

R2E133-BH66-31

# AC centrifugal fan

backward-curved



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## Nominal data

Type	R2E133-BH66-31		
Motor	M2E052-BF		
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 (rpm)	min <sup>-1</sup>	2800	3300
Power consumption	W	24	27
Current draw	A	0.11	0.13
Capacitor	µF	1	1
Capacitor voltage	VDB	400	400
Capacitor standard		S0 (CE)	S0 (CE)
Min. back pressure	Pa	0	0
Min. back pressure	in. wg	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	50	60
Starting current	A	0.20	0.21

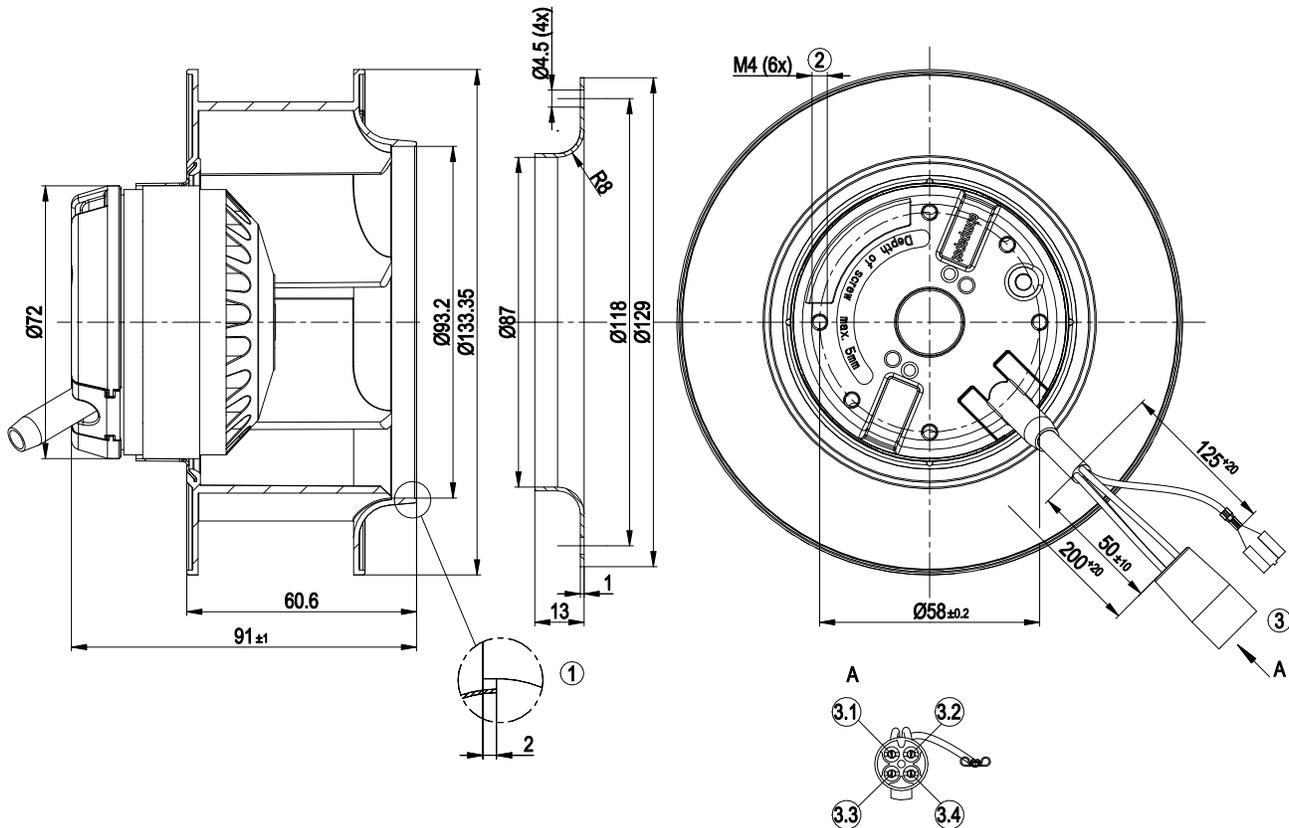
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment  
Subject to change



### Technical description

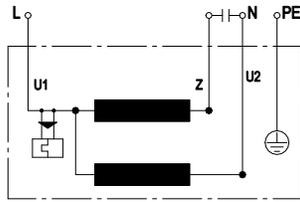
<b>Weight</b>	0.7 kg
<b>Fan size</b>	133 mm
<b>Impeller material</b>	PA plastic
<b>Number of blades</b>	7
<b>Direction of rotation</b>	Clockwise, viewed toward rotor
<b>Degree of protection</b>	IP44; installation- and position-dependent
<b>Insulation class</b>	"B"
<b>Max. permitted ambient temp. for motor (transport/storage)</b>	+ 80 °C
<b>Min. permitted ambient temp. for motor (transport/storage)</b>	- 40 °C
<b>Installation position</b>	Any
<b>Condensation drainage holes</b>	None
<b>Mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)</b>	< 0.75 mA
<b>Motor protection</b>	Thermal overload protector (TOP) internally connected
<b>With cable</b>	Variable
<b>Protection class</b>	I (with customer connection of protective earth)
<b>Conformity with standards</b>	EN 60335-1; CE
<b>Approval</b>	UL 1004-3; CSA C22.2 No. 77

## Product drawing



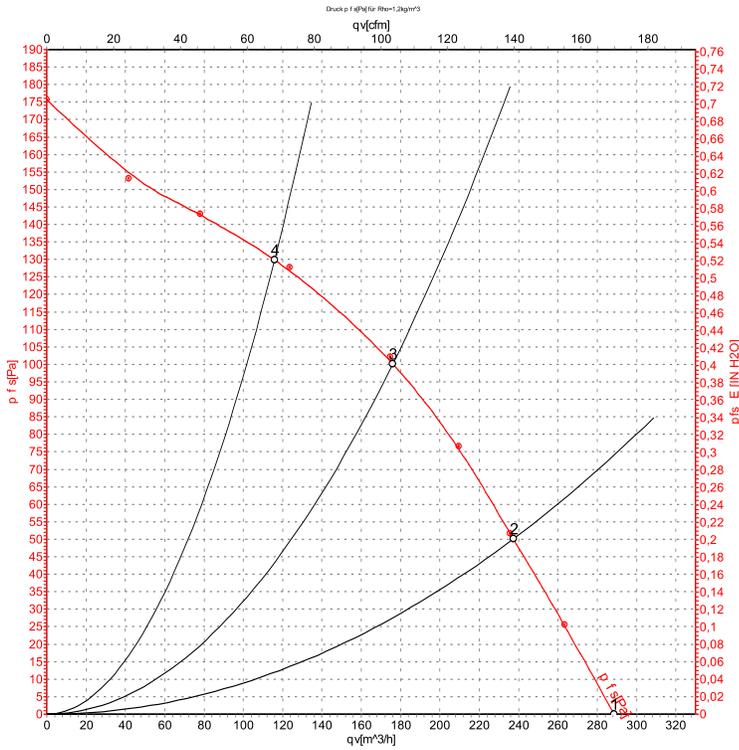
1	Accessory part: Inlet ring 09566-2-4013, not included in scope of delivery
2	Max. clearance for screw 5 mm
3	Cable PVC AWG20, 4-pole connector housing tyco 925075-7, 4x plug pin tyco 163555-6, 1x flat push-on receptacle 6.3 x 0.8
3.1	N (black)
3.2	brown
3.3	L (blue)
3.4	not used

## Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				

## Curves: Air performance 50 Hz



Measurement: LU-54086-1

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.

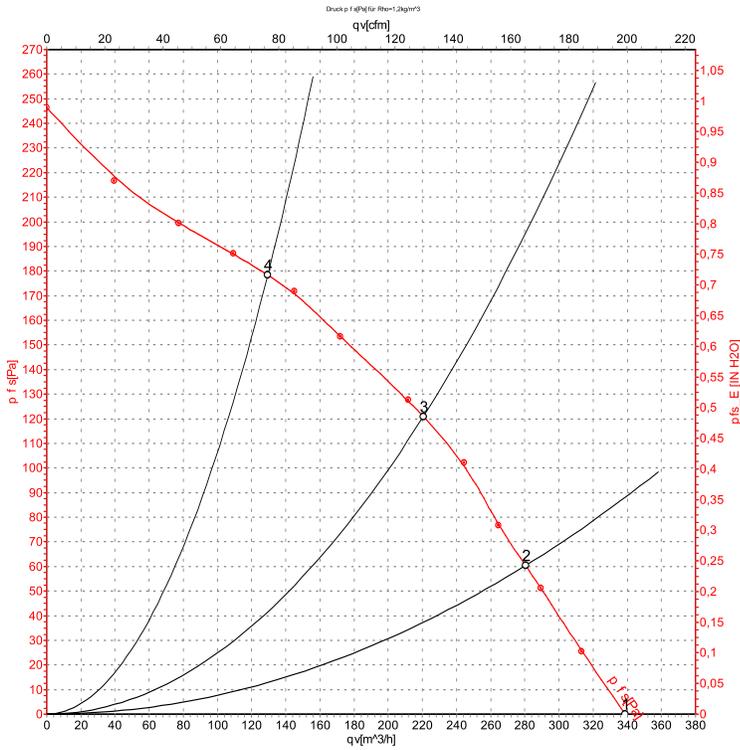
## Measured values

	U	f	n	P <sub>e</sub>	I	q <sub>v</sub>	P <sub>f<sub>s</sub></sub>	q <sub>v</sub>	P <sub>f<sub>s</sub></sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	cfm	in. wg
1	230	50	2800	24	0.11	290	0	170	0.00
2	230	50	2710	25	0.11	235	50	140	0.20
3	230	50	2700	26	0.11	175	100	105	0.40
4	230	50	2710	26	0.11	115	130	70	0.52

U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow · p<sub>s</sub> = Pressure increase



## Curves: Air performance 60 Hz



Measurement: LU-54087-1

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 <sub>e</sub>	I	q <sub>v</sub>	P <sub>fs</sub>	q <sub>v</sub>	P <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	cfm	in. wg
1	230	60	3300	27	0.13	340	0	200	0.00
2	230	60	3150	29	0.13	280	60	165	0.24
3	230	60	3125	29	0.13	220	120	130	0.48
4	230	60	3145	29	0.13	130	180	75	0.72

U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase

