

R2E180-CF91-13 ebmpapst Datasheet  
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## Nominal data

Type	R2E180-CF91-13	
Motor	M2E068-BF	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Type of data definition		fa
Valid for approval / standard		CE
Speed (rpm)	min <sup>-1</sup>	1970
Power input	W	36
Current draw	A	0.17
Motor capacitor	µF	1
Capacitor voltage	VDB	400
Capacitor standard		S0 (CE)
Min. back pressure	Pa	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	85
Starting current	A	0.2

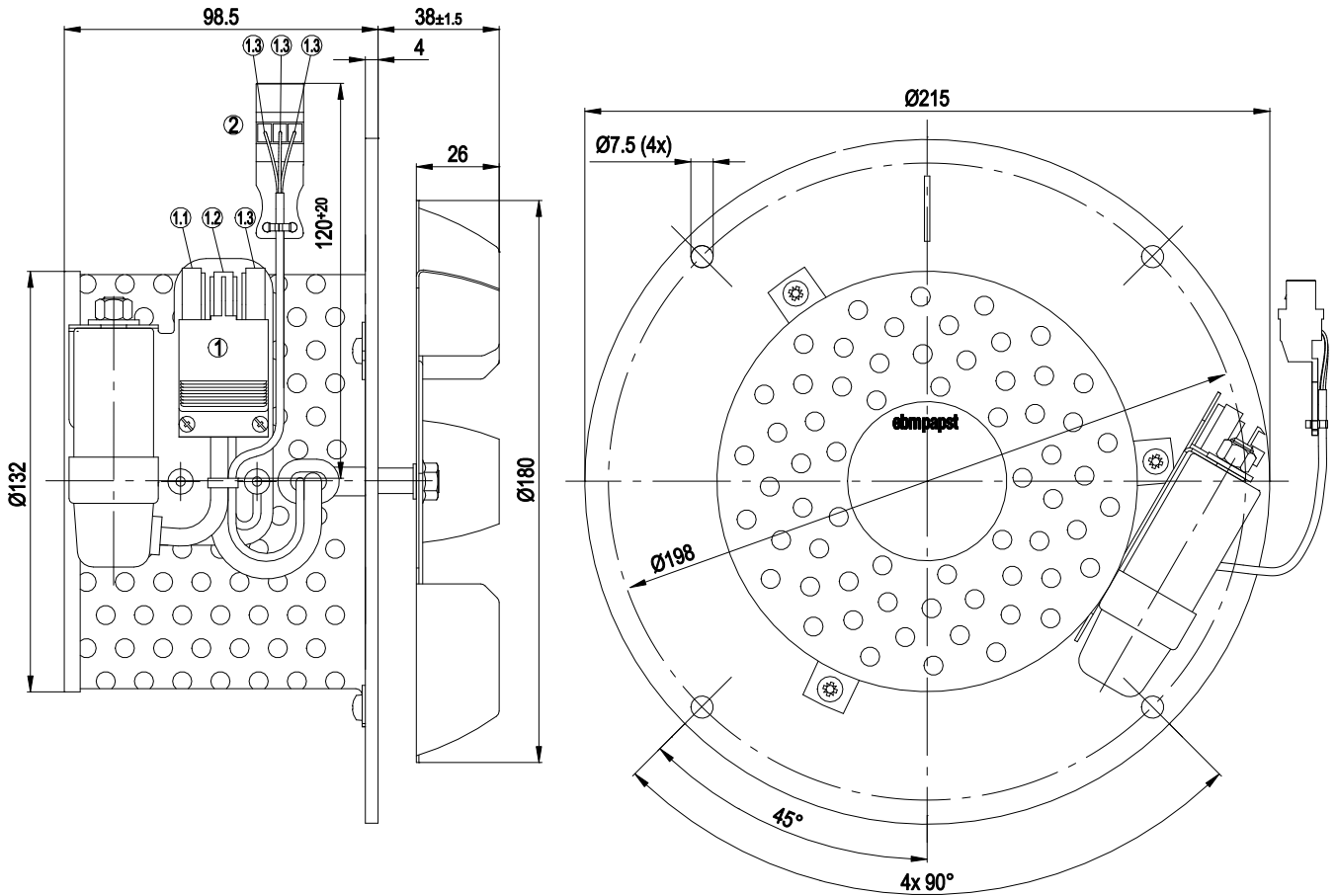
ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit  
 Subject to alterations



## Technical features

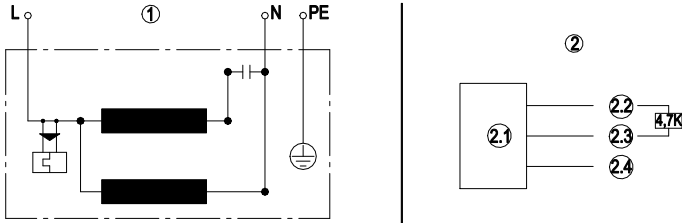
Mass	3.1 kg
Size	180 mm
Surface of rotor	Uncoated
Material of impeller	Sheet steel, rust-resistant
Number of blades	6
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position
Insulation class	"F"
Humidity (F)/environmental protection class (H)	H0 - dry environment
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Motor capacitor according to EN 60252-1 in safety protection class	S2
Product conforming to standard	EN 60335-1; CE

Product drawing



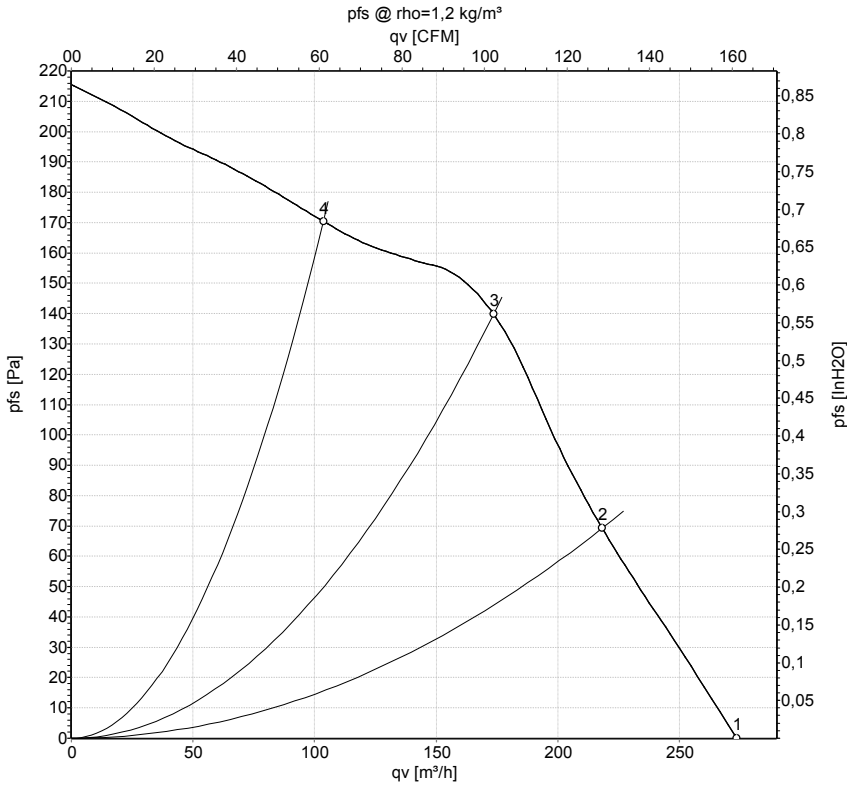
1	Connection line silicone 4G 0.5 mm <sup>2</sup> , connector housing 3-pole Wieland 93.832.4357.0
1.1	N (black)
1.2	PE (green/yellow)
1.3	L (blue)
2	Connector housing 3-pole Lumberg 3615-1
2.1	0 V (black)
2.2	out (white)
2.3	+5 V (red)

## Connection screen



1	Fan connection diagram
L	blue
N	black
PE	green/yellow
2	Hall IC circuit
2.1	Hall IC
2.2	Red (+5V)
2.3	White (out)
2.4	Black (0V)

## Charts: Air flow 50 Hz



Measurement: LU-144883-1

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: L<sub>wA</sub> measured as per ISO 13347 / L<sub>pA</sub> 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 <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	m³/h	Pa	cfm	inH2O
1	230	50	1970	36	0.17	275	0	160	0.00
2	230	50	1960	36	0.16	220	70	130	0.28
3	230	50	2085	35	0.15	175	140	100	0.56
4	230	50	2245	33	0.14	105	170	60	0.68

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

