R2E146-BE08-31

AC centrifugal fan

forward curved, single inlet

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Nominal data

Type	**R2E146-BE08-31**
Motor	**M2E068-BF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	220 .. 240
Frequency	Hz	50
Type of data definition		cu
Valid for approval / standard		CE
Speed	min^{-1}	1800
Power input	W	100
Current draw	A	0.45
Motor capacitor	µF	2
Capacitor voltage	VDB	450
Capacitor standard		P2 (CE)
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	40
Starting current	A	0.52

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

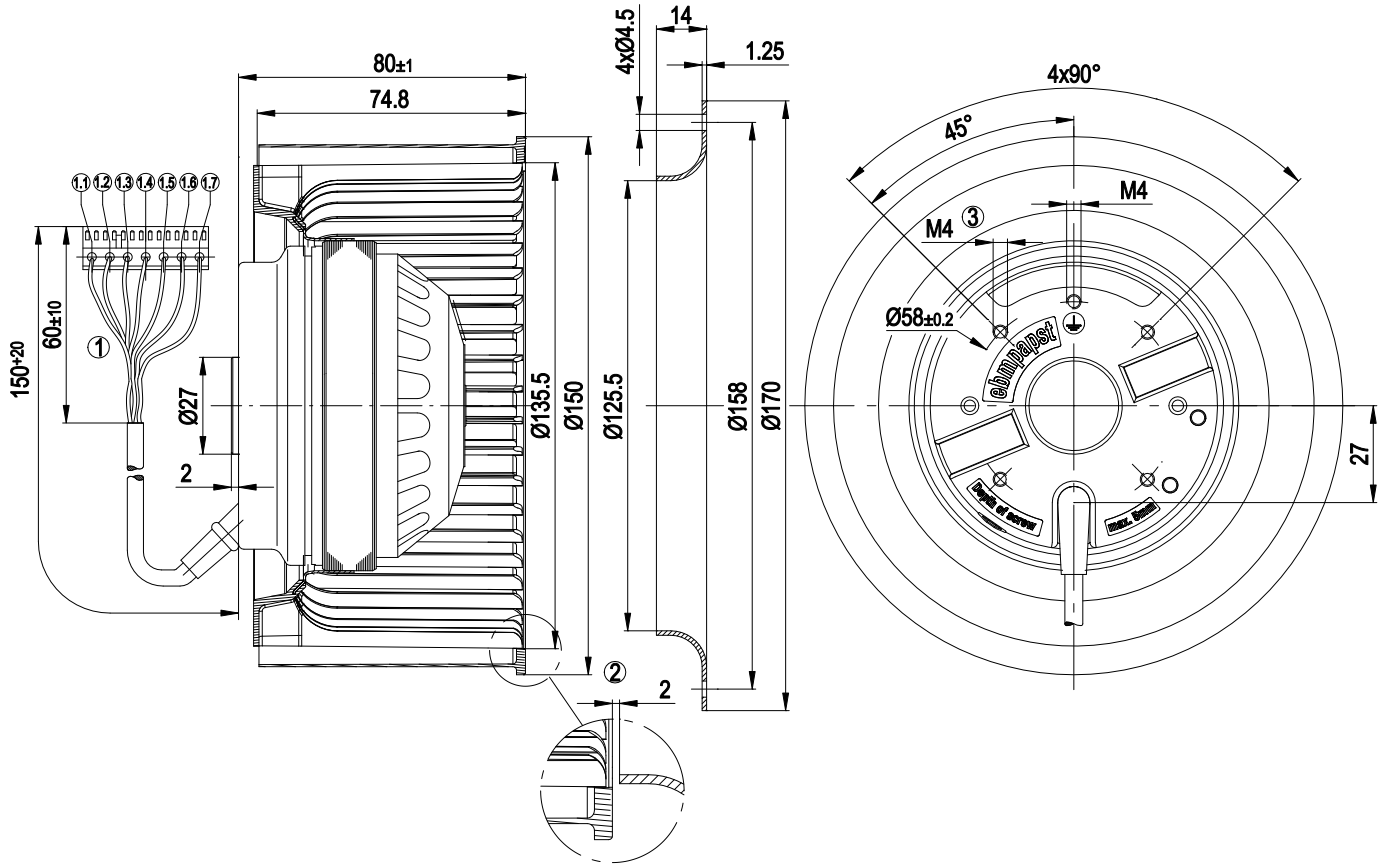
Mass	1.2 kg
Size	146 mm
Material of impeller	PP plastic, white
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position
Insulation class	"B"
Humidity class	F0
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Speed steps	4
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Electrical leads	With plug
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



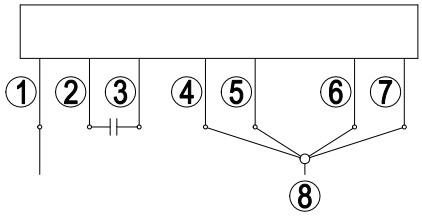
1	Connection line 7xAWG 20, Stocko spring housing MFMP 7262-007-012-960
1.1	blue
1.2	white
1.3	red
1.4	grey
1.5	black
1.6	yellow
1.7	brown
2	Accessory part: Inlet nozzle 09576-2-4013, not included in the standard scope of delivery.
3	Depth of screw max. 5 mm

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Connection screen



Note: fast speed (step IV); slow speed (step I); the switch must interrupt the circuit during the changeover.

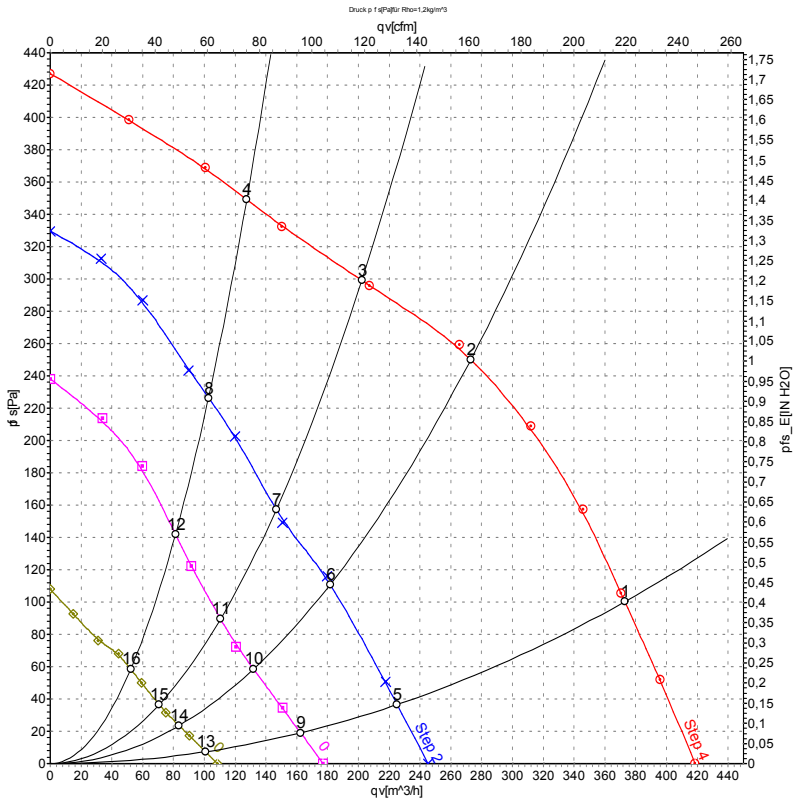
1	= N = blue
2	brown
3	yellow
4	Step I black 1 / white
5	Step II black 2 / red
6	Step III black 3 / grey
7	Step IV black 4 / black
8	L1

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Charts: Air flow 50 Hz



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	4	230	50	1800	100	0.45	375	100
2	4	230	50	2110	89	0.39	275	250
3	4	230	50	2305	83	0.37	200	300
4	4	230	50	2480	76	0.34	130	350
5	3	230	50	990	67	0.31	225	37
6	3	230	50	1370	64	0.29	180	113
7	3	230	50	1690	60	0.28	145	156
8	3	230	50	2010	54	0.26	105	226
9	2	230	50	740	55	0.26	165	19
10	2	230	50	1025	54	0.25	130	58
11	2	230	50	1260	52	0.25	110	89
12	2	230	50	1580	49	0.23	80	142
13	1	230	50	480	46	0.22	100	7
14	1	230	50	670	45	0.21	85	24
15	1	230	50	820	44	0.21	70	36
16	1	230	50	1015	43	0.21	50	58

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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