D2E160-GL21-21

AC centrifugal fan

forward-curved, dual-intake

with housing (flange)



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Nominal data

Type	**D2E160-GL21-21**
Motor	**M2E074-HA**

Phase		1~
Nominal voltage	VAC	120
Frequency	Hz	60
Method of obtaining data		ml
Valid for approval/standard		UL 507
Speed (rpm)	min^{-1}	2000
Power consumption	W	730
Current draw	A	6.1
Capacitor	µF	50
Capacitor voltage	VDB	280
Capacitor standard		UL
Min. back pressure	Pa	200
Min. back pressure	inH2O	0.8
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	55

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

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Technical description

Weight	6.48 kg
Fan size	160 mm
Rotor surface	Partly cast in aluminum
Terminal box material	PP plastic
Impeller material	Sheet steel, galvanized
Housing material	PP plastic
Motor suspension	Motor vibration-damped on both sides
Direction of rotation	Counterclockwise, 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, open rotor
Mode	S1
Motor bearing	Ball bearing
Speed levels	4
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	With plug; Via terminal box, capacitor integrated and connected
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Axial
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S2
Approval	CSA C22.2 No. 113; UL 507

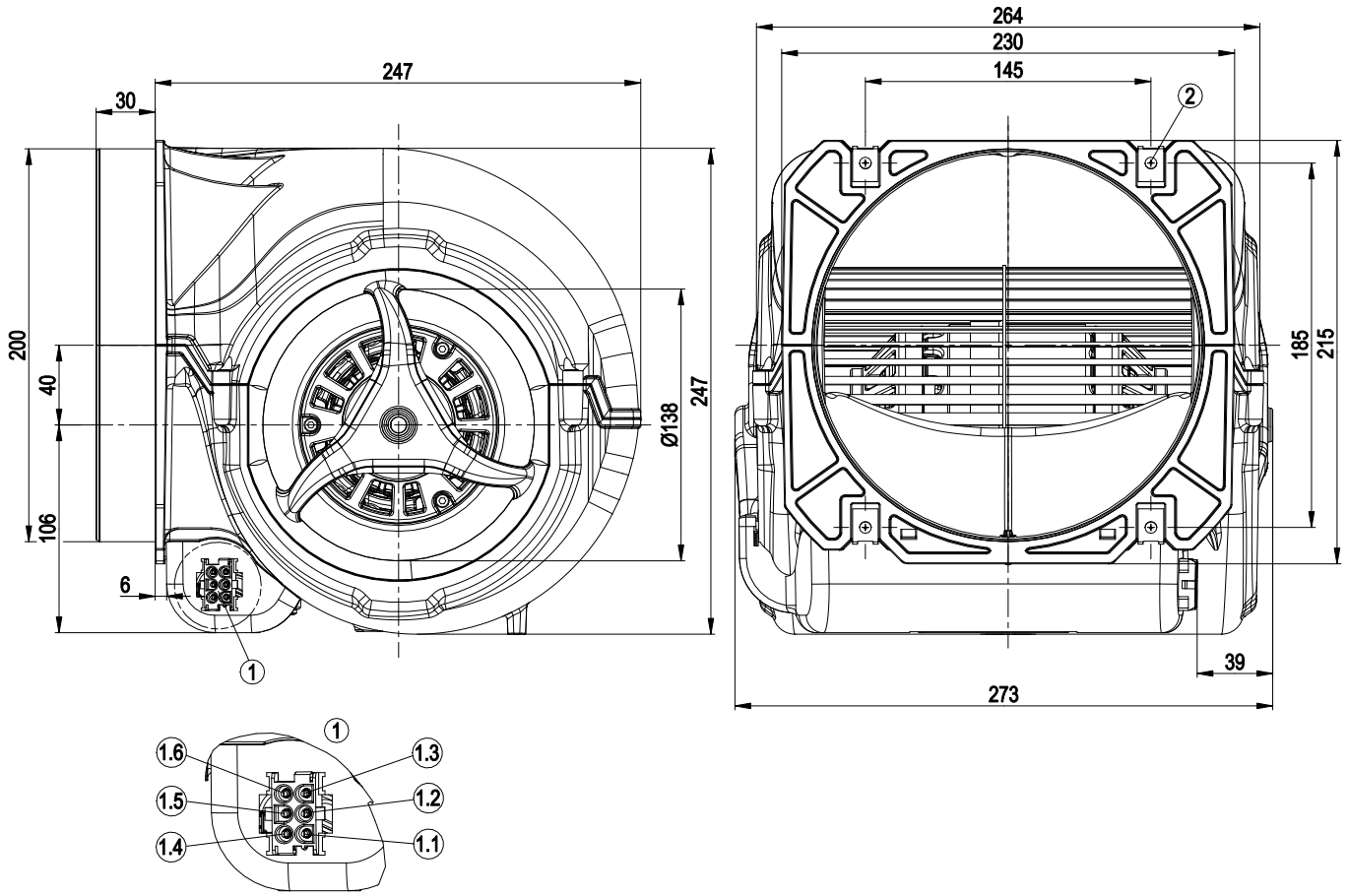
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Product drawing



1	Coded plug system AMP Universal Mate-N-Lok; connector housing: 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 = step 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 material thickness of mounting)

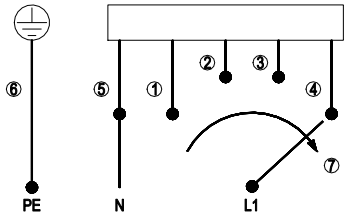
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Connection diagram



The switch must interrupt the circuit when switching.

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

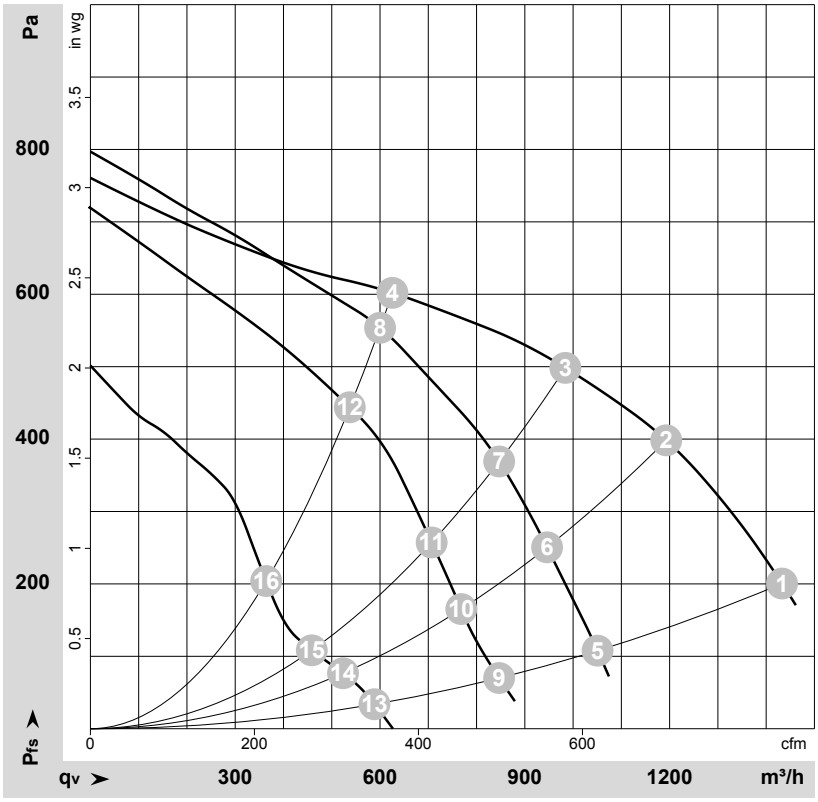
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Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-121638-1
Measurement: LU-121644-1
Measurement: LU-121645-1
Measurement: LU-121647-1

Air performance measured according to ISO 5801 installation category A. 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

	Stage	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	inH2O
1	4	120	60	1990	730	6.10	1435	200	845	0.80
2	4	120	60	2385	723	5.97	1195	400	700	1.61
3	4	120	60	2620	693	5.81	985	500	580	2.01
4	4	120	60	2910	669	5.66	625	600	370	2.41
5	3	120	60	1420	443	4.12	1050	110	620	0.44
6	3	120	60	1905	428	4.11	945	251	555	1.01
7	3	120	60	2270	404	4.06	845	370	500	1.49
8	3	120	60	2810	348	3.97	600	557	355	2.24
9	2	120	60	1180	383	3.60	845	67	500	0.27
10	2	120	60	1575	375	3.59	770	165	450	0.66
11	2	120	60	1910	358	3.56	705	257	415	1.03
12	2	120	60	2505	311	3.46	535	444	315	1.78
13	1	120	60	855	295	2.90	590	35	345	0.14
14	1	120	60	1075	286	2.85	525	77	310	0.31
15	1	120	60	1255	284	2.84	460	108	270	0.43
16	1	120	60	1725	271	2.82	365	204	215	0.82

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

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