R2E220-AB76-46

AC centrifugal fan

backward curved, single inlet

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Nominal data

Type	**R2E220-AB76-46**
Motor	**M2E068-CF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Type of data definition		fa
Valid for approval / standard		CE
Speed	min^{-1}	2700
Power input	W	85
Current draw	A	0.38
Motor capacitor	µF	2.5
Capacitor voltage	VDB	400
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 = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

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Technical features

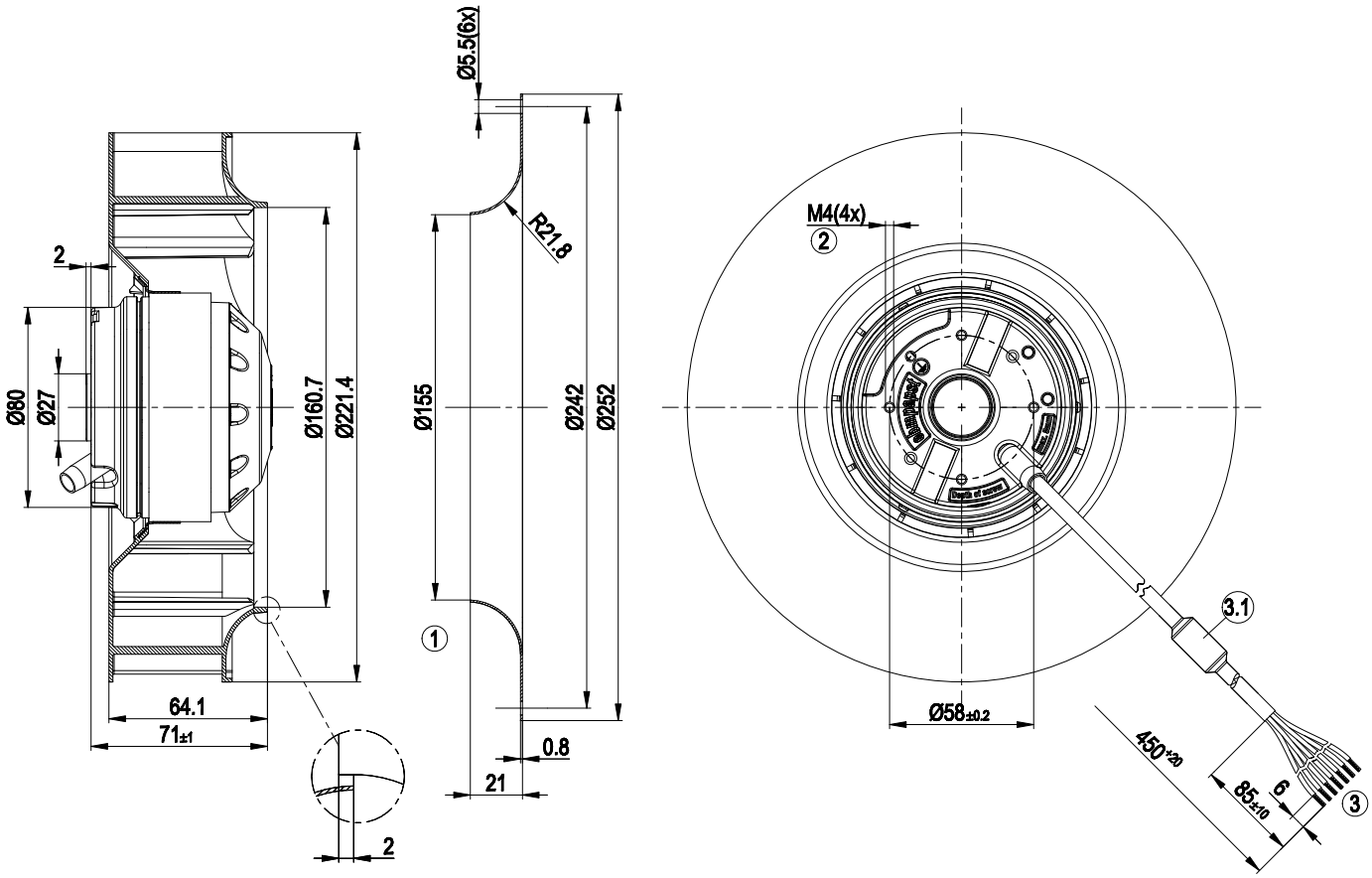
Mass	1.8 kg
Size	220 mm
Surface of rotor	Coated in black
Material of impeller	PA plastic
Number of blades	11
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"B"
Humidity class	F1-2
Max. permissible ambient 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	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Speed steps	3
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)
Product conforming to standard	EN 60335-1; CE

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Product drawing



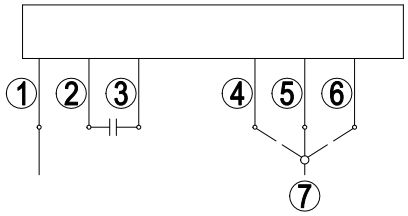
1	Accessory part: Inlet nozzle 09609-2-4013, not included in the standard scope of delivery
2	Depth of screw max. 5 mm
3	Connection line 7G AWG20, 7x brass lead tips crimped
3.1	Blue strand with fuse and protection against accidental contact

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Connection screen



Note: Fast speed (step III); slow speed (step I)

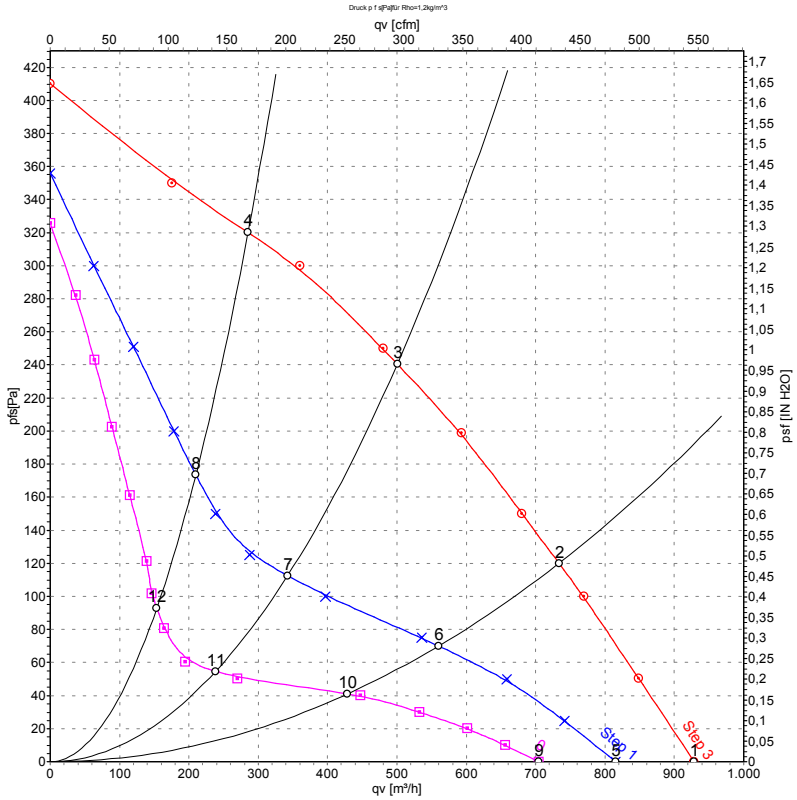
1	N = blue	2	brown	3	yellow
4	Step I black	5	Step II black	6	Step III black
7	L1				

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Charts: Air flow 50 Hz



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

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

	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 = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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