the standard scope of delivery |
| 3 | Depth of screw max. 5 mm  |

## Connection screen



U1	blue	Z	brown	U2	black
PE	green/yellow				

## Charts: Air flow 50 Hz



Measurement: LU-136801

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.

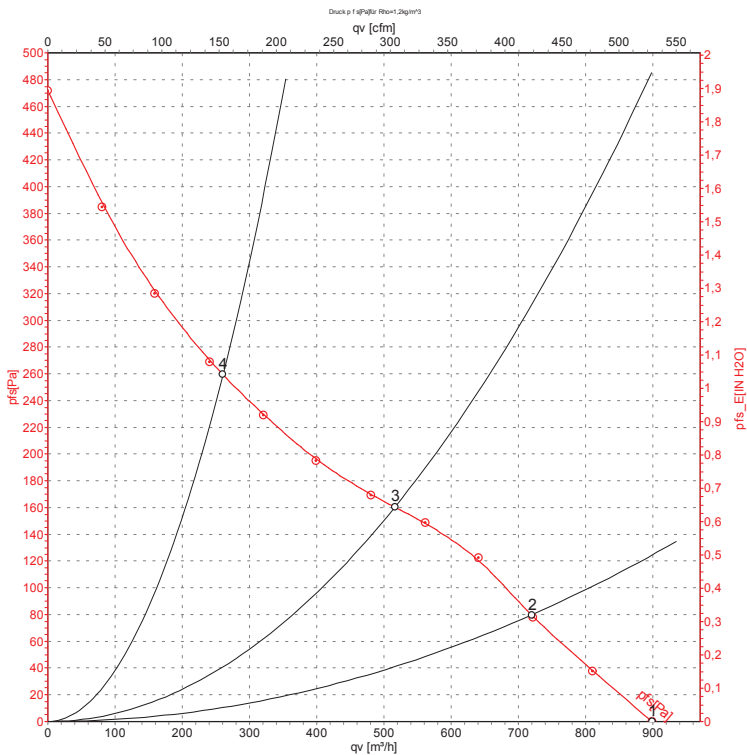
## Measured values

	U	f	n	P <sub>e</sub>	I	qv	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m³/h	Pa
1	115	50	2350	77	0.67	865	0
2	115	50	2215	82	0.72	680	100
3	115	50	2150	85	0.75	475	180
4	115	50	2210	81	0.70	290	240

U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase



## Charts: Air flow 60 Hz



Measurement: LU-136805

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	f	n	P <sub>e</sub>	I	qv	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m³/h	Pa
1	115	60	2455	92	0.81	900	0
2	115	60	2260	98	0.85	720	80
3	115	60	2100	100	0.88	515	160
4	115	60	2265	96	0.84	260	260

U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase

