W2E250-EC01-05

AC axial fan

straight blades (A series)

Fan housing with guard grille

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Nominal data

Type	**W2E250-EC01-05**
Motor	**M2E068-EC**

Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		-	-
Speed (rpm)	min^{-1}	2650	2900
Power consumption	W	160	210
Current draw	A	0.70	0.92
Capacitor	µF	5	5
Capacitor voltage	VDB	400	400
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	70	65

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	3.5 kg
Size	250 mm
Motor size	68
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Fan housing material	Sheet steel, pre-galvanized and coated with black plastic (RAL 9005)
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
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
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
With cable	Lateral
Protection class	I (if the protective earth is connected by the customer to the marked PE connection point)
Conformity with standards	EN 60335-1

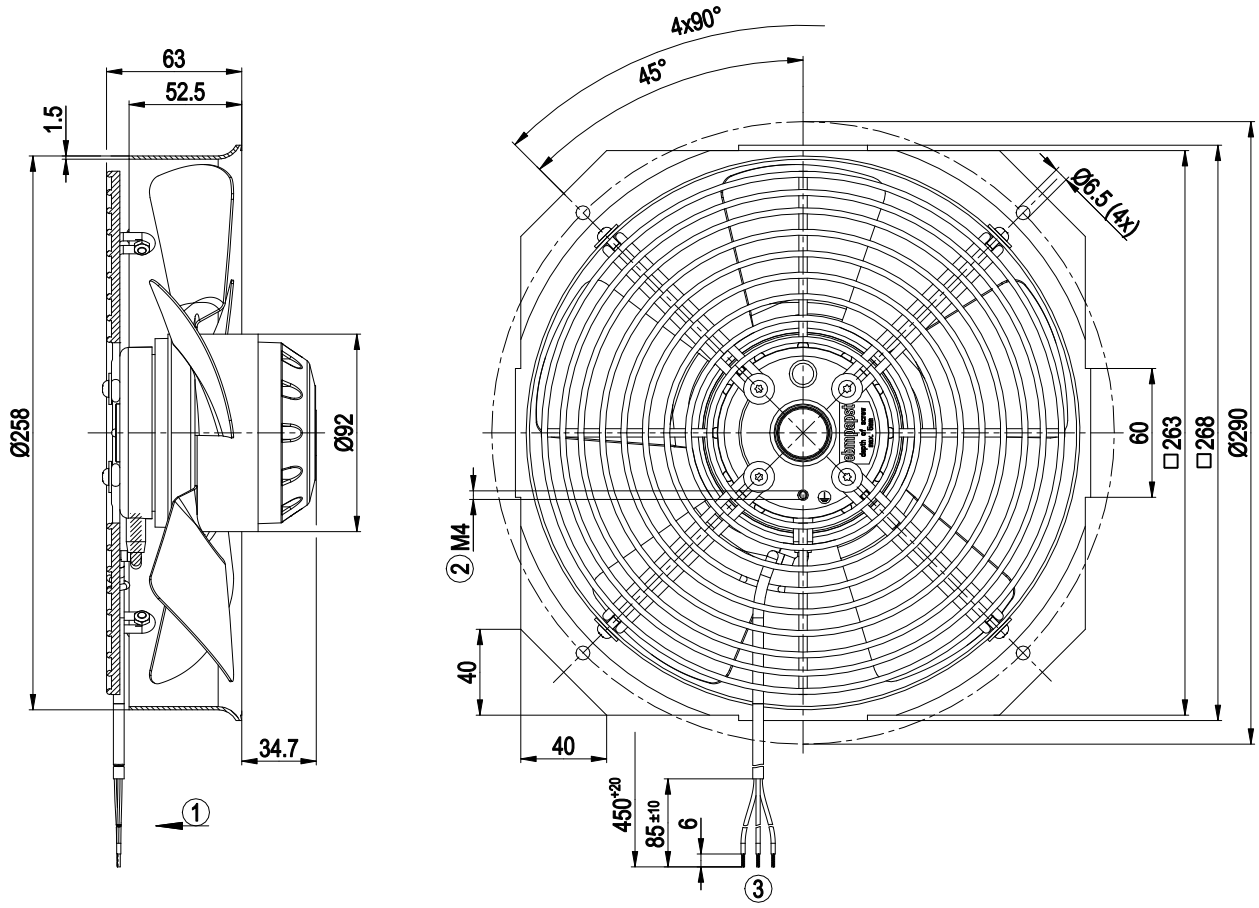
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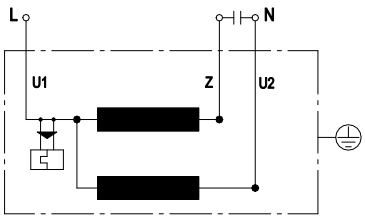
Fan housing with guard grille

Product drawing



1	Airflow direction "V"
2	Max. clearance for screw 5 mm
3	Cable silicone 3x 0.5 mm²
	3x splice

Connection diagram



U1	blue	Z	brown	U2	black

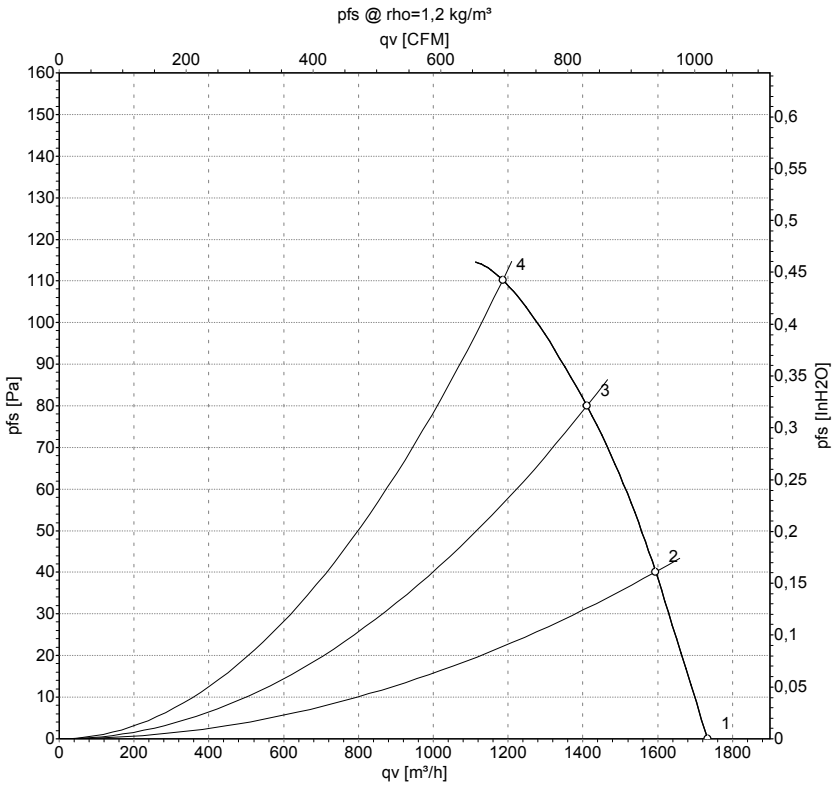
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AC axial fan

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Fan housing with guard grille

Curves: Air performance 50 Hz



Measurement: LU-16452-1

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	in. wg
1	230	50	2650	160	0.70	1735	0	1020	0.00
2	230	50	2610	163	0.71	1595	40	940	0.16
3	230	50	2580	170	0.74	1410	80	830	0.32
4	230	50	2565	172	0.75	1185	110	700	0.44

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

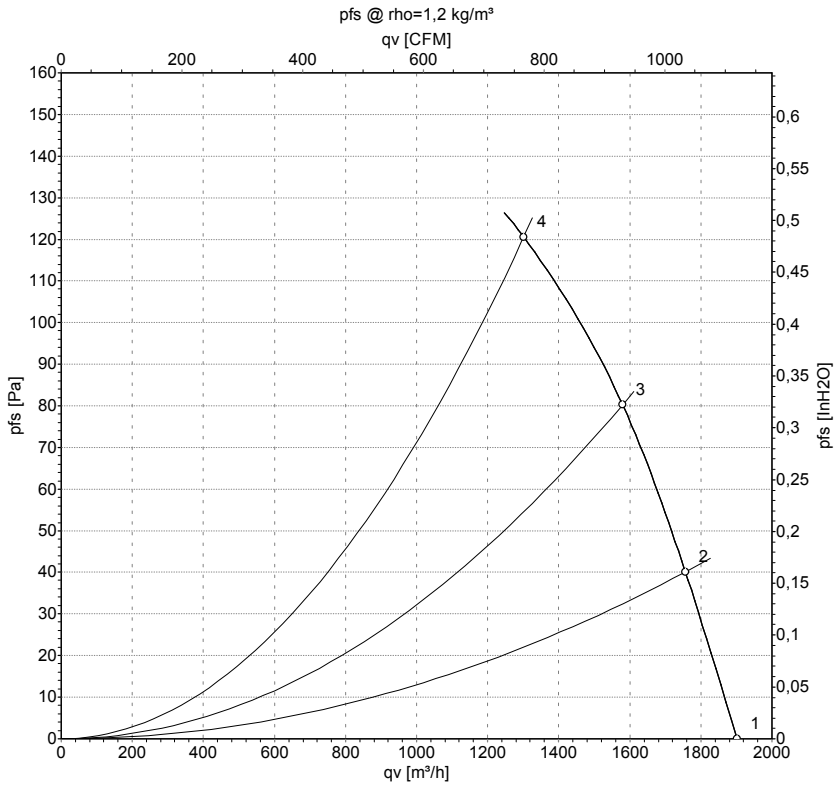
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Fan housing with guard grille

Curves: Air performance 60 Hz



Measurement: LU-16454-1

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	in. wg
1	230	60	2900	210	0.92	1900	0	1120	0.00
2	230	60	2855	227	0.99	1755	40	1035	0.16
3	230	60	2785	235	1.02	1580	80	930	0.32
4	230	60	2735	241	1.05	1300	120	765	0.48

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

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