

D4E250-CA01-01

# AC centrifugal fan

forward curved, dual inlet  
with housing (large flange)



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## Nominal data

Type	D4E250-CA01-01		
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
Min. ambient temperature	°C	-40	-40
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

Installation category	B
Efficiency category	Total
Variable speed drive	No
Specific ratio*	1.00

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

		Actual	Request 2013	Request 2015
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 definition with optimum efficiency. LUJ-120630  
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.



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## Technical features

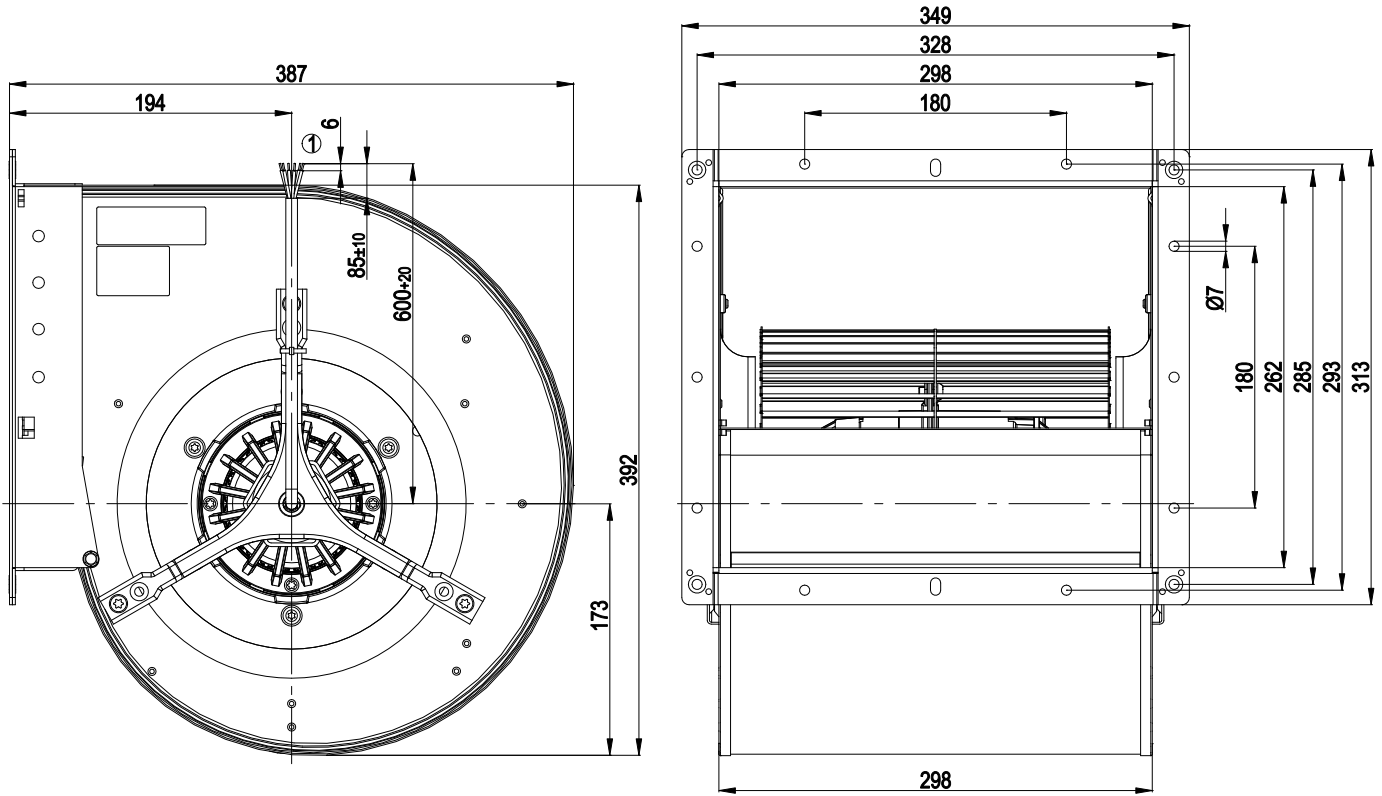
<b>Mass</b>	16.3 kg
<b>Size</b>	250 mm
<b>Surface of rotor</b>	Cast in aluminium
<b>Material of impeller</b>	Sendzimir galvanized sheet steel
<b>Housing material</b>	Sendzimir galvanized sheet steel
<b>Direction of rotation</b>	Clockwise, seen on rotor
<b>Type of protection</b>	IP 20
<b>Insulation class</b>	"F"
<b>Humidity class</b>	F0
<b>Max. permissible ambient motor temp. (transp./ storage)</b>	+ 80 °C
<b>Min. permissible ambient motor temp. (transp./storage)</b>	- 40 °C
<b>Mounting position</b>	Any
<b>Condensate discharge holes</b>	None
<b>Operation mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)</b>	<= 3.5 mA
<b>Motor protection</b>	Thermal overload protector (TOP) brought out
<b>Cable exit</b>	Axial
<b>Protection class</b>	I (if protective earth is connected by customer)
<b>Product conforming to standard</b>	CE
<b>Approval</b>	CCC; EAC



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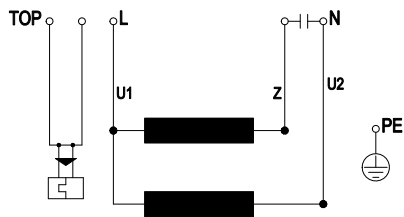
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## Product drawing



1 Connection line ETFE AWG18, 6 x brass lead tips crimped

## Connection screen



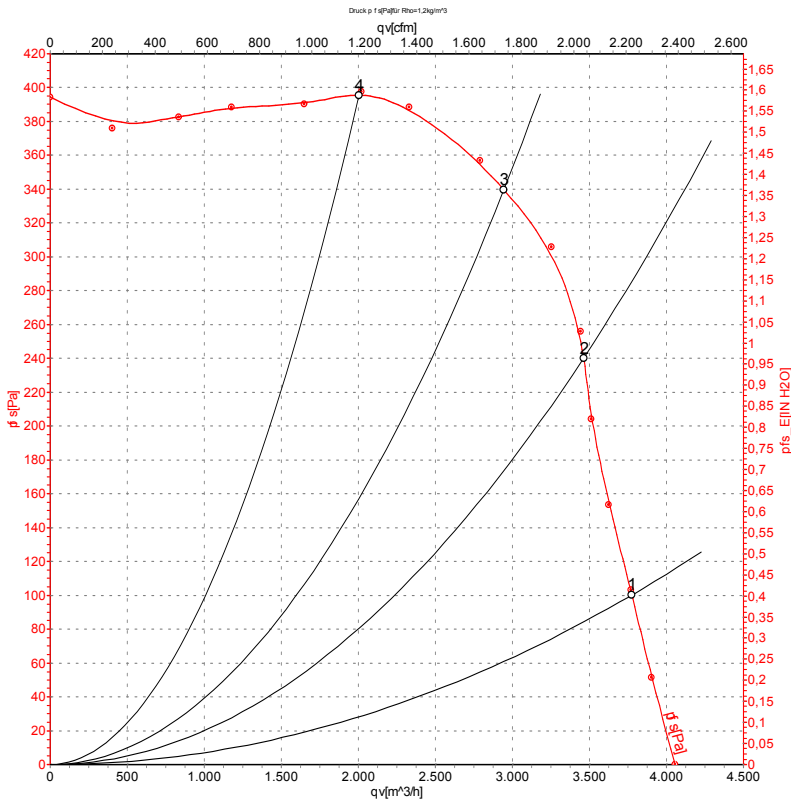
TOP	2 x grey	U1	blue	Z	brown
U2	black	PE	green / yellow		



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## Charts: Air flow 50 Hz



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: L<sub>WA</sub> measured as per ISO 13347 / L<sub>pA</sub> 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	m³/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

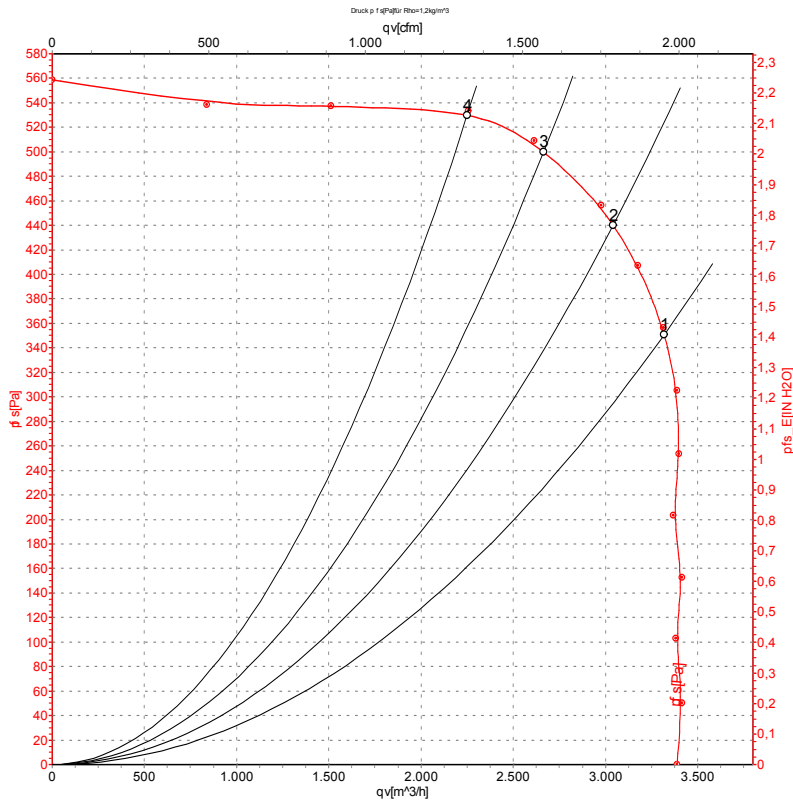
U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · qv = Air flow · P<sub>fs</sub> = Pressure increase



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## Charts: Air flow 60 Hz



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: L<sub>wA</sub> measured as per ISO 13347 / L<sub>pA</sub> 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

