

R2E280-AE52-05

# AC centrifugal fan

backward-curved, single-intake



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## Nominal data

Type	R2E280-AE52-05	
Motor	M2E068-EC	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		fa
Valid for approval/standard		-
Speed (rpm)	min <sup>-1</sup>	2700
Power consumption	W	225
Current draw	A	1.0
Capacitor	µF	7
Capacitor voltage	VDB	400
Capacitor standard		S0 (CE)
Min. back pressure	Pa	0
Min. back pressure	in. wg	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	40
Starting current	A	2.5

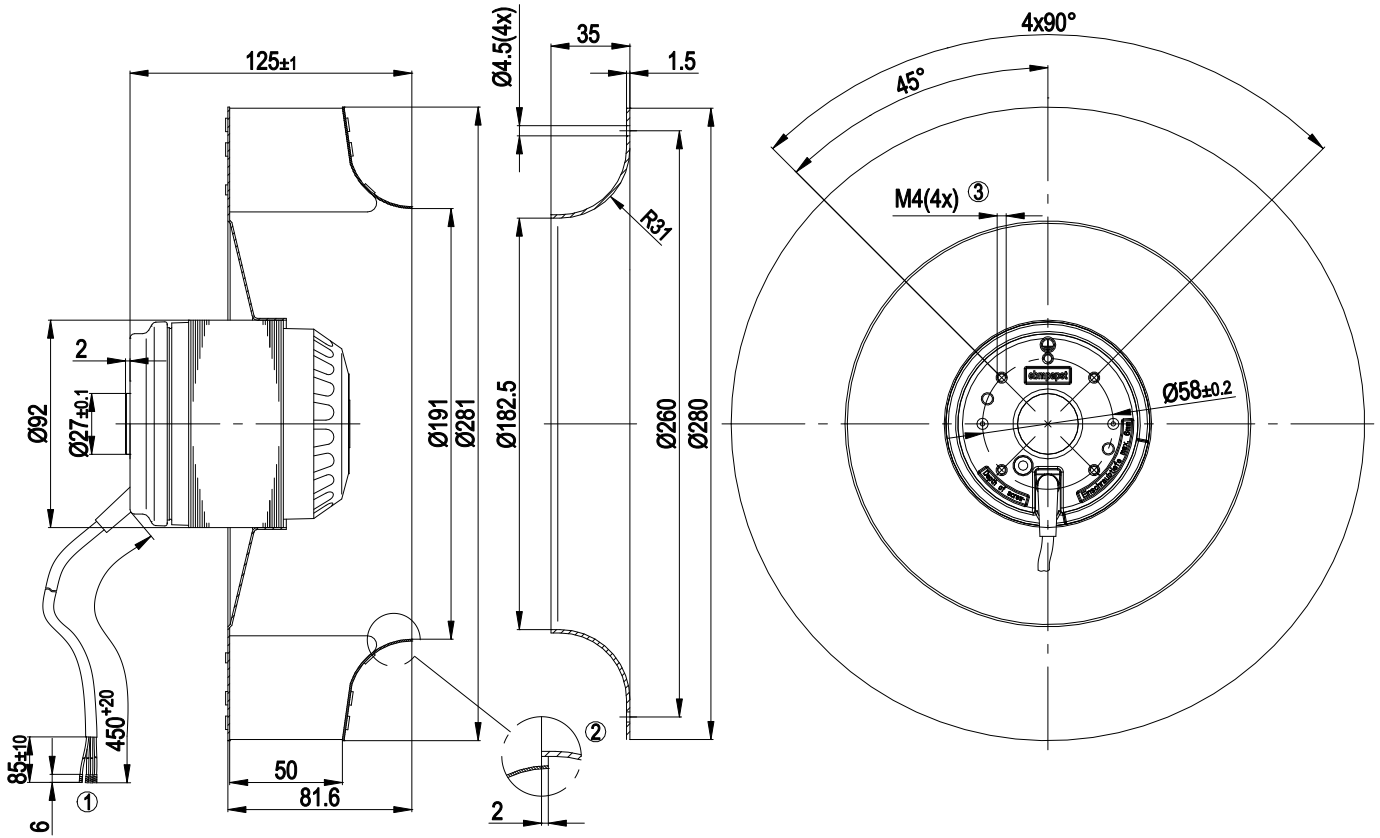
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment  
Subject to change



### Technical description

<b>Weight</b>	3.5 kg
<b>Size</b>	280 mm
<b>Motor size</b>	68
<b>Rotor surface</b>	Painted black
<b>Electronics housing material</b>	Rotor: painted black
<b>Impeller material</b>	Sheet steel, painted black
<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 as per EN 60034-5
<b>Insulation class</b>	"F"
<b>Moisture (F) / Environmental (H) protection class</b>	H1
<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>	Shaft horizontal or rotor on bottom; rotor on top on request
<b>Condensation drainage holes</b>	On rotor side
<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>Approval</b>	CCC; EAC

## Product drawing



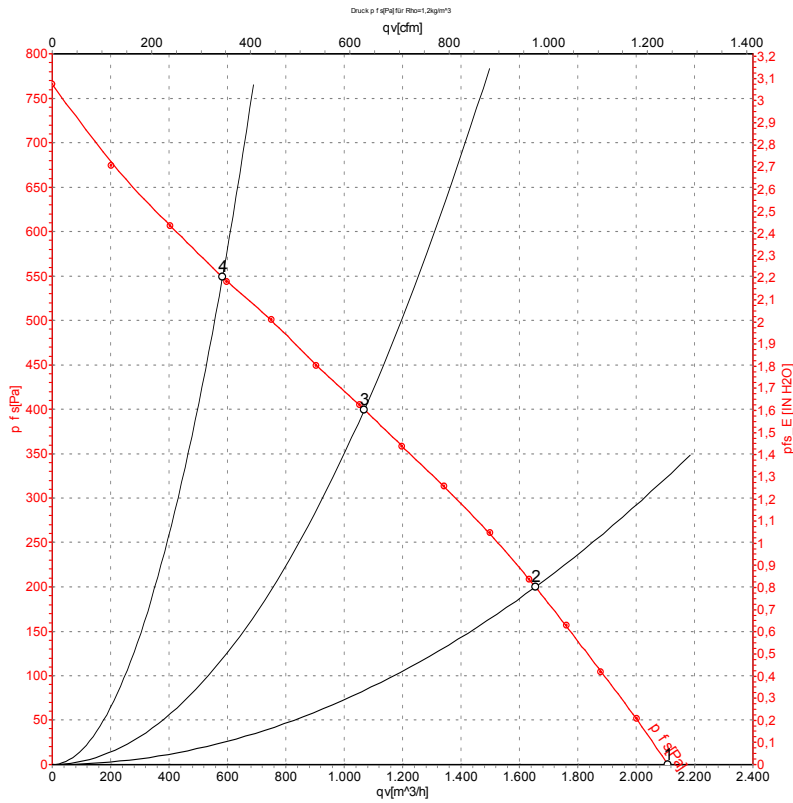
1	Cable silicone 4G 0.5 mm <sup>2</sup> , 4x crimped splices
2	Accessory part: inlet ring 96360-2-4013 not included in scope of delivery
3	Max. clearance for screw 6 mm

## Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				

## Curves: Air performance 50 Hz



Measurement: LU-107236-1

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	q <sub>V</sub>	P <sub>fs</sub>	q <sub>V</sub>	P <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	cfm	in. wg
1	230	50	2700	225	1.00	2110	0	1240	0.00
2	230	50	2510	289	1.26	1655	200	975	0.80
3	230	50	2365	324	1.42	1070	400	630	1.61
4	230	50	2490	291	1.27	585	550	345	2.21

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

