W2E300-CP02-71

AC axial fan

sickle-shaped blades (S series), single-intake

Fan housing with guard grille

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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**W2E300-CP02-71**
Motor	**M2E074-DF**

Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		CE	CE
Speed	min^{-1}	2700	3000
Power consumption	W	230	350
Current draw	A	1.10	1.55
Capacitor	µF	8	8
Capacitor voltage	VDB	400	400
Capacitor standard		P0 (CE)	P0 (CE)
Max. back pressure	Pa	160	50
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	50	30

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}	%	30.9	30.2
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		40.7	40
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.28
09 Air flow q_v	m^3/h	2290
09 Pressure increase p_{fs}	Pa	140
10 Speed n	min^{-1}	2570
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-29177

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Technical description

Weight	5.3 kg
Fan size	300 mm
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Fan housing material	Sheet steel, galvanized and coated with black plastic (RAL 9005)
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	"A"
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F1-2
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor storage	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
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	CSA C22.2 No. 100; UL 1004-1

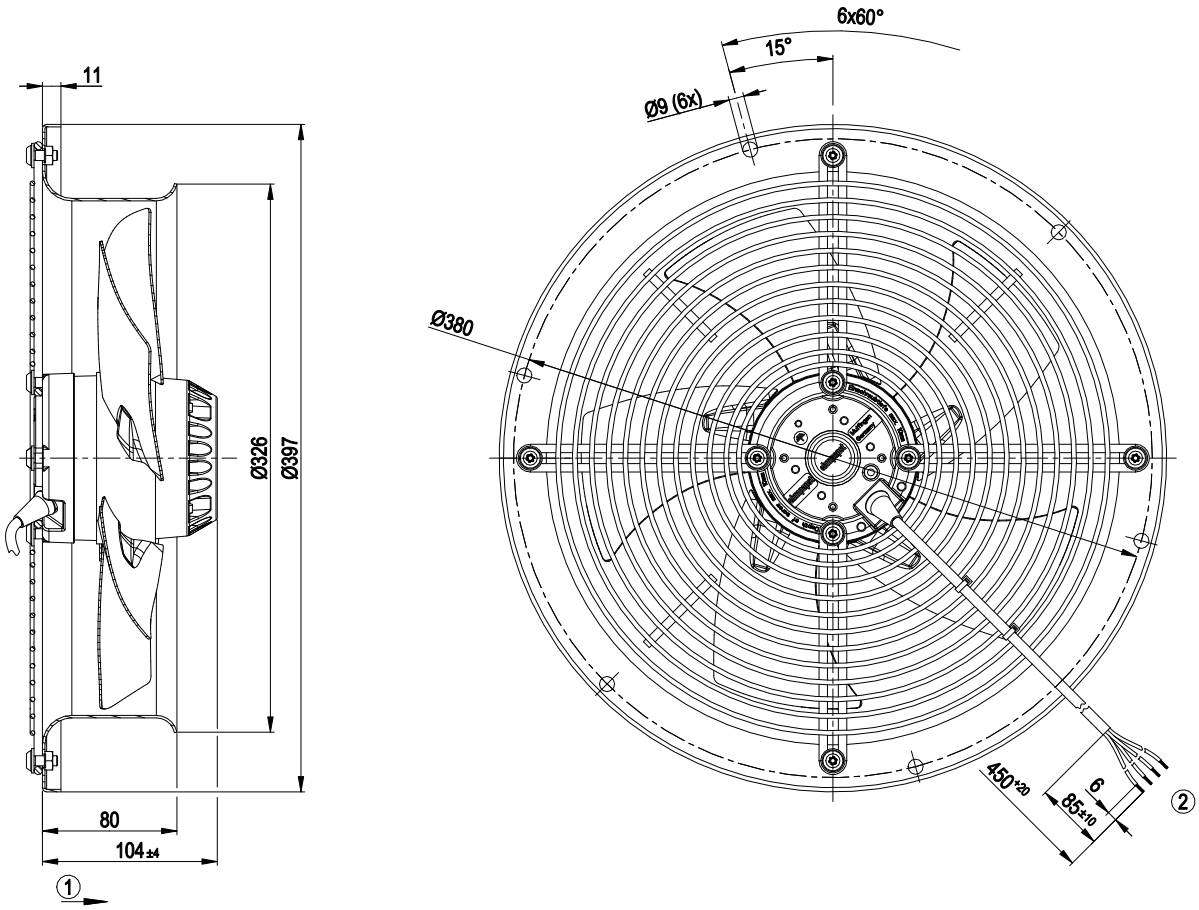
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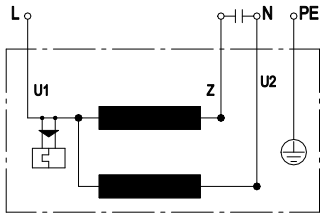
Fan housing with guard grille

Product drawing



1	Direction of air flow "A"
2	Cable PVC 4G AWG20, 4x crimped splices

Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				

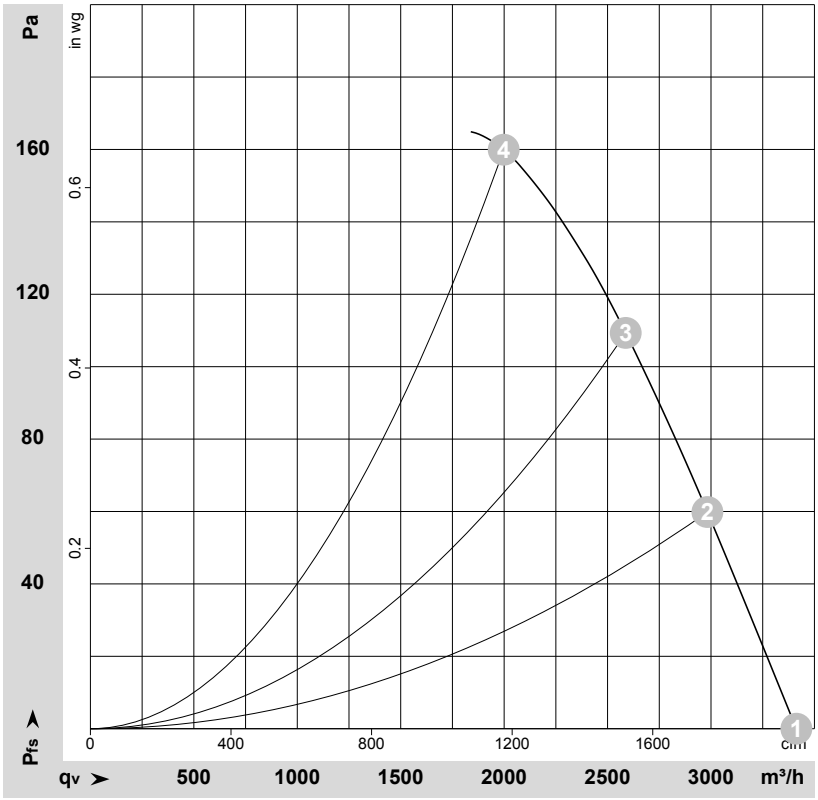
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Fan housing with guard grille

Curves: Air performance 50 Hz



ρ = 1,15 kg/m³ ± 2%

Measurement: LU-29177

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	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	230	50	2700	230	1.10	3415	0
2	230	50	2675	256	1.12	2985	60
3	230	50	2615	275	1.20	2590	110
4	230	50	2540	300	1.31	2000	160

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

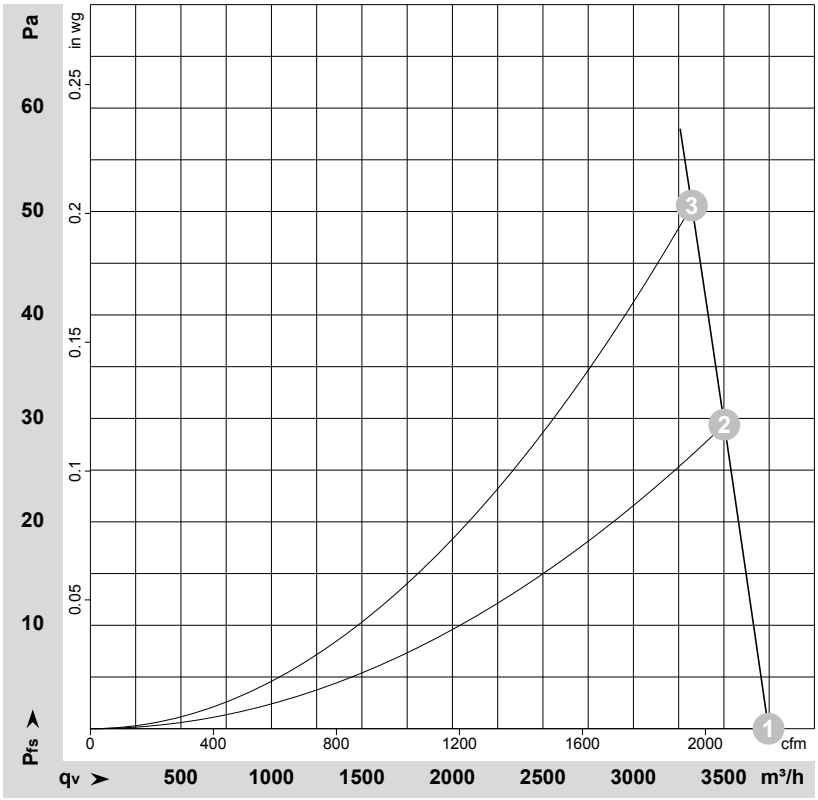
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Curves: Air performance 60 Hz



ρ = 1,15 kg/m³ ± 2%

Measurement: LU-29105

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	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	230	60	3000	350	1.55	3745	0
2	230	60	2930	357	1.58	3500	30
3	230	60	2875	362	1.60	3325	50

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

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