

# AC centrifugal fan

forward curved, dual inlet  
with housing (large flange)

D4E250-CA01-06 ebmpapst Datasheet  
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County court Stuttgart · HRA 590344

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County court Stuttgart · HRB 590142



## Nominal data

Type	D4E250-CA01-06		
Motor	M4E094-LA		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		ml	ml
Valid for approval / standard		CE	CE
Speed	min <sup>-1</sup>	1200	1400
Power input	W	1250	1285
Current draw	A	6	5.9
Motor capacitor	µF	14	14
Capacitor voltage	VDB	500	500
Min. back pressure	Pa	100	350
Max. ambient temperature	°C	40	40

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit  
Subject to alterations

## Data according to ErP directive

		Actual	Request 2013	Request 2015
Installation category	B			
Efficiency category	Total			
Variable speed drive	No			
Specific ratio <sup>*</sup>	1.00			
Overall efficiency $\eta_e$		43.5	34.6	41.6
Efficiency grade N		50.9	42	49
Power input $P_e$	kW	0.68		
Air flow $q_v$	m <sup>3</sup> /h	2440		
Pressure increase $p_f$	Pa	444		
Speed n	min <sup>-1</sup>	1395		

Data established at point of optimum efficiency

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



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## Technical features

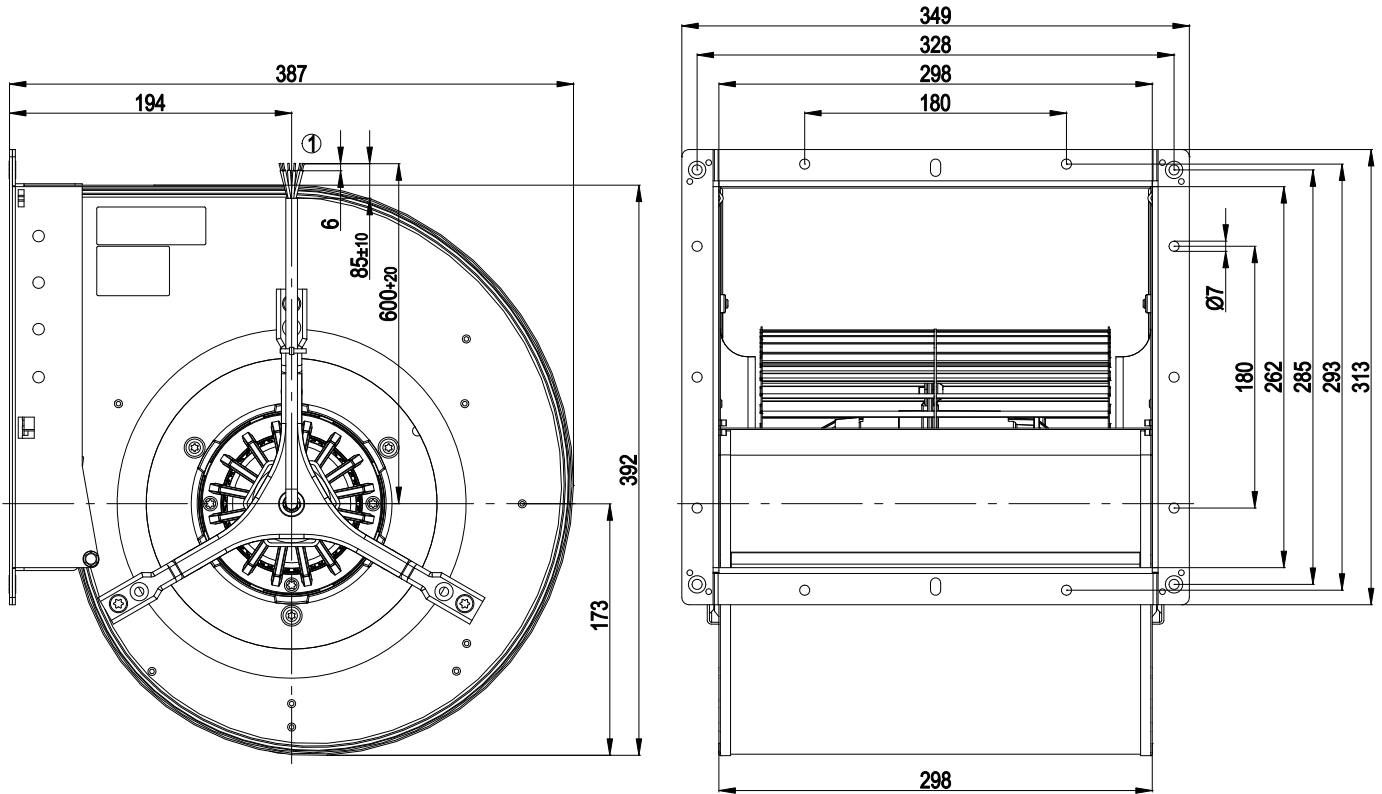
Mass	17.8 kg
Size	250 mm
Surface of rotor	Cast in aluminium
Material of impeller	Sheet steel, hot-dip galvanised
Housing material	Sheet steel, hot-dip galvanised
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 20
Insulation class	"F"
Humidity class	F0
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) brought out
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60034-1 (2004); CE
Approval	UL 1004-1; CSA C22.2 Nr.100



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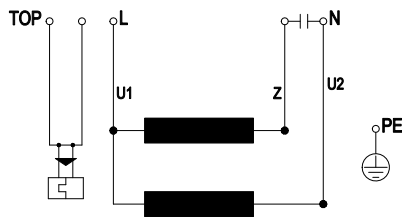
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## Product drawing



1 Connection line PFA, 6x brass lead tips crimped

## Connection screen



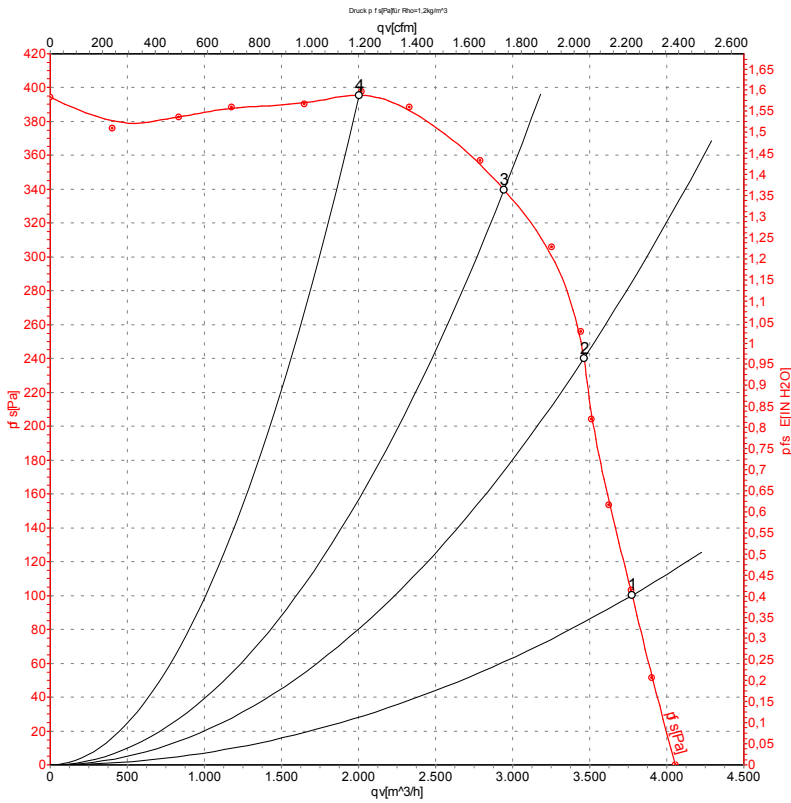
TOP	2 x grey	U1	blue	Z	brown
U2	black	PE	green / yellow		



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## Charts: Air flow 50 Hz



Measurement: LU-41792

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

## Measured values

	U	f	n	P <sub>e</sub>	I	qv	P <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa
1	230	50	1200	1250	6.00	3770	100
2	230	50	1280	1073	5.18	3460	240
3	230	50	1350	843	4.18	2945	340
4	230	50	1420	598	3.26	2005	400

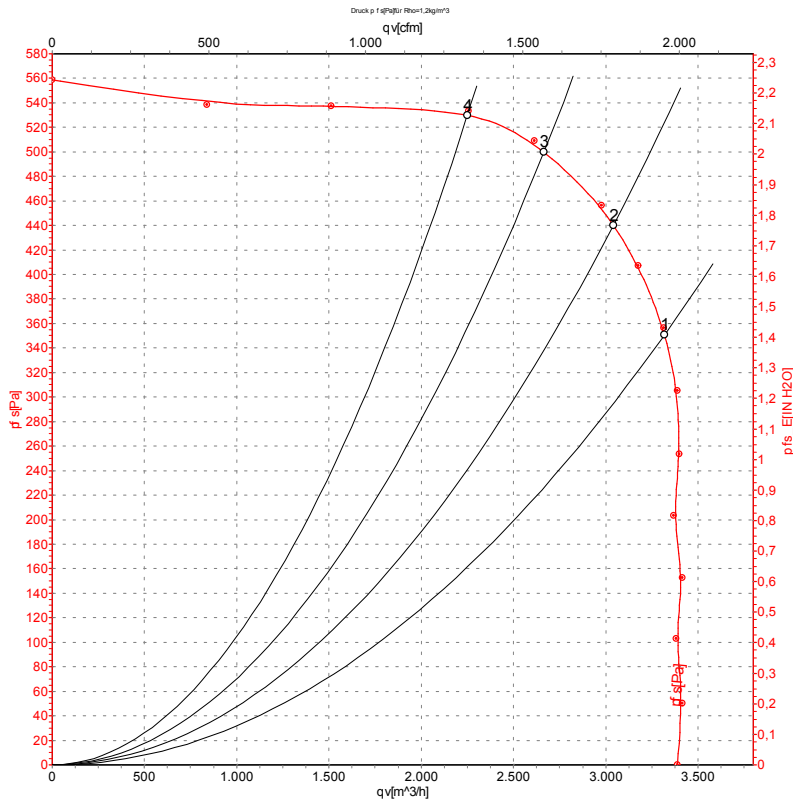
U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · qv = Air flow · P<sub>fs</sub> = Pressure increase



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## Charts: Air flow 60 Hz



Measurement: LU-41793

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

## Measured values

	U	f	n	P <sub>e</sub>	I	qv	P <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa
1	230	60	1400	1285	5.90	3310	350
2	230	60	1515	1137	5.07	3040	440
3	230	60	1590	1002	4.40	2665	500
4	230	60	1650	870	3.78	2250	530

U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · qv = Air flow · P<sub>fs</sub> = Pressure increase

