

R4E355-AL02-06

# AC centrifugal fan

backward-curved, single-intake



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## Nominal data

Type	R4E355-AL02-06		
Motor	M4E074-GA		
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>	1420	1650
Power consumption	W	245	420
Current draw	A	1.12	1.9
Capacitor	µF	8	10
Capacitor voltage	VDB	400	450
Capacitor standard		S0 (CE)	S0 (CE)
Min. back pressure	Pa	0	
Min. back pressure	inH <sub>2</sub> O	0	
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	70	40
Starting current	A		2.62

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



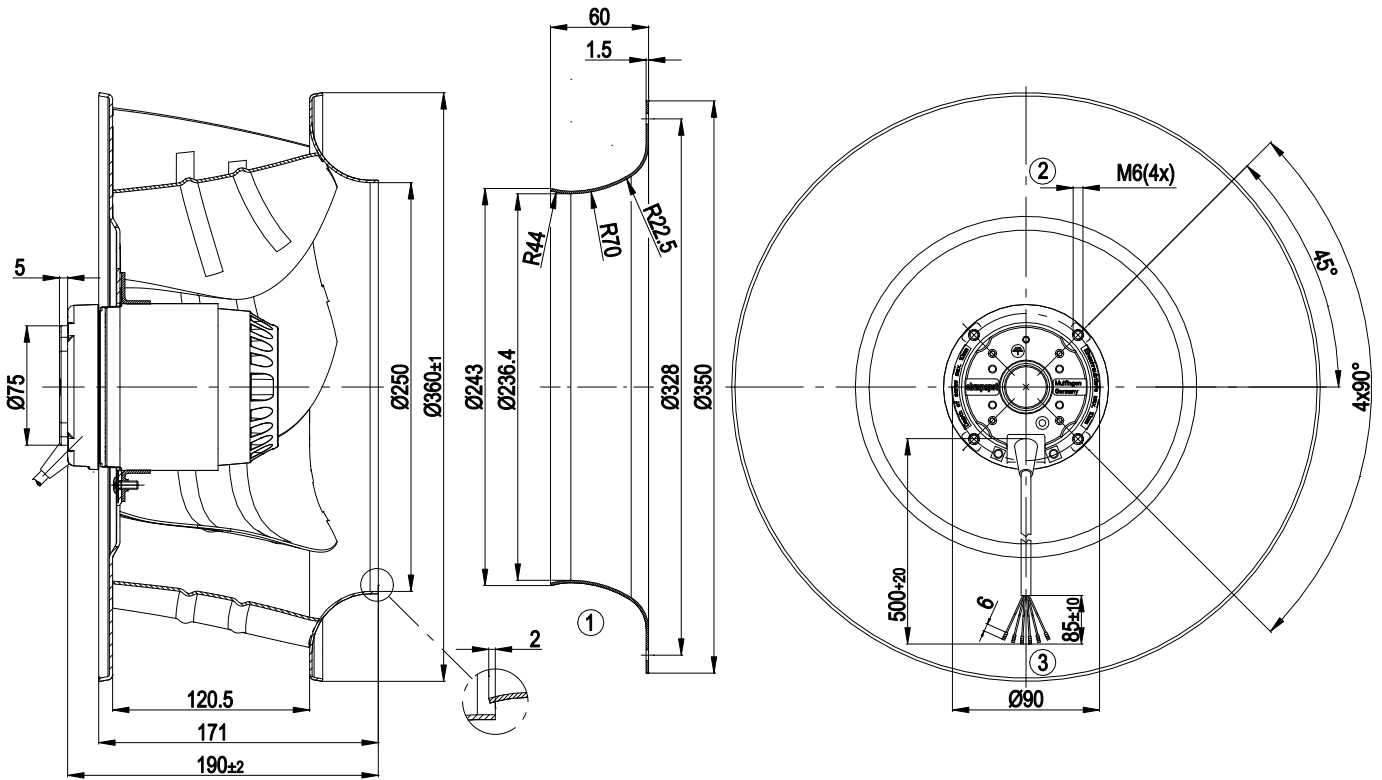
### Technical description

<b>Weight</b>	5.39 kg
<b>Fan size</b>	355 mm
<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>	IP00
<b>Insulation class</b>	"F"
<b>Moisture (F) / Environmental (H) protection class</b>	F5
<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>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) with basic insulation
<b>With cable</b>	Variable
<b>Protection class</b>	I (with customer connection of protective earth)
<b>Conformity with standards</b>	EN 60335-1
<b>Approval</b>	CCC

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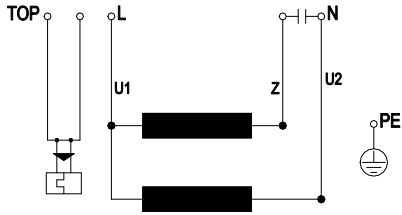
## Product drawing



- |   |  |
|---|--|
| 1 | Accessory part: inlet ring 35560-2-4013 not included in scope of delivery. Other inlet rings on request. |
| 2 | Max. clearance for screw 10 mm   |
| 3 | Cable PVC 6x 0.5 mm <sup>2</sup> , 6x crimped splices  |



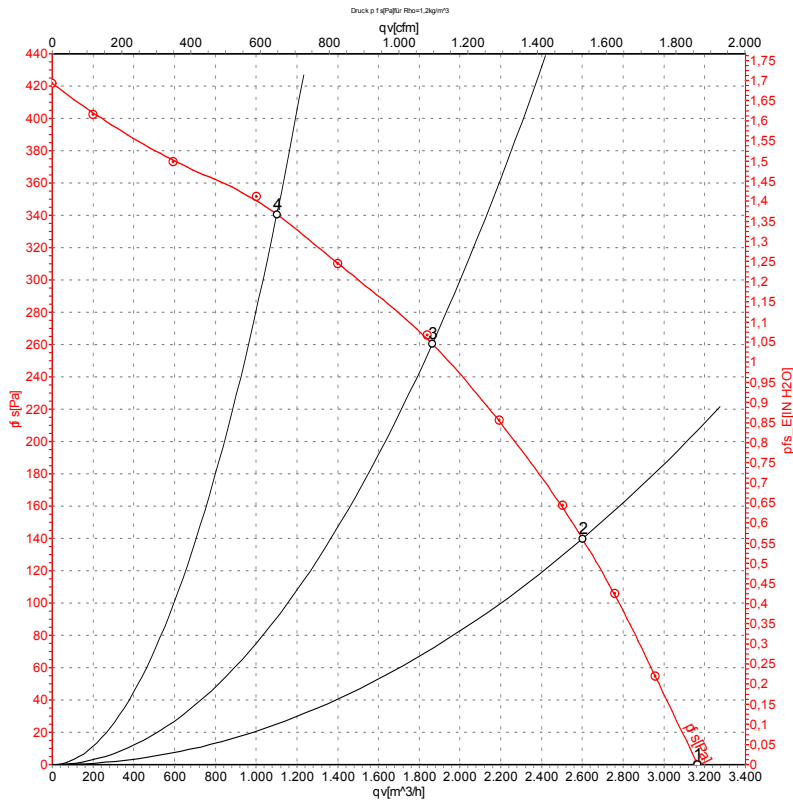
## Connection diagram



TOP	2x gray	U1	blue	Z	brown
U2	black	PE	green/yellow		



## Curves: Air performance 50 Hz



Measurement: LU-106561-1

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.

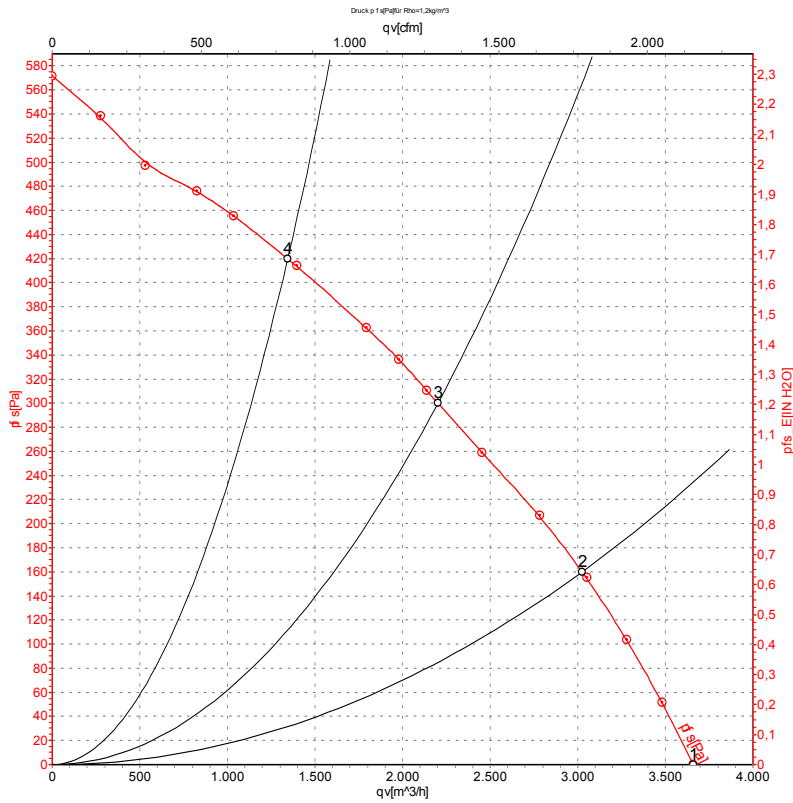
## Measured values

	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	inH2O
1	230	50	1420	245	1.12	3165	0	1865	0.00
2	230	50	1400	288	1.28	2600	140	1530	0.56
3	230	50	1390	298	1.32	1865	260	1095	1.04
4	230	50	1410	271	1.22	1100	340	650	1.36

U = Power supply · 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



Measurement: LU-54519-1

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	inH <sub>2</sub> O
1	230	60	1650	420	1.90	3660	0	2155	0.00
2	230	60	1595	464	2.04	3025	160	1780	0.64
3	230	60	1545	481	2.10	2205	300	1295	1.20
4	230	60	1605	458	2.01	1345	420	790	1.69

U = Power supply · 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

