

# AC centrifugal fan

backward-curved, single-intake

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## Nominal data

<b>Type</b>	<b>R4E310-AO32-17</b>		
<b>Motor</b>	<b>M4E074-DF</b>		
Phase		1~	1~
Nominal voltage	VAC	115	115
Frequency	Hz	60	60
Method of obtaining data		fa	fa
Valid for approval/standard		CE	UL 1004-3
Speed (rpm)	min <sup>-1</sup>	1720	1720
Power consumption	W	155	185
Current draw	A	1.5	1.8
Capacitor	µF	16	16
Capacitor voltage	VDB	220	220
Capacitor standard		S0 (CE)	
Min. back pressure	Pa	0	0
Min. back pressure	in. wg	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	65	65

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



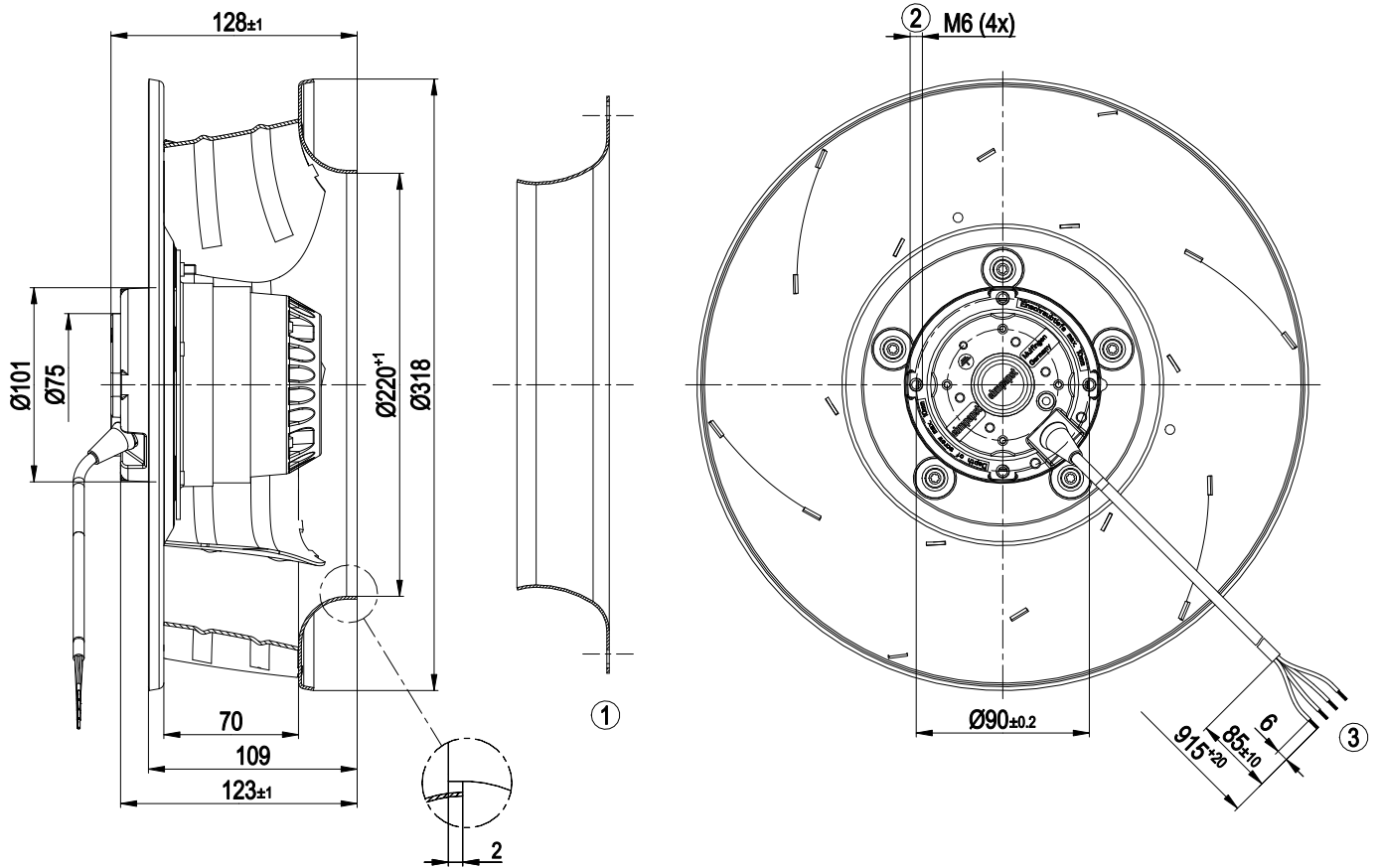
## Technical description

<b>Weight</b>	3.8 kg
<b>Size</b>	310 mm
<b>Motor size</b>	74
<b>Rotor surface</b>	Painted black
<b>Impeller material</b>	Sheet aluminum
<b>Number of blades</b>	6
<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>Conformity with standards</b>	EN 60335-1; CE
<b>Approval</b>	UL 1004-3; CSA C22.2 No. 77

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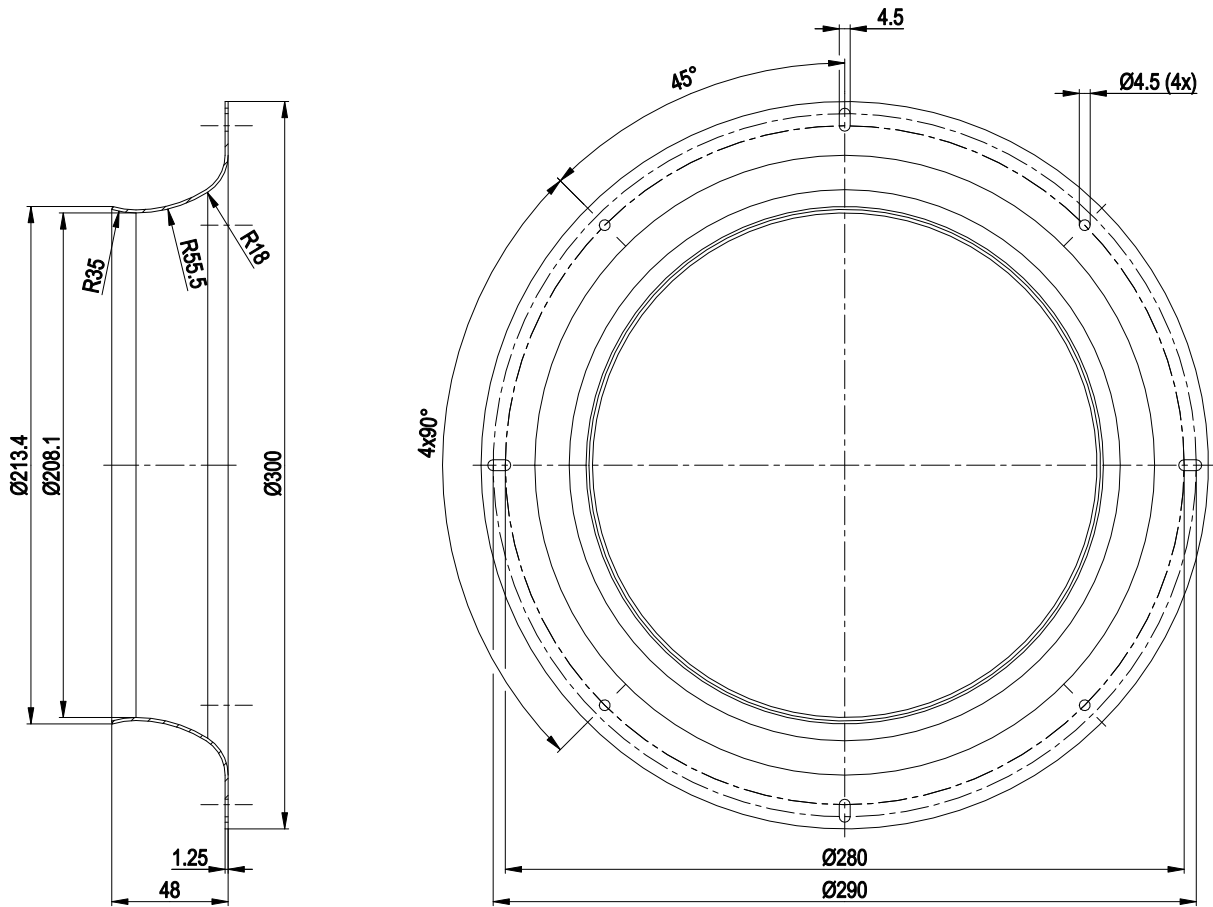
backward-curved, single-intake

## Product drawing



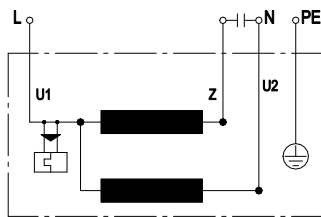
1	Accessory part: inlet ring 31050-2-4013 not included in scope of delivery
2	Max. clearance for screw 10 mm
3	Cable PFA AWG20
	4x splice

## Accessory part



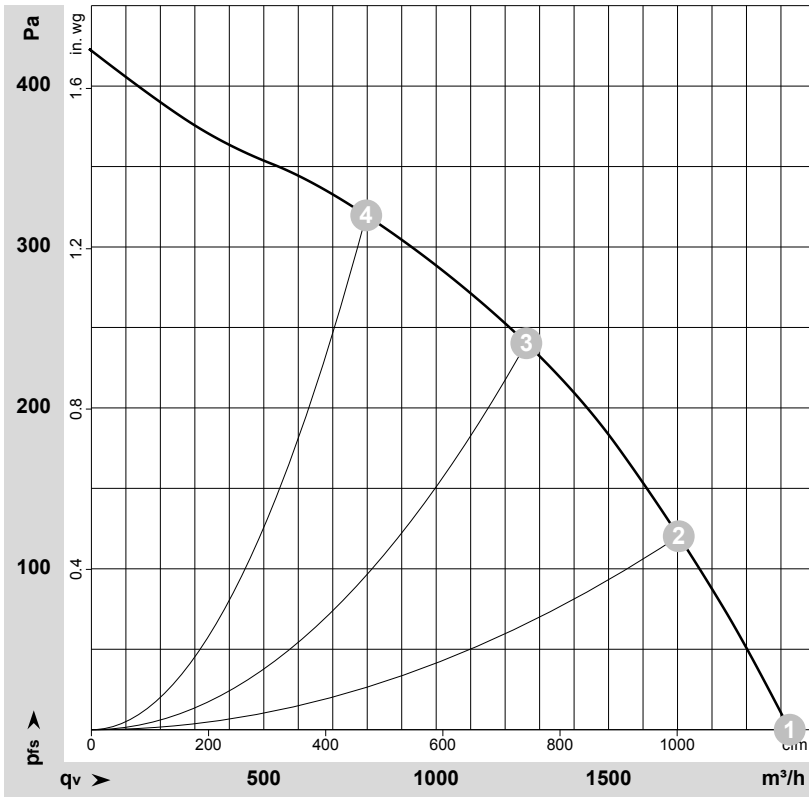
inlet ring 31050-2-4013 not included in scope of delivery

## Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				

## Curves: Air performance 60 Hz



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

Measurement: LU-58085-1

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	115	60	1720	155	1.50	2025	0	1190	0.00
2	115	60	1695	183	1.70	1705	120	1005	0.48
3	115	60	1675	199	1.82	1260	240	745	0.96
4	115	60	1685	191	1.75	795	320	470	1.28

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

