

R4E355-AF05-05

# AC centrifugal fan

backward-curved, single-intake



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## Nominal data

Type	R4E355-AF05-05		
Motor	M4E074-EI		
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>	1410	1630
Power consumption	W	170	250
Current draw	A	0.78	1.1
Capacitor	µF	6	6
Capacitor voltage	VDB	400	400
Capacitor standard		S0 (CE)	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	40	40

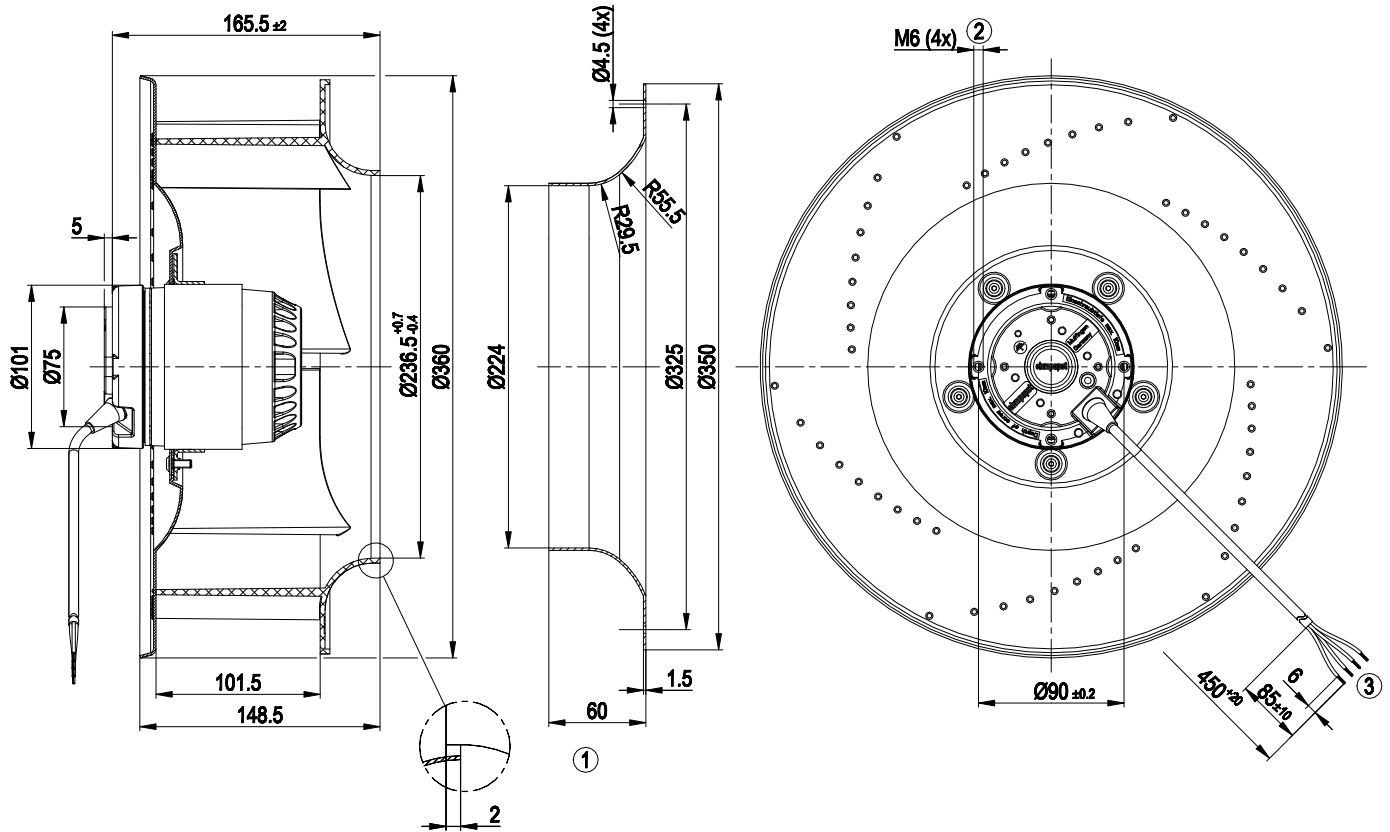
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment  
Subject to change



## Technical description

Weight	4.6 kg
Size	355 mm
Motor size	74
Rotor surface	Painted black
Impeller material	PP plastic
Number of blades	6
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H1+; F5
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1
Approval	CCC; EAC

## Product drawing



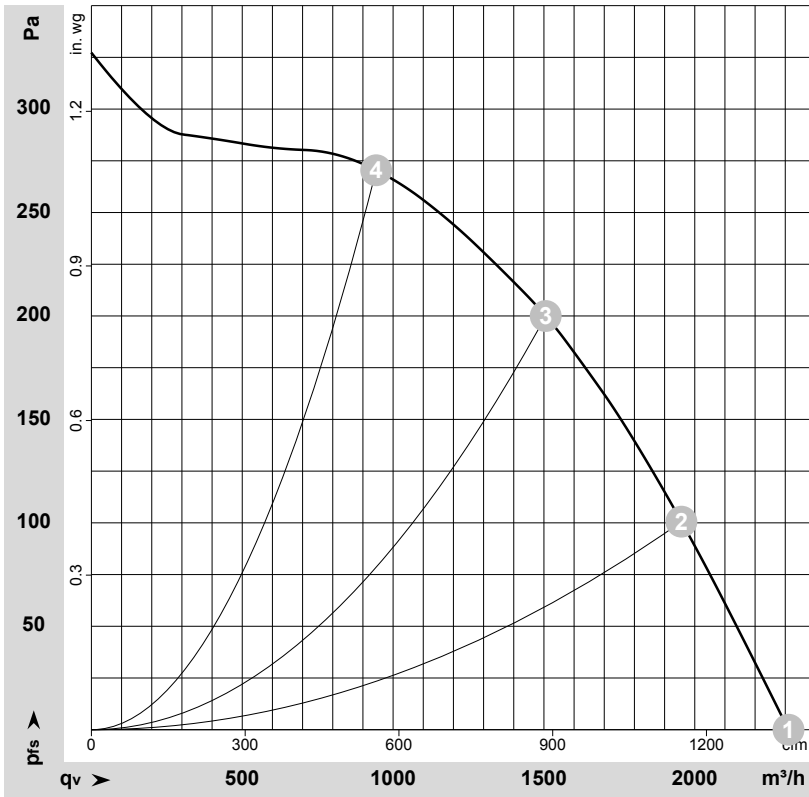
- |   |  |
|---|--|
| 1 | Accessory part: inlet ring 51357-2-4013, not included in scope of delivery |
| 2 | Max. clearance for screw 10 mm   |
| 3 | Cable silicone 4G 0.5 mm <sup>2</sup> , 4x crimped splices                 |

## Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				

## Curves: Air performance 50 Hz



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

Measurement: LU-106566-1

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

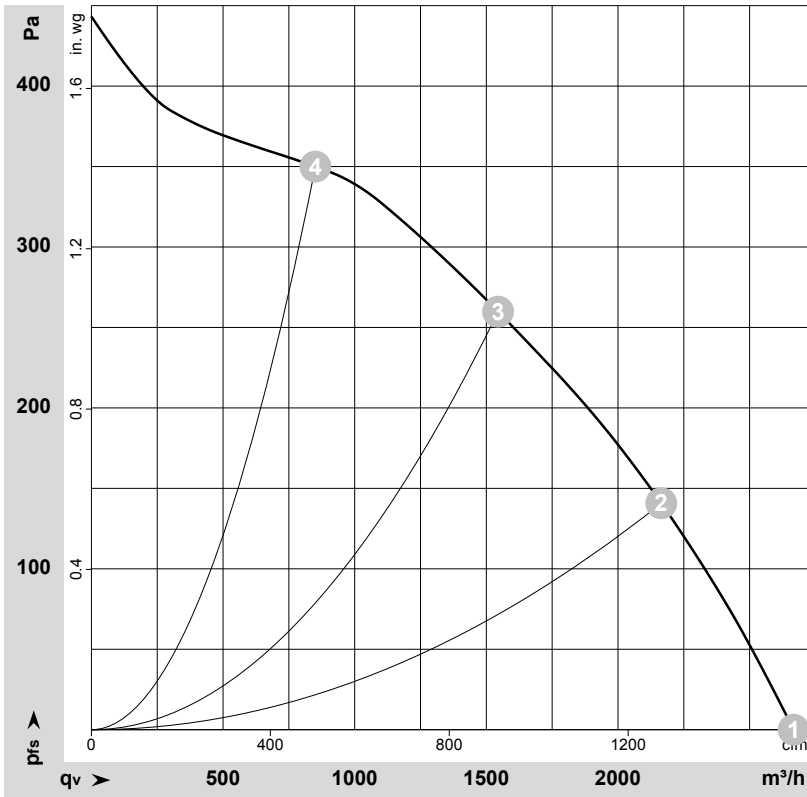
## Measured values

	Wired	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	1~	230	50	1410	170	0.78	2310	0	1360	0.00
2	1~	230	50	1390	192	0.86	1955	100	1150	0.40
3	1~	230	50	1365	212	0.94	1505	200	885	0.80
4	1~	230	50	1375	206	0.91	945	270	555	1.08

Wired = Wiring · 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



## Curves: Air performance 60 Hz



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

Measurement: LU-106568-1

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

	Wired	U	f	n	$P_e$	I	$q_v$	$P_{fs}$	$q_v$	$P_{fs}$
		V	Hz	$\text{min}^{-1}$	W	A	$\text{m}^3/\text{h}$	Pa	cfm	in. wg
1	1~	230	60	1630	250	1.10	2665	0	1570	0.00
2	1~	230	60	1565	287	1.26	2165	140	1275	0.56
3	1~	230	60	1490	310	1.35	1545	260	910	1.04
4	1~	230	60	1550	293	1.28	850	350	500	1.41

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) ·  $P_e$  = Power consumption · I = Current draw ·  $q_v$  = Air flow ·  $P_{fs}$  = Pressure increase

