

# AC centrifugal fan

backward-curved, single-intake

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## Nominal data

<b>Type</b>	<b>R2E225-BA47-09</b>		
<b>Motor</b>	<b>M2E068-EC</b>		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		-	-
Speed (rpm)	min <sup>-1</sup>	2650	3000
Power consumption	W	145	205
Current draw	A	0.63	0.9
Capacitor	µF	5	5
Capacitor voltage	VDB	400	400
Min. back pressure	Pa	0	0
Min. back pressure	inH <sub>2</sub> O	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	75	75

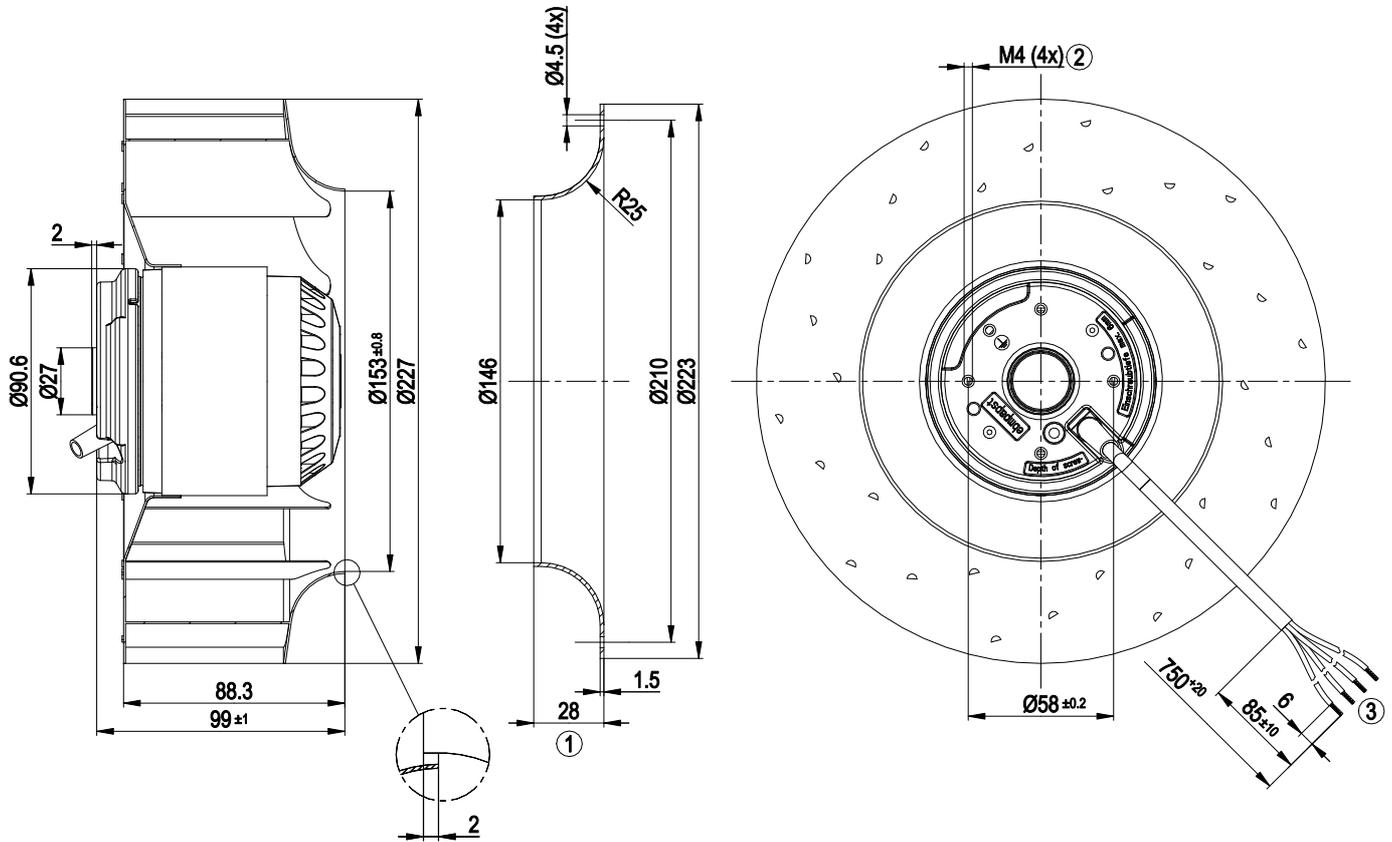
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment  
Subject to change



### Technical description

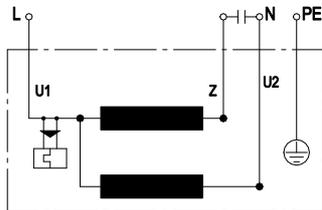
<b>Weight</b>	3.2 kg
<b>Fan size</b>	225 mm
<b>Rotor surface</b>	Unpainted
<b>Impeller material</b>	Sheet steel, galvanized
<b>Number of blades</b>	11
<b>Direction of rotation</b>	Clockwise, viewed toward rotor
<b>Degree of protection</b>	IP44; installation- and position-dependent
<b>Insulation class</b>	"F"
<b>Moisture (F) / Environmental (H) protection class</b>	H0 - dry environment
<b>Max. permitted ambient temp. for motor (transport/storage)</b>	+ 80 °C
<b>Min. permitted ambient temp. for motor (transport/storage)</b>	- 40 °C
<b>Installation position</b>	Any
<b>Condensation drainage holes</b>	None
<b>Mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)</b>	< 0.75 mA
<b>Motor protection</b>	Thermal overload protector (TOP) internally connected
<b>With cable</b>	Variable
<b>Protection class</b>	I (with customer connection of protective earth)
<b>Conformity with standards</b>	EN 60335-1

## Product drawing



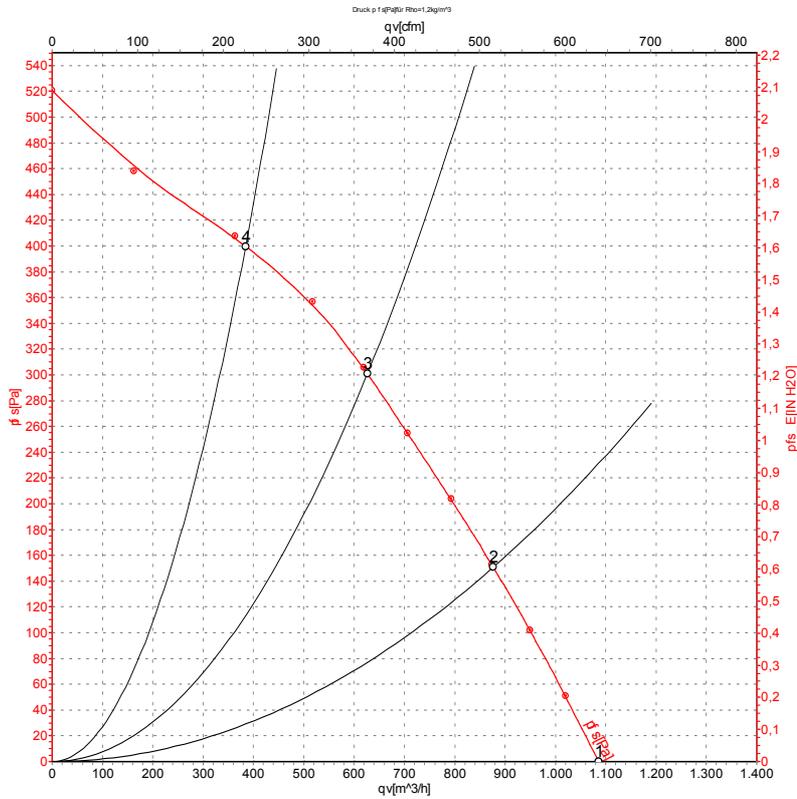
- |   |   |
|---|---|
| 1 | Accessory part: inlet ring 96358-2-4013 not included in scope of delivery |
| 2 | Max. clearance for screw 6 mm   |
| 3 | Cable silicone 4G 0.5 mm <sup>2</sup> , 4x crimped splices                |

## Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				

## Curves: Air performance 50 Hz



Measurement: LU-30832-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. 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.

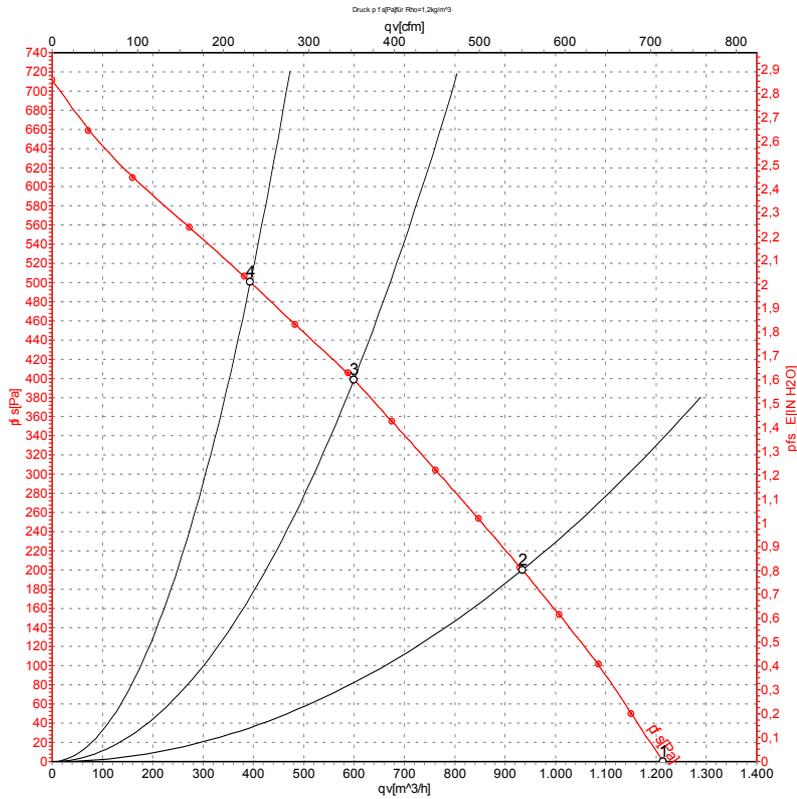
## Measured values

	U	f	n	P <sub>e</sub>	I	qv	p <sub>fs</sub>	qv	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	CFM	inH <sub>2</sub> O
1	230	50	2650	145	0.63	1085	0	640	0.00
2	230	50	2630	156	0.67	875	150	515	0.60
3	230	50	2595	164	0.71	625	300	370	1.20
4	230	50	2645	152	0.66	385	400	225	1.61

U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase



## Curves: Air performance 60 Hz



Measurement: LU-30833-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. 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

	U	f	n	P <sub>e</sub>	I	qv	p <sub>fs</sub>	qv	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	CFM	inH <sub>2</sub> O
1	230	60	3000	205	0.90	1215	0	715	0.00
2	230	60	2870	221	0.97	935	200	550	0.80
3	230	60	2820	228	1.00	600	400	355	1.61
4	230	60	2935	211	0.93	395	500	230	2.01

U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase

