

AC centrifugal fan

forward curved, dual inlet
with housing (large flange)

D4E225-CC01-39 ebmpapst Datasheet
sales@fansco.com
www.fansco.com

Limited partnership · Headquarters Muldingen
County court Stuttgart · HRA 590344

General partner Elektrobau Muldingen GmbH · Headquarters Muldingen
County court Stuttgart · HRB 590142



Nominal data

Type	D4E225-CC01-39		
Motor	M4E074-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 ⁻¹	1210	1300
Power input	W	540	625
Current draw	A	2.4	2.75
Motor capacitor	µF	16	16
Capacitor voltage	VDB	400	400
Capacitor standard		P2 (CE)	P2 (CE)
Min. back pressure	Pa	250	300
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	30	30

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 η_e	36.5	33.9	40.9
Efficiency grade N	44.6	42	49
Power input P_e	kW	0.53	
Air flow q_v	m ³ /h	1965	
Pressure increase p_f	Pa	361	
Speed n	min ⁻¹	1335	

Data definition with optimum efficiency.



AC centrifugal fan

forward curved, dual inlet
with housing (large flange)

Technical features

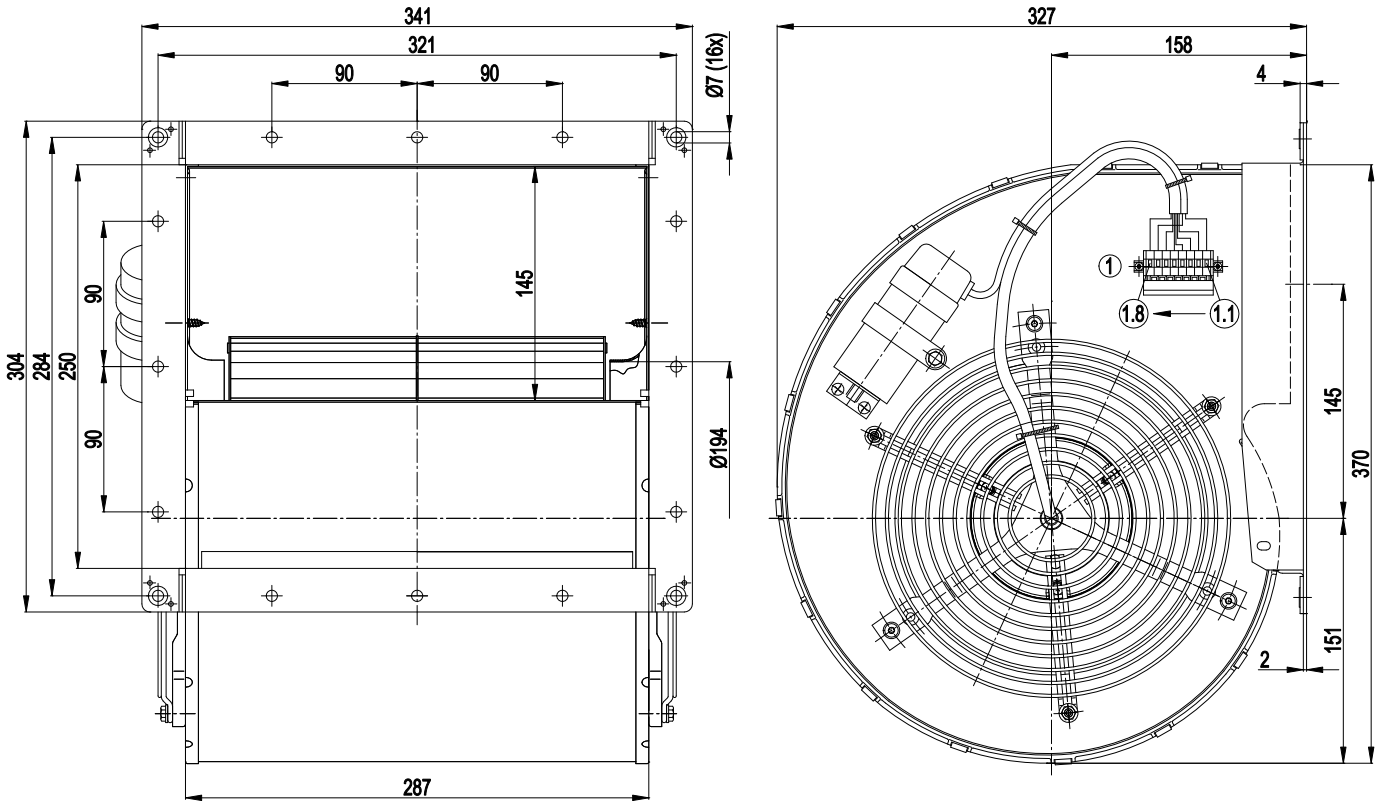
Mass	13.4 kg
Size	225 mm
Surface of rotor	Coated in black
Material of impeller	Sheet steel, galvanised
Housing material	Sheet steel, galvanised
Material of guard grille	Steel, galvanised and plastic-coated in white aluminium (RAL 9006)
Motor suspension	Motor anti-vibration mounted on both sides
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 22
Insulation class	"B"
Humidity class	F2-1
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)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) brought out
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	CSA C22.2 Nr.100; UL 1004-1; CCC



AC centrifugal fan

forward curved, dual inlet
with housing (large flange)

Product drawing



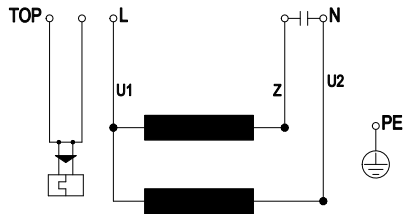
1	Connection line with connector housing WAGO 231-608/019-000
1.1	Capacitor
1.2	Z
1.3	U1
1.4	TOP
1.5	PE
1.6	TOP
1.7	Capacitor
1.8	U2



AC centrifugal fan

forward curved, dual inlet
with housing (large flange)

Connection screen



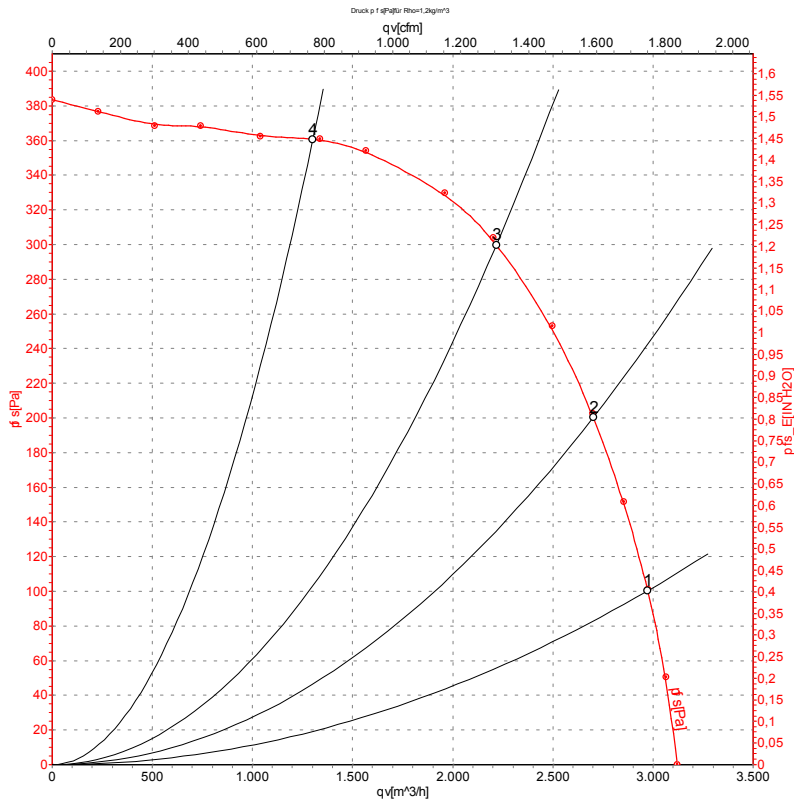
TOP	2 x grey	U1	blue	Z	brown
U2	black	PE	green / yellow		



AC centrifugal fan

forward curved, dual inlet
with housing (large flange)

Charts: Air flow 50 Hz



Measurement: LU-35314

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 _e	I	qv	P _{fs}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa
1	230	50	1150	783	3.42	2975	100
2	230	50	1195	689	3.05	2700	200
3	230	50	1300	581	2.65	2215	300
4	230	50	1395	445	2.15	1300	360

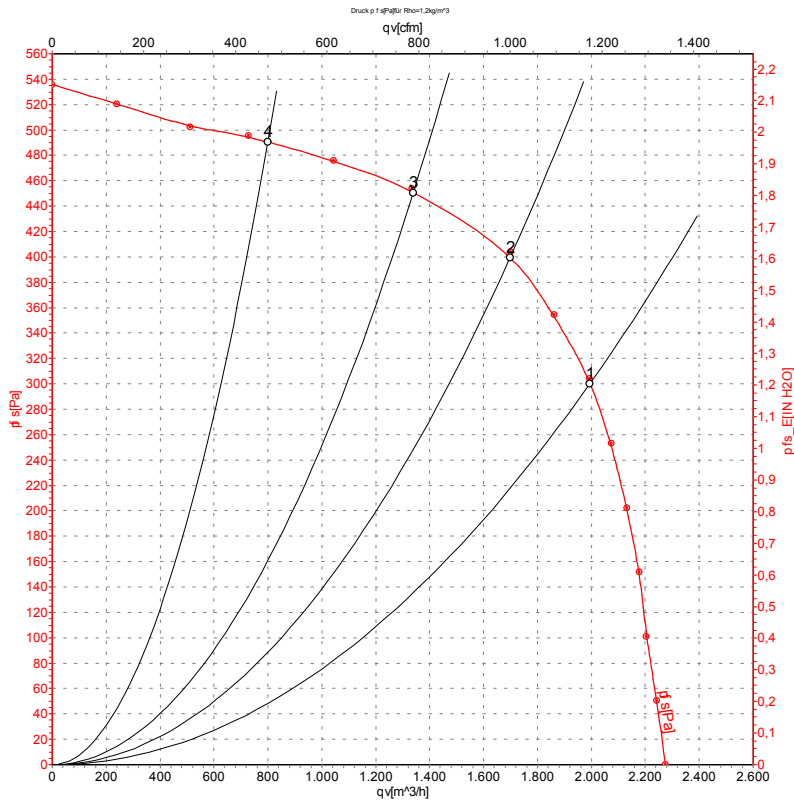
U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · P_{fs} = Pressure increase



AC centrifugal fan

forward curved, dual inlet
with housing (large flange)

Charts: Air flow 60 Hz



Measurement: LU-35316

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_{WA} measured as per ISO 13347 / L_{pA} 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 _e	I	qv	P _{fs}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa
1	230	60	1300	646	2.81	1995	300
2	230	60	1465	553	2.43	1700	400
3	230	60	1565	474	2.13	1340	450
4	230	60	1645	390	1.83	800	490

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · P_{fs} = Pressure increase

