D2E160-GL07-01

AC centrifugal fan

forward curved, dual inlet

with housing (large flange)

ebm-papst Mulfingen GmbH & Co. KG
Bachmühle 2 · D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com
www.ebmpapst.com

Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344

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

ErP2013 EXCEEDS THE NORM

Nominal data

Type	**D2E160-GL07-01**	
Motor	**M2E074-HA**	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Type of data definition		ml
Valid for approval / standard		CE
Speed	min^{-1}	1700
Power input	W	470
Current draw	A	2.06
Motor capacitor	µF	12
Capacitor voltage	VDB	400
Capacitor standard		P2 (CE)
Min. back pressure	Pa	100
Max. ambient temperature	°C	50

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	A
Efficiency category	Static
Variable speed drive	No
Specific ratio*	1.01

* Specific ratio = 1 + p_{fs} / 100 000 Pa

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}		32.3	27.9	34.9
Efficiency grade N		41.4	37	44
Power input P_e	kW	0.36		
Air flow q_v	m^3/h	905		
Pressure increase p_{fs}	Pa	478		
Speed n	min^{-1}	2520		

Data established at point of optimum efficiency

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Technical features

Mass	6.5 kg
Size	160 mm
Surface of rotor	Partially cast in aluminium
Material of terminal box	PP plastic, black
Material of impeller	Sheet steel, hot-galvanised
Housing material	PP plastic, black
Motor suspension	Motor mounted vibration-free on both sides
Direction of rotation	Counter-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, open rotor
Operation mode	S1
Motor bearing	Ball bearing
Speed steps	4
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Electrical leads	Via terminal box, integrated capacitor connected via terminal box; With plug
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE

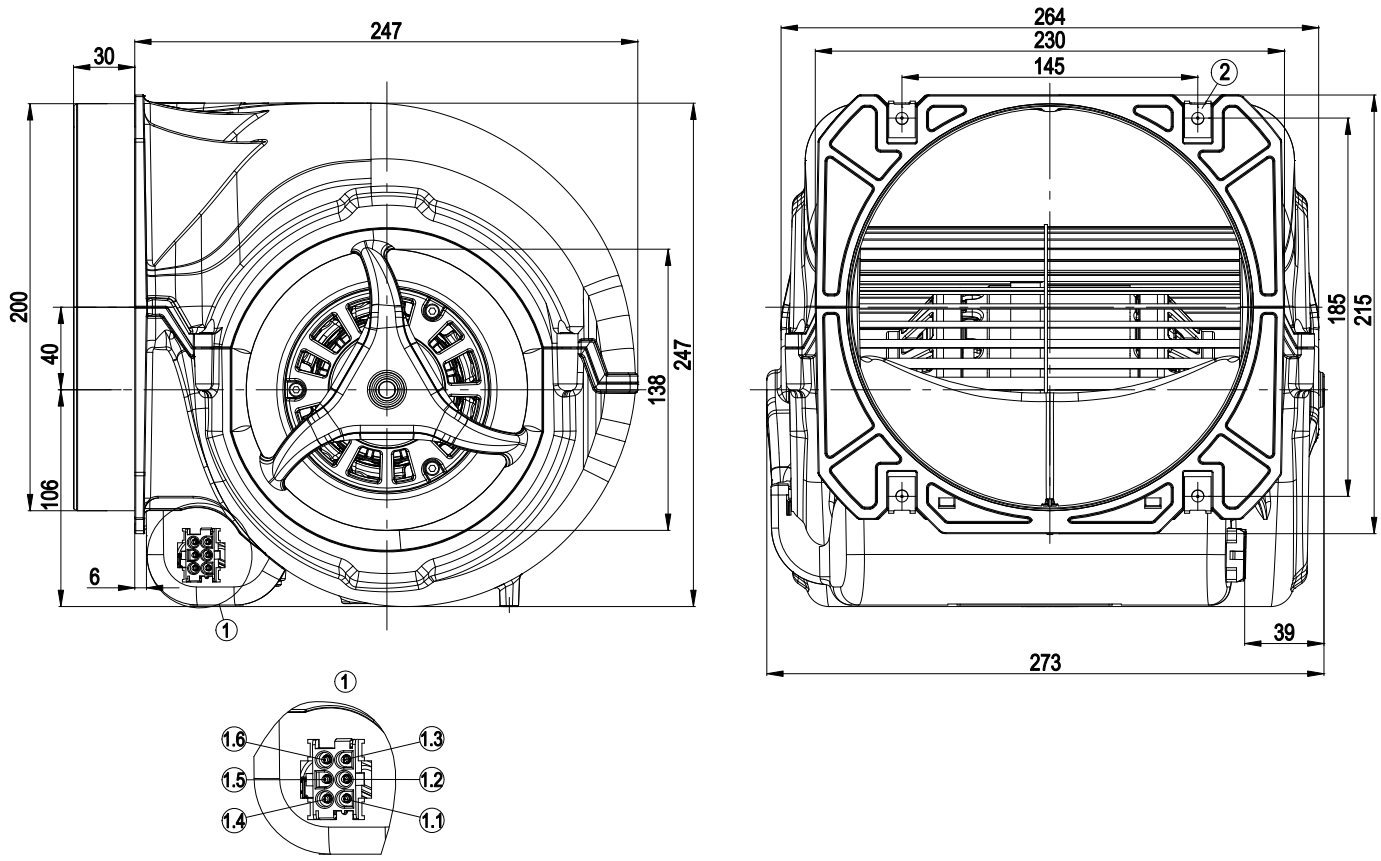
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Product drawing



1	AMP Universal Mate-N-Lok coded plug system; connector shell: AMP 926 682-3; 6x plug pin: AMP 926 886-1
1.1	L = step 1 (min.)
1.2	L = step 2
1.3	L = stage 3
1.4	L = step 4 (max.)
1.5	N
1.6	Protective earth
2	4x sheet metal nut for thread EN ISO 1478-ST4.8 (min. screw length 14.5 mm plus thickness of mounting material)

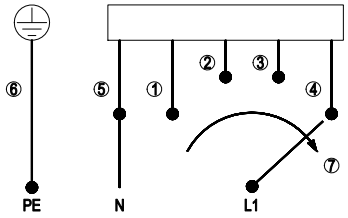
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Connection screen



When changing speeds, switch must break the circuit

1	Step 1 (min.)	2	Step 2	3	Step 3
4	Step 4 (max.)	5	N	6	PE protective earth
7	Speed increase				

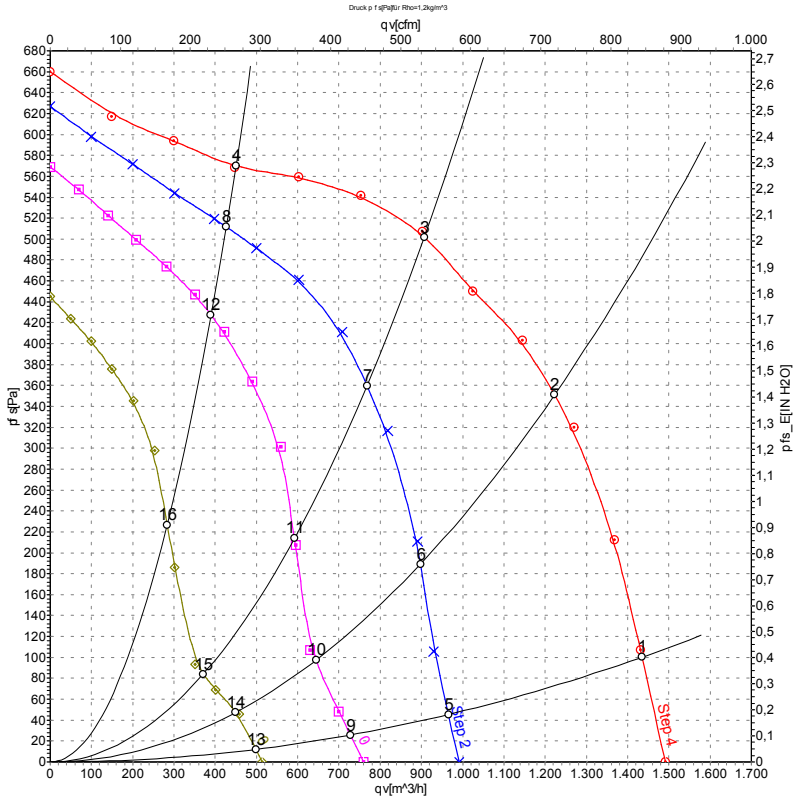
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Charts: Air flow 50 Hz



Measurement: LU-127474
Measurement: LU-127462
Measurement: LU-127463
Measurement: LU-127464

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

	Stage	U	f	n	P_e	I	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa
1	4	230	50	1800	500	2.19	1435	100
2	4	230	50	2170	440	1.94	1225	350
3	4	230	50	2515	371	1.70	905	500
4	4	230	50	2700	309	1.52	450	570
5	3	230	50	1125	378	1.69	965	44
6	3	230	50	1635	352	1.61	900	193
7	3	230	50	2155	295	1.44	770	360
8	3	230	50	2600	210	1.22	425	512
9	2	230	50	870	319	1.44	730	26
10	2	230	50	1170	310	1.41	645	94
11	2	230	50	1690	285	1.34	590	214
12	2	230	50	2380	205	1.11	390	427
13	1	230	50	615	270	1.23	500	12
14	1	230	50	855	260	1.19	450	49
15	1	230	50	1070	256	1.18	370	84
16	1	230	50	1745	226	1.09	285	226

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

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