

AC centrifugal fan

forward-curved, dual-intake
with housing (large flange)



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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	D4E250-CA01-01		
Motor	M4E094-LA		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		ml	ml
Valid for approval/standard		CE	CE
Speed (rpm)	min ⁻¹	1200	1400
Power consumption	W	1250	1285
Current draw	A	6	5.9
Capacitor	µF	14	14
Capacitor voltage	VDB	500	500
Min. back pressure	Pa	100	350
Min. back pressure	in. wg	0.4	1.41
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	40	40

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

Data according to Commission Regulation (EU) 327/2011 (prEN 17166)

		Actual	Req. 2015			
01 Overall efficiency η_e	%	43.6	41.6	09 Power consumption P_e	kW	0.68
02 Measurement category		B		09 Air flow q_v	m³/h	2440
03 Efficiency category		Total		09 Pressure increase p_f	Pa	444
04 Efficiency grade N		51	49	10 Speed (rpm) n	min ⁻¹	1395
05 Variable speed drive		No		11 Specific ratio*		1.00

Data obtained at optimum efficiency level.

* Specific ratio = $1 + p_f / 100\,000\text{ Pa}$

LU-120630

The efficiency values displayed for achieving conformity with the Ecodesign Regulation EU 327/2011 has been reached with defined air duct components (e.g. inlet rings).
The dimensions must be requested from ebm-papst. If other air conduction geometries are used on the installation side, the ebm-papst evaluation loses its validity/the conformity must be confirmed again.
The product does not fall within the scope of Regulation (EU) 2019/1781 due to the exception specified in Article 2 (2a) (motors completely integrated into a product).

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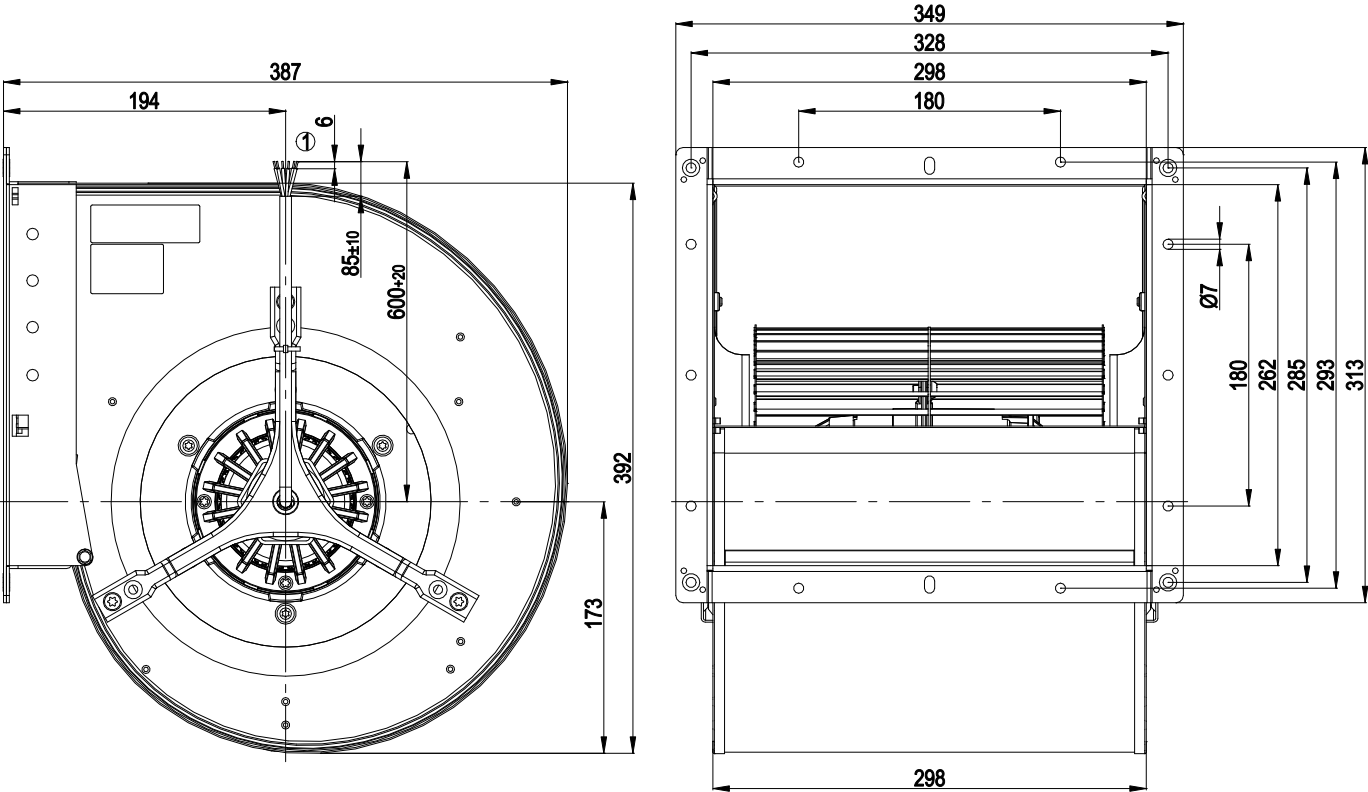
Technical description

Weight	16.88 kg
Size	250 mm
Motor size	94
Rotor surface	Cast in aluminum
Impeller material	Sendzimir galvanized sheet steel
Housing material	Sendzimir galvanized sheet steel
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP20
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
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 switch auto reset, lead out, with basic insulation
With cable	Axial
Protection class assignment	I; If a protective earth is connected. The built-in component has several local protection class assignments. The final protection class is determined by the intended installation.
Motor capacitor according to EN 60252-1 in safety protection class	S0
Conformity with standards	CE
Approval	CCC; EAC

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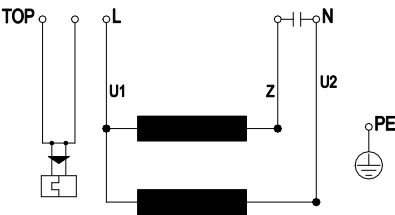
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Product drawing



1 Cable ETFE AWG18, 6x crimped splices

Connection diagram

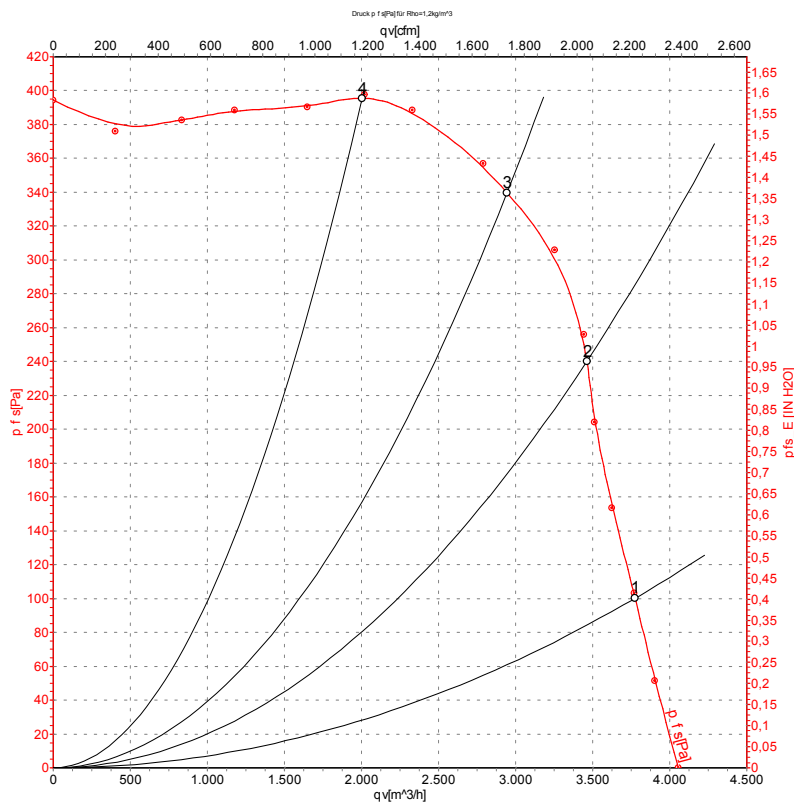


TOP	2x gray	U1	blue	Z	brown
U2	black	PE	green/yellow		

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Curves: Air performance 50 Hz



Measurement: LU-41792-1
Date: 1999-11-17

Air performance measured according to ISO 5801 installation category B. 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

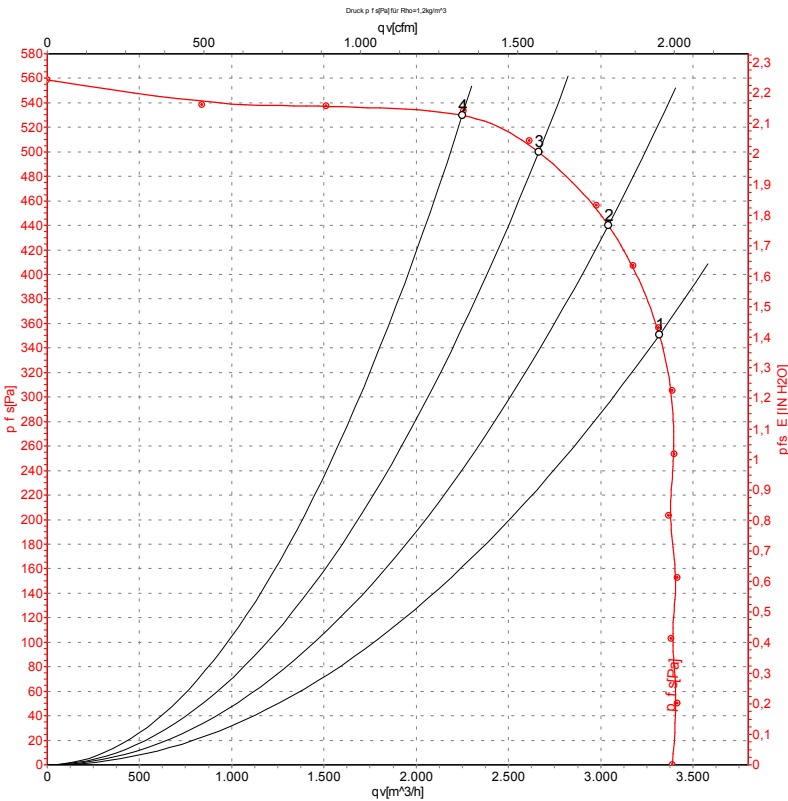
	U	f	n	P_e	I	q_v	p_{fs}	q_v	p_{fs}
	V	Hz	min ⁻¹	W	A	m³/h	Pa	cfm	in. wg
1	230	50	1200	1250	6.00	3770	100	2220	0.40
2	230	50	1280	1073	5.18	3460	240	2040	0.96
3	230	50	1350	843	4.18	2945	340	1735	1.36
4	230	50	1420	598	3.26	2005	400	1180	1.61

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

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Curves: Air performance 60 Hz



Measurement: LU-41793-1
Date: 1999-11-17

Air performance measured according to ISO 5801 installation category B. 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 _e	I	q _V	p _{fs}	q _V	p _{fs}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa	cfm	in. wg
1	230	60	1400	1285	5.90	3310	350	1950	1.41
2	230	60	1515	1137	5.07	3040	440	1790	1.77
3	230	60	1590	1002	4.40	2665	500	1570	2.01
4	230	60	1650	870	3.78	2250	530	1325	2.13

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