AC centrifugal fan

backward-curved, single-intake

Limited partnership · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**R4D355-AO10-10**
Motor	**M4D094-EA**

Phase		3~	3~
Nominal voltage	VAC	400	400
Wiring		Δ	Y
Frequency	Hz	50	50
Method of obtaining data		ml	ml
Valid for approval/standard		-	-
Speed (rpm)	min^{-1}	1370	1140
Power consumption	W	290	210
Current draw	A	0.62	0.35
Min. back pressure	Pa	0	0
Min. back pressure	in. wg	0	0
Max. ambient temperature	°C	85	85
Starting current	A	2.15	

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

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Technical description

Weight	5.8 kg
Size	355 mm
Motor size	94
Rotor surface	Painted black
Impeller material	Sheet aluminum
Number of blades	6
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H2
Max. permitted ambient temp. for motor (transport/storage)	+80 °C
Min. permitted ambient temp. for motor (transport/storage)	-40 °C
Installation position	Any
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Variable
Protection class	I (with customer connection of protective earth)
Approval	EAC

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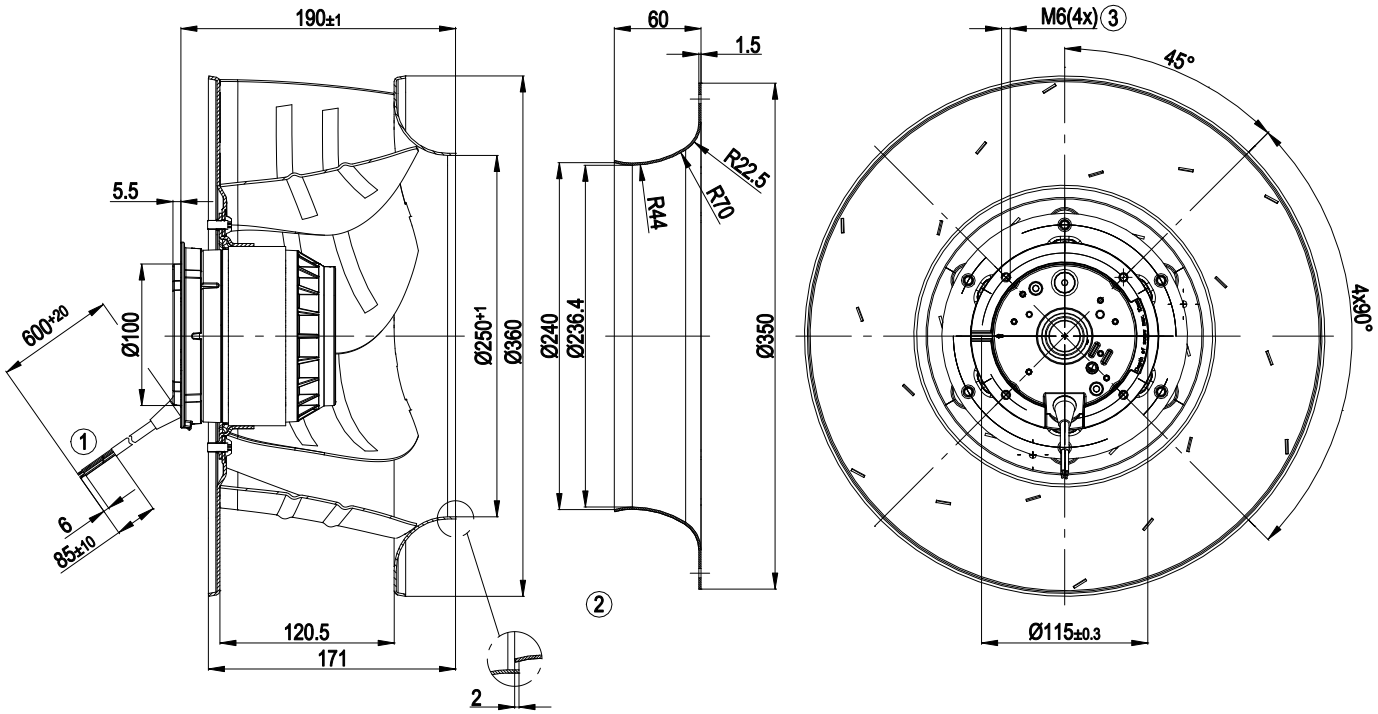
Product drawing



1	Cable silicone 9G 0.5 mm², 9 x crimped splices
2	Accessory part: inlet ring 35560-2-4013 not included in scope of delivery
3	Max. clearance for screw 10 mm

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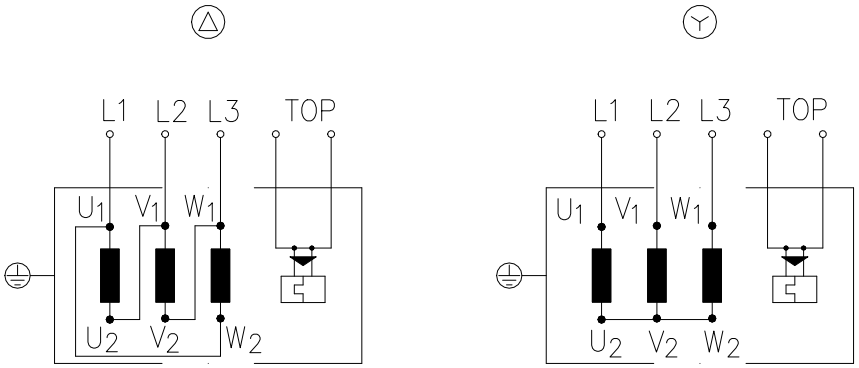
Connection diagram



Change of rotation direction by reversing two phases

Δ	Delta connection	Y	Star connection	L1	= U1 = black
L2	= V1 = blue	L3	= W1 = brown	W2	yellow
U2	green	V2	white	TOP	2x gray
PE	green/yellow				

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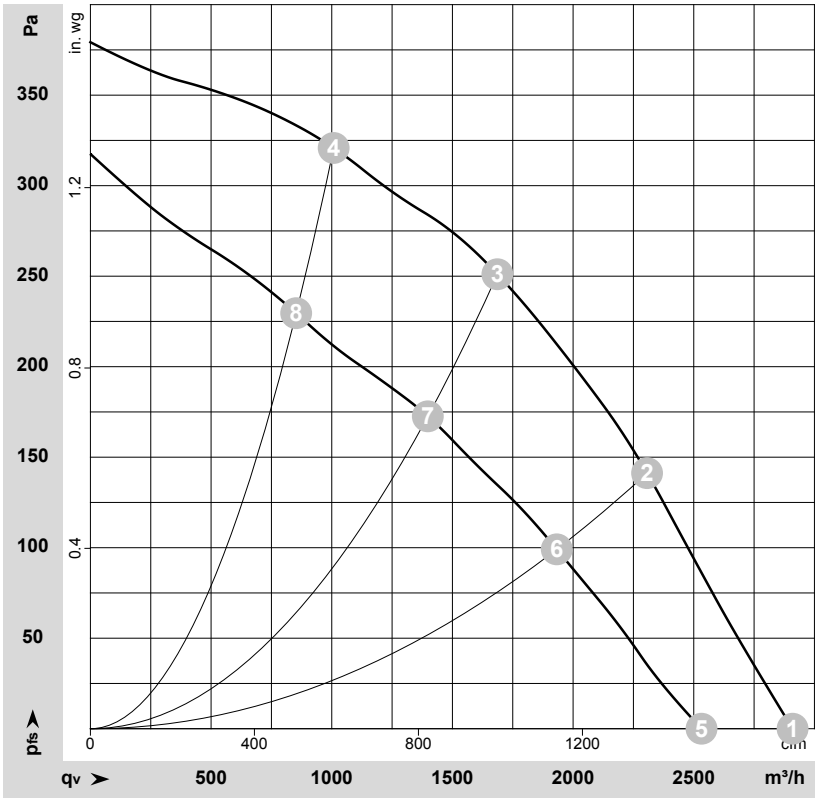
Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-124967-1
Measurement: LU-124969-1

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	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	Δ	400	50	1405	235	0.58	2910	0	1710	0.00
2	Δ	400	50	1380	278	0.61	2305	140	1360	0.56
3	Δ	400	50	1370	290	0.62	1685	250	990	1.00
4	Δ	400	50	1390	259	0.59	1010	320	595	1.28
5	Y	400	50	1215	175	0.30	2530	0	1490	0.00
6	Y	400	50	1150	203	0.34	1930	99	1135	0.40
7	Y	400	50	1140	210	0.35	1400	173	825	0.69
8	Y	400	50	1180	191	0.32	855	230	500	0.92

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