R2E220-AB76-85

AC centrifugal fan

backward-curved, single-intake

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Nominal data

Type	**R2E220-AB76-85**
Motor	**M2E068-CF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		fa
Valid for approval/standard		CE
Speed	min^{-1}	2700
Power consumption	W	85
Current draw	A	0.38
Capacitor	µF	2.5
Capacitor voltage	VDB	450
Capacitor standard		P2 (CE)
Min. back pressure	Pa	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	55

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

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Technical description

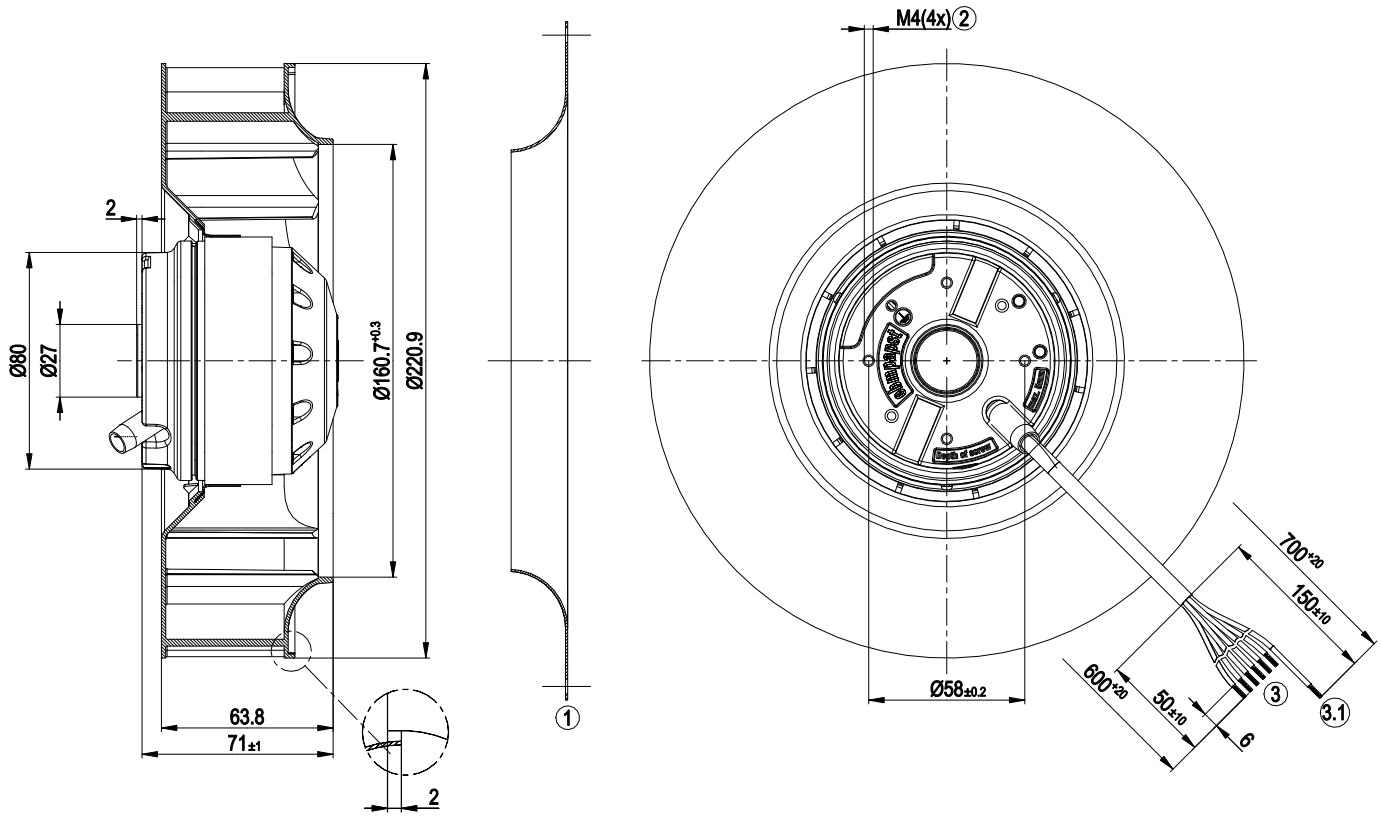
Weight	1.8 kg
Fan size	220 mm
Rotor surface	Painted black
Impeller material	PA plastic
Number of blades	11
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F1-2
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor storage	Ball bearing
Speed levels	3
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	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE

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Product drawing



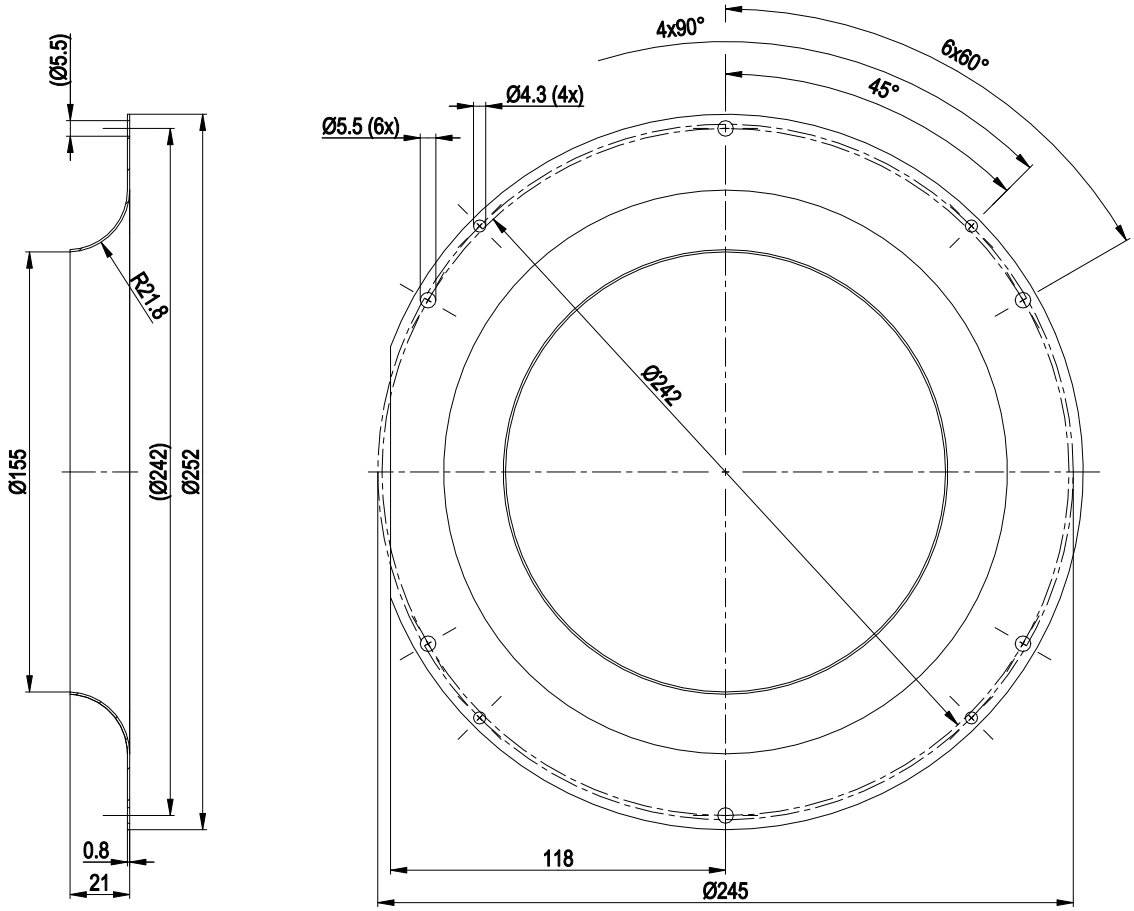
1	Accessory part: inlet ring 09609-2-4013, not included in scope of delivery
2	Max. clearance for screw 5 mm
3	Cable 7G AWG20, 7x crimped splices
3.1	PE (green/yellow)

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Accessory part

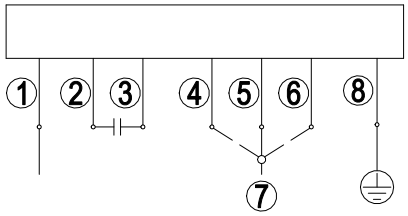


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Connection diagram



Note: High speed (step III); low speed (step I)

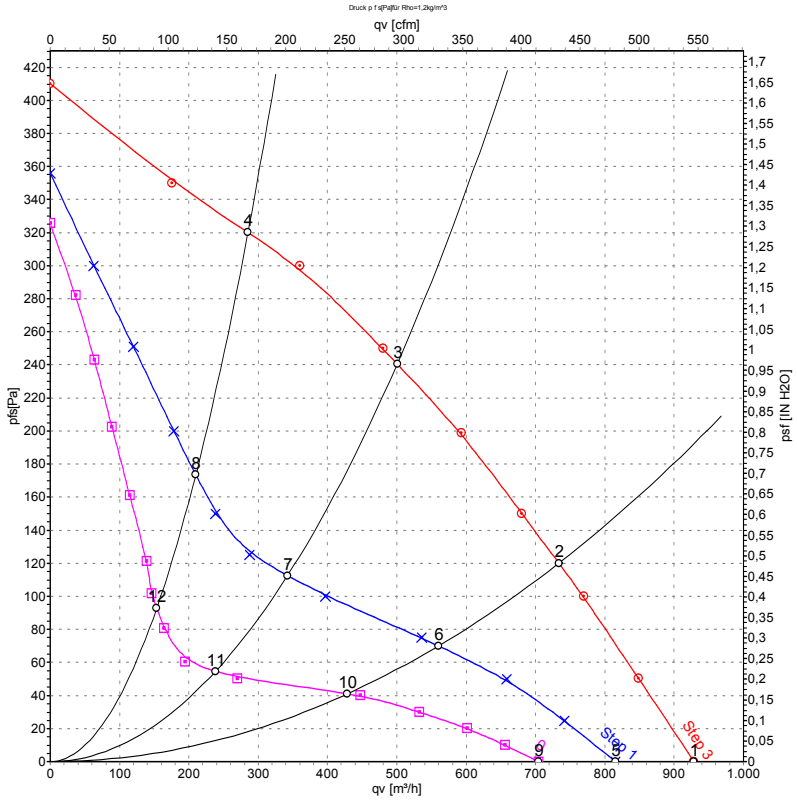
1	blue (N)	2	brown	3	yellow
4	Step 1 (white)	5	Step 2 (gray)	6	Step 3 (black)
7	L1	8	PE (green/yellow)		

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Curves: Air performance 50 Hz



Measurement: LU-34893
Measurement: LU-34894
Measurement: LU-34895

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

	Stage	U	f	n	P_e	I	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa
1	3	230	50	2700	85	0.38	930	0
2	3	230	50	2645	94	0.42	735	120
3	3	230	50	2555	107	0.47	500	240
4	3	230	50	2620	97	0.43	285	320
5	2	230	50	2390	75	0.33	815	0
6	2	230	50	2025	95	0.41	560	70
7	2	230	50	1755	104	0.45	340	112
8	2	230	50	1930	96	0.42	210	174
9	1	230	50	2110	77	0.34	705	0
10	1	230	50	1550	93	0.41	430	41
11	1	230	50	1220	98	0.43	240	55
12	1	230	50	1400	94	0.41	155	93

U = Power supply · f = Frequency · n = Speed · P_e = Power consumption · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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