D2E140-AU47-01

AC centrifugal fan

forward-curved, dual-intake

with housing (flange)

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Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**D2E140-AU47-01**
Motor	**M2E068-EC**

Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		ml	ml
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	1980	2270
Power consumption	W	250	260
Current draw	A	1.1	1.14
Capacitor	µF	5	5
Capacitor voltage	VDB	400	400
Capacitor standard		S0 (CE)	S0 (CE)
Min. back pressure	Pa	150	300
Min. back pressure	inH2O	0.6	1.2
Max. ambient temperature	°C	40	40

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

Data according to ErP Directive

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	32.6	32.6
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		44	44
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.16
09 Air flow q_v	m^3/h	500
09 Pressure increase p_{fs}	Pa	378
10 Speed (rpm) n	min^{-1}	2535
11 Specific ratio*		1.00

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

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

LU-59924

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Technical description

Weight	5.5 kg
Fan size	140 mm
Rotor surface	Unpainted
Impeller material	Sheet steel, sendzimir galvanized
Housing material	Sheet steel, hot-dip galvanized
Motor suspension	Motor mounted on brackets for one-sided vibration damping
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44
Insulation class	"B"
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
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) internally connected
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE

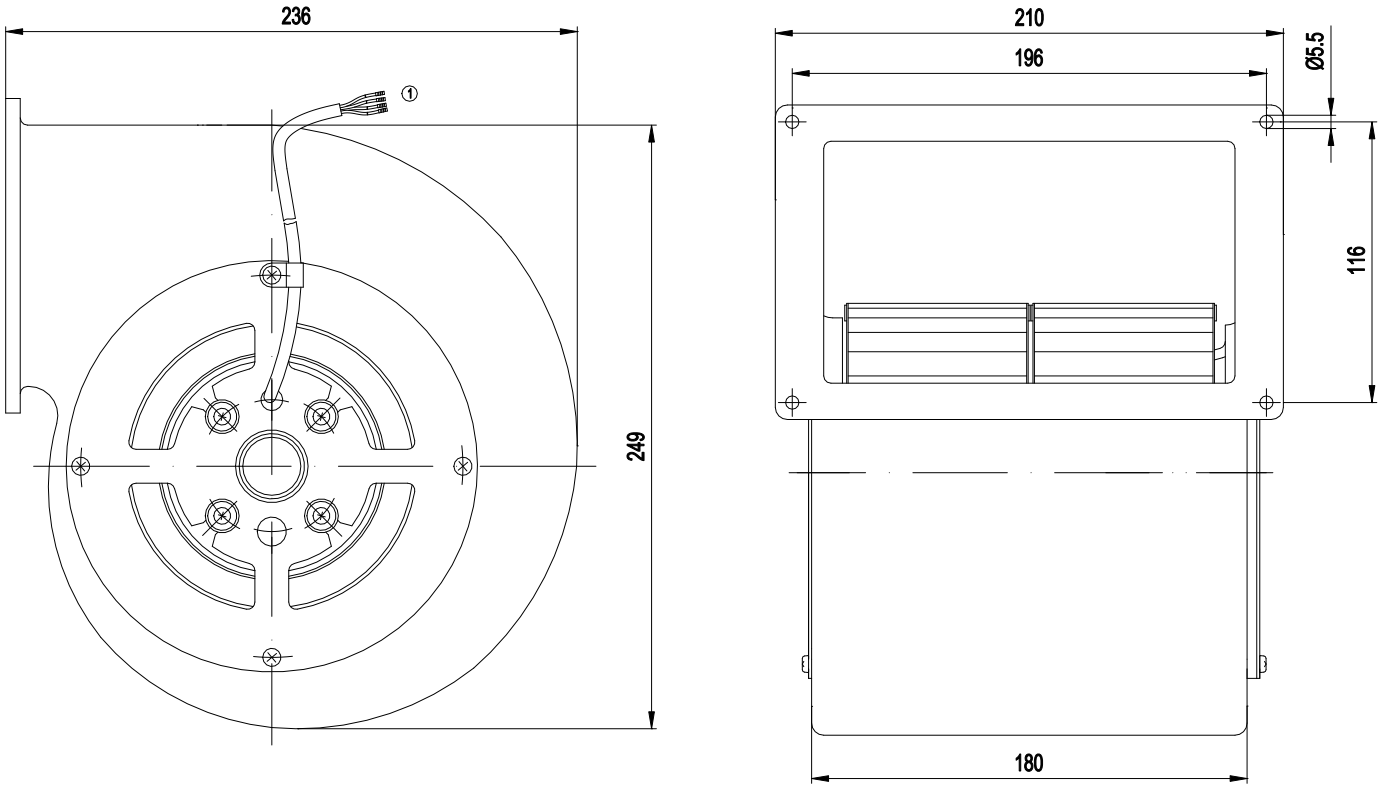
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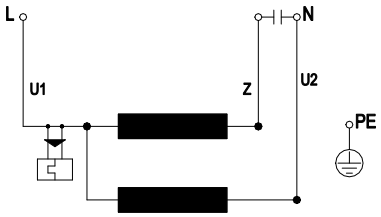
with housing (flange)

Product drawing



1	Cable PVC, 4x crimped splices
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Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				

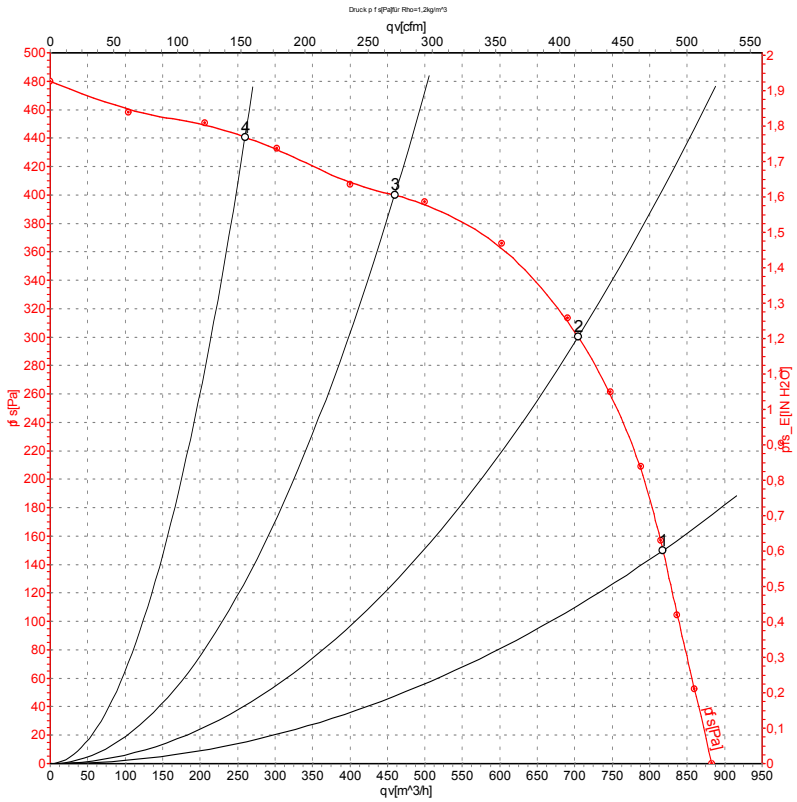
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Curves: Air performance 50 Hz



Measurement: LU-59924-1

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

	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	230	50	1980	250	1.10	820	150	480	0.60
2	230	50	2245	216	0.94	705	300	415	1.20
3	230	50	2555	161	0.70	460	400	270	1.61
4	230	50	2710	128	0.56	260	440	155	1.77

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

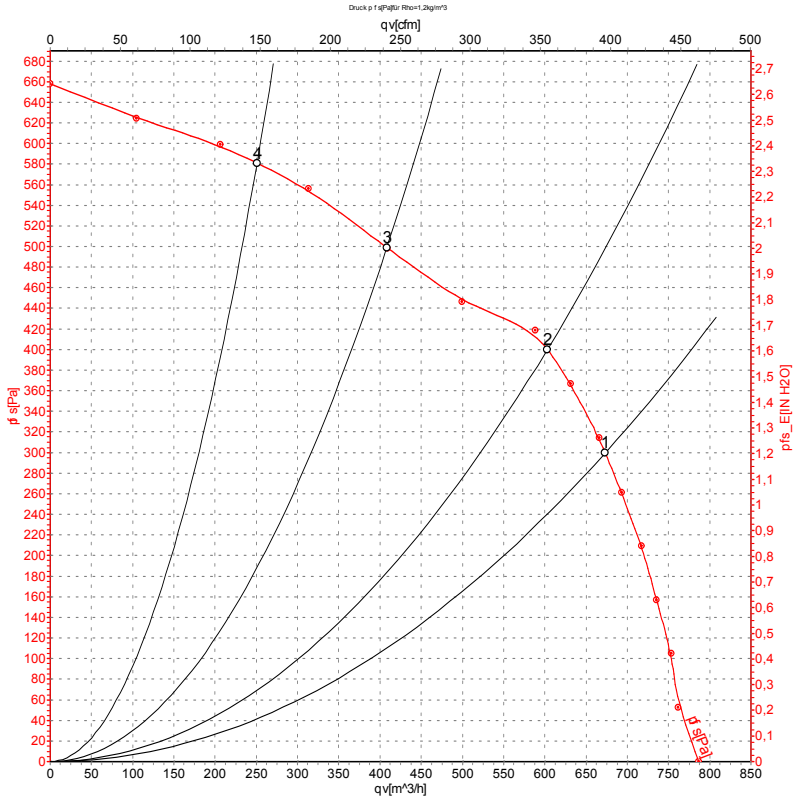
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Curves: Air performance 60 Hz



Measurement: LU-59926-1

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

	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	230	60	2270	260	1.14	675	300	395	1.20
2	230	60	2515	239	1.04	605	400	355	1.61
3	230	60	2830	210	0.91	410	500	240	2.01
4	230	60	3100	170	0.75	250	580	150	2.33

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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