

R4E225-BK05-03

AC centrifugal fan

forward curved, single inlet

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County court Stuttgart · HRB 590142



Nominal data

Type	R4E225-BK05-03		
Motor	M4E094-FA		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		fa	ml
Valid for approval / standard		CE	CE
Speed	min ⁻¹	1330	1500
Power input	W	395	500
Current draw	A	1.98	2.3
Motor capacitor	µF	6	6
Capacitor voltage	VDB	450	450
Min. back pressure	Pa	0	100
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	70	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 integrated	No
Specific ratio*	1,00

* Specific ratio = $1 + p_{fs} / 100\,000\text{ Pa}$

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}		26,7	26,6	33,6
Efficiency grade N		37,1	37	44
Power input P_e	kW	0,23		
Air flow q_v	m ³ /h	815		
Pressure increase p_{fs}	Pa	275		
Speed n	min ⁻¹	1430		

Data established at point of optimum efficiency



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Technical features

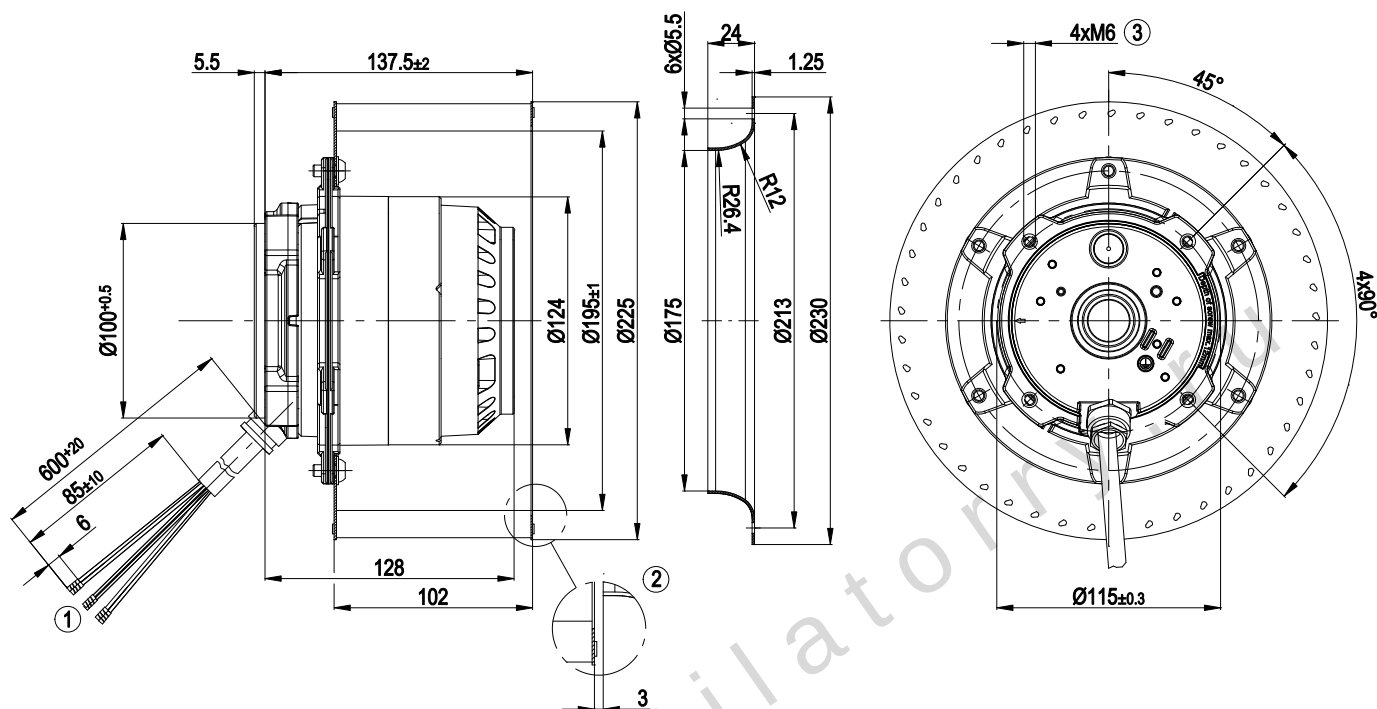
Mass	6.0 kg
Size	225 mm
Surface of rotor	Coated in black
Material of impeller	Sheet steel, hot-dip galvanised
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"F"
Humidity class	F4-1
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Leakage current	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) brought out
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60034-1 (2004); CE
Approval	CCC

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Product drawing



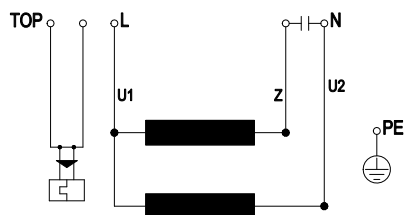
1	Connection line silicone, 6 x brass lead tips crimped
2	Accessory part: Inlet nozzle 09605-2-4013, not included in the standard scope of delivery
3	Depth of screw max. 12 mm

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Connection screen



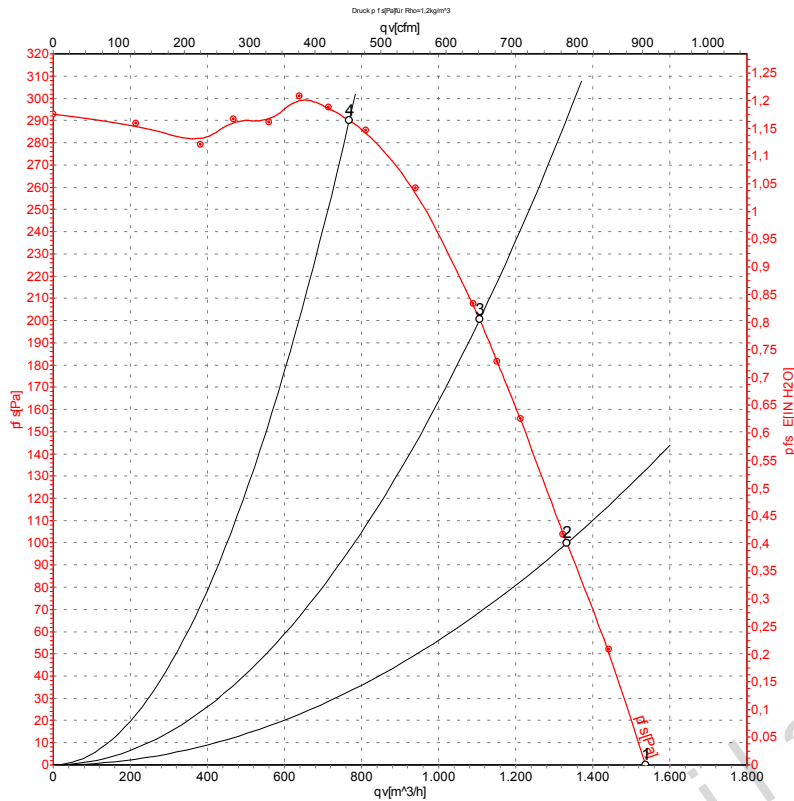
TOP	2 x grey	U1	blue	Z	brown
U2	black	PE	green / yellow		

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Charts: Air flow 50 Hz



Measurement: LU-54520

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

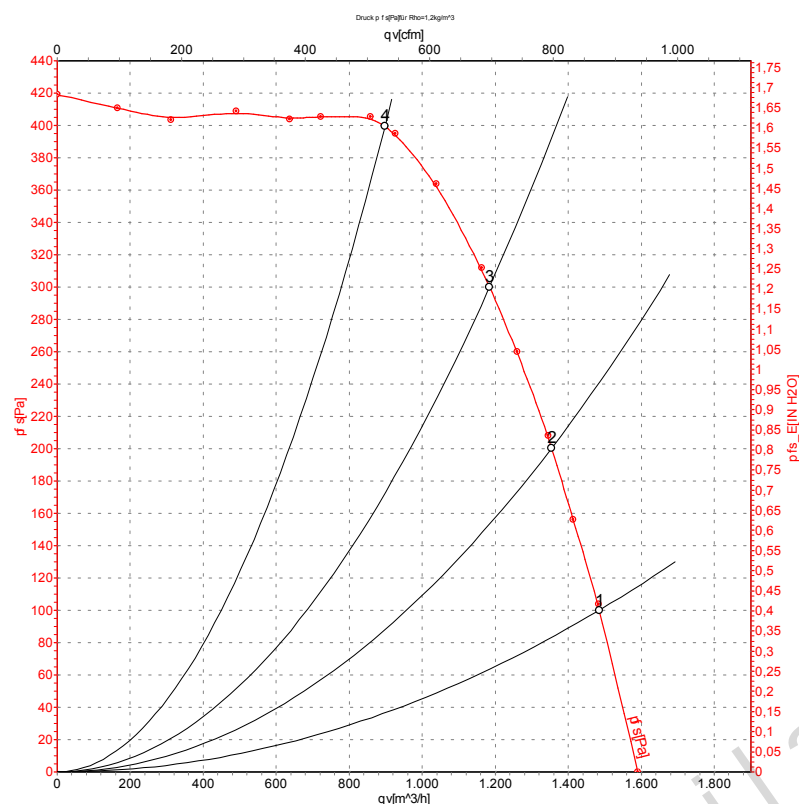
	U	f	n	P _e	I	qv	p _{fs}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa
1	230	50	1330	395	1.98	1535	0
2	230	50	1370	340	1.76	1335	100
3	230	50	1400	290	1.58	1105	200
4	230	50	1435	225	1.39	770	290

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Charts: Air flow 60 Hz



Measurement: LU-54523

Air performance measured as per ISO 5801
Installation category A. For detailed
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contact ebm-papst. Suction-side noise
levels: L_{WA} measured as per ISO 13347 /
L_{pA} 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

	U	f	n	P _e	I	qv	p _{fs}
	V	Hz	min ⁻¹	W	A	m³/h	Pa
1	230	60	1500	500	2.30	1485	100
2	230	60	1560	443	2.00	1355	200
3	230	60	1615	383	1.71	1185	300
4	230	60	1680	303	1.35	900	400