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**Nominal data**

<b>Type</b>	<b>R2E180-CB28-09</b>		
<b>Motor</b>	<b>M2E068-BF</b>		
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>	2550	2800
Power consumption	W	60	75
Current draw	A	0.28	0.33
Capacitor	µF	1.5	1.5
Capacitor voltage	VDB	450	450
Capacitor standard		S0 (CE)	S0 (CE)
Min. back pressure	Pa	0	0
Min. back pressure	inH <sub>2</sub> O	0	0
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	40	60
Starting current	A	0.45	0.45

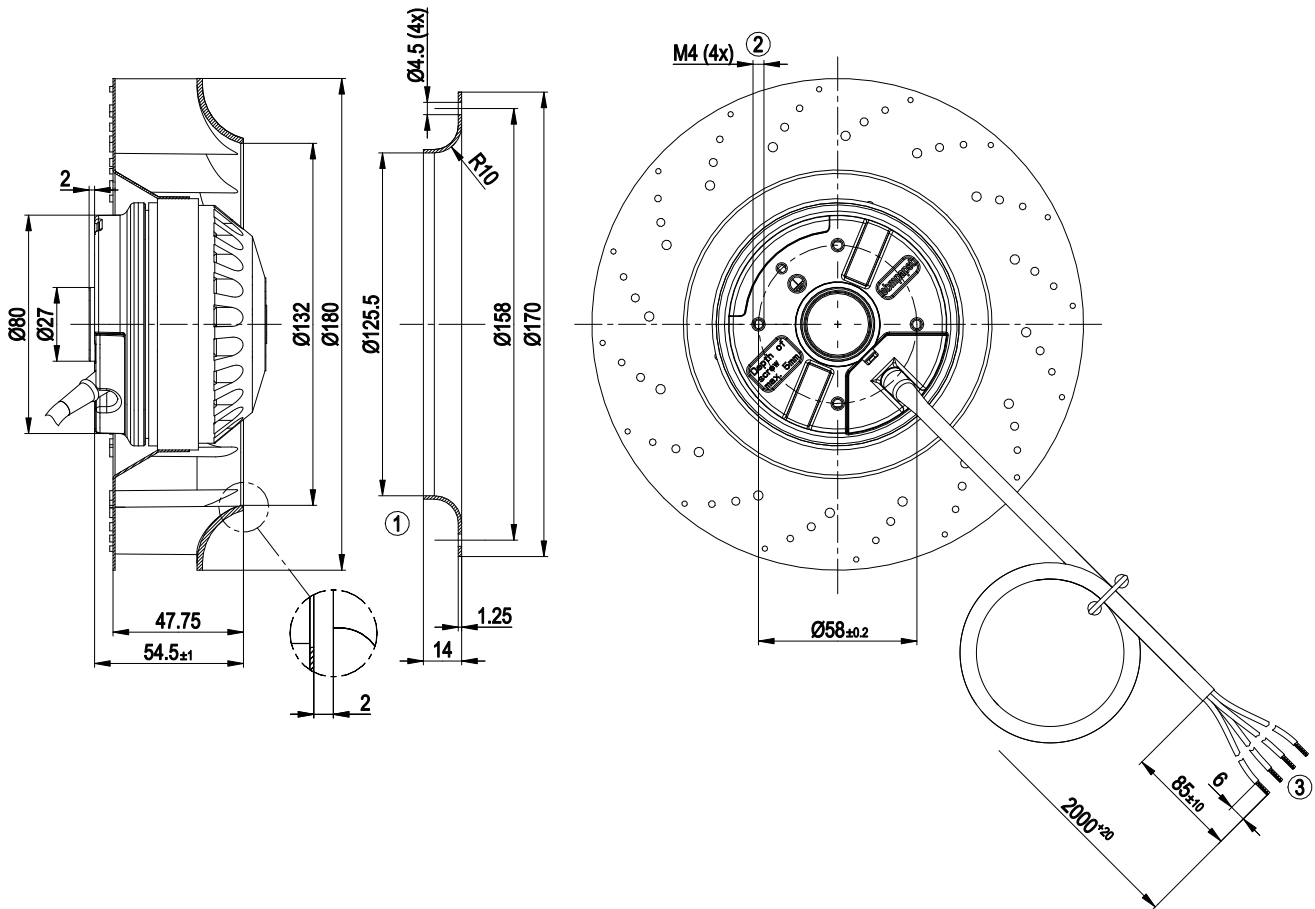
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment  
 Subject to change



### Technical description

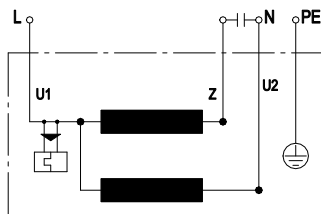
<b>Weight</b>	1.4 kg
<b>Fan size</b>	180 mm
<b>Rotor surface</b>	Painted black
<b>Impeller material</b>	PA plastic
<b>Number of blades</b>	16
<b>Direction of rotation</b>	Clockwise, viewed toward rotor
<b>Degree of protection</b>	IP44; installation- and position-dependent as per EN 60034-5
<b>Insulation class</b>	"B"
<b>Moisture (F) / Environmental (H) protection class</b>	H0+
<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>	Shaft horizontal or rotor on top; rotor on bottom on request
<b>Condensation drainage holes</b>	On stator side
<b>Mode</b>	S1
<b>Motor bearing</b>	Ball bearing with low-temperature lubricant
<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

## Product drawing



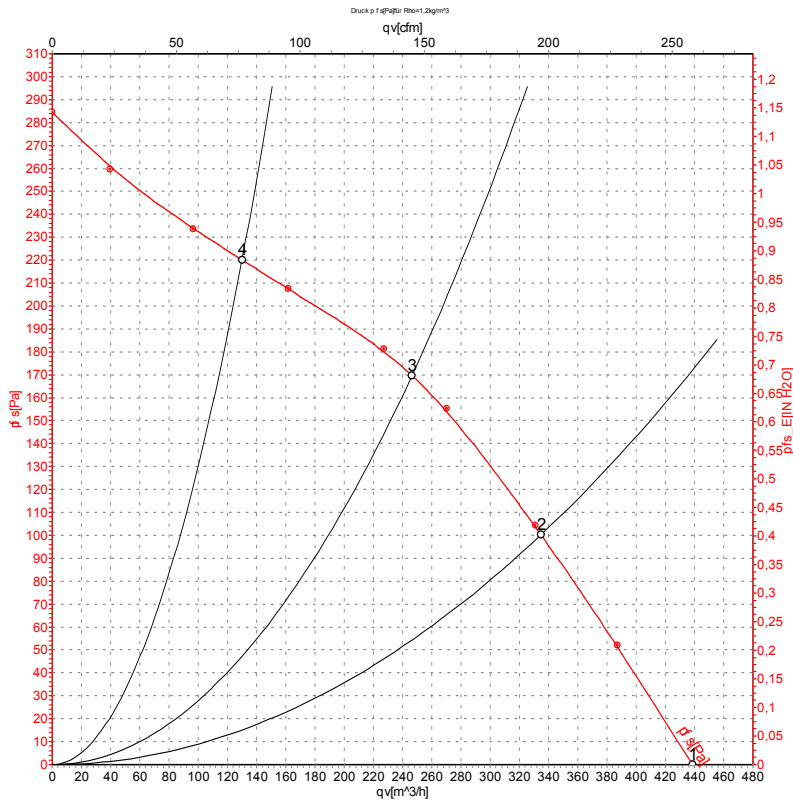
- |   |   |
|---|---|
| 1 | Accessory part: inlet ring 09576-2-4013 not included in scope of delivery |
| 2 | Max. clearance for screw 5 mm   |
| 3 | Cable PVC 4G 0.5 mm <sup>2</sup> , 4x crimped splices                     |

## Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				

## Curves: Air performance 50 Hz



Measurement: LU-57242-1

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.

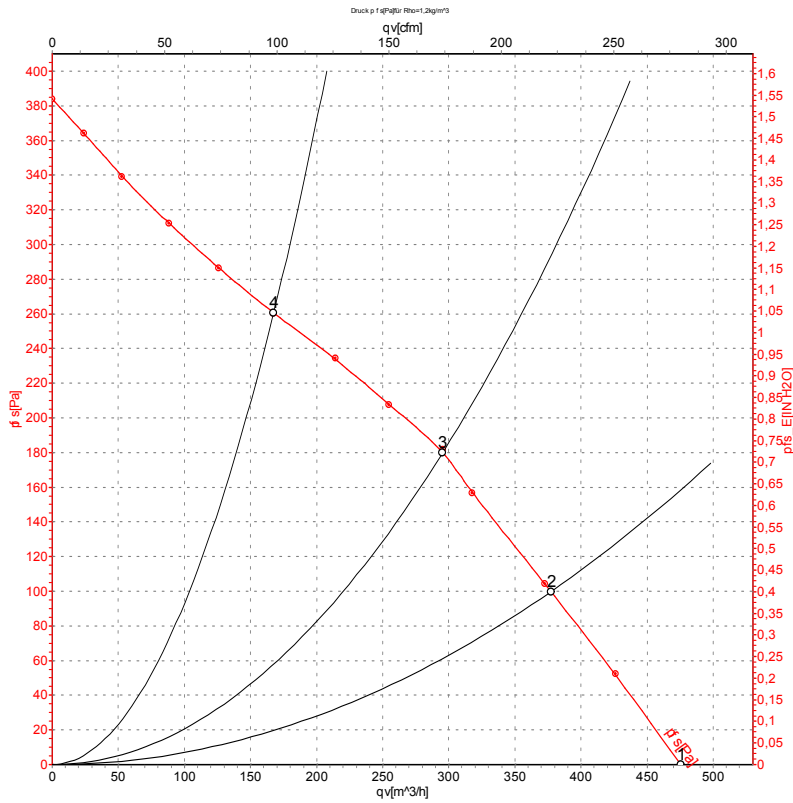
## Measured values

	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	inH <sub>2</sub> O
1	230	50	2550	60	0.28	440	0	260	0.00
2	230	50	2485	62	0.28	335	100	195	0.40
3	230	50	2535	60	0.27	245	170	145	0.68
4	230	50	2630	55	0.26	130	220	75	0.88

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



## Curves: Air performance 60 Hz



Measurement: LU-57243-1

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	inH <sub>2</sub> O
1	230	60	2800	75	0.33	475	0	280	0.00
2	230	60	2670	79	0.34	375	100	220	0.40
3	230	60	2725	77	0.33	295	180	175	0.72
4	230	60	2895	71	0.31	170	260	100	1.04

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

